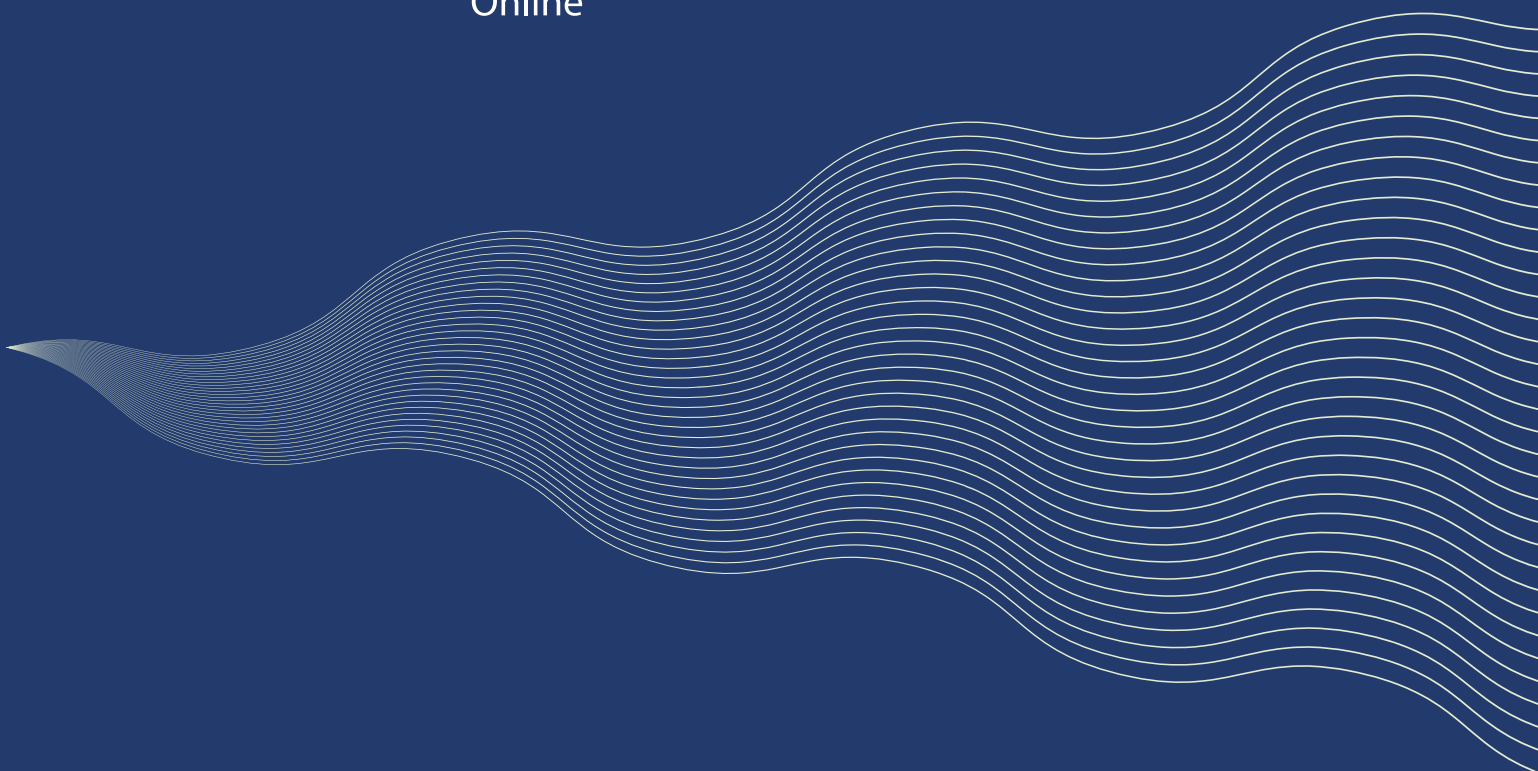**IDK** INTERDISCIPLINARY DOCTORAL CONFERENCE

TANULMÁNYKÖTET
CONFERENCE BOOK

XI. INTERDISZCIPLINÁRIS DOKTORANDUSZ KONFERENCIA

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XI. INTERDISZCIPLINÁRIS DOKTORANDUSZ KONFERENCIA 2022 TANULMÁNYKÖTET

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5

The poetic relationship between inspiration and life in the poetry of Lőrinc Szabó

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My research delves into a new aspect of Lőrinc Szabó's poetry: the poetic relationship between inspiration and life. The poetic process and biological existence are intertwined in his poetry and this connection has an impact on his poetic expression.

I aim to analyse the ways in which inspiration and life connect on a semantic, lyric and linguistic level in the poetry of Lőrinc Szabó. My interpretation helps to develop a method of literary studies, so the research of life and inspiration move into a new dimension.

At the core of my research, is the close reading of poems by Lőrinc Szabó. I approach the lyric connections of inspiration and life with my interpretation of *Poem intead of poems* (*Vers versek helyett*). I contextualise the results of this close reading, so we get a broader perspective on his lyrical expression.

The research shows that inspiration and life have a correlation on biological, linguistic and (meta)poetic levels in the poetry of Lőrinc Szabó. This synthesis highlights his poetry in the twentieth century and gives a new definition to inspiration.

Keywords: inspiration, life, twentieth century poetry, poetry of Lőrinc Szabó

Starting with the volume *You and the World (Te meg a világ)*, the poetry of Lőrinc Szabó is characterized by the expression of spiritual/intellectual processes through the body, the sensual experience of the outside world, its storage in the body, which is accessed by the gaze that can also see inwards. Plant, animal, and human life become equivalent, and a subject emerges who is uncertain about its own control. [1] The controlling nature of life becomes interesting in a new aspect in this poetry, when it exerts its power in the act of creating the poem, similarly to the inspiration that operates and determines the language of the poem. *Poem instead of Poems* (*Vers versek helyett*) separates the poem created in the creative process from the self and the reference. This method locates the poem formation in a third state of existence between the two, which is embedded in the allegory of birth and being born. From this point of view, the starting question would be how the poem embeds both on the poetic and linguistic levels the separation from the self and the it, the relationship between the two, and how it relates this to the constellation network of the allegory of birth and being born.

Szabó Lőrinc: Vers versek helyett
Levél a Válasz szerkesztőjéhez

Hol a tíz vers, amit ígértem? A
pillanat el-elmerengő szeme
látta csak, a belső csodálkozás,
minden költészet anyja. Fénymohó
lelkünk észleli a fogantatást,
becézi első mozdulatait
magzatának és reménykedik és
jósol, ígér, bár talán elvetél.
S nem csoda, hogy úgy ujjong: a megélt
költemény a legszebb; de száz s ezer
kell belőle, míg világra jön egy;
s létük ad reményt, hogy egyáltalán
értheti a költőt, aki nem az.
Mind megvan hát az a tíz vers. Hol? A
húsomban, idegemben, valahol
mirígyeim álmában. Egy katáng
az első köztük; éles csonkja még
ma is ott szárad, ahol megcsikart,
Akarattyán, a híd-roncsnál. Sokat
gondolok rá, s régóta: egy gonosz
véletlen gonosszá tette szegényt,
szegény ártatlant: öt hete szidom,
nyaram fulánkját. De, bárhogy szidom,
nem sejti bűnét, azt, hogy becstelen
belesántúltam. Néma vers komor
viszonyunk lett, nem ő; kapcsolatunk
fájdalma, nem én: így teremt a lét
kvalitásokat, melyek nincsenek,
s tényeket, melyek egy vonatkozás
gyermekei csak s tündér rabjai.
Más vers-embrió: csurgás a Dunán.

Lőrinc Szabó: Poem instead of Poems
Letter for the editor of Válasz

Where are the ten poems, that I promised? The
eyes of a fleeting moment
only saw, the inner wonder,
the mother of all poetry. Our lustful
soul perceives conception,
fondles the first moves
of her fetus and hopes and
predicts, promises, although it might miscarry.
And it is no wonder, that it cheers like that: the lived
poem is the most beautiful; but a hundred and a thousand is
needed until one is born;
and their existance gives hope, that
the poet can be understood by one who isn't.
So I have all ten poems. Where? In my
flesh, in my nerves, somewhere
in my gland's sleep. A common cichorium
is the first among them; its sharp stump
still dries there, where it was scratched,
at Akarattya, at the bridge-wreck.
I have been thinking about it a lot and for a long time: an evil
accident made it poorly evil,
poor innocent: I've been scolding it for five weeks
my summer stinger. But, however I scold,
it does not suspect its sin, that, I limped into it.
Silent poem became our gloomy
relationship, not it; our relationship's
pain, not mine: that's how life creates
qualities that are not there
and facts that are a reference, its
children are only and prisoners of fairies.
Another poem-embryo: trickle on the Danube.

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[1] Kulcsár-Szabó, E.: 'Lizard on a Sunlit Stone'. Lőrinc Szabó and the Biopoetical Beginnings of Modern Poetry. Mezei, G. (transl). In: Kulcsár-Szabó, Z., Lénárt, T., Simon, A., Végső, R., (eds): Life After Literature. Perspectives on Biopoetics in Literature and Therory. Springer. 2020. pp. 215–228.

Négy szép nap. Az egész út? Töredék
szemcséi is egészek; mert ahogy
hajlok szinte emlékeim fölé,
nagyító-szemem úgy tágítja a
rostokat, hogy a hályogos tudat
képsorrá nyílik, oly igazivá,
amilyen nemrég a valódi volt:
kérdőjel-nyakú gémmé füzesek
sziget-orránál, napfénnyé, amint
evezőinkről csepeg, pacskoló
gyerekhaddá ártéri pázsiton,
s munkáscsapattá: híd-traverzeket
csörömpöltet szörny tehergépkocsi,
nap kél s én borotválkozom a rőt
folyam tükrében, hangyaraj szorong
egy elöntött nád tornyán, szélesen
gyujt a dél lángecsete, lebegő
sirály siklik át a Deák Ferenc
esti zakatolásán, s gyöngyeit
villantja, már feketedve, az éj.
Hol volt mindez? Honnan merűl elő
gém és motorzaj, víz és alkonyat,
s mi az anyaguk? Eleven mozi
perget utóéleteket, s mikor
a harmadikra, negyedikre, a
tizedikre gondolok, álmodott
versekre (szellemekre, kiket oly
gyanakodva vizsgálok, mint korom):
feltámadása kezd átzsongani
ezer halottnak, nem-tudom-minek,
ami volt már, s mindig lesz, mig leszünk
(de csak ha hívjuk, vagy ha, sugarak
gyanánt, melyeket áram alakít
érzékelhető hanggá, ő maga
tovább szűli szerveinkben magát):
mondom, élő zene motoz körűl,
látható zene, hangkép, valami
párlat, mely van is, nincs is, valami
oltóanyaga s élősdije a
képzeletnek.
Nem a tárgy már, csak a
kapcsolata! Az bűvöl, a viszony,
nem a tűnt tény: az első lobbanást
az veti mindig, s ha van rá időnk,
éppoly gyönyört ad, mint amilyet az
élet maga: lélegzetem eláll,
úgy hallgatózom befelé, szemem
kettőzi látását, s köldökzsinór
köt, vissza, egy más világba, amely
érzékelés nélkül érzékien
hozza a mámort, mit alig merünk
hinni: az emlékezet ihletét.
Ez a mámor, az emlékezeté
(melyet szüntelen táplál a jelen),
ez a termő és megtartó zene

Four beautiful days. The whole way? Fragment
its grains are whole; because as
I lean over my memories,
my magnifying-eye expands the
fibers, that the vesicular consciousness
opens into a sequence of images, so real,
as real as the recent one:
question mark-necked heron willows
at the tip of the island, sunlight, how
it drips from our paddle, splashing of
children's group on floodplain grass,
and into a work team: bridge traverses
rattled monster truck,
the sun rises and I shave in the
mirror of red the stream, the swarm of ants is anxious
on a tower of flooded reeds, widely the midday
flamebrush lights up, floating
a seagull glides across the Deák Ferenc
in the evening, and its pearls
flash in the already blackened night.
Where was all this? Where does it come from
heron and engine noise, water and twillight,
and what is their material? Live cinema
spins afterlives, and when
I think of the third, fourth, the
tenth, dreamed
poems (about spirits, whom I
investigate suspiciously like my age):
resurrection begins to reverberate for
a thousand dead, I don't know why,
what has been and always will be as long as we will be
(but only if we call it, or if, rays
as those shaped by a current
into a recognisable sound,
it continues to give birth in our organs):
I say, live music tapping,
visible music, sound image, some kind of
extract, which is either there or not, some kind of
serum and parasite for the
imagination.
Not the subject anymore, only the
reltionship! That charm, the relationship,
not the apparent fact: the first spark
it always throws, and if we have time for it,
it gives as much pleasure as it is
life itself: my breath stops,
so I eavesdrop inwardly, my eye
double vision, and umbilical cord binds,
back, to an other world, which
sensuously without feeling
brings the intoxication, which we hardly dare
to believe: the inspiration of memory.
This is the intoxication of memory
(which is constantly fed by the present),
this is productive and sustaining music

(zenének mondom, oly anyagtalan,	(I call it music, so immaterial,
megfoghatatlan), ez a révület	intangible), this trance
negyvennyolc éve kelt és altat és	wakes me and puts me to sleep for forty-eight years
csupa látomás, csupa suttogás:	all visions, all whispers:
ez az én élt versem! és, óh, milyen	this is my lived poem! and, oh, how there is
bőven van, akár tízszer tízre is	plenty, even ten times ten
futná naponta! Csak kedv kell, s idő	it would run daily! Only mood is needed, and time
s fesztelenség kell, kiszűrni a nagy	and tension is needed to filter out
zsongásból a külön dallamokat.	single melodies from the big buzz.
Ez itt önmagán tűnődött, saját	This one here was wondering about itself, it
működését fogta szavakba: ezt	put into words how it works: this
küldöm jövendő társai elé,	I send to its future companions,
én, a hangszere, s örülök neki,	I, the instrument, and I am glad,
mert, bár panaszkodik, íme, remél,	because, although it complains, behold, it hopes,
sőt dicsekszik, gazdája kincseit	and even boasts about its master's treasures,
emlegetve, aki nem oly erős	who is not so strong
(s nem oly ópiumszívó), hogy maga-	(and not such an opium addcict), that would be
magának elég maradjon, hanem	enough for himself, but
mihelyt nyomorúlt külső élete	when his outer life was miserable he allows,
engedi, már zendíti dalait.	he's already singing his songs.

translation by Enikő Anna Ágoston

In the first thirteen lines of the poem, the performative mechanism of the "ígéret" ("promise") is transferred by the self to the it in order to absolve itself of the responsibility of writing the poem, thus linguistically realizing the medial function of the self, which is at the mercy of it, at the beginning of the poem. After the first line ("Hol a tíz vers, amit ígértem?"; "Where are the ten poems, that I promised?"), only possessives and verbs for the first person plural and third person singular appear until the fourteenth line. The loss of autonomy of the self is staged in the poetic constellation of the poem's conception. The possessive relationship of "pillanat […] szeme" ("The eyes of […] moment") associates the eye, as the visual organ, to the moment, to a unit partially separated from time, to a memory, and unites them. With this, it makes remembering a condition for perception, positioning the content of the moment that can be separated from the self in the eye, which is why the outside can become internal ("belső csodálkozás"; "inner wonder"). The phrase "el-elmerengő" ("fleeting") creates a trembling effect with the iteration of the prefix, while the immersion of the memory into the body is also present through the placement of the inscription and the semantic moment in the eye. The enjambment connects the memory written in the body with the soul, and the relationship between the two brings about birth: "minden költészet anyja. Fénymohó / lelkünk észleli a fogantatást" ("the mother of all poetry. Our lustful / soul perceives conception"). The adjective "fénymohó" (literally: greedy for light) can also refer to the mother of poetry, to the image-like or photo-like memory of the eye, to its visual medial ability to store and capture light. At the same time, the soul – extended beyond the boundaries of the self in the first person plural possessive – interacts with the mastery of the sensuality of the eye as the intellectual storehouse of light perception. The double identifying interpretive structure ("A / pillanat el-elmerengő szeme / látta csak, a belső csodálkozás, / minden költészet anyja."; "The / eyes of a fleeting moment / only saw, the inner wonder, / the mother of all poetry.") identifies the "mother of poetry", referring to ancient Greek mythology, Mnemosyne, the mother of the muses, who is the goddess of memory, with the bodily function and with the eye that partially belongs to it and includes the moment. Ancient Greek inspiration is often the elevated state that enables the

expression of the muse, which deprives the poetic self of its controlling power. [2] While *Poem instead of poems* alludes to tradition and deprives the self of its power, it medially gives up its body to another manifestation: to life, which thus becomes the substitute for inspiration and the muse, in the same way as body and soul come into contact with an intellectual creation through a process extended beyond the self.

The term "észleli" ("perceives") even connotes the intellectual process of brain activity in making connections. Furthermore, the relationship between the body and the soul is realized in miscarriage, as the promise of the soul could be fulfilled by the body's performative creative capacity, just as the poem would also be born with linguistic materiality. Just like the body, the soul also takes over the bearing of the sensation, the sensation that is born through medial changes in the language. Sensation becomes sense in the lines "hogy egyáltalán / értheti a költőt, aki nem az" ("that / the poet can be understood by one who isn't."). The identification of the "költő" ("poet") and the "az" ("that") deixis pointing to the distance create the distance, as the poet's presence is no longer a function of understanding, but a distant presence with whom the "nem költő" ("not poet") can connect through interpretation. The "költő" ("poet") is a similar and occasional linguistic event as the lyrical self, which is an empty space and is filled by the occasional voice while reading a poem. In the same way, the soul – similarly to the detachable poem – is a partial unit of the poet, which can be separated from him with the third-person singular emotion conveyance and the (memory) storage function of life: "S nem csoda, hogy úgy ujjong: a megélt / költemény a legszebb" ("And it is no wonder, that it cheers like that: the lived / poem is the most beautiful"). Once in the body, the memory is present in the possession of the self, acting as an objective storage.

The first example of a poem preserved in human organism mediality emphasizes the sensual relationship between the reference and the poet: "nem ő; kapcsolatunk / fájdalma, nem én" ("not it; our relationship's / pain, not mine"). The personal pronouns are placed at the two endpoints of the relationship, so the emotion resulting from the contact between the two becomes a bridge that creates the relationship and is also visible in the syntactic structure, which also strengthens the relationship between he and I with the possessive relationship of the first person plural. This connection is brought to the foreground by the lines that also form a bridge between the melo- and optopoetical:

"Egy katáng	"A common cichorium
az első köztük; éles csonkja még	is the first among them; its sharp stump
ma is ott szárad, ahol megcsikart,	still dries there, where it was scratched,
Akarattyán, a híd-roncsnál."	at Akarattya, at the bridge-wreck"

The cichorium becomes visible, a memory, a poem, through the corporal sensation in contact with the self, in the connection between the two. Sensuality is emphasized in four lines about the plant: "éles" ("sharp"), "megcsikar" ("scratched"), "szárad" ("dries"). The "cs" phonemes (pronounced: /tʃ/) in "csonkja" ("stump"), "megcsikart" ("scratched") and "híd-roncsnál" ("at the bridge-wreck") connect these words melopoetically with their clicking, snapping linguistic sound effect. The deixis "ott" ("there") indicates both the "megcsikart" ("scratched") point and the location ("Akarattyán a híd-roncsnál"; "at Akarattya, at the bridge-wreck"). The bridge-wreck and the plant come into an interchangeable relationship through the fragmented (truncated) properties and the scrathing, as if the sensation is projected onto the entire space, similarly to how the pain of the sensual relationship shreds the body. The plant inscribes itself in the body while taking advantage of the pain caused by the sensation, it becomes a part of the

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[2] Murray, P.: Poetic Inspiration. In: Destrée, P., Murray, P. (eds): A Companion to Ancient Aesthetics. Wiley-Blackwell. Chichester, 2015. pp. 158-174.

body through this, but in the meantime it also remains an external, foreign substance, like a stinger: "nyaram fullánkja" ("my summer stinger"). All that remains from the summer is what has a tactile effect. In the silence of tactility, the unspoken poem is present in the same way as in the fixed textuality:

"Néma vers komor viszonyunk lett, nem ő; kapcsolatunk fájdalma, nem én: így teremt a lét kvalitásokat, melyek nincsenek, s tényeket, melyek egy vonatkozás gyermekei csak s tündér rabjai."	"Silent poem became our gloomy relationship, not it; our relationship's pain, not mine: that's how life creates qualities that are not there and facts that are a reference, its children are only and prisoners of fairies."

Life is strengthened in this relationship, and the poem is born from the nuances of life: "így teremt a lét / kvalitásokat" ("hat's how life creates / qualities"). The enjambment emphasizes the creative attitude of life, and then clarifies the qualitative nuances.

It is as if the sequence and recording of medial shifts, the recording of perpetually in motion life reflected on the antecedents of the avant-garde, [3] but the kinetic dynamics come into play with a different kind of poetics. In *Poem instead of poems,* the dynamics are created by the enjambments that are characteristic of Lőrinc Szabó's poetry, which expand the semantic space and offer application possibilities. The deictic relations set in motion the space between the referential outside and the linguistic inside of the poem, which enters into a dynamic relationship with the occasional dialogue between the it and the self as well, the casualness of which is provided by the sensual dialogue that can also be experienced in the reader's body. The interpretable layering of the visuality of the text is expanded by the sound and semantic potential of the language, which also overwrites the visual representation. An example of this is the already mentioned bridge-like syntax and the use of parentheses, which store language and poetry in a similar way to the body. The storage of poetry is created with sensuality, just as the constellation-creating role of acoustics plays a powerful role in creating a relationship with the chicory, for example, and thus creates the dynamic permeability between the poetic language and (referential) space. Sensual stimuli are brought to the foreground by the fragmentary rhythmicity of the montage technique (alluding to avant-garde technique) in the mechanized body, thus enabling movement.

"Mirígyeim álmában" ("in my gland's sleep") summarizes the essence of the lines written so far: the inseparability of intellectual and physical activity. At the same time, in this double possessive structure, the poem's essential and primary medium (the "dream") has a secondary relationship with the self: it can be separated from it as a storage that can be observed from the outside, just like "nyaram fullánkja" ("my summer stinger"), where the "stinger" comes into contact with the self through the secondary possession, but it still became independent in its separability. Similarly, the handling of bodily materials, as it can be separated from the self, appear as storage in possession of them:

"Mind megvan hát az a tíz vers. Hol? A húsomban, idegemben, valahol mírigyeim álmában."	"So I have all ten poems. Where? In my flesh, in my nerves, somewhere in my gland's sleep."

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[3]Kulcsár-Szabó, E.: Literary Movement-Images. Ernst Stadler and Lőrinc Szabó. Mezei, G. (transl). In: Bengi, L., Kulcsár Szabó, E., Mezei, G., Molnár, G. T., Kelemen, P. (eds): Hungarian Perspectives on the Western Canon. Post-Comparative Readings. Cambridge Scholars Publishing. Newcastle, 2017. pp. 2–15.

They belong to the self in a possessive relationship, but they are still autonomous storages that the self can access, but can move also distance itself from. The self and the it can interact in the mentioned possession, despite the fact that the verbal dialogue between the self and the it is impossible at the linguistic level:

"öt hete szidom, nyaram fulánkját. De, bárhogy szidom, nem sejti bűnét, azt, hogy becstelen belesántúltam."	"I've been scolding it for five weeks my summer stinger. But, however I scold, it does not suspect its sin, that, I limped into it."

The distance between the self and the referential it is eliminated by the dialogue – beyond language, but realized in the language of poetry – of the two, in the same way as the dialogicity of the poems of Yeats, Rilke and Pound seeped into the poetry of Lőrinc Szabó[4] during the translation of their works, and, overriding the traditions, created the dialogic poetics in the *You and the World (Te meg a világ)* volume.[5] In *Poem instead of poems* the principle of dialogicity appears in a form adapted to the reflective process of writing poetry and creates the separation of the speech of the poem from the two endpoints participating in the dialogue. The dialogue between the self and the external referential world (that is, the 'it') is the poem. The most striking display of dialogicity is the repetition of the question-answer structure, which presupposes a present other, whose voice is conveyed by the poem, as if another medium – in this case, the lyrical self, the textuality, linguistic materiality of the poem – is necessary for asking the decodable question. The body itself works in a similar way, which creates the conveying medium for entering into dialogue between the lyrical self and the outside world. This connection is kept active by the inspiration identified with life, but just as birth is an sporadic event, so is the poem itself, as an act of dialogicity. The polyphonic speech of the poem is born from the dialogue of the self and the it. This polyphony is also multifaceted medially, as imagery, the different types of sound and the mechanics of linguistic rhetoric prevail in the dialogue. The outside world can be identified with the referential self at several points, and in the process it also becomes equal to the self referred to in the poem. As the difference is undecidable, the poem created in the dialogue overwrites the speech of the referential outside world and identifies it with itself. The nascent poem is the result of the dialogue, but in the same way the self claims it as its own as well by saying it and owning it through the body connected to the self. The dialogic voice overwrites the lyrical self as well as the referential outside, using both as a tool to be born in the dialogue and stored in their linguistic and sensual mediality. At the end of the poem, the self and the it merge into one through the instrumentalization: thus, the detached song becomes the joint product of the two. "It is real as a meeting point of both sides, a "mediation" of body and world through the autopoetic self-realization."[6] The voice of the poem is born in this process exposed to reciprocity and goes through the medial changes of the dialogue between the outside world and the body in relation to the self, as the poem continues with the verbalization of the second poem.

The second beginning of the poem ("vers-embrió"; "poem-embryo") is rooted in a sound effect, which is also the result of a sensual perception: "csurgás" ("trickle"), which is medialized into a visual and linguistic form by the poetic sound from the biological organism. The corporal storage is fragmented ("rostok", "fibers"; "hályogos tudat", "vesicular consciousness"), as is the pictorial montage technique of the sound effect:

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[4] Kabdebó, L.: On the Borderline of Nineteenth and Twentieth Century Poetic Discourses. The Appearance of the Dialogical Poetic Paradigm. Neohelicon. 1994. Vol. XXI/1. pp. 61–83.

[5] Kabdebó, L.: Lőrinc Szabó and Max Stirner, Neohelicon. 2002. Vol. XXIX. 1. pp. 131–162.

[6] Weber, A.: Biopoetics. Towards an Existential Ecology. Springer. Netherlands, 2016. pp. 29.

"kérdőjel-nyakú gémmé füzesek
sziget-orránál, napfénnyé, amint
evezőinkről csepeg, pacskoló
gyerekhaddá ártéri pázsiton,
s munkáscsapattá: híd-traverzeket
csörömpöltet szörny tehergépkocsi,
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folyam tükrében, hangyaraj szorong
egy elöntött nád tornyán, szélesen
gyujt a dél lángecsete, lebegő
sirály siklik át a Deák Ferenc
esti zakatolásán, s gyöngyeit
villantja, már feketedve, az éj."

"question mark-necked heron willows
at the tip of the island, sunlight, how
it drips from our paddle, splashing of
children's group on floodplain grass,
and into a work team: bridge traverses
rattled monster truck,
the sun rises and I shave in the
mirror of red the stream, the swarm of ants is anxious
on a tower of flooded reeds, widely the midday
flamebrush lights up, floating
a seagull glides across the Deák Ferenc
in the evening, and its pearls
flash in the already blackened night."

This sequence of images can be identified with a film set in a cinema in the sense that we consider the old film reels, which were film strips made up of images. The expression "eleven mozi" ("live cinema") also refers to the detached nature of imagery, the objectification of the self, and the separation of the corporal organism from the self. At the beginning of the sequence, the "kérdőjel-nyakú gém" ("question mark-necked heron") foreshadows the linguistic possibility embedded in the image, whose linguistic materiality is ensured by the spinning, fragmentary rhythmicity of the images, and later by the musicality, which is explicitly shown.

From the thematic appearance of the music, the process of birth is also marked visually by parentheses, like the visual markers of the body's casing or the lens of a (film) projector. *Poem instead of Poems* makes a distinction between the poem that is in the body's closed casing and the poem that can be brought outside. Just as the poems are stored in the body – which can be separated from the self – have been discovered before through the possession, the intellectual content of the poem is stored between the parentheses before it is transferred to the language through the music's mediality, which acts in both directions. The "feltámadás" ("resurrection") is released from the living body through musical mediation ("átzsongani"; "reverberate") and gains its own life in the music; with the help of the prefix "át" ("through"), it gets out of the parenthesis:

„álmodott
versekre (szellemekre, kiket oly
gyanakodva vizsgálok, mint korom):
feltámadása kezd átzsongani
ezer halottnak"

„dreamed
poems (about spirits, whom I
investigate suspiciously like my age):
resurrection begins to reverberate for
a thousand dead"

It is as if a medium lends his body to the voice of the poem, the "spirit" to speak. It provides a body, without which the intellectual content would be dead, which is why a mediator is necessary, in the same way music provides a medial form for its intellectual storage. This is also confirmed by the following passage about how music is born in the biological organism as a parasite (of the imagination) and in the verbalizing process of the self ("mondom", "I say") comes out of the parentheses, similarly to being born out of a body:

"(de csak ha hívjuk, vagy ha, sugarak
gyanánt, melyeket áram alakít

"(but only if we call it, or if, rays
as those shaped by a current

érzékelhető hanggá, ő maga	into a recognisable sound,
tovább szűli szerveinkben magát):	it continues to give birth in our organs):
mondom, élő zene motoz körűl"	I say, live music tapping"

The body casing embedded in parentheses metaphor works similarly in the following three cases. First, when physical nourishment is paralleled with the poem/music being born in it "(melyet szüntelen táplál a jelen)", "(which is constantly fed by the present)". Second, when the casing of immateriality are parentheses, similarly to how the body is to the intellectual: "(zenének mondom, oly anyagtalan, / megfoghatatlan)", "(I call it music, so immaterial, / intangible)". And when the effect of opium becomes perceptible inside the body: "(s nem oly ópiumszívó)", "(and not such an opium addict)". The internal music that can be brought outside alludes to the linguistic articulation of the whisper, and, in the metaphor of the poem, to the feasibility of the textual form that is placed in the possession of the self:

"(zenének mondom, oly anyagtalan,	"(I call it music, so immaterial,
megfoghatatlan), ez a révület	intangible), this trance
negyvennyolc éve kelt és altat és	wakes me and puts me to sleep for forty-eight years
csupa látomás, csupa suttogás:	all visions, all whispers:
ez az én élt versem! és, óh, milyen	this is my lived poem! and, oh, how there is
bőven van, akár tízszer tízre is	plenty, even ten times ten
futná naponta! Csak kedv kell, s idő	it would run daily! Only mood is needed, and time
s fesztelenség kell, kiszűrni a nagy	and tension is needed to filter out
zsongásból a külön dallamokat."	single melodies from the big buzz."

The optopoetics of the vision (which was dominant in the montage technique earlier) and the melopoetics of the whisper (as the poem uses the acoustics of language through the sensuality of the body) have an effect on the spoken language and seep into it, creating it as its components. From the interplay of these two, the utterance can be created, which the poem reflects with a romantic tradition: "oh" prevails as an invocation of invocation, as an attempt to summon the sound itself, as it semantically denotes emptiness. [7] It is a matter of preparing the utterance in such a way that the poem activates its signifier status only as a sound, but not conceptually. It alludes to the conditions of speech, without which the poem remains merely an attempt at the process of invocation as an empty, lip-rounding sound in "oh".

In romantic poetry, it is common for the poet to be compared to a musical instrument through which nature speaks. One of the most well-known examples of this is Shelley's poem *Ode to the West Wind*, [8] which was translated into Hungarian by Lőrinc Szabó. Romanticism often used tools in its access to nature to understand the relationship between sensuality and transcendence: one of these tools was the Aeolian harp, which is played by the blowing of the wind. "The Aeolian harp […] was an instrument of inspiration. The Aeolian harp was superior to other instruments because its music was unpredictable and because it was played, not by man, but by the breath of Nature herself." [9] The breath of nature in *Poem instead of poems* is substituted for and becomes more extended to life itself, which is inherent in the human organism, and the breath itself is no longer an external force, as the romantic wind, but an internal source.

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[7] Culler, J.: Theory of the Lyric. Harvard University Press. Cambridge–London, 2015. pp. 190, 213, 217, 223, 235, 236.
[8] Wilson, R.: Poetry as Reanimation in Shelley. In: Wilson, R., (eds): The Meaning of „Life" in Romantic Poetry and Poetics. Rotledge. New York, 2009. pp. 125–145.
[9] Hankins, T. L., Silverman, R., J.: The Aeolian Harp and the Romantic Quest of Nature. In: Hankins, T. L., Silverman, R. J.: Instruments and the Imagination. Princeton University Press. New Jersey, 1995. pp. 86–112, 88.

"éppoly gyönyört ad, mint amilyet az
élet maga: lélegzetem eláll,
úgy hallgatózom befelé, szemem
kettőzi látását, s köldökzsinór
köt, vissza, egy más világba, amely
érzékelés nélkül érzékien
hozza a mámort, mit alig merünk
hinni: az emlékezet ihletét."

"it gives as much pleasure as it is
life itself: my breath stops,
so I eavesdrop inwardly, my eye
double vision, and umbilical cord binds,
back, to an other world, which
sensuously without feeling
brings the intoxication, which we hardly dare
to believe: the inspiration of memory."

The sensuality (inscribed in the body through life) that has been interpreted so far becomes memory, which thus also stores life and the inspiration that can be identified with it. The Hungarian term inspiration (ihlet) can be etymologically traced back to breathing, just as the Latin inspirare also carries the meaning of breathing. The inspiration associated with memory supersedes breathing to draw attention to life, as the poem conveys the same semantically with the cessation of breath, listening in the body, the essential questioning of life – and not its operating processes.

In the case of "kiszűrni a nagy / zsongásból a külön dallamokat. / Ez itt önmagán tűnődött" ("to filter out / single melodies from the big buzz. / This one here was wondering about itself"), the melodies and the nearby deixis ("ez", "this"), and even the place deisgnation ("itt", "here") bring the textual self-reflection and musicality into relation. In the excerpt "ez az én élt versem" ("this is my lived poem!"), the it is objectified into "this" and the self, who serves as the medium and gives up its life, designates its roles, which are continuously unfolded by the poem, but at the end the two roles are outlined through the personal suffixation. The it develops autonomously in the self, using its biological and linguistic organicity: "Ez itt önmagán tűnődött, saját /működését fogta szavakba", "This one here was wondering about itself, it / put into words how it works". In addition, the self is an objectified linguistic materialization, which is operated by the poem, the same way life operates the body. At the end of the poem, the first person singular verb conjugations of the poetic medium disappear, it speaks about itself objectively, from an external perspective in the third person singular, similarly to how it spoke about the poem, so the self becomes the it, thus losing its complete independence: the poet – as the self itself, as a linguistic event and mediator – is instrumentalized and the poem becomes a musicality that can be separated from it.

It is inspiration that activates the instrumentalized poet to play himself through his language. In the medial transitions, the inspiration emerges in the order of feeling, image and music, reaching the articulate linguistic utterance, a process that runs parallel to the allegory of birth in the context of the body in the poem. The medial operations overlap in several places and provide the poem with a polyphonic sound that is created in the dialogue between the self and the it. In addition to the medially mixed dialogicity, the dialogue is maintained by the question-answer structure and the mediating medium of the body, in which the poem's predecessor, the outside, identified as the it, and the self maintain the relationship through sensation. It is in favor of the self and the it identified with the outside world, that they become linguistic space, empty mediators of the speech event, losing their referentiality. In the same way, the poet distances himself from the poem, loses his identity in order to serve the linguistic creation of inspiration as an instrument. The self keeps in touch with its body through the possession relations and will be just as partial an element of the expression-machine of inspiration as the mind and body that keep in touch. The different relationships, as well as the relationship between the self and the it are held together by grammatical structures, as is the syntactic-visual bridge between the self and the it in contact with the melo- and optopoetic system. As the sensual memory created in the relationship is written into the poetic layers of

the poem, it creates the dynamics of life and inspiration with enjambmants, deictic relations, dialogicity, visual-linguistic oscillation and the fragmentary montage technique. *Poem instead of poems* presents its reader with a unique concept of inspiration, while also reaching back to traditions, reflecting on ancient, romantic and avant-garde creative processes, yet overwriting them through the linguistic-poetic identification of the mechanism of life and inspiration. Lőrinc Szabó's poem plays the changed traditions like a retuned instrument and offers a new expression of inspiration in relation to life.

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Shanghai Cooperation Organization (SCO): its past, present and future

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Abstract: Shanghai Cooperation Organization, an expanding regional formation, encompassing the giant countries of Eurasia, has frequently been interpreted as an anti-western alignment given the presence of China and Russia now Iran. Initially, the regional platform was established to counter the threat of terrorism and extremism, coordinate the course of actions of the countries, and facilitate cooperation. The organization gained further relevance following the accession of new members as such India, Pakistan, and Iran. The most recent summit of SCO held in Uzbekistan has been the showcase of the growing reputation of the organization. This article aims to discuss the background of the SCO, its past, relevance and functions, and its role in Central Asia and beyond. Moreover, it further focuses on the possible scenarios of its transformation, its expanding reach, and the future. Although the latest and rapid enlargements of the SCO bolstered its weight and geopolitical standing, the overall perspective remains uncertain. However, now it owes a historical chance to turn into a new multilateral Eurasian platform.

Introduction

In 2001, China, Russia, and the four Central Asian nations of Tajikistan, Kazakhstan, Kyrgyzstan, and Uzbekistan formed the "Shanghai group." In 2016 it extends to Pakistan and India, and in 2021 it reaches Iran. Following the fall of the USSR in 1991 and the instability this caused in the region, the SCO's primary goal is to address the geopolitical changes that have occurred in Central Asia. In order to ensure the collective security of its members in the face of dangers "from terrorism, radicalism, and separatism," the Shanghai group and later the Organization increasingly formalized collaboration. This pact places China and Russia in the spotlight and formalizes their geostrategic rapprochement outside of the confines of the area. After gaining their independence, the Central Asian Republics attempted to maintain their existence and assimilate into the international system. However, with the fall of the USSR, they were unable to obtain the support they had hoped for from Western nations against Russia, which saw the region as its backyard. Also there were China as the other great power emerging in the region and was seeking greater presence in the region. The Shanghai Cooperation Organization, which China and Russia laid the foundations to establish in the region, aims to prevent non-regional powers from being active in Central Asia. Russia and China saw that their interests in Central Asia for a variety of reasons. They were to improve their relations with the countries of the region. In such a situation, the Shanghai Cooperation Organization has emerged as the most sensible avenue for two powerful powers like China and Russia as well as the emerging Central Asian Republics to pursue their objectives and safeguard their interests. The article covers the history of the Shanghai Cooperation Organization, its summits, institutional makeup, and the significance of the SCO to its member states. The article's goal is to assess the organization's place in the current system of international relations in light of all of these.

I.   History and evolution of Shanghai Cooperation Organization

I.1 The birth of SCO

The Shanghai Cooperation Organization has been part of the gradual shift towards Asia in Russian foreign policy since the mid-1990s. At the origin of this reorientation, the "Primakov doctrine", named after the minister of Russian Foreign Affairs from 1996 to 1998, consists in conducting a triangular diplomacy by forging strong ties with Beijing so as to regain room for maneuver in relations with Washington and the Europeans, in a period of American unilateralism where the Russians are suffering more than they are actors of their destiny. To this end, a "strategic partnership" was established with China in April 1996 by Boris Yeltsin. The agreements signed relate to civil nuclear power, the exploitation of energy resources, the arms industry and trade2. The two parties also set themselves the objective of settling their differences relating to their 4,250 km long common border[1].

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[1] Воронович, В. (2007). *Эволюция Шанхайской организации сотрудничества в контексте формирования азиатской системы безопасности*. Международное общественное объединение Развитие. Retrieved January 8, 2023, from https://evolutio.info/ru/journal-menu/2007-2/2007-2-voronovich

I.1   Shanghai Group - or Forum (1996-2001)

The strategic partnership initiated with China in April 1996 was immediately extended to a regional level by the establishment of the "Shanghai Group or Forum of which three Central Asian States are members, in addition to Russia and China: Kazakhstan, Kyrgyzstan and Tajikistan. Moscow's objective is not to leave the field open to a rapidly developing China by establishing cooperation with it and its traditional allies in Central Asia. The Shanghai Group was established in response to the geopolitical upheaval brought on by the collapse of the USSR and the emergence of independent republics in Central Asia. It also addresses China's concerns regarding the potential influence of Kazakhstan and Kyrgyzstan in the province of Xinjiang. The five States also agreed to "agreements aimed at increasing trust in the military field in the border area" in 1996 and a "agreement on the cooperative reduction of military troops in the border regions" in 1997, in addition to creating a joint political forum. In order to stabilize Central Asia, which is seen as a common security problem due in part to the emergence of terrorist phenomenon and radicals in the region, the five nations must first put an end to tensions along their extensive borders. China and the other members of the group signed many agreements between 1996 and 2000 to resolve border conflicts.

I.2 Founding of the Shanghai Cooperation Organization in 2001

Relations between China and Russia are advancing in the political, economic, and energy spheres. The two powers mutually aid one another. China, on the other hand, is utilizing its alliance with Russia to diversify its energy supply and balance the power of the United States in the Asia-Pacific. To weigh in Europe, Russia is seeking support from China[1]. In 2001, bilateral ties between the five members of the Shanghai Group and Russia and China reached a significant turning point. On the one hand, the Sino-Russian Treaty of Good Neighborship, Friendship, and Cooperation, which was signed on July 16, 2001, officially establishes the two nations' strategic alliance. In contrast, Uzbekistan joins the five members of the Shanghai Group, transforming the forum into the Shanghai Cooperation Organization (SCO), whose focus is the fight against terrorism, separatism, and extremism, as stated in the joint declaration. The SCO was first established solely for economic and security needs in the area and not as a weapon to challenge American influence in Asia. But over time, the SCO has become as one of the premier venues for China and Russia to show their political support against US hegemony. The SCO Charter states that the alliance's objectives include regional stability and security, combating terrorism and extremism, fostering economic cooperation, partnering in the energy sector, and fostering cross-cultural dialogue. The improvement of transportation infrastructure, energy, telecommunications, the oil and gas industry, agriculture, and the exploitation of water resources are all priority topics.

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[1] Тасс. (n.d.). *15 лет ШОС: история и развитие шанхайской организации сотрудничества - ТАСС*. ТАСС. Retrieved January 8, 2023, from https://tass.ru/mezhdunarodnaya-panorama/3355240?utm_source=google.com&utm_medium=organic&utm_campaign=google.com&utm_referrer=google.com

I.3 How did the SCO develop?

In 2002, the SCO as an organization was fully formed. The Charter of the SCO and the Declaration of the Heads of State of the SCO Member States were both signed during the meeting of heads of state in St. Petersburg, and an agreement was reached about the creation of the SCO Regional Anti-Terrorist Structure. The Council of Heads of State conference in 2005, where it was resolved to provide observer status to three major Asian powers—India, Iran, and Pakistan—was a significant milestone for the SCO. This status was first given to Mongolia in 2004. The organization's geographical reach was increased, which allowed the SCO's worldwide stature to significantly rise. An agreement on enduring good neighborliness, friendship, and collaboration was signed by the SCO nations in 2007. Sri Lanka and Belarus were given the status of conversation partners in 2009. The Declaration on Building a Region of Long-Term Peace and Shared Prosperity was ratified by the SCO leaders in 2012. In the same year, Turkey joined the SCO as a discussion partner and Afghanistan was granted observer status in the organization. India and Pakistan submitted formal applications to join the Shanghai Cooperation Organization in 2014. The decision to begin the process for India and Pakistan's membership in the SCO was accepted by the SCO leaders in 2015. Decisions were also made to award Belarus observer status in the SCO and to designate Azerbaijan, Armenia, Cambodia, and Nepal as dialogue partners. Afghanistan and Iran both assert full participation in the SCO[1].

II.   How does the SCO appear on the global geopolitical map?

A total of 61 percent of the Eurasian continent is covered by the SCO's territory, which stretches from the Atlantic to the Pacific and from the Arctic to the Indian Ocean. The World Bank estimates that 7.26 billion people lived on Earth in 2014. In 2014, there were 1.57 billion people living in the SCO member nations, and 3.17 billion when the observer nations are included. In 2014, the SCO member states' combined gross domestic product (in current prices) totaled $12.5 trillion, or 16.03% of the global index (for comparison, the USA's GDP was $17.42 trillion and the EU's was $18.47 trillion). In 2014, the global GDP at purchasing power parity was $108.7 trillion. PPP GDP during the same time period for the SCO countries was $22 trillion, or 20.24% of the world GDP[2].

III.   How is interaction carried out within the framework of the SCO?

Leaders' summits are conducted once a year, and the Council of Heads of State is the highest authority in the Shanghai Cooperation Organization. Every year, the SCO Council of Heads of Government discusses topics, particularly those pertaining to the economic domains of

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[1] *ШОС: история создания и особенности организации*. РЕН ТВ. (2022, June 14). Retrieved January 8, 2023, from https://ren.tv/longread/987748-shos-istoriia-sozdaniia-i-osobennosti-deiatelnosti-organizatsii

[2] Admin. (2021, August 14). *Shanghai Cooperation Organization*. tnu. Retrieved January 8, 2023, from https://tnu.tj/index.php/ru/shanhajskaja-pjaterka-kak-osnova-stanovlenija-shos/

cooperation. Within the scope of the organization, the Council of Foreign Ministers, the Meeting of Heads of Ministries and Departments, and the Council of National Coordinators have all been created. The Secretariat in Beijing and the Executive Committee of the Regional Anti-Terrorist Structure in Tashkent are the two permanent organizations of the SCO. The SCO Forum, a public advisory and expert body established in 2006 to promote and scientifically support the organization's operations, carry out cooperative research on pressing topics, and outline the goals and guiding principles of the SCO, was founded. The SCO's involvement in humanitarian cooperation is significant. Russia suggested the creation of a network-based university in 2007. In 2008, the decision was made to launch the SCO Network University, a network of collaboration between institutions in member nations. More than 80 universities from Belarus, Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan are part of the university, which started operations in 2010. The master's program offers training for specialists in seven fields, including regional studies, ecology, energy, IT technologies, nanotechnologies, pedagogy, and ecology. The International Young Person's Card Initiative of the SCO Member States was presented in 2015 in Moscow (SCO Youth Card). The card should evolve into a sort of social package for young people, promoting the growth of humanitarian cooperation and encouraging study of the history and culture of the SCO member nations[1].

IV.   How does economic cooperation operate within the SCO's framework?

In 2001, the SCO member nations' heads of government met for the first time. A Memorandum outlining the key objectives and orientations of regional economic cooperation was signed at this conference, marking the start of the process of establishing advantageous circumstances for trade and investment. Priority areas of contact include the cooperative growth of the oil and gas industry, transportation infrastructure, and the establishment of favorable circumstances for the free flow of capital, services, and technology. A long-term program of multilateral economic cooperation through 2020 was approved in Beijing in 2003 as a result of a conference of the chiefs of government of the SCO nations, and it calls for the formation of a shared economic space inside the alliance. The amount of commerce will be increased in the near term, and a free trade zone will be established in the long run. Energy, transportation, agriculture, telecommunications, environmental protection, and other sectors are listed as the key areas of cooperation in the agreement. In 2004, the action plan for the program's execution was signed. The SCO has cooperation in the financial industry as one of its top goals. The fundamental barrier to the organization's continued expansion has long been the lack of a mechanism for financing collaborative initiatives. Within the framework of the SCO, a Development Bank and a Development Fund (special account) are being established to address this issue. China took the initiative to establish a Development Bank for the organization's member nations in 2010. The bank's primary areas of interest will be international commerce and interstate infrastructure

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[1] Facon, I. (2006). *Revue le courrier des pays de l'est | cairn.info*. cairn.info. Retrieved January 8, 2023, from https://www.cairn.info/revue-le-courrier-des-pays-de-l-est.htm

projects. Vladimir Putin, the president of Russia, suggested setting up the SCO Development Fund in 2013[1]. It was revealed in 2015 that the SCO nations intended to build an international project finance center on the Interbank Association of the group. The SCO Energy Club, established at Russia's instigation, started operations in 2013. Afghanistan, Belarus, Mongolia, India, Kazakhstan, Tajikistan, Turkey, and Sri Lanka signed a memorandum on the creation of this organization, together with the Russian Federation and China. It was determined in 2015 to begin creating a five-year plan for regional economic cooperation. Ten areas will see the development of cooperation, with 100 projects totaling around $100 billion planned in each of those regions. The expansion of transportation infrastructure is the primary direction.

V.   How do the nations of the SCO work together in the area of security?

The SCO does not have a military component, although the member nations do discuss security and counterterrorism-related matters. Since 2002, the SCO member nations have routinely conducted joint anti-terrorist drills as part of their security cooperation (both on a bilateral and multilateral basis). The Peace Mission exercises, which have been conducted since 2003, are the largest of them (the next one is scheduled for September 2016 in Kyrgyzstan). A protocol on collaboration was signed in 2004 by the foreign ministers of the SCO nations. The text emphasized the importance of holding meetings at various levels in order to determine the SCO members' shared viewpoints on significant global issues. Security in Central Asia, the development of an efficient system of collective security in the Asia-Pacific region, the war against international terrorism, extremism, transnational organized crime, and the trafficking of illicit weapons and drugs were some of the primary challenges. The group stated ambitions to take on the global drug cartel in 2006, and wants to help Afghanistan's situation return to normal in 2008. With participation from members of the EU, CSTO, NATO, and other organizations, the first significant international conference on Afghanistan took place in 2009 under the auspices of the SCO. The heads of state of the SCO approved the Anti-Drug Strategy of the SCO Member States for 2011-2016 and the action program for its implementation on June 15, 2011, at the SCO's anniversary summit. This strategy was created to increase the effectiveness of cooperative efforts to counter the drug threat in the SCO space[2]. Agreements on conducting combined counterterrorism operations on the SCO states' soil and on cooperation in the area of locating and closing off entry points for individuals engaged in terrorism, separatism, and extremism into SCO nations were also inked at the same event. A program of cooperation in the fight against terrorism, separatism, and extremism for the years 2013 to 2015 was adopted by the SCO leaders in 2012[3].

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[1] Geoconfluences. (2022, October 13). *Organisation de Coopération de Shanghai (OCS)*. Accueil. Retrieved January 8, 2023, from https://geoconfluences.ens-lyon.fr/glossaire/organisation-de-cooperation-de-shanghai-ocs

[2] Perspective monde. (2018). Retrieved January 8, 2023, from https://perspective.usherbrooke.ca/bilan/servlet/BMAnalyse/2569

[3] Guang, Pan. "Shanghai Cooperation Organizaton: Challenges, Opportunities and Prospects", (Elizabeth Van Wie Davis, Rouben Azizien eds.), Islam, Oil and Geopolitics: Central Asia After September 11, Rowman & Littlefield Publishers, 2007.

VI.   Structure of the SCO

Within the framework of the Shanghai Cooperation Organization, the following were established:

The Council of Heads of State (CHS), the highest decision-making body in the SCO, meets about once a year;

The Council of Heads of Government (CHG) meets once a year to discuss the strategy of multilateral cooperation, resolve fundamental and topical issues, and also approves the annual budget of the SCO;

Council of Foreign Ministers (CMFA);

Meetings of heads of ministries and departments;

Council of National Coordinators (CNC) - coordination mechanism within the SCO;

Regional Anti-Terrorist Structure (RATS) - a permanent body located in Tashkent;

The Secretariat, a permanent body headed by the Secretary General, is located in Beijing;

Interbank Association (IBO). Currently, the SCO member countries are eight states: India, Kazakhstan, China, Pakistan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan. Four countries have the status of an observer state in the SCO: Afghanistan, Iran, Mongolia and Belarus. And Sri Lanka, Turkey, Armenia, Azerbaijan, Cambodia and Nepal are partners in the SCO dialogue.

The official languages of the organization are Russian and Chinese.

Conclusion

Today, the debates on the future of the SCO are based on Russia and China, which are its main members. There is a positive belief that the organization can be effective as a regional and global power with its existence but the fact is that it has not yet completed its institutional structure and the negative view towards conflicts of interest among its members persists. The starting point of the projections for the future of the SCO is the expectations of the member states from the organization and the differences in their perceptions of national interests. Russia's expectation from the SCO, as the former USSR heartland is to be powerful and hegemon again in the region.

Benefiting from the rich resources of Central Asia, the desire to take control of the region with the help of the organization makes the SCO very important in the eyes of the Russia. Especially, the joint history of Central Asia and Russia provides advantages and justification for the sovereignty of Central Asia. China approaches the SCO in a similar but different way to that of the Russia. In parallel with the enormous growth rates in its economy, the increasing need for energy resources (Central Asia is an energy center) reinforces China's aim of being a hegemonic power in this geography. The Central Asian Republics, on the other hand, used the SCO primarily to ensure their border security. While they see it as a shield that provides security, they wish to benefit from the cooperation in the SCO to ensure political stability, domestic security and economic prosperity. Taking into account two different aspects of the future of the SCO, predictions can be made: The first of these is the SCO's reductionist analysis. Russia's prestige and infrastructure, China's capital

and labor power, energy volume of Asian Republics within the framework of effective cooperation, Sco can provide the transition from a regional level to a global actor level. The second prediction for the future of the SCO is negative.

The conflict between the interests of the member states, especially the Russia and China in Central Asia, raises concerns that there may be frictions between these two states over time. Therefore, it is obvious that the relations between China and Russia will be decisive in the future of the SCO. The fact is that the establishment and organizational structure of the SCO is still new it is the biggest disadvantage regarding the future of the organization. Therefore, it should not be expected that the SCO will assume a dominant role in the international system, especially in Central Asia, in the near future. It should be noted that the attitudes of China and the Russia towards international problems are still individual. It may be possible that the Central Asian Republics cannot fully trust the Russia with the experience of the USSR, and China with the experience of East Turkestan. In addition, the Central Asian Republics have some problems among themselves. It negatively affects the SCO's ability to achieve stability in the near future. Despite the difficulty of being an active actor in the near future, the SCO has significant potential especially given that new members are joning (Pakistan, India, Iran). With the reality of the member states' decisions to cooperate, which can overcome or at least postpone their problems and fears, the SCO is on its way to becoming an important organization in the future.

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The Huszt Hoard of the Hungarian National Museum

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This research cover a topic related to Islamic coins, The Huszt Hoard of the Hungarian National Museum. In 1904 the hoard was discovered in Máramaros county, in the north-eastern part of historic Hungary. Today, the hoard is in possession the Hungarian National Museum, The Hoard content 368 Islamic dirhams. The dirhams in the hoard dating to the tenth century to the Samanid dynasty in Central Asia, and the period after the Hungarian conquest to Carpathian Basin, The hoard also included large quantities of so called imitations from Volga Bulgar. There are many rare types among these imitations.

The research depends on the practical by studying and describing each individual coin: the mint of the struck, the name of the Samanid Amir and the Abbasid Caliph, the date, weight, and diameter; then the description of inscriptions and content. In this new study we were able to have new information about the provenance of the metal and the ore source, the production technology, the geographical distribution of dirhams mints, and the difference between the original and the imitation dirhams.

The research aims to highlight the importance of Islamic silver coins in the Hungary during the ninth-tenth centuries. Sheds light on the Commercial Relations between The Islamic World, Vikings, and Eastern Europe during the ninth-tenth centuries. Finally, The hoard's dirhams will presented in one modern catalog.

Keywords: Huszt; Dirham; Samanid; Volga Bulgar; Hungary; Carpathian Basin.

I. Introduction

In 1904 a large Islamic dirhams hoard (Huszt) was discovered in Máramaros county, in the north-eastern part of historic Hungary. The territory is now in north-western Romania and western Ukraine. The place of discovery can be localized to the area of Máramaros county, less so to the vicinity of Huszt and definitely not to the town of Huszt itself. The area of the one-time Máramaros county north of the river Tisza now belongs to the Transcarpathian territory, which is the only part of Ukraine located beyond the Carpathian Mountains that make up part of the Pannonian Basin. Accessible to the main territory of Ukraine through numerous mountain passes, it joins Ukraine with that part of East-Central Europe. Today, the hoard is in possession the Hungarian National Museum. The Hoard content 368 Islamic dirhams. There is no information as to the circumstances of discovering the hoard. The Huszt hoard is one of the important collections even compared to large quantities of oriental silver coin hoards found in Northern and Eastern Europe. [1]The dirhams in the hoard dating to the tenth century to the Samanid dynasty in Central Asia, and also included large quantities of so called imitations from Volga Bulgar. There are many rare types among these imitations.

II. Historical Background

II. 1. The Samanid dynasty (261- 389 AH/ 874 - 999 AD)

The Samanid dynasty was centered in Khorasan and Transoxania.[2] The Samanid were descendants of founder Saman Khuda who converted to Islam in the first half of the eighth century in the time of the tenth Umayyad Caliph Hisham Ibn Abd al-malik (105- 125AH/ 724-743 AD)[3]. Saman has thus named his son Asad after the Muslim ruler. Asad who had four sons, were each appointed as the governors of cities in Khorasan by the Abbasid Caliph al-Ma'mun in the ninth century AD.[4]. Among these, Ahmad was the governor of Farghana and he had two Sons one of them was Ismail. Ismail the founder of the Samanid empire (279- 295 AH/ 892-907 AD),[5] Ismail started expanding the Samanid power in Central Asia and he reached the rich natural resources particularly silver mines of the Pamir region.[6] In 894.5 AD/ 281 AH, The first Abbasid type dirhams bearing the name of the Samanid Amir were struck in Samarqund, and al-Shash mints a sign that the Caliph regarded the Samaind as independents vassals of the Caliphate. After Isma'il death, his San Ahmad became the Amir, at his reign the Arabic language became the administrative language of the whole of the Samanid Empire. Ahmad was killed in 301 AH/ 914 AD, after only seven years of rule, by his Turkish slaves while sleeping in a tent.[7] Nasr Ibn Ahmad his reign was the golden age of the Samanid (301- 331 AH/ 914-943 AD),[8] The Samanid territory reached its greatest extent and increased production of silver dirhams in the Samanid mints, giving Samanids an unprecedented source of income.[9] Diverting caravan trade through their lands and over the Caspian Sea to the Pontic Steppe and Eastern Europe, the Samanids installed themselves as the masters of the east-west trade. Samanid coins became the most reliable currency among the Bulgar, Khazar, Byzantine, and Arab traders who were active in the Pontic Steppe, as well as the Norse raiders who were attracted by the incredible wealth

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[1] Fomin and Kovács 1987:7.
[2] Manṣūr 1989: 133.
[3] Brackelmann 1949: 165.
[4] Defremery 1845: 2.
[5] Kennedy 2004: 183.
[6] Treadwell 1991: 91.
[7] al-DawÁdÁrÐ, *Kanz al-durar wa-jÁmiÝ al-ghurar,* V/ 339-340.
[8] Kamoliddin 2011: 210.
[9] Kilger 2008: 207.

generated in the region. Mansur II was the last real Samanid Amir who was installed on the throne in 999 AD by Turkish lender, Mansur was murdered. His brother Isma'il II tried to refresh the Samanid but he fall because of the new Ghaznaid power as well as the Seljuk one which Started to control central Asia. Mansur II was the last real Samanid Amir who was installed on the throne in 389 AH/ 999 AD by a Turkish lender, Mansur II was captured and later murdered, while a younger brother, IsmÁÝil continued to press Samanid claims, and gain occasional successes, until 395 AH/ 1005 AD. His death decisively put an end to any Samanid claims to the throne and allowed for the new Ghaznavid power, as well as the nascent Seljuk one, to rise and control Transoxiana and Khurasan. [10]

II. 2. The Volga Bulgar

The Volga Bulghars were a branch of the Bulghar tribal union, who after their defeat from the Khazars on the Pontic steppe in the middle of the seventh century AD, migrated to the Upper Volga-Kama region.[11] At the beginning of the tenth AD century al-Muqtadir Billah, the Abbasid caliph of the Muslim Empire received an ambassador from the ruler of the Volga Bulgarian Khan Almas who asked him instructions on religion and Islamic laws also build him a mosque and erect a minbar so that he could have the prayers said in his name in his land and in all parts of his kingdom and also requesting that a fortress be built for defense against the kings who were his adversaries.[12] The caliph, understanding the importance of Islamic penetration into Eastern Europe which had been temporary before, sent an embassy from Baghdad in 921 AD.[13] It reached the Samanid court in Transoxania. It travelled from Bukhara to Khwarazm. Finally, only five members of the embassy crossed the Kazak steppe and arrived at the Volga-Kama region in 922 AD.[14] One of them was Ahmad Ibn Fadlan, who wrote about his journey which played an intermediary role between the world of Arabic civilization and the peoples of Eastern Europe at a time when medieval states were coming into being.[15] His account of the journey has become an invaluable source of information on the ethnography and history of contemporary peoples from Central Asia to the Middle Volga, the lands through which the mission passed. For many decades now, Ibn Fadlan's text has been the object of intensive study and keen debate among scholars in Russia and abroad. [16]

In 965 AD after the fall of the Khazar Qaganate, Volga Bulgaria became one of the strongest and wealthiest states in Eastern Europe and they were undoubtedly in full control of trade until the end of the 11th century.[17] The end of the Bulgars was by the Mongols. The Mongol invasion on Volga Bulgaria occurred during 627 AH /1230 AD. [18]

III. How The Hoard Arrive and The Important of The Trade

During the Middle Ages, an enormous quantity of Islamic silver dirhams were exported from the Muslim world to Northern and Eastern Europe.[19] Starting from the beginning of the ninth century. [20] It is well known that in that period the intensification of the trade between the Near-

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[10] Frye 1975: 160.

[11] Nicolle & Viacheslav 2013: 10.

[12] Ibn Faḍlān, *Risālat Ibn Faḍlān,* 22.

[13] Koestler 1976: 256.

[14] Ibn Fadlān 2005:44.

[15] Montgomery 2000: 1-2.

[16] Wilson 2014: 6-7.

[17] Krylasova, Podosenova, & Belavin 2016: 103.

[18] Yemelianova 2002: 16.

[19] Noonan 1998:151.

[20] Kovalev 2001: 245.

Eastern and Middle-Asian Islamic countries with Vikings and eastern Europe reached its apogee. Millions of dirhams were carried from Islamic dynasties to Eastern Europe and the Baltic region, over the course of the ninth and eleventh centuries, by far the most common coin types were Abbasid, struck across the lands of the Caliphate. [21] Between the beginning of the tenth century and the early of the eleventh century, It was carried there mainly from Samanid Central Asia via the southern Ural steppe and Volga Bulgaria. The tenth-century trade went from Central Asia to the Volga and from the Volga to all parts of Eastern and Northern Europe.[22] Another important partner of the Vikings was the Magyars in the Dnieper region. The origins of the Hungarian people can be traced, albeit tenuously, to an original homeland to the east and south of the Urals, in Western Siberia thanks in part to the unique Finno-Ugric origin of the Hungarian language.[23] In 895 AD it was the Pecheneg (a nomadic people living further East) attack on the Hungarian settlement area in Etelköz which was one of the reasons for the Hungarian conquest of the Carpathian Basin.[24] From all these contacts, the Viking trade through the Khazars and the Volga Bulghars is of utmost importance in the Volga region, whilst the relationship with the nomadic Pechenegs and the Magyars in the south Russian steppe and the Carpathian Basin were significant for the areas of Kievan Rus'. In spite of pointing out differences between the 'Dnieper' and the 'Volga' Rus community, interconnectedness existed. People from the Dnieper also visited Khazaria and Bulghar, and the reverse occurred too, a major land trade route connected Bulghar with Kyiv that continued towards the Central European markets.

The Arab geographers are explicit that dirhams were paid mainly for slaves and furs.[25] Ibn Rusta, who was writing at the beginning 10th AD century, describes how the Scandinavians settled in Eastern Europe, were making profits on the Slavic in Arabic Saqaliba – slaves.

From Bulgar, we have the famous eye-witness account of Ibn Fadlan,[26] who visited it in 922 AD, and who emphasizes the central importance of the slave trade[27]

Ibn Hawqal implies the existence of two separate trade systems. the eastern one, where the Rus were selling Slavic slaves for Samanid dirhams at the markets of Bulgar and of Itil. As for the other one, sources suggest that the Spanish market was supplied by Jewish merchants who were buying Slavic slaves at the market of Prague. [28]

Around 960 AD Ibrahim Ibn Yaqub al-Tartushi, an Andalusian merchant who worked to bring the white slave from Europe to Andalusia, what remains of his journey informs us that he went to Germany The Saqalabah countries reached Eastern Europe and across the Adriatic and visited Prague and met with King Otto the Great - Emperor of the Holy Roman Empire - and met with him ambassadors from the Bulgarian king, and in Germany he met Arab traders coming from Hungary carrying flour, tin and fur, and also visited the Khazar countries.[29]

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[21] Noonan 1985: 179- 204.

[22] Noonan 1987: 221.

[23] Denis 1990: 243.

[24] Róna-Tas 1997: 248.

[25] Al Halabi 2022: 2.

[26] Smirnov 1940: 80.

[27] Ibn Faḍlān 2014: 242- 243. Ibn Faḍlān, *Risālat Ibn Faḍlān,* 153.

[28] Ibn Íawqal, *KitÁb ÒÙrat al-arÃ,* 106.

[29] Switat 2018: 221.

IV. The Huszt Hoard

The dirhams at the hoard dating to the tenth century AD to the Samanid dynasty in Central Asia, and to the period after the Hungarian conquest of the Carpathian Basin. The dirhams were mint in four main mints in Central Asia.

IV. 1. al-Shash Mint

al-Shash was a historic principality of Uzbekistan and the modern-day location of the capital city Tashkent. The name was given to the region and the city at the same time. al-Shash is located in northeastern Uzbekistan, near the border with Kazakhstan, and lies to the west of the Altai Mountains and is next to the Chirchiq River.[30] After the Islamic conquest of al-Shash by Qutayba Ibn Muslim in 95 AH/ 714 AH, it became an important city in the region[31], especially under the Samanid[32] dynasty the city was an important center for trade along the silk road and continues as a prominent export center to Eastern Europe for silk, cotton, textiles, and other products. [33] The numismatic evidence suggests that the overwhelming majority of the dirhams struck at al-Shash were discovered outside of Central Asia, in northern-eastern Europe and these dirhams were struck specifically for trade with this region. During one-hundred-year period of continuous dirham production, al-Shash experienced some significant peaks and falls in its output.[34] In The Huszt hoard the big quantity of the dirhams were struck in al-Shash, begging from 287AH/ 900 AD when the first dirhams were struck in al-Shash until the last dirhams in 323 AH/ 935AD, there were only eight years for which no dirhams from the al-Shash mint are recorded in the hoard. The first dirhams were struck in 287AH/ 900AD during the rule of Samanid Al-Amir Isma'il ibn Ahmad (279- 295 AH. 892- 907 AD) and in the name of Abbasid caliph al-Mut'did Billah (279- 289 AH. 892. 902 AD). Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD) was the most prolific al-Amir in striking dirhams at this mint.
Al-Amir Ahmad Ibn Isma'il (295- 301 AH/ 907- 914 AD), During his reign of only seven he was the second-most productive ruler in the hoard. While al-Amir Isma'il ibn Ahmad (279- 295 AH. 892- 907 AD) was the least productive ruler in the Huszt hoard.

IV. 2. Samarqand Mint

The city of Samarqand, which located within the borders of the Uzbekistan today, is accepted as one of the oldest settlements in Central Asia.[35] In 710 AD/ 91 AH, Islamic armies under Qutayba ibn Muslim entered the city. After the Muslim conquest to the city became one of the easternmost outposts of Islam and, along with Bukhara.[36] The Abbasid administration in Samarkand came to an end with the Samanid domination in the 860 AD/ 246 AH. In a period of about one hundred and fifty years, the Samanids declared the city as the capital of the dynasty and the city became even more important commercially.[37] Samarqand also had one of the most prolific Samanid mints during the tenth century, with an output that was rivaled only by al Shash.[38] Samanid dirhams struck in Samarqand circulated widely outside of Central Asia during the tenth and eleventh centuries.[39]

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[30] YÁqÙt, *MuŸjam al- buldÁn*, 2 vols, 23.
[31] Gibb 1923: 45.
[32] Denis 1990: 69.
[33] MuÎammad ÝAbd al-ÝAÛÐm 2009: 98.
[34] Kovalev 2002: 50.
[35] Hammet 2022: 188.
[36] ÝAdil 2006: 27.
[37] Hammet 2022: 190.
[38] Kovalev 2002: 204.
[39] Suerchkov 2009: 155.

In the Huszt hoard Samarqand is the second most prolific mint. The coins can be dated to three Samanid Aimers Isma'il ibn Ahmad, Ahmad Ibn Isma'il, and Nasr Ibn Ahmad. dirhams were first struck by Isma'il ibn Ahmad I, The earliest issue from Samarqand by this Amir were minted in Samarqand in the year 284AH/ 897AD, during the time of Abbasid Caliph al-Mut'did Billah. From this year until the end of his rule in 295AH/907AD, Samarqand produced ever-increasing quantities of dirhams, reaching a zenith in output by 287AH/ 900AD. Overall, 4% of all dirhams minted in Samarqand by the Samanids were struck during the seven-year rule of Ahmad Ibn Isma'il. He was the second-most prolific amir in striking dirhams in Samarqand at the hoard. After Amir Nasr Ibn Ahmad took power, Samarqand saw a new height in the mint output which was never surpassed by him or any earlier amirs. Nasr minted 91,8% of dirhams struck in Samarqand. Nasr Ibn Ahmad was the most prolific amir in striking dirhams in Samarqand. The beginnings of dirham output in Samarqand in the early 284AH/ 897AD and the sharp increase in production intensity in the following two decades closely corresponds with the rise of commerce between northern Europe and Central Asia.

IV. 3. Andarabah Mint

Andarabah is the name of a river and the town that sits on it in northern Afghanistan, in what was once the province of Ṭoḵārestān during the medieval of Islam. The town lies in a wooded [40] region of what the 4 AH/10 AD century geographers called the Nahr Andaraba. which is the southeasternmost headwater of the Došī river, which eventually joins the Qondoz river and flows into the Oxus.[41] After the Arab conquest, Andarābah came within the province of Ṭuḵārestān and was administered from Balḵh. the town became an important coins mint during the Samanid ear. Local Amirs from the Banijurid or Abu Dawudids who were a short-lived Iranian dynasty that ruled Tukharistan and parts of the Hindu Kush. they were vassals of the Samanids until their fall in 296 AH/ 908AD,[42] and also Saffarid dynasty began producing coins in the mint of Andarābah that were quite distinct from the contemporary coinage of the caliphate.[43] In the early years of Samanid rule, Andarabah continued to strike dirhams from dies made by the resident engravers. But within a couple of years, the Samanid governors decided to expand the local mint network and to improve the style of the crude local dirhams, to bring them up to the standard of the metropolitan mints of Samarqand and al-Shash, and replaced the Andarabah engraver with a more competent craftsman. The Andarabah engravers die provided the prototype of ornamental devices, such as ornate forms of the caliphal title and the leaf-shaped letter terminals which appeared briefly in the dirhams, but they did not went further than this and was not a particularly competent engraver to boot.[44]

In the Huszt hoard 4% of all the dirhams were struck in Andarabah, it had the third most prolific Samanid mints in the hoard. starting from the dirham struck by Amir Isma'il Ibn Ahmad in 291 AH/ 903AD in the name of Caliph al-Muktaffi Billah, Overall, three dirhams minted in 298-299 AH/ 910-911AD in Andarabah by the Samanids were struck during the seven-year rule of Ahmad Ibn Isma'il with name of Abbasid Caliph al-Muqtadir Billah. He was the second-most prolific amir in striking dirhams in Andarabah at the hoard. Nasr Ibn Ahmad was the most prolific Amir in striking dirhams in Andarabah, Nasr minted 86 % of all dirhams struck in Andarabah all the dirhams were with the name of Abbasid Caliph al-Muqtadir.

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[40] al-IÒÔakhrÐ *al-MasÁlik wa'l-mamÁlik:* 120.
[41] YÁqÙt, *MuÝjam al-buldÁn.* 1 v, 260.
[42] al-NusfÐ, *al-Qand fÐ dzikr ÝUlamaÞ Samarqnd,* 38.
[43] al-Yaʿqūbī *Kitāb al-BuldÁn,* 122.
[44] Treadwell 2012: 102.

IV. 4. Balkh Mint

Balkh is a town in the Balkh Province of Afghanistan, about 20 km (12 mi) northwest of the provincial capital, Mazar-e Sharif, and some 74 km (46 mi) south of the Amu Darya river and the Uzbekistan border.[45] It was a province of the Achaemenid Empire (sixth century BC),[46] the capital of the Hellenistic kingdom of Bactria,[47] and a part of the Kūshān Empire that flourished in the first to the third centuries.[48] After the Muslim conquest, Balkh, along with Merv (in today's Turkmenistan), became one of the main centres of Arab settlement in north-eastern Iran in the eighth century.[49] The city experienced a renewed flourishing of its arts and culture under the Samanid.[50] In the Huszt hoard 2.7% of all the dirhams were struck in Balkh, which made Balkh the fourth most prolific Samanid mints in the hoard. the first dirham minted by Isma'il ibn Ahmad and during the reign of Abbasid Caliph al-Muktaffi Billah with the Banijurid ruler name Ahmad Ibn Muhammad in the four line of the reverse in 292 AH/ 904AD. Nasr Ibn Ahmad was the most prolific amir in striking dirhams in Balkh in the hoard, all the dirhams dating after the year 311 AH/ 923AD and were struck in the name of Nasr Ibn Ahmad and Abbasid Caliph al-Muqtadir Billah. Three dirhams date to years 321-322 AH/ 933-934AD with name of Abbadid Caliph al-Qahir Billah and Nasr Ibn Ahmad Samanid Amir.

IV. 5. Imitation dirhams of the Volga Bulgar

The Volga Bulgars began to emit Islamic dirhams by the beginning years of the tenth century.[51] These coins were complete imitations of silver dirhams, mainly those struck by the Samanids of central Asia, who were their main trading partner starting in the year 287 AH/ 900 AD.[52] The imitation dirhams went through some general stages of development, following the general style of the Samanids dirhams types, with the names of the Samanids aimers and the Abbasid Caliphs on the central legend of the reverse, as well as the names of Samanid mints such as al-Shash, Samarqand, Andarabah, and Balkh on the marginal legend of obverse.[53]

The Volga Bulgar continued to strike imitations of Samanids dirhams into later decades, and during the first half of the tenth century, the Volga Bulgars also issued semi-imitative dirhams,[54] which means they added some distinctive local elements to the otherwise imitation coins (for example: inserting into their legends names of local rulers and the name of the mint) to the otherwise imitation coins.[55] The Volga-Bulgar imitations dirhams contained an even amount of silver and can generally be distinguished by their deviant calligraphy. The imitations are more or less contemporary with the originals and were intended to circulate alongside the prototypes.[56] Most of the Imitation dirhams are with defaced legends, the point of disfigurement can vary greatly. The Volga Bulgars minted their own "official" coinage from the beginning of the years 337-338 AH/949-950 AD and continuing intermittently until 376-377 AH/986-987 AD,[57] which meant that these dirhams consistently showed on their legends not only the names

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[45] Briant 2002: 743.
[46] Azad 2013: 4.
[47] Boardman, Jasper, & Oswyn 1988: 314-315.
[48] Sims-Williams 1997
[49] Gibb 1923: 8-9.
[50] Azad 2013: 4.
[51] Kovalev 2016: 191.
[52] Noonan 2001: 140-219.
[53] Al Halabi 2022: 445.
[54] Vasmer: 1925: 67.
[55] RamaÃÁn 2008: 373.
[56] Jonsson 2018: 7.
[57] Christian 1832: 175.

of their rulers and the local mints of Bulgar and Suwar (both located along the river Volga),[58] but also the exact dates of struck.[59] The dirhams came to resemble the standard issues minted by other states across the Islamic world.[60]

The imitations dirhams in the Huszt hoard imitate the dirhams of Samanid dynasty central Asia, The prototype of most of these imitations is a dirham with the name of Nasr Ibn Ahamad, while some imitate the dirhams of Ismai'l Ibn Ahmad. Furthermore, there are some rare dirhams among these imitations. In general, the high-quality imitations show the more intricate die relations. Most of the time, poor imitations come in closed groupings, often in quite tiny amounts. These were typically struck using just one set of dies. It is uncommon to come across coins that were minted using dies of various grades. Obviously, the abundance of the types of crude imitations containing small quantities of coins is characteristic of the technical standards of European finances. The prevailing theory in Oriental numismatics was that the masters who engraved the coin dies made a feeble attempt to duplicate the Arabic inscriptions on the Kufic dirhams.Many of them had not only any knowledge of the language in which the legends were written, but they were not even always aware of the fact that they were working on objects bearing inscriptions.

They copied the letters or, at best, the individual words, in a very clumsy way making masses of blunders meanwhile. All this is self-evident. Among the craftsmen there were men of different talents. They included the master craftsmen, who were truly masters of their art and artists of their crafts, the imitators, who made accurate copies, and finally the journeymen.

V. Conclusion

The Huszt hoard has remained the only tenth-century Arabic sliver dirhams coins found in the Carpathian Basin. The hoard is remarkable primarily because it was found at the south-western most point of the distribution of ninth-tenth century Muslim silver coins in Eastern Europe, and to this day no other such hoard has found in the Carpathian basin.

The present study can shed much light on the Huszt hoard find and may answer the questions of how, when, and where these silver dirhams traveled in and out of the Muslim world to the Carpathian Basin. Besides that, the study highlights possible trade and economic relations between the Islamic world and Eastern Europe.

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[58] Rispling 1983: 146-148.
[59] Zimonyi 1990: 81-83.
[60] Kovalev 2016: 191.

Obverse   Reverse   Obverse   Reverse

1. Isma'il ibn Ahmad (279- 295 AH. 892- 907 AD). Caliph al-Mut'did Billah (279- 289 AH. 892. 902 AD). Minted in 284AH/ 897AD. 2.45g. 2.23 mm. HNM[61]: N: R. 11. 11858.

2. Isma'il ibn Ahmad (279- 295 AH/892- 907 AD). Caliph al-Muktaffi Billah (289- 295AH/ 902- 908 AD). Minted in 291 AH/ 904AD. 2.62 g. 2.24 mm. HNM: N: R. 11. 11884.

Obverse   Reverse   Obverse   Reverse

3. Ahmad Ibn Isma'il (295- 301 AH/ 907- 914 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 300 AH/ 912AD. 2.82 g. 2.26 mm. HNM: N: R. 11. 11878.

4. Ahmad Ibn Isma'il (295- 301 AH/ 907- 914 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 299 AH/ 911AD. 2.89 g. 2.26 mm. HNM: N: R.11.12108.

Obverse   Reverse   Obverse   Reverse

5. Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 305 AH/ 917AD. 2.89 g. 2.26 mm. HNM: N: R. 11. 11901.

6. Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 320 AH/ 932AD. 1.96 g. 2.27 mm. HNM: N: R.11.12054.

Obverse   Reverse   Obverse   Reverse

7. Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Qahir Billah (320- 322AH/ 932- 934 AD). Minted in 321 AH/ 933AD. 2.89 g. 2.29 mm. HNM: N: R.11.12091.

8. Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-RÁdÐ Billah (322- 329AH/ 934- 940 AD). Minted in 329 AH. 940AD. 2.75 g. 2.29 mm. HNM: N: R.11.12106.

Figure 1: Islamic Samanid Sliver dirhams from Huszt hoard, al-Shash Mint. Source S. Al Halabi [2021].

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[61] HNM: Hungarian National Museum

Obverse   Reverse   Obverse   Reverse

Isma'il ibn Ahmad (279- 295 AH. 892- 907 AD). Caliph al-Mut'did Billah (279- 289 AH/ 892. 902 AD). Minted in 287AH/ 900AD. 2.64 g. 2.25 mm. HNM: N: R. 11. 11862.

Isma'il ibn Ahmad (279- 295 AH/892- 907 AD). Caliph al-Muktaffi Billah (289- 295AH/ 902- 908 AD). Minted in 292 AH/ 904AD. 2.18 g. 2.25 mm. HNM: N: R. 11. 11866.

Obverse   Reverse   Obverse   Reverse

Ahmad Ibn Isma'il (295- 301 AH/ 907- 914 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 295 AH/ 907AD. 1.75 g. 2.24 mm. HNM: N: R. 11. 11874.

Ahmad Ibn Isma'il (295- 301 AH/ 907- 914 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 301 AH/ 913AD). 2.84 g. 2.27 mm. HNM: N: R. 11. 11887.

Obverse   Reverse   Obverse   Reverse

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 308 AH/ 920 AD. 2.89 g. 2.28 mm. HNM: N: R. 11. 11926.

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 317 AH/ 930AD. 2.98 g. 2.27 mm. HNM: N: R.11.12004.

Obverse   Reverse   Obverse   Reverse

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Qahir Billah (320- 322AH/ 932- 934 AD).Minted in 321 AH/ 933AD. 2.43 g. 2.27 mm. HNM: N: R.11.12074.

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-RÁdÐ Billah (322- 329AH/ 934- 940 AD). Minted in 323 AH/ 935AD. 3.01 g. 2.27 mm. HNM: N: R.11.12102.

Figure 1: Islamic Samanid Sliver dirhams from Huszt hoard, Samarqand Mint. Source S. Al Halabi [2021].

Obverse   Reverse   Obverse   Reverse

Isma'il ibn Ahmad (279- 295 AH/892- 907 AD). Caliph al-Muktaffi Billah (289- 295AH/ 902- 908 AD). Minted in 292 AH/ 904AD. 2.94 g. 2.27 mm. HNM: N: R. 11. 11867.

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 312 AH/ 924 - 925 AD. 2.98 g. 29 mm. HNM: N: R. 11.11959.

Figure 3: Islamic Samanid Sliver dirhams from Huszt hoard, Balkh Mint. Source S. Al Halabi [2021].

Obverse   Reverse   Obverse   Reverse

Isma'il ibn Ahmad (279- 295 AH/892- 907 AD). Caliph al-Muktaffi Billah (289- 295AH/ 902- 908 AD). Minted in 291 AH/ 903AD. 2.86g. 2.26mm. HNM: N: R. 11. 11865.

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 303 AH/ 915AD. 2.23 g. 2.23mm. HNM: N: R. 11. 11896.

Figure 4: Islamic Samanid Sliver dirhams from Huszt hoard, Andarabah Mint. Source S. Al Halabi
[2021].

Obverse   Reverse   Obverse   Reverse

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD). Minted in 307 AH/ 919 AD. 3.36 g. 2.29 mm. HNM: N: R. 11. 11914.

Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Caliph al-Muqtadir Billah (295- 320 AH/ 908- 932 AD) Minted in 317 AH/ 930 AD. 2.12 g. 2.28 mm. HNM: N: R. 11.12003.

Figure 5: Islamic Samanid Sliver dirhams from Huszt hoard, Ma'adin Mint. Source S. Al Halabi
[2021].

Obverse   Reverse   Obverse   Reverse

Imitation Isma'il ibn Ahmad (279- 295 AH/892- 907 AD). Caliph al-Muktaffi Billah (289- 295AH/ 902- 908 AD). al-Shash Mint 289AH/ 902AD. 2.71g. 2.24 mm. HNM: N: R. 11. 11856.

Imitation of Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Samarqand Mint 302 AH/914 AD. 2.81 g. 2.27 mm. . HNM: N: R. 11. 11894.

Obverse   Reverse   Obverse   Reverse

Imitation of Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). 1.69 g. 2.22 mm. HNM: N: R. 11. 11923.

Imitation of Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Andarabah mint. 3.06 g. 2.29 mm. HNM: N: R.11.12115.

Obverse   Reverse   Obverse   Reverse

Imitation of Nasr Ibn Ahmad (301- 331 AH/ 914- 943 AD). Bulgar Mint. 2.07 g. 2.27 mm. HNM: N: R. 11.11976.

Imation Volga Bulgar. 1.74 g. 2.23 mm. HNM: N: R.11.12117.

Obverse   Reverse   Obverse   Reverse

Imation Volga Bulgar. 1.84 g. 2.22 mm. HNM: N: R.11.12127.

Imation Volga Bulgar. 1.50 g. 2.22 mm. HNM: N: R.11.12126.

Figure 6: Islamic Imitation Sliver dirhams from Huszt hoard. Source S. Al Halabi [2021]

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Pricing Strategies in Oligopolistic Market

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Abstract: This study aims to analyze the pricing strategies that are usually adopted by firms in an oligopolistic market structure. Oligopoly means having a limited number of firms and imperfect competition. Thus, firms tend to use different pricing strategies in pricing their products like the kinked demand curve, price leadership, and cartel pricing models. The current study illustrates that the competition between firms in an oligopolistic market is not guaranteed; it is up to oligopolistic firms to determine what aims to achieve and what type of strategy to adopt in pricing their products which will ensure the sustainability for these firms in the dynamic and changing environment in which they exist.

Keywords: Oligopoly, Oligopolistic Market Structure, Price.

I.   Introduction

Pricing strategy constitutes an essential part of the strategic plan of the company that is affected by the market setting or environment. The environment of the marketplace is a dynamic one that enforces firms to continuously make adjustments and reviews in the prices of their products. In this regard, it is important to note that the total revenues from the price generated from the sold units cover the costs and a sufficient profit investment (Sammut Bonnici& Channon, 2015).

Many factors affect in general the choice of pricing strategies; for example, the overall corporate strategy, buyer expectations and behavior, competitor strategies, industry changes, and regulations. Mark-up pricing is a common pricing way that includes adding a markup on the product costs. In this regard, several firms compute the cost of producing a product and add a specific margin. On the other hand, other companies may depend on the perceived value as identified by the buyer. This means that the price is set to maximize the value that the buyer assigns to the product based on its use by the customers. Moreover, Competition-based pricing is another way in which prices are assessed based on competitors' prices. (Sammut Bonnici& Channon,2015).

Setting the best price is a challenging and essential part of the marketing process for firms in an oligopolistic market where few firms dominate the market and there are several pricing models adopted by oligopolistic firms in this regard. The seller (firms or companies) may rely on different resources in setting the prices of their products. When the customer pays the price of a product, he or she expects to have something in exchange. Both the buyer and seller participate in the exchange voluntarily because the exchange will lead them both to be better off. In general, the assessment of pricing strategies depends on several options that are available to the firms. It mainly depends on the customers' demand schedule, the cost function of the business, the pricing strategy of competitors, and the pricing strategy options that are available (Sammut Bonnici& Channon,2015).

II.   Discussion

Price is defined by Kinnear and Bernhardt (1986) as "that which is given in return for a product in a commercial exchange". This means that if the product in the commercial exchange is good, then the product's price will most likely be called "price". It is also important to note here that the product may be a "service" like wages, transportation, education, health care ...etc (Schindler. M & Schindler, 2011).

The marketing concept focuses on satisfying customers' needs. So, sellers or companies take into account keeping a long-term customer-company relationship rather than a short one. In other words, when companies set the prices of their products and services, they should take into consideration the customers' values, expectations, and feelings. Customers have expectations of the product or service and its prices. So when customers feel that the price is substantially higher than their expectations (which is called "sticker shock") or the price is unfair they will have a bad perception toward the selling company(Schindler. M & Schindler, 2011).

Costs fall into two types: variable and fixed costs. Pricing setting techniques are used by companies that launch products and provide services to identify the price of the supplied products and services. In this regard, companies rely on two approaches; the first one clarifies

that the pricing technique is based on costs, and the other one illustrates that pricing is dependent on the willingness of the market or consumers to accept the price (Rekettye, & Liu,2018).

II .1 Oligopolistic Market Structure

Oligopoly is a term that means "Few Sellers". It is a specific type of market structure in which there are a few companies that are interacting, competing, and concentrating a considerable proportion of the market share (Farnham, 2014). This type of market structure exists in which there are only a small number of companies producing products either homogeneous or differentiated and dominate the market. Due to such a small number of dominating companies, any change done by any of them in price, production, or any other parameters will affect the other competing companies in terms of profits, output …etc.

Originally, the first definition of the oligopolistic market structure was done in 1838 by a French economist and mathematician Augustin Cournot who applied mathematics to the treatment of economics. Cournot had a great contribution in this field so in addition to laying the basis of the Oligopoly theory he created a distinguished model that was analyzed from static and dynamic equilibrium (Valaskova, et al, 2019).

Rothschild (1947) mentioned that "Oligopolistic circumstances lead to a multitude of conditions surrounding the quoted price". This type of market structure is a decisive one that includes the domination of a few large companies. This means that the activity of companies is impacted by the activity of other companies or rivals. In other words, firms in the oligopolistic market operate and interact with one another. So, if one company increases the price, the customer will refer to other similar or identical products that are provided by other companies (Rekettye, & Liu,2018). For example, in Tabaco and car industries and other oligopolistic market structures, companies try to monitor and keep an eye on the activities of rivals and companies in the market and they respond immediately. This is called a "differentiated oligopoly"; this means that companies try to develop and differentiate their products rather than raising the prices (Rekettye, & Liu, 2018). Moreover, companies in the oligopolistic market structure monitor also other activities of other companies in the market like price changes and the launching of new products or services. It is important to mention here that the entry barriers are large and challenging in the case of an oligopolistic market structure (Rekettye, & Liu,2018).

Thompson et al. (2005) suggested that in the case of oligopoly, barriers to entry are high since the main players have a higher opportunity in the industry over rivals. Any attempt of entry by any other firm in the industry could result in reactions and counter-reactions. So, the demand and competitors or rivals are fundamental factors that should be noted by firms once they set their prices.

In the study, "The Conquering Strategies of Oligopolistic Firms. A review on entry Strategies of Tesco Company Plc in the UK and beyond", the researchers investigated the UK Grocery Market which is an oligopolistic market. The findings of the study revealed that in an oligopolistic market where there are few sellers and the setting is difficult to set, managers have to take into consideration the consequences of all decisions and acts of other businesses in the market and the actions of other firms in the sector that would influence the optimum decisions of the manager (Audu, Danjuma& Habukuk, 2014).

The problem with setting the prices in an oligopolistic market is that in oligopolistic markets, each company's decision has the potential to affect its rivals' sales. Oligopolists are interdependent, thus their fundamental challenge is insecurity about the behavior and reactions of rivals. Each oligopolistic firm must properly conjecture the strategies of the rivals to achieve the maximum possible profits (Allen & Hellwig,1986).

II.2 Oligopoly Pricing Models

II.2.1 Kinked demand curve

One of the fundamental concepts of oligopoly theory was a kinked demand curve. This curve clarifies the reason behind price change by firms in an oligopolistic market structure. This means that if one oligopolistic firm tends to raise the price, then it will lose market share to other firms. On the other hand, if the firm decreases the price, then this will be an opportunity for other firms to match the lower price and in consequence, this will lead the firm to earn less profit. Furthermore, this theory explains that in an oligopoly, prices are rigid and firms will encounter various impacts for price change in either direction decrease or increase (Hoag & Hoag, 2006), (Bhaskar, 1988).

II.2.2 Price leadership model

An oligopoly can result in a complex price and adjustment patterns. While oligopolistic companies may be divided into price leaders and price followers, some can take double roles in a hierarchically organized manner, becoming a leader in one company but a follower in another group. In this model, a leadership firm exerts enough influence in the market so it can effectively determine the price of goods or services for the entire market. In the case of an oligopoly market, the firm that initiates the price is the dominant one that sets the price and other smaller companies use it. In this regard, rivals or competitors have limited choices like following the dominant firm and matching that price (Kim, Lan, & Dobson, 2012).

In price leadership there are three primary models which are: barometric, collusive, and dominant:

II.2.2.1 Barometric model:

 In this model, the firm is more adept than others at identifying shifts in applicable market forces like changing the cost of production. If it is a good manufacturer and the business is tailored to consumer trends, a company with a limited market share will serve as a barometric price leader. Additional producers will follow their lead if the price leader knows what they still have to do. However, since a barometer leader has so little power to force his decisions on other companies in the industry, his leadership may be short-lasting (Kim, Lan, & Dobson, 2012).

The case of this model mostly occurs in a market or industry where there is a small number of companies in the industry, entry to the industry is restricted, products are homogeneous, and demand is inelastic.

II.2.2.2 Collusive model:

 This model can be generated in oligopolistic markets. Smaller companies on the market are simply forced to follow the price shift created by the dominant companies. This is the most

common practice in industries where entry costs are high and production costs are known. Agreements – whether explicit or implied – between businesses can be deemed illegal if the effort is to defraud the public. There's a fine line between price control and unlawful collusion. Collusive–and potentially illegal–price management is more likely to be perceived if an adjustment in the price of a product is not linked to improvements in business operating costs (Kim, Lan, & Dobson, 2012).

II.2.2.3 Dominant model:

When the overwhelming majority of the market share in its sector is owned by a company, the dominant price leadership model emerges. Other, smaller companies provide the same goods or services as the leading organization within the sector. These smaller businesses, however, cannot impact prices in this model .

The dominant paradigm of price leadership is often called a partial monopoly. The price leader may be engaging in aggressive pricing in this form of the model, which refers to the practice of reducing prices to levels that discourage smaller, competitive companies from remaining businesses. Noting that this practice is illegal in most countries (Kim, Lan, & Dobson, 2012).

II.2.3 Cartel Price model

This model is defined as a collective of companies that are united in making price and production decisions. Oligopolistic corporations form a cartel to maximize their market strength, and their members work together to define the amount of production generated by each member or the price paid to each member. To maximize their market control, oligopolistic corporations form a cartel, and participants work together to define the amount of production generated by each member and/or the cost to be paid for each.

Price-fixing is defined as when companies are worried about raising suspicions that a cartel has developed. Antitrust laws have a dynamic effect on prices as they deal with the factors deciding the internal stability of the cartel (Harrington,2004).

III.   Results

An oligopoly is a form of market structure in which there are a small number of companies; none of them can avoid any substantial impact on other companies. The ratio of concentration tests the market share of the biggest businesses. One corporation is a monopoly, two companies are a duopoly, and two or more companies are one oligopoly. Pricing is a very critical mechanism for creating oligopolistic markets to serve the overall strategies of the company and is seen as the main part of an oligopoly's marketing strategy.

Pricing in an Oligopolistic market is affected by the nature of the such type of market structure in which few dominating companies are sharing the majority of the market share and the existence of high barriers that complicate the access of any new entrant who may have plans or intentions to access the market. Moreover, the interaction between oligopolistic firms is very complex. In this regard, we can find three main models for pricing set in the oligopolistic market: the kinked-demand theory, or non-collusive oligopoly, the cartel model, and the price leadership model.

Firms in an oligopoly structure may collude or corporate with each other to set the price and the level of production in a certain industry for the sake of profit maximization. In some other cases, oligopolistic firms choose not to collude with other firms in the industry where each firm determines the prices of their products and their output level independently. The kinked demand curve model is considered the most important model in this category. In this regard, this oligopolistic model shows that markets are rigid and businesses are facing multiple consequences for either price rises or price decreases. The curve of demand is tangled since competing companies are composed of price cuts and price rises differently.

Collusion between oligopolistic firms at an extreme can act as a monopoly. It takes one of two forms - explicit collusion and implicit collusion. Explicit Collusion takes place when two or more firms in the same industry formally agree to control the market while implicit collusion exists in the case of an informal agreement between the firms for the sake of controlling the market. Oligopolists pursuing their self-interest would produce a greater quantity than a monopolist and charge a lower price. Cartel and price leadership models are regarded as the most important models in this category.

In the Cartel model sellers are so well-coordinated in managing their operations that they operate as a subsidiary of one company rather than a rival company, taking independent decisions on quantity and price. In this regard, it's worth noting that the OPEC organization is an important example of the Cartel model. (OPEC) is an example of an oligopoly whose members collude overtly to fix the price of a barrel of oil. Now, it includes 13 members and controls the majority of crude oil reserves in the world. OPEC was formed in 1961 to agree on a common policy for the production and sale of petroleum. On that basis, OPEC will be a cartel for EU rules on competition, but only if the Member States are 'enterprises.' The EU tribunals have held that regardless of its status and how it is funded; the definition of a company covers all organizations engaged in economic activity. Despite its clear breach of competition law, OPEC has never been questioned by a government or entity (although there have been a couple of private damages actions in the US). Politics and pragmatism are the cause of the inability to act.

In some cases of oligopoly, there is a dominant company that initiates the price and all other companies follow it. This form of pricing is market leadership. Price leadership arises when a leading firm in a given industry can exert such control in the sector that it can effectively decide the price of products or services for the entire market. The dominant price leadership model exists when one firm holds the overwhelming majority of the market share in its industry. Within the market, there are other, smaller companies that offer the same goods or services as the leading company. A dominant price leadership model is often referred to as a partial monopoly.

IV.   Conclusion

In an Oligopolistic market structure, several pricing models are used to set the prices for the products and services like the kinked curve model, cartel, and price leadership model. Oligopoly lies between monopoly and perfect competition. The business solution is the same as the one for a monopoly where oligopolists can collect and create a cartel. If firms cannot join forces and create cartels, production and market prices will depend on the number of companies. The fewer the number of firms, the more the result appears like a monopoly where the price exceeds the marginal cost and the quantity is below the efficient level. The greater the number of firms, the more the result appears like the competition where the price equals marginal cost

and the quantity is efficient. Depending on the number of businesses, an oligopoly can look like a monopoly or a competitive market. There's no guarantee on how companies in Oligopoly will be competing; it's up to them to decide the company's goals, the attractiveness of the market, and the essence of the product. A price decrease can have competitive advantages such as gaining market share or deterring entry, but competitors are in danger of simply reducing their prices in response.

Collusion between oligopolistic firms in a certain industry is considered an important factor in determining the pricing policy of the product and services in an oligopolistic market. It's adopted by firms for the sake of profit maximization. Kinked-demand theory is a model where oligopolistic firms do not collude or corporate while cartel and price leadership represent the opposite case. Oligopolistic firms pursuing their self-interest would produce a greater quantity than a monopolist and charge a lower price. Noting that Collusive arrangements are generally illegal.

It should be mentioned that oligopolistic firms prefer rivalry at non-prices to avoid price wars where there is a competitive exchange between competing firms that reduce their goods' prices in a strategic effort to squeeze each other down and gain a higher market share. This action can be used in the short term to raise sales or used as a long-term strategy. A price decrease could achieve strategic advantages, such as market share gain or dissuade entry, but competitors could simply lower their prices as a response.

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Animal lunacy, idiocy and cleverness in a Southern-Hungarian animal shelter

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My study investigates local emic notions of lunacy, idiocy, and cleverness in a Southern-Hungarian small-scale animal shelter setting. Based on data taken from participant observation and a number of qualitative interviews I will argue that local notions on the mental qualities of animals can form the basis of human-animal relationships. I will demonstrate a perceived continuum of animal thinking capacity from lunacy through idiocy to cleverness which informs the strategies of animal care at Cerberus, a small-scale animal shelter in Hungary. There is a traditional focus in animal shelter ethnography on the emotions and moral conflicts[1] that shelter caretakers go through in doing the "dirty work"[2] of animal euthanasia. Another school of thought examines power relations and the question of domination in the context of animal shelter life. Inspired by Paul Shepard's work on the importance of thinking about animals' mental qualities in the formation of human intelligence,[3] the central theme of my paper will discuss animal cognition, and the importance of caretakers' perception of animal lunacy, idiocy, and cleverness in maintaining and building relationships with animals. I believe that the main purpose and function of an animal shelter is not merely the adoption of rescue dogs, but the production of a certain type of ideal family dog that can be then deposited in an ideal human environment, the loving family. Understanding certain mental qualities and behaviours of shelter dogs is a crucial part of the process of creating sociable creatures that can take their place beside their human masters. Animal shelter work then can be understood as what Béla Gunda describes a "domestication effort,"[4] an endeavour to bring companions "into the warmth of the cottage,"[5] and into social life in general.

Keywords: animal shelter ethnography, animal cognition, domestication

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[1] ARLUKE, 1991; 1994.
[2] TALLBERG, 2014.
[3] SHEPARD, 1998 (1978).
[4] GUNDA, 1975.
[5] GUNDA, 1969, 498.

I. Introduction

This study is an anthropological examination of ways in which animal shelter caretakers perceive dog cognition and attribute certain mental categories to animals. The field work was conducted in a small-scale, privately run animal shelter in southern Hungary. My study is influenced by the Human-Animal Studies literature that examines the cultural constitution of human-animal relationships, and by animal shelter ethnography, which is a minor, but growing subdiscipline of anthropology that focuses on this relationship in a shelter environment. I believe that the anthropological study of animal shelters, where many of our beloved pets come from, is crucial in better understanding one of our most cherished connection to the natural environment: the relationship between pets and their human masters.

Contemporary pet relations are fraught with controversy and conflict: on the one hand, pets are very close to humans emotionally, and they become an integral part of our social lives. They may even become members of our families. On the other hand, different species that we usually consider pets are left uncared for, homeless, unloved, and even abused every day. Arnold Arlukes' question, first formulated in 1994, still stands today: "What is it about modern society that makes it possible to shower animals with affection while simultaneously maltreating or killing them as utilitarian objects?"[6] Part of the answer is that, as Guenther puts it, pets' "social value is ultimately human-centric"[7]: human ownership gives pets access to the social world where they can engage in loving relationships with their owners. For pets, owners are society's gatekeepers. Their place in society has to be mediated through—and represented by—human registers.[8] Therefore, pets are intimately tied up with us: human dominion over them defines their existence in socially meaningful ways and gives them their well-defined status in cultural life as someone's companion. But not all pets belong to the human lifeworld: this essay's subjects, sheltered animals, lacking close human ties, have an indefinite status.

Animal shelter life is a life in liminality: animals in a shelter are seen as potential pets, yet they lack any clear human connection or a socially mediated relation of ownership. They are, as Taylor claims, merely "pets in waiting."[9] Shelter workers usually assume not an owner's but a caretaker's role: they think of sheltered animals as their charges whose interests they have to represent.[10] Sheltered animals, while they wait for an owner, ultimately remain the property of the shelter organization. This is not surprising since, as Hamilton and Taylor remind us, "in modern 'western' societies, much human-animal interaction is mediated and structured through some kind of organization"[11] rather than interpersonal relationships: the examples of animal shelters and zoos, I believe, stand out in this regard.

One may even argue that the liminality that shelter animals experience may extend to shelter workers as well. According to Linda Tallberg, the shelter caretaker's role can be regarded as a specific kind of "dirty work," with very low prestige. They are full of morally questionable and unwanted tasks that "bear a stigma in the wider society," such as the euthanization of animals in

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[6] ARLUKE, 1994, 145.

[7] GUENTHER, 2020, 145.

[8] CZERNY, 2017, 11; 15-17.

[9] TAYLOR, 2010, 14.

[10] TAYLOR, 2007, 65-67.

[11] HAMILTON-TAYLOR, 2012, 45.

order to combat pet overpopulation.[12] Even shelter spaces themselves are liminal. They are usually situated at the edges of cities, in industrial areas, or in areas overgrown with vegetation, as if to be hidden from the public eye. This public eye is more often fixed on a more understandable human-animal relationship: the loving connection between pets and their owners. Animal shelters and our relationships with our pets have one thing in common, however: they are imbued by emotions.

II. Animal shelter ethnography and animal cognition

II.1. Animal shelter ethnography

Shelters are emotionally charged spaces. This partly derives from the characteristics of the shelter's physical space. Kennels are populated with sad dogs and cats who would like to get out of their kennels or cages, happy and excited pets can be seen leaving the shelter environment for the last time with their new owners, and angry shelter workers who take in surrendered, injured or malnourished animals. Apart from these circumstances, another part of shelters' emotionality is bound up with their mission. As Taylor points out, many shelter workers exhibit a "missionary zeal" when it comes to helping animals and improving their conditions. Therefore, caretakers often have an activist identity to which they are very attached to and feel strongly about: they are "in it for the animals."[13] In Hungary, this is usually the case in private animal shelters, run by animal welfare advocates, but not necessarily in state-run animal control facilities which are more business oriented, and whose main goal is maintaining public safety by catching stray animals. Thirdly, and probably most importantly, the emotional burden of animal shelters arises from the basic function of these institutions: to provide long term-emotional service through the adoption of pets to owners and families, with the expectation that this relationship will evolve into a relationship of love and caring between humans and animals. Ultimately, this definite and close association with a human being is the factor which clears shelter animals of their liminality and gives them a definite social status as somebody's companion.

Emotions play a substantial part in ethnographic studies of animal shelters as well, but these studies remain anthropocentric at heart.Many shelter ethnographies concentrate on negative human emotions that caretakers might feel regarding the morally questionable shelter practices they may be required to perform. Such is the euthanasia of sheltered animals due to the scarcity of resources and infrastructure to adequately care for them. Arnold Arluke's studies have been formative in this respect. Arluke argues that a "caring-killing paradox" characterizes the relationship between shelter animals and their caretakers. Shelter workers, who usually have an animal welfare activist stance, experience moral dissonance when they have to medically kill animals.[14] "Euthanasia may represent a moral stress or conflict between their care for and interest in animals and their rationalization of euthanasia as a way of dealing with pet overpopulation."[15] In order to combat this dilemma, certain norms and practices come into being in a shelter environment that ultimately define a kind of "shelter culture." For example, newcomer shelter workers are introduced to the process of euthanasia only slowly and graudually, and initially they focus on the technical aspects of it. The killing itself is defined as a humane act and there is a shifting of blame from to workers

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[12] TALLBERG, 2014, 17-18; 21.
[13] TAYLOR, 2010, 8.
[14] ARLUKE, 1994, 147; ARLUKE, 1991, 1176.
[15] ARLUKE, 1991, 1176.

to the general public who they see as having failed to care for and accommodate these animals.[16] For Arluke, then, shelter culture is basically a toolset to ease the moral stress of euthanasia which, as we now know from Reeve and Rogelberg's quantitative follow-up study on the subject, can immensely affect the mental health of shelter caretakers.[17] Linda Tallberg in her own study of a kill-shelter in Australia—kill shelter meaning that animal euthanasia is a routine procedure there— also focuses on how shelter caretakers cope with their negative emotions and the social stigma and "dirtiness" of their work.[18] She suggests that caretakers may adopt four types of roles in this environment: the Victim, the Tourist, the Hero and the Professional. She argues that on the long run only the roles of the Hero, who takes it upon him- or herself to shield others from the taint of euthanasia, or the Professional, who considers it a necessary part of the job, are viable strategies. The Victim or the Tourist type of caretakers, who become emotionally too invested, usually do not last long in a kill-shelter environment.[19]

Another common thread that runs through ethnographic studies of animal shelters is the question of power relations, of domination. There is an inconvenient truth to shelter life in general: the benevolent intentions of these organizations notwithstanding, they are fundamentally a breach of animals' freedom and bodily integrity. According to Katja Guenther, this domination over animals' life comes from the basic shelter practices of helping, policing and killing animals. The operations of all three of these practices, or "regimes of domination," are structurally similar to contemporary state power, and can be equated to the roles of the welfare state, the carceral state and the antroparchal state, the latter meaning "a web of state policies and practices that seek to secure and maintain humans' domination over nature."[20] For Guenther, an animal shelter is an institutional extension of human dominion over nature that enforces mainstream (and middle class!) norms of pet keeping practices, while lower-class people are often caught up in hierarchical and unequal power relations, rendering them unable to hold on to their companions who end up in a shelter.[21] Providing, in Elan Abrell's words, "the mundanities of care"[22] to shelter animals, trying to control their behaviour and environment and ultimately killing them impose serious costs on sheltered animals, especially since their welfare is mostly negotiated by human actors and the animals themselves have no control over the process. Everyday practice and policy remain a matter of contention in shelters, and shelter workers themselves are often caught up in complex and unequal power relations through their struggles with policy makers and upper-end management, to which Tallberg's monography provides ample ethnographic evidence.[23] Ultimately, structures of power and of control are woven into the fabric of these institutions.

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[16] ARLUKE, 1991, 1177-1179.
[17] REEVE-ROGELBERG, 2005, 119-143.
[18] TALLBERG, 2014, 18-20.
[19] TALLBERG, 2014, 99-101; 114-120.
[20] GUENTHER, 2020, 34-35.
[21] GUENTHER, 2020, 62-93; 152-179.
[22] ABRELL, 2021, 82.
[23] TALLBERG, 2014.

II.2. The question of animal cognition

Thus, animal shelter studies traditionally focus on questions about emotions and power relations in the shelter environment. This also means that other questions, perhaps just as important to understanding these institutions, are often left opaque. Studies on the cultural perceptions on shelter animal mentality and personality are lacking, for example. As Taylor laments: "whilst there are a growing number of sociological studies investigating animal shelter life, few of them have chosen to focus upon ways in which animal shelter workers impute mindedness and/or personality to the animals under their care." Taylor's study on this subject leads us to believe that for shelter workers, attributing personality to animals is almost a necessity: taking care of conscious, intentional and reciprocating animal subjects helps justify the kind of zeal[24] they feel while maintaining these institutions. However, the personality of shelter animals attributed by their caretekers is very particular in nature: it is an a priori, always positive personality.[25] This means that even if a dog is perceived to be misbehaving, he remains, at heart, a good dog: behavioural issues arise from society's mistreatment of this animal and are not part of an animal's own nature. For shelter workers in Taylor's study, "animals were perceived as never being intrinsically bad but were seen as being made that way by their errant owners."[26] Or, we may add, by the lack of an owner.

The scarcity of studies elaborating on cultural perceptions of animal personality seems especially lamentable if we consider that thinking about animals' different qualities, mental qualities included, is probably a part of human nature. Paul Shepard argues that the development of our intelligence through our evolutionary history hinged on thinking about animal behaviour and their physical and mental characteristics. Animals constituted a certain kind of difference that was similar to us enough to be understood, yet distant enough to help differentiate uniquely human qualities and modes of behaviour. Animal life was the Other in whose light human personality could crystallize. Animals retain their primordial evocativeness even today and remain an integral part of our ontogenesis, or early child development.[27] While Shepard's argument remains philosophical and tentative, there is some evidence that points to its accuracy. According to Becky Tipper's study on children's social relations, children, when faced with the question of "who mattered to them," readily included a "veritable menagerie of creatures" in their accounts, displaying a "posthuman inclusivity" in their relationships and a keen interest in animal others.[28] Moreover, when questioned about their family members, they often made references to the animals of said family members: for them "animals were an integral part of knowing someone human."[29] If we accept Shepard's thesis, animals also remain as an integral part of knowing our own humanness, our own specific qualities that separate us from those beings who are in many ways like us.

We should probably not be surprised to see that studies pertaining to animal mentality, especially in an animal shelter setting, are few. Any scientific study about animal thinking invokes the philosophical problem of other minds, which presents an insurmountable epistemological obstacle, especially in consideration of minds that are not human. Donald Griffin argues that

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[24] TAYLOR, 2007, 67.
[25] TAYLOR, 2007, 67-69.
[26] TAYLOR, 2007, 68.
[27] SHEPARD, 1998 (1978).
[28] TIPPER, 2011, 149-150.
[29] TIPPER, 2011, 151.

animals do possess the capacity for thinking, and their behaviour and communication through which they are expressing feelings and thoughts are "windows into animal minds."[30] Ethologists, similarly to anthropologists, should adopt a participatory approach to studying animal thinking and communication.[31] Carl Safina is of a similar opinion: for him, since our nervous system is very similar to that of many animals, and these are the products of the same basic evolutionary processes, anthropomorphic projections on animal minds are the first—and best—guesses we can make regarding the inner consciousness of these beings.[32] There may be certain limits to this approach, however. On this issue I tend to agree with Tim Ingold who claims that, while animals do possess consciousness and are intentional agents in their own right, the capacity for thought itself is dependent upon language. Animals are fundamentally not "mute thinkers," as Lewis Henry Morgan, one of the founders of cultural anthropology famously put it,[33] but loud, communicating non-thinkers.[34] "Throughout its waking life the animal continually emits a veritable profusion of signals, but without a reflexive linguistic facility it cannot isolate thoughts as objects of attention. That is, rather than thinking without communicating, the animal communicates without thinking: so that, as Ingold states, the signals it transmits correspond to bodily states and not to concepts."[35]

Grasping other minds, and animal minds in particular, is an epistemological impossibility, especially in a Western scientific context. Yet this epistemological barrier, while insurmountable, is not a universal human experience: there are many cultures that do transcend this boundary. One clear example are the aboriginal peoples of Amazonia: for them, one ideological tenet is what Eduardo Viveiros Castro calls "perspectival multinaturalism." This means that all the creatures, animal, human or spirit, share a basic, underlying humanity, and possess the same cultural precepts. What differentiates them is their nature, their bodily characteristics, and through this, their perspectives on these same cultural concepts.[36] For the jaguar in the jungle, for example, beer exists as a cultural innovation: but because of his unique jaguar nature, his perspective on beer is different: for him, the blood of slain creatures is the same what we, humans know as beer.[37] Because of this same underlying culture, although distributed in different natures, knowing other perceptions on life and other minds is not only a possibility but a necessity, as Eduardo Kohn's study of the Ávila Runa people leads us to understand. For the Ávila Runa, losing touch of this basic similarity that binds creatures together, not being able to grasp and understand their different viewpoints, carries the risk of becoming unable to adequately communicate and enter into interactions with nonhuman subjects, a threat that Kohn calls "cosmological autism."[38] For a forest dwelling, hunting people like the Runa, "transspecies interactions depend on the capacity to recognize subjectivity," and "losing this ability can be disastrous."[39]

We do not necessarily have to go to the Amazon rainforest to find people who recognize and value this trans-specific subjectivity, and who think that animal minds, animal thinking and intentions are fundamentally knowable. As Clinton Robert Sanders' study on an American

[30] GRIFFIN, 2001, 4833.
[31] GRIFFIN, 1976, 87-90.
[32] SAFINA, 2016.
[33] MORGAN, 1868, 250.
[34] INGOLD, 1988, 90-95.
[35] INGOLD, 1988, 95.
[36] VIVEIROS DE CASTRO, 2014, 49-63.
[37] VIVEIROS DE CASTRO, 2014, 56-57.
[38] KOHN, 2007, 9.
[39] KOHN, 2007, 9.

veterinary clinic[40] and Sarah Czerny's study on Croatian dog owners illustrate,[41] most pet owners readily anthropomorphize the mental capabilities of their companions and have no problems in interacting with them as beings capable of expressing basic thoughts, their knowledge even informing human actions.[42] In what follows, I will argue that animal shelter caretakers have a similar perception. What I will offer more specifically is the perspective of the shelter caretakers of Cerberus, a Southern-Hungarian animal shelter, on the mental qualities of dogs under their charge. Knowing the mentality of shelter animals and knowing what to expect from them in everyday interactions is an important issue of workplace safety and convenience. Cosmological autism poses a danger threatens the shelter's ultimate goal: finding adoptive owners for the dogs in their care.

III. Animal lunacy, idiocy and cleverness in Cerberus

III.1. Characteristics of the dog shelter

Cerberus is a small-scale, privately run dog shelter in a large city of Southern Hungary. Unlike city pounds, state-controlled animal control facilities ("gyepmesteri telep"), Cerberus does not have any legal obligation to catch stray dogs to preserve public safety, does not receive state-funding and does not practice animal euthanasia due to financial and infrastructural strain: the killing of animals is a rare occurrence, only considered when an animal is gravely ill and suffering. Indeed, many of Cerberus' residents come from animal control facilities, practically escaping death, since after a mandatory hold period, they would be medically euthanized there. Arluke's caring-killing paradox, therefore, is not an everyday cause of worry and consideration for Cerberus caretakers. Unlike animal control facilities, this shelter has much more control over which and how many dogs they take in and care for.

Cerberus is situated near a suburban area, next to the railway line. While not far from it, its surroundings are not part of the city proper: large swaths of fields and power lines encircle two dozen gardens, separated from each other by wire fencing. These gardens, many of them neglected and overgrown today, used to be the property of former miners, a place where they could get some much-needed fresh air and enjoy the outdoors. Now mostly pensioners use these for gardening, growing vegetables, barbequing, and spending time with their grandchildren. Cerberus owns two of these gardens, in which they built twenty kennels housing 30 to 35 dogs, and a container for storing food and tools. The whole area has a natural and rural charm to it: walking to the shelter through the fields, seeing nature in its full bloom, hearing birds sing and crows croak has definitely a calming effect.

That is, until one arrives at the shelter proper. Because Cerberus, above all else, is a busy place, bustling with activity. For shelter caretakers, there is always something to do: dogs need to be fed, their kennels cleaned. There are medications to administer, shelter facilities and utilities must be maintained, not to mention the occasional task of answering the anthropologist's pestering questions. The dogs, who are let out 5 or 6 times a day, alone or in small groups, run around, brawl and bite each other, or jump on humans in order to get some much-appreciated petting. In the

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[40] SANDERS, 1993.
[41] CZERNY, 2017,
[42] CZERNY, 2017, 13-14.

meantime, there is the constant barking and whining of the other canines who stay in the kennel but would love to get out and play. Thus, the shelter itself is very lively and fast-paced. Interactions between humans and animals are frequent, dogs and humans participate in a dynamic multispecies institution.

The shelter Cerberus, like its mythical counterpart, is essentially three-headed: three permanent caretakers, Annette, Leslie and Francis run the day-to-day operations. In what follows, we will take a closer look at their interactions with, and their opinions on, the dogs they care for. There is constant talking to the dogs, and much of it is a kind of "mentality talk" where they refer to the inner mental states of these animals through the use of a range of adjectives, going from "lunacy" through "idiocy" to "cleverness". I collected these data through anthropological fieldwork starting in September 2021. My fieldwork is traditional in the sense that I try to spend as much time in the shelter as possible, taking part in and observing the everyday activities of shelter caretakers and their charges, while I also conduct interviews and write field diaries concerning these experiences. However, the fieldwork is also somewhat unorthodox, since an animal shelter is not the usual area of study for ethnography. Anthropology as a science is the science of Man, of interactions between humans, their social relations and the societies and communities that they collectively form. Most of the activity in an animal shelter is between humans and animals, or between the animals themselves, however, which presents new kinds of situations and challenges to ethnography in general. As Hamilton and Taylor remind us: "a set of ethnographic challenges are presented when organizational spaces include animals because the actors in the field are not all 'like us' and do not belong to human society in straightforward ways." Yet the study of such organizations is essential because "these settings often have cultures which draw upon a wholly different set of meanings, values and discourses from organizations which don't include animals. This is because animals perform a highly significant role in the orientation of identity and culture for humans."[43] Cerberus is such a setting with a prevalent and continuous discourse on animal mentality.

III.2. Animal lunacy, idiocy and cleverness

The personality and different habits of shelter dogs is always a central issue at Cerberus. Discussions about them sometimes can sometimes be as simple as saying that a particular dog is cute, or that the other dog does not like to play ball that much. Many of the narratives on animal personhood, however, concern certain mental qualities caretakers perceive in animals. The basis of these, as Veronique Servais argues, is the same as the basis of many anthropomorphic projections: the everyday interactions between humans and animals.[44] Shelter workers use a range of adjectives to allude to the mentality of certain animals during their everyday work, and they are eager to comment on these in interview situations as well. As we will see, negative adjectives like "lunatic," "crazy," "idiot," or "looney."[45] are used when the dog is perceived to be misbehaving in certain ways, making shelter caretaking work more unsafe, tenuous, and difficult, while the positive adjectives surface when the dog is being cooperative, obedient and easy to manage.

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[43] HAMILTON-TAYLOR, 2012, 9.
[44] SERVAIS, 2018.
[45] Elmebeteg, őrült, idióta, gyagyás in Hungarian, respectively.

Both too much and too little cooperation can be conceived as a kind of behavioural extremity, and at Cerberus, behavioural extremities and cultural representations on animal cognition are intertwined. If the dog follows his natural instincts to a great extent, he usually becomes, at least for shelter caretakers, hard to predict and control, and so his mentality will be represented in a negative light. On the other hand, when the dog obeys commands and does not hinder caretaking work with his behaviour, his mentality will be painted more positively. Following cultural norms rather than natural instincts is what constitutes, for Cerberus workers, a *"ready dog"* *("kész kutya"),* a dog who then can safely be given up for adoption to prospective owners. By cultural norms I mean a set of human expectations toward dog behaviour to which dogs, ideally, need to conform to in a shelter setting, but which dogs in reality often transgress.

The most serious and worrisome transgression a dog can do is, of course, to be aggressive. In Cerberus, aggressive dogs are often spoken of as being lunatics or crazy. Such was the case for Lady, a troubled young German shepherd who occasionally was biting the hands or thighs of the caretakers. For Francis, this displayed aggression by Lady and dogs similar to her is more part of their nurture than nature: *"So, if the dog is brought up faulty, it will become like this. If it is brought up from early childhood (well), being told what not to do, it will become normal. But if it's like a dog brought to the shelter, its personality is a bit distorted from the get-go. And if it is not taken care of, then it will stay like this. So, it is not human-centric, nor animal-centric even, but it is like I am the chief here. And it will stay like that. For me, Lady, who is not here anymore, was just like that. She was biting and everything, she was a lunatic. She was charging all the other dogs, even through the kennel."* For Annette, Lady was seen as potentially psychopathic: *"I don't know if it is even possible in dogs, but she has a mental condition: she may be even a psychopath,"* she told me.

One of the main problems with aggressive dogs, according to Cerberus workers, is that they cannot connect with humans properly and they become stressed and unruly in a shelter environment. According to Annette, what they desperately need to improve is human connection, the very thing they lacked before coming to the shelter. *"In itself, there is no problem with Athina. Just that both of them, Athina but Thalia also, are very stressed dogs, and so there is always a chance that this (biting) happens. She goes crazy and she doesn't communicate at all. These dogs, especially Athina and Thalia were born on the streets. So, they were not close to humans at all. That's why they turned out like this."* For shelter caretakers, being "homeless dogs,"[46] ("hajléktalan kutya"), not adapting to human companionship is what usually leads to dogs' "lunacy" and intensive stress, which is the underlying cause for potential aggression.

There are attempts in Cerberus to give these stressed dogs the human companionship they need, for example, through feeding them from the hand, trying to pet them or play with them. This often turns out to be an uphill battle, however, since many of these dogs reject human advances and would rather be left alone. Leslie's short lament that *"I can't even pet Thalia"* is a telling condensation of the frustration shelter workers feel when they cannot connect with dogs under their charge, especially since they consider human connection necessary to improve the animals' chances for adoption. The main problem is that there is no time and expertise to individually tame, train, and rehabilitate aggressive and frightened dogs at Cerberus. Sometimes, as was the case with Thalia, putting another dog in her kennel with whom she gets along can improve a dog's mood, and Cerberus caretakers do advocate for this approach. The ultimate solution, however, is the

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[46] A term mostly favoured by Francis and Leslie

assistance of a qualified dog trainer, a "professional" ("szakember"). Annette often talks about this: *"As for Thalia... Thalia definitely needs a professional. Someone who does rehabilitation. She needs an expert, who is very adept at these kinds of things, because we can't really solve this."* Such was the experience of Lady, for whom Cerberus eventually found an expert who operates a small rehabilitation centre for dogs with behavioural issues. Due to financial constraints, Lady's case remains an exception from the rule, however, and these "lunatic,", "crazy" and "stressed" dogs who show signs of aggression have to get by with the unprofessional and limited care and attention the caretakers of Cerberus can provide them with.

For the most part, cases of aggression, while always on the horizon in an animal shelter, remain rare occurrences. A more immediate and everyday concern is non-aggressive, but, from the caretakers' perspective, misbehaving dogs, who hinder animal caretaking work. In general, workers of Cerberus expect their dogs to go out or into their kennels as ordered; not to go into the storage areas where the food, the tools or the straw are; not to play too pushy or domineering with other dogs; not to pester the caretakers by jumping on them constantly; and not to defecate in the kennel, which then, they would have to clean. Obviously, dogs never conform completely to these expectations, and are often disciplined verbally as a result. In these verbal disciplining situations, shelter workers use adjectives like "idiot," "brain-dead," "silly," or "dumb."[47] An "idiotic" dog (idiot being the most prolific term) is essentially a misbehaving dog who, with his excessive activity, obstructs the dynamic flow of caretaking work and causes some level of frustration to caretakers who lash out verbally in an attempt to discipline the animal. Such was the case with Hector, for example, who one morning didn't want to come outside his kennel for feeding, which did not escape Annette's attention: *"Hector! You idiot! You are a curse from God!"* Something similar happened to Dezső and Rezső, two Staffordshire bull terrier brothers who did not want to go into their kennels when Annette ordered them. Instead, they went into a straw storage area to brawl there and made a huge mess, earning them their own set of shouting: *"You're so uncomprehending! Get out of there! I can't believe it! Brainless, brain-dead idiots!"*

These verbal disciplining situations in which shelter caretakers allude to the idiocy of misbehaving animals happen several times every day: they are by far the most common type of verbal communication that flows from caretakers to animals. They are usually short and have the basic structure of cursing and telling the dog that he is an idiot or something of the sort; but they might have a number of other elements as well. The caretakers sometimes articulate what has transpired in question form, for example, *("Did you really have to poop there?")*. Then, after the cursing and referencing the dog's idiocy, they may tell the dog how he should have behaved instead: *"I was just about to let you out to do you duty!"* There can also be an element of threating perceived misbehaving dogs with a slap or a kick for example, which is seldom the case, however. Disciplining the dog physically is not considered a good animal caretaking practice at Cerberus, and it almost never happens. Still, the potential for physical aggression is left open in these verbal disciplining situations.

There is another allusion to animal mentality that comes up regularly when communicating with or about animals: dogs in Cerberus can be "looneys" ("gyagyás") as well, which is quite a mild term. Unlike the adjectives like "lunatic" or "idiot," this term is not used when a dog misbehaves in certain ways, like showing signs of aggression or obstructing the flow of animal caretaking work. Being a "looney" or "silly" ("hülye") describes harmless eagerness on most

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[47] Idióta, agyhalott, buta, hülye

occasions: when the dog is jumping on humans for attention or runs around or plays with another dog in a very dynamic fashion. For example, one time Annette and Francis were looking for Dezső-Rezső, who were famous for running around brawling with each other.

Annette: Where are those two silly ones? Are they outside?

Francis: Dezső! Rezső! Where are you?

Annette: "Ah, there they are!

Francis: Two looneys.

These actions do not constitute a break with human expectations of dog behaviour and the "cultural" norms of shelter life in general. Playing excitedly is thus perfectly acceptable dog behaviour at Cerberus, but it does involve a certain loss of human control and a loss of being able to predict animal behaviour. This is why, I think, the language of lunacy, in a much milder sense, is invoked. Ultimately, there is a very thin line that excited, playful, "looney" dogs walk: the moment they step over the lines of cultural norms, and as we have seen in an earlier instance with Dezső-Rezső playing in the hay storage, make a mess, they risk being demoted from harmless looneys to deviant idiots, and receiving the verbal disciplining this entails.

While all dogs have the potential to become idiots and looneys, there are some at Cerberus who are seen as more manageable, easier to work with. As Leslie pointed out: *"Pablo is jumping on you constantly. That is why he is a looney. Lola is not like that. Lola is more normal."* For a dog to be seen as "normal" ("normális"), "good-natured" ("jó természetű") or even "clever" ("okos)", three terms Cerberus employees often employ, he has to cooperate with shelter workers to a considerable extent: he has to be obedient, his behaviour must be predictable and controllable. These positive terms on animal mentality are much less readily used than the negative ones, however. Obeying the rules of the shelter, not making a mess, not hindering caretaking work is seen as the norm in Cerberus, and "good natured" dogs receive very little praise. While disciplining is a frequent occurrence, praising, its polar opposite, remains a rarity. This does not mean, however, that the efforts of these dogs are left unacknowledged: Cerberus caretakers often allude to the cleverness of these animals in interview situations. Our example will be of Csimasz, another German shepherd, who is very easy to get in and out of the kennel. Csimasz is also "kennel clean" ("kenneltiszta"), and while he likes to play with caretakers, he rarely bothers them if they do not have the time for him. According to Francis: *"I don't know [why], Csimasz is clever, he is just like that. Every other dog has a little mania, you know, but he, he is good-natured. I could imagine him to be a guard-dog or a police dog even."* Annette's assessment of this dog is very similar: *"The cleverest, the most unproblematic is Csimasz. It's Csimasz. To him, you don't have to beg. He pays attention to you. It's interesting, because usually I don't like German shepherds. It's not like I don't like them, but more like I wouldn't want one, but at the shelter, he is my favourite."*

Arguably, the key word here is in Annette's account: unproblematic. "Good natured" and "clever" dogs present no unique challenges to shelter workers, unlike "lunatic" dogs with whom close interactions can be unsafe, "idiotic" dogs who hinder caretaking work by breaking social rules, and "looney" dogs who, while not inherently problematic, are always on the verge of getting out of control. There is a continuum of mental qualities Cerberus workers attribute to dogs in their interactions with them and in their narratives. The key to this, I think, is whether the dog follows his natural instincts to a great extent through which he comes at odds with animal keeping practices, or his behaviour is controllable and predictable by humans and in line with the specific cultural

norms at the shelter. Safety and convenience are both necessary for the dynamic flow of caretaking work that workers aspire to have at Cerberus. To put it simply: too much Nature is the foundation for animal lunacy, idiocy and looniness, while adapting to Culture is what constitutes, somewhat ironically, good-natured and clever dogs.

Attributing mentality in some of the ways I described here is part and parcel of animal keeping work at Cerberus: caretakers do not suffer from the kind of "cosmological autism" that is a constant cause of concern of the Ávila Runa people of Amazon, studied by Eduardo Kohn: they readily ascribe personality to their charges, are intimately familiar with them and enter interactions which are informed by the perceived mentality of animals. Ultimately, animal lunacy, idiocy and cleverness have implications outside the shelter life as well, and it can affect the adoptability of the sheltered animals.

IV. Conclusion: Cerberus as a "domestication effort"

The main objective of a privately-run shelter like Cerberus is preparing dogs for adoption. The language shelter workers employ when discussing this goal is the language of family: caretakers' main source of pride is when their charges become companions in a "loving family" and leave the "coldness of outside kennel life" for the "warmth of the house." While all dogs are potentially adoptable from the moment they start their life at the shelter, this does not mean that all dogs have equal opportunities when it comes to finding an owner. As Leslie told me about Gigi, a small mongrel dog who is very hesitant in her interactions with humans in any form: *"Somebody who wants a dog is looking for a companion. A pet. To take her for a walk or something. She needs a patient man who sees all this through. She could become a (real) dog this way. A ready dog."*

Adoptability is a central criterion in an animal shelter. At Cerberus, some dogs are seen as *"ready dogs" ("kész kutyák")*, meaning that they are ready for human companionship, while others, like Gigi, would need more attention, taming and patience. This is, of course connected to the perceived mentality of these animals: those dogs who are unable or unwilling to cooperate with shelter workers and are spoken of as being "lunatics" (aggressive) or "idiots" (obstructive) are considered to have less of a chance of becoming "family dogs" ("családi kutyák"). If these dogs do find an owner, it usually comes as a surprise for shelter workers. This was the case when Leslie told Francis that Buci, a "lunatic" dog who was regularly charging at other dogs through the kennels, found an owner. Francis, hearing this, exclaimed, perhaps too bluntly: *"Buci got adopted? What the fuck? Our Buci? Who the fuck would like a dog like that?"* Not cooperating with caretakers, not keeping in line with shelter norms interferes with the main mission of Cerberus, to facilitate the emergence of ideal family dogs, which is why, I think, misbehaving animals' mentality is often constructed in a negative light, as we have seen in the discussions about animal lunacy, idiocy and looniness.

Béla Gunda in his 1975 article "Domestication Efforts of the Indians," drawing from early written sources, archaeological and ethnographic data, gives an overview on the pet keeping practices of Native American tribes. He argues that the capturing of young animals like different bird species and guinea pigs, and their taming, which were frequent occurrences in Native American societies, can be seen as the beginning of domestication.[48] This early domestication was

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[48] GUNDA, 1975, 56.

motivated not by economical or ideological reasons, but by a more underlying human need: the need for companionship.[49] I believe that animal shelter work can be thought of as a domestication effort as well. Like Native American hunters, Cerberus workers also go out, not into the forest per se, but certainly to the streets and outskirts of settlements, to capture stray, wandering, "homeless" animals who are seen as being in need of human assistance. Like the birds and guinea pigs of Native Americans in Gunda's account, dogs are also destined to become companions and pets of human families. However, unlike birds and guinea pigs, dogs are already domesticated. Thus, animal shelter caretaking work can only be thought of as a domestication effort if we abandon the view of domestication as a series of historical processes that, through the control of animal behaviour and reproduction, created the domesticated species we know today. Instead, domestication can be understood as, in Charles Stépanoff's and Jean-Denis Vigne's words, an "ongoing transformation"[50] and a specific type of human-animal relation in which humans and domestic species create and inhabit a shared cultural habitat, the *domus*, forming hybrid communities in the process.[51]

Each and every part of the caretaking work at Cerberus, from rescuing the dogs, feeding them, cleaning their kennels, to verbally disciplining them when they misbehave is subordinated to the ultimate goal of facilitating the transformation of dogs regarded as wild, too closely following natural instincts, to dogs who are predictable, cooperative and "clever" animals, who are "ready" to take their place in social life as a human being's companion. As Leslie touched upon this subject: *"Dogs by themselves won't socialize. The reason they became, they became domestic animals is because Man socialized them. They would be beasts otherwise. And they could go back to the wild, absolutely could go wild again, if they lived (without us)."*

Finally, I want to come back to the point I touched on at the beginning of this study: the liminality of shelter animals. Sheltered dogs at Cerberus have no owners; lacking a clear-cut and essential connection to a human being means, that they, while not absolutely removed from it, are not really a part of society in any meaningful way. They live their life in limbo, in „hopeful waiting"[52] to become someone's companion, to become a part of the *domus* proper. While shelter workers do consider them as more than mere beasts and interact with them as with conscious and intentional subjects, their perceived personalities are ultimately not their own. Rather, their personality is tied to their potential for adoption, and this depends on caretakers and prospective owner's ability to control them and predict their behaviour. This is what gives rise to a prolific talk on animals' mental qualities, on animal lunacy, idiocy and cleverness at Cerberus.

[49] GUNDA, 1975, 60.
[50] STÉPANOFF-VIGNE, 2018, 10.
[51] STÉPANOFF-VIGNE, 2018, 13-16.
[52] GUENTHER, 2020, 213.

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Evaluation of Nuclear Factor Kappa B (NF-κB) and Liver Function in Hepatitis Patients and Correlation of NF-κB with Liver Enzymes

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Abstract

Background: Hepatitis affects the liver cells, and it is regarded as a potentially life-threatening infection that affects millions of individuals worldwide. Therefore, this study was designed to evaluate the levels of NF-κB, liver function, and the correlation between NF-κB and liver enzymes in hepatitis patients. The monitoring of these parameters in hepatitis patients can be of great use in determining the health status of individuals with hepatitis for improved diagnosis and treatment.

Methods: This study was conducted on 180 subjects, comprising 100 apparently healthy subjects and 80 confirmed hepatitis patients. Ten milliliters (10mls) of venous blood samples were collected from each subject from the ante-cubital vein using sterile disposable needles and syringes. Five milliliters (5mls) were immediately dispensed into plain containers for the estimation of NF-kB and serum proteins; another 5mls were dispensed into lithium heparin bottles for the estimation of liver function parameters and the qualitative detection of hepatitis antigens and antibodies. The samples were analyzed according to the specifications of the methods applicable for each parameter.

Results: The results showed that NF-κB levels were significantly higher ($p<0.05$) in hepatitis patients as compared to the controls. Plasma ALT, AST, ALP, and GGT levels were significantly higher ($p<0.05$) in hepatitis patients in comparison with the controls. However, serum levels of total proteins, albumin, and globulin levels were significantly lower ($p<0.05$) in hepatitis patients when compared to the controls. There was a strong positive correlation between NFKB, AST, and GGT, while a negative correlation was observed between NFKB and ALP.

Conclusion: The plasma levels of NF-κB, ALT, AST, ALP, GGT and serum proteins of hepatitis patients were significantly altered in hepatitis patients. Also, this study established a positive correlation between NF-κB and liver enzymes such as ALT, AST and GGT and negative correlation with ALP.

Keywords: NF-κB, Hepatitis, Liver Enzymes, Inflammation

I.   Introduction

One of the most important organs of the body in humans is the liver, and almost every organ in the body is supported by the liver, which is imperative for survival because of its strategic area and multidimensional functions (Fernández-Checa *et al.*, 1998). There is the likelihood of liver disorders developing when one or more of its roles are compromised, and one of such is hepatitis (Casaro et al., 2019).

Hepatitis is described as the inflammation of the liver (Bernal & Wendon, 2013; Mahmud et al., 2017; Stanaway et al., 2016). It has been reported to be a global health challenge, with high endemicity in South-East Asia and Sub-Saharan Africa, where several fatalities and morbidities have occurred (Fattovich, 2003). In a review of world records, about 342 million people were affected by chronic hepatitis B and 142 million people were affected by chronic hepatitis C infections (Basra & Anand, 2011; Hyder et al., 2013). Hepatitis is described as acute when it resolves within six months and chronic when it lasts beyond six months (Bernal & Wendon, 2013). Furthermore, the transmission of Hepatitis B and Hepatitis C occurs parenterally, and over time, it may progress to chronic hepatitis (Behera & Patnaik, 2016).

The hepatocytes have a half-life of 6–12 months or more, and they shed off this virus into the blood circulation, where it causes persistent infection in the host because of the weakened immune system (Esrefoglu, 2012; Shiina et al., 1991). According to the above, acute to chronic hepatitis develops as a result of a severe hepatitis virus attack on the liver. Therefore, there could be an alteration of the liver's function, and this could be assessed by evaluating the activities of liver enzymes and serum proteins. The diagnosis of viral, metabolic, and autoimmune hepatic disorders and the selection criteria for liver transplant are highly dependent on the assessment of these enzymes' activities (Dufour, 2005; Sherwood et al., 2001). There is elevation of these enzymes during hepatic damage, where the liver releases cytoplasmic protein into the vascular circulation, which is accompanied by ischemia-induced necrosis, drug intoxication, and reperfusion injury (Pelsers et al., 2002; Sherwood et al., 2001). Moreover, there is also the likelihood that the serum proteins may be affected considering the liver's involvement in protein synthesis. The elevation of serum total protein is diagnostic of liver dysfunction, dehydration, biliary dysfunction, a high-protein diet, and a high-calorie diet (Woitge et al., 1998).

Furthermore, the various inflammatory responses involved during hepatitis and other liver dysfunctions are regulated by the nuclear factor kappa-light-chain enhancer of activated B cells (NF-κB) (Gilmore, 2006). NF-κB is a protein complex that is present in animal cells and controls DNA transcription (Gilmore, 2006) It also plays a vital role in the production of cytokines, regulation of immune responses to infection, cell survival, and cellular responses to stimuli such as stress, free radicals, heavy metals, UV radiation, and bacterial and viral antigens (Gilmore, 2006). Inaccurate and precise regulation of NF-κB may contribute to the development of cancer, inflammatory and autoimmune diseases, viral infection, septic shock, and improper immune development (Park & Youn, 2013).

The regulation of the inflammation-cancer axis and the maintenance of liver homeostasis are both largely dependent on the signaling pathway of NF-κB (Arsura & Cavin, 2005; Jacobs & Harrison, 1998; Pahl & Baeuerle, 1995; Sun & Karin, 2008). However, the activation of NF-κB has been implicated in inflammatory and wound healing responses, considering its function and operation in the hepatocytes in viral, alcoholic, metabolic, and immune-driven stress responses (Arsura & Cavin, 2005). Also, increased levels of NF-κB have been traced to the onset of liver cirrhosis, fibrosis, and cancer, and this process is mediated by NF-κB activation in severe and chronic injuries through the release of large amounts of pro-inflammatory cytokines and chemokines (Elsharkawy & Mann, 2007; Levrero & Zucman-Rossi, 2016).

There are reports that a relationship exists between increased levels of NF-kB in liver diseases and the degree of inflammation (Ribeiro et al., 2004).

One of the pathogenic mechanisms associated with hepatitis infection is the activation of the NF-kB signaling pathway, and there have been reports of discrepancies about the relative alteration in protein turnover rate in some liver dysfunctions such as hepatitis (Millward et al., 1997; Zuckerman, 1999). Therefore, it becomes necessary to evaluate the liver function and NF-kB status in hepatitis patients to explore the disease correlations. Understanding these serum biochemical changes will enable researchers to understand how to correlate these parameters with hepatitis progression and further develop new measures and protocols for the management and diagnosis of hepatitis. In addition, targeting NF-kB as a potential treatment protocol will help to alleviate inflammatory responses during hepatitis, which will lead to infection recovery.

II   Materials and Methods

II.2.1   Study Design

The patients were recruited from six (6) Primary Health Centers (PHCs) in Ekpoma, Esan West, and Edo State. In this cross-sectional study, non-random sampling method was adopted. Furthermore, to ensure hepatitis status validity, both confirmed and negative cases were re-tested by the researchers with HBV and HCV qualitative test strips using standard laboratory procedures. It is based on this validity that hepatitis and control subjects were selected and grouped for the study.

II.2.2   Sample Size and Study Participants

The sample size was determined using the formula described by Araoye (2004). A total of 180 subjects were recruited for this study, which consisted of 100 apparently healthy subjects (controls) and 80 confirmed hepatitis subjects (test samples). By gender distribution, there were 99 males and 81 females. The control group (CG) consisted of patients aged 18 to 50 without hepatitis who had not been hospitalized or on medication in the previous month prior to the start of this study.

Hepatitis group (HG) consisted of already diagnosed and confirmed hepatitis subjects between 18 and 50 years old who gave consent for the study and did not have any underlying illnesses such as acquired immunodeficiency syndrome, those on immunosuppressive medication, patients with kidney disease, or those who had undergone kidney or pancreatic transplantation.

II.2.3   Sample Collection

Ten milliliters (10mls) of venous blood samples were collected from each subject from the ante-cubital vein using sterile disposable needles and syringes. 5mls were immediately placed in plain containers for the estimation of NF-kB and serum proteins (total protein, albumin, and globulin). 5mls were placed immediately into lithium heparin bottles for the estimation of liver enzymes (ALT, AST, ALP, and GGT) and qualitative detection of hepatitis antigens and antibodies. Using a dry, clean Pasteur pipette, the serum or plasma was separated from the red cells and transferred into dry, plain specimen containers labeled to correspond to the initial blood sample bottles. The serum and plasma were then stored at -70 °C pending the analysis of the samples. The samples were analyzed according to the specifications of the methods applicable for each parameter.

II.2.4   Ethical Considerations

This study was approved by the Esan West Local Government ethical committee under protocol EWLG 309/7/2021. Patients recruited for this study provided informed consent after being thoroughly explained the study protocols and assured of confidentiality. This study was carried

out in accordance with the appropriate guidelines and regulations/protocols of the Declaration of Helsinki.

II.2.5   Sample Analysis

II.2.5.1 Detection of hepatitis Antigen/Antibody

The qualitative detection of Hepatitis B surface antigen was determined using the strip method described by Deguchi et al (2004)**.** The qualitative detection of hepatitis C antibodies was determined using the strip method described Wilber (1993). These methods are qualitative, membrane-based immunoassays for the detection of antibodies to HBV and HCV in plasma.

II.2.5.2 Determination of NF-κB

The serum level of NF-kB was determined using the double-sandwich Elisa method described by Gilmore (2006). The optical density (OD) value of each sample and specimen was subtracted from that of the blank well. The standard curve was drawn manually. The concentration value of samples was taken as the abscissa, and OD readings were the vertical coordinate. A smooth line was used to connect each coordinate point of the standard sample. The concentration of samples was found by checking the OD readings.

II.2.5.3 Determination of Liver Enzymes

The ALT and AST activities in the sample were determined using the colorimetric method described by Reitman & Frankel (1957). ALP activity in the sample was determined using the Deutsche method described by Rec (1972). The GGT activity in the sample was determined using the method described by Szasz (1969).

II.2.5.4 Determination of Serum Proteins

The total protein in the sample was determined using the biuret method described by Gornall et al (1949). The amount of albumin in the sample was determined using the bromo-cresol green method described by Doumas et al (1971). Serum globulin is estimated indirectly by subtracting the albumin concentration from the total protein concentration.

II.2.6   Statistical Analysis

The results were presented as the mean with standard deviation (mean $\pm$ SD). A test for normality was performed by the Shapiro-Wilk test. Student's t test was used to compare the mean difference of the parameters among the two groups, while ANOVA (LSD) was used to compare the mean difference of the parameters among the HBV, HCV, and control groups. Spearman's correlation was used to determine the relationship between NF-kB and liver enzymes. $P<0.05$ was regarded as statistically significant. Statistical analysis was performed using IBM Statistical Package for Social Science (SPSS) version 27.0 (SPSS Inc., Chicago, IL, USA).

III   Results

When hepatitis patients were compared to controls, their NF-kB levels were significantly higher ($p<0.05$). In addition, ALT, AST, ALP, and GGT activities were significantly higher ($p<0.05$) in hepatitis patients compared to controls. Total protein, albumin, and globulin levels were significantly lower ($p<0.05$) in hepatitis patients when compared with the controls (Table 1).

The results showed that NF-kB levels were significantly higher ($p<0.05$) in HCV subjects when compared with HBV and controls. ALT, AST, ALP, and GGT levels were significantly higher ($p<0.05$) in HCV patients when compared with HBV and controls. Total protein and albumin levels were significantly lower ($p<0.05$) in HCV patients when compared with HBV and controls. Globulin levels were significantly lower ($p<0.05$) in HBV patients when compared with HCV patients and controls (Table 2).

The results showed that there is a strong positive correlation between NF-B and ALT (r = 0.3537; 0.0013). There is a strong positive correlation between NFKB and AST (r = 0.4617; 0.0010). A weak negative correlation was established between NF-B and ALP (r = -0.0344; 0.7619). There is also a positive correlation between NFKB and GGT (r = 0.2653; 0.0174) (Figure 1).

Table 1: Comparison of NF-κB and Liver Function of hepatitis subjects and control

Parameters	Control Subjects (n=100)	Hepatitis Patients (n=80)	t value	P value
NFkb (ug/ml)	0.23±0.05	0.87±0.06	3.356	0.001
ALT(U/L)	39.23±11.39	48.83±11.52	5.589	<0.001
AST (U/L)	56.11±11.21	61.70±10.15	3.466	<0.001
ALP (U/L)	90.54±10.77	100.75±1.51	3.266	0.001
GGT (U/L)	80.63±18.37	115.55±10.00	3.226	0.001
TP (g/dl)	7.00±0.23	6.43±0.61	6.301	0.001
Albumin (g/dl)	3.66±0.20	3.35±0.41	4.955	0.002
Globulin (g/dl)	3.34±0.28	3.12±0.35	3.914	0.001

Key: n=Sample size; p>0.05= Not significant; p<0.05= Significant; NFkb- Nuclear factor kappa binding factor, ALT-Alanine aminotransferase; AST; Aspartate aminotransferase; ALP=Alkaline Phosphatase; GGT, Gamma glutamyl transferase, TP- Total Protein

Table 2: Comparison of NF-κB and Liver Function of HBV, HVC and control

Parameters	Control (n=100)	Hepatitis B Patients (n=50)	Hepatitis C Patients (n=30)	F Value	P Value
NF-κB (ug/ml)	0.23±0.05[a]	0.85±0.09[b]	0.91±0.08[c]	5.624	0.004
ALT(U/L)	39.23±11.39[a]	47.92±10.42[b]	50.33±13.20[c]	16.020	0.001
AST (U/L)	56.11±11.21[a]	58.96±8.87.91[b]	66.27±10.63[c]	10.801	0.002
ALP (U/L)	90.54±10.77 [a]	96.64±19.91[b]	107.60±12.64[c]	7.913	0.001
GGT (U/L)	80.63±18.37 [a]	117.16±10.75 [b]	112.87±8.08[c]	17.852	0.001
TP (g/dl)	7.00±0.23 [a]	6.50±0.62 [b]	6.37±0.60 [b]	13.348	0.001
Albumin (g/dl)	3.66±0.20 [a]	3.40±0.40 [b]	3.30±0.42 [b]	7.620	0.001
Globulin (g/dl)	3.34±0.28 [a]	3.11±0.36 [b]	3.12±0.35 [b]	13.348	0.001

Key: n=Sample size; p>0.05= Not significant; p<0.05= Significant; NF-κB- Nuclear factor kappa binding factor, ALT-Alanine aminotransferase; AST; Aspartate aminotransferase; ALP=Alkaline Phosphatase; GGT, Gamma glutamyl transferase, TP- Total Protein; * Values in a row with different superscript are significantly different at p<0.05.
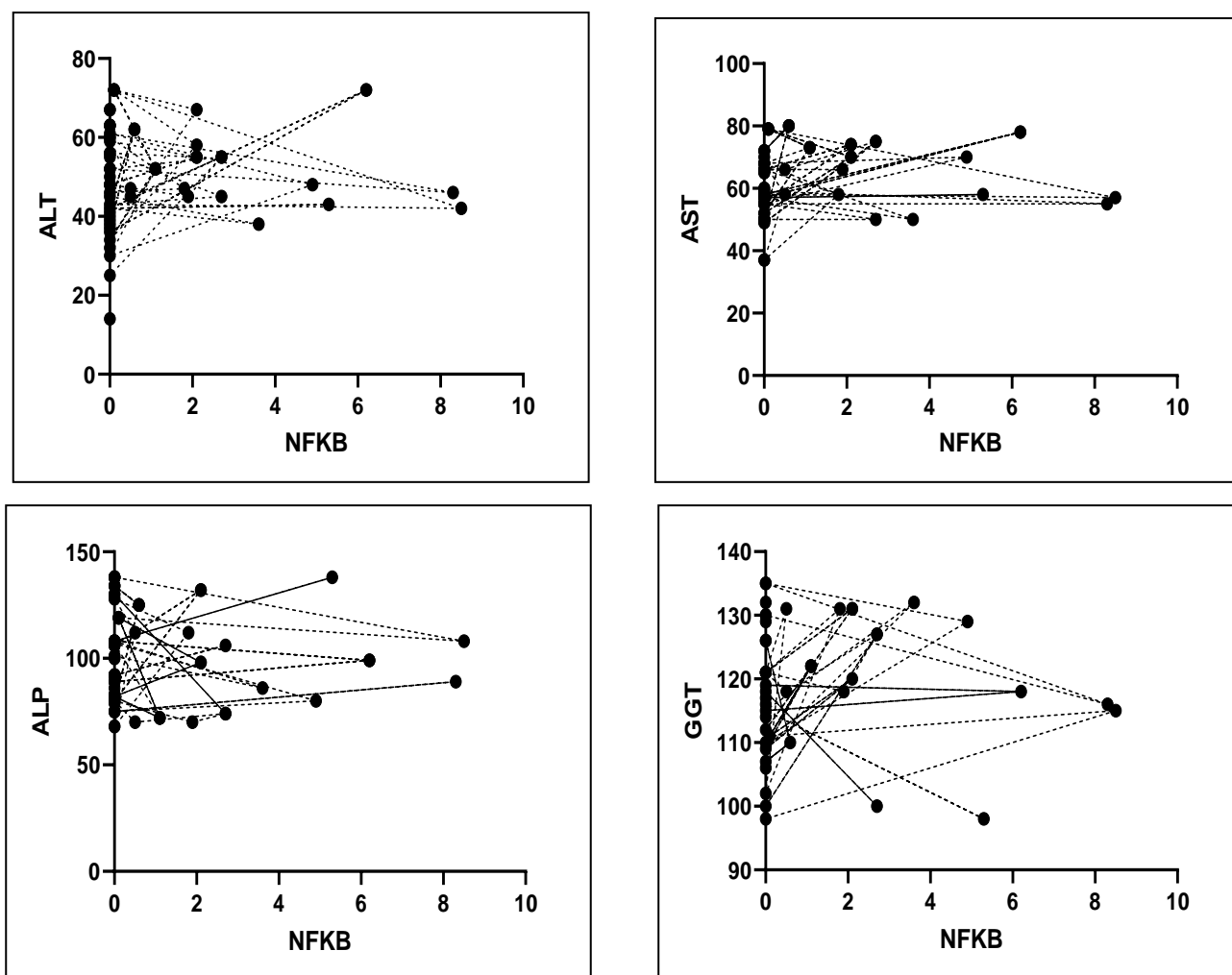
Figure 1: Correlation of NF-κB with liver enzymes.
NFKB vs ALT (r=0.354, p=0.001); NFKB vs AST (r=0.462, p=0.001); NFKB vs ALP (r= -0.034, p value=0.763); NFKB vs GGT (r=0.265, p value=0.017)

IV   Discussion

The result of this study revealed that serum NF-κB was significantly higher in hepatitis patients as compared to the controls. This agrees with the reports of Park & Youn, (2013), where they reported that incorrect regulation of NF-κB has been linked to cancer, inflammatory and autoimmune diseases, septic shock, viral infection, and improper immune development. The results obtained are also in line with the study of Levrero & Zucman-Rossi (2016), where they opined that the increased levels of NF-κB have been traced to the onset of liver cirrhosis, fibrosis, and cancer, which are mediated by NF-κB activation in severe and chronic injuries through the release of large amounts of pro-inflammatory cytokines and chemokines. However, NF-κB controls many genes involved in inflammation, and as a result, it is not surprising that NF-κB is found to be chronically active in many inflammatory diseases, such as hepatitis, inflammatory bowel disease, arthritis, sepsis, gastritis, asthma, atherosclerosis, and others (Monaco et al., 2004).

Other studies have reported that during inflammation, the function of a cell depends on signals it activates in response to contact with adjacent cells and combinations of hormones, especially cytokines, that act on it through specific receptors (Kaisari et al., 2013). Similarly, Zuckerman (1999), reported that the activation of the NF-kB signaling pathway is strongly associated with

the onset of hepatitis and other inflammatory disorders. The nuclear factor-kappa signaling pathway plays a central role in liver homeostasis, pathophysiology, and regulation of the inflammation-cancer axis (Gilmore, 2006). The NF-kB transcription factor family in mammals consists of five proteins: p65 (RelA), RelB, c-Rel, p105/p50 (NF-kB1), and p100/52 (NF-kB2), which can form large numbers of homo- and heterodimers (Sun & Karin, 2008). In unstimulated cells, the NF-κB dimers are sequestered in the cytoplasm by the inhibitor of KB (IKBs) (Jacobs & Harrison, 1998).

Many previous studies that reported the involvement of NF-κB in hepatitis established a link between hepatitis protein and other viral proteins with NF-κB function during the course of chronic B hepatitis (Pahl & Baeuerle, 1995). Notably, the hallmark of first-line antiviral host defense responses entails the release of NF-κB-dependent interferons and cytokines, including tumor necrosis factor alpha (TNFα), IL-1β and IL-1α. The activation of NF-κB is often observed in hepatitis-associated hepatocellular carcinoma (HCC) as well (Levrero & Zucman-Rossi, 2016). Also, there are reports on the involvement of NF-κB regulators in mouse models in which its ablation leads to spontaneous liver injury, fibrosis, HCC, while many molecules and pathways that are linked to HCC are either targets of or activators of NF-κB. In line with this, Pikarsky et al (2004) demonstrated that NF-κB is required for the promotion of TNF-driven inflammation-associated cancer. As mentioned above, liver inflammation, injury, cirrhosis, and cancer are deemed to be linked to the activation of NF-κB signaling in many studies (Luedde & Schwabe, 2011) which coincides with the higher values of NF-κB obtained in hepatitis patients. The increased levels of NF-κB in this study may be a pointer to the distinct role played by NF-κB in different stages of hepatocarcinogenesis (Luedde & Schwabe, 2011). This suggests that the role of NF-κB signaling in HBV-associated HCC is complex and could be regarded as a double-pointer marker in the diagnosis and treatment of hepatitis and other liver-related disorders. Also, some other studies have demonstrated their multiple hepatocarcinogenesis mechanisms (Luedde & Schwabe, 2011; Pikarsky et al., 2004).

The results showed that there is a positive correlation between NF-κB, ALT, AST, and GGT, while a weak negative correlation exists between NF-κB and ALP (Figure 1). This assertion could be attributed to the strong correlation between TANK-binding kinase-1 (TBK1) expression and liver disorders such as hepatocellular carcinoma (Kim et al., 2010). It was further elucidated that hepatitis B viral X protein (HBx) activates NF-κB signaling by upregulating TBK1 expression at the transcriptional level by examining HBx-expressing cell lines using a human NF-κB signaling pathway PCR array, real-time RT-PCR analysis, and western blot analyses (Kim et al., 2010). It was also suggested that the presence of dominant-negative forms of TBK1 could be responsible for NF-κB activation. There are also reports on the increased levels of TBK1 in cancer cell lines and HBV-positive patients, which may have contributed to the linear relationship that was observed between NF-κB, ALT, and AST. According to Tai et al., (2000), HCV infection plays a role in activating the transcription factor NF-kB in human liver tissues. It was further noted that HCV core transfection can also activate NF-kB in the human hepatoblastoma cell line and confer resistance to TNF-a–mediated apoptosis, suggesting that these mechanisms of resistance to TNF-a–mediated apoptosis in HCV-infected cells could be responsible for the activation of NF-kB. These processes will lead to the activation of NF-kB with a concomitant increase in serum liver enzymes (Luedde & Schwabe, 2011). These positive associations may be attributed to the myriad of functions of NF-κB in different cellular compartments, ranging from survival of hepatocytes to inflammation of the Kupffer cells and hepatic stellate cells. This broad-spectrum function predisposes NF-κB to alterations in chronic liver disorders, hence the positive correlation that was observed with liver enzymes.

Liver enzymes (AST, ALT, ALP, and GGT) are well-known enzymes used as biomarkers to predict possible liver toxicity (Haklar, 2016). Generally, damage to liver cells will result in elevations of these enzymes in the serum. Furthermore, measurement of the enzymatic activities of AST, ALT, ALP, and GGT is of clinical and toxicological importance as changes in their activities are indicative of liver damage by toxicants or in diseased conditions. The observed increase in the activities of serum ALT, AST, and ALP in hepatitis subjects may be an indication of liver dysfunction. The increase in the activities of ALT, ALP, and AST in the serum may be mainly due to leakage of these enzymes from the liver cytosol into the blood stream. The result of this study showed that the activities of serum ALT, AST, ALP, and GGT were significantly higher in hepatitis subjects as compared to the control subjects. This observation is in line with the study of Holstege (2016), where similar elevated findings were reported.

Gamma-glutamyl transpeptidase (GGT), a membrane enzyme found in the hepatobiliary system, is essential for the synthesis of glutathione, which is the main antioxidant molecule in cells. According to various reports, the presence of cholestasis in viral hepatitis will lead to increased levels of plasma GGT by more than 10-fold, whereas in the absence of cholestasis, it increases up to 5 times (Silva *et al*., 2004). The elevations in serum GGT levels are in line with the study of Silva et al (2004), where they reported increased levels of GGT in 96 patients (48% with chronic HCV infection). Also, there were higher levels of plasma GGT levels in chronically HCV-infected patients than were reported in several other studies (Hwang et al., 2000; Kiso et al., 1996). The results of this study are also consistent with several reports of an increased rate of serum GGT levels in hepatitis patients, ranging from 38.4% to 70% (Sansonno & Dammacco, 1992). According to Giannini et al (2001), a mild increase in GGT levels among hepatitis patients. The increase in the serum levels of GGT in hepatis patients could be attributed to the increased GGT synthesis in the liver and a possible adaptive response to the pathological changes that occur in such diseases. As a sequel to these pathological changes, there could be an overflow of the enzyme into the blood stream, resulting in elevated levels of serum GGT. The relationship between elevated GGT levels and liver impairments such as liver fibrosis has been considered in studies where the enzyme is included in the prothrombin, g-glutamyl transferase, and apolipoprotein index in line with the procollagen III peptide and is used to detect cirrhosis or fibrosis in several liver diseases, including chronic viral hepatitis (Teare et al., 1993). GGT has been considered alone or in combination with other biochemical biomarkers to be a surrogate marker of fibrosis in chronically Hepatitis-infected patients (Poynard et al., 2002; Silva et al., 2004). However, alterations in serum GGT levels have been reported in cirrhosis, alcoholic liver disease, and viral hepatitis (Hyder et al., 2013). This is due to the fact that GGT is located on the cell membranes of the hepatobiliary system, making it very sensitive and an important enzyme in the identification of cholestatic disease, both intra- and extra-hepatic (Hyder et al., 2013).

The result of this study revealed a significant increase in the plasma levels of ALT and AST. ALT is the most reliable biochemical value to reveal liver injury in patients with acute and chronic viral hepatitis. This is attributed to the exclusive distribution of ALT in the cytoplasm and its longer half-life in the blood (about 50 hours) than for AST (about 16 hours) (Arome & Enegide, 2013). This is in line with the study of Rizvi et al (2018) where they assessed serum ALT levels in chronic hepatitis C patients in accordance with gender and indicated that serum ALT levels increase significantly with periportal bridging necrosis. They reported that an elevation in serum levels of aminotransferases is considered to be an indicator of hepatocellular damage owing to their hepatic concentration. There have been several reports on the linear relationship that exists between the degree of elevation of serum ALT and the extent of liver injury as predicted by the HAI score (McCormick et al., 1996). In addition, increased levels of serum ALT activities have been reported in 85% of PCR-RNA positive hepatitis patients

compared to normal controls (Rizvi et al., 2018; Wahib et al., 2005). AST values were significantly higher in hepatitis subjects as compared to controls. This is consistent with the study of Maulidia et al (2020). AST is located in the heart, skeletal muscles, kidneys, brain, and red blood cells. The increase in AST levels could be attributed to its presence and high concentrations in the cytosol and mitochondria. Also, it is present in large quantities in the liver acini, and damage to this part would result in more significant alterations in AST levels (Kamimoto et al., 1985; Rej, 1989). It was also reported in several studies that serum AST was significantly altered in both HBV and HCV. (Maulidia et al., 2020). This is consistent with the finding that 90% of hepatocellular carcinoma patients had elevated AST levels (Lopez et al., 1996).

Furthermore, serum ALT, AST, ALP, and GGT levels were significantly higher in HCV patients when compared with HBV and controls. This agrees with the study of Ahmad et al., (2021) where they reported increased levels of liver enzymes in HCV as compared to HBV. The change in serum AST and ALT levels can be used to investigate asymptomatic viral hepatitis. (Marcellin, 1999). It was also reported that ALT levels were significantly higher in HCV-infected pregnant women as compared to HBV-infected women. Several other studies, however, have reported serum ALT and AST changes that are consistent with this study (Ahmad et al., 2021; Han et al., 2011; Nguyen et al., 2009).

The results also revealed significantly elevated values of ALP in comparison with the controls. This is in line with the study of Arome & Enegide (2013). The possible mechanisms of this increase could be related to the decreased excretion of ALP in bile, which will lead to the regurgitation of the enzyme into circulation by the hepatic sinusoids (Arome & Enegide, 2013). The production of ALP by the bile ducts is a result of increased cholestasis, which will make ALP available to enter the blood stream as a result of its release from its membrane-bound site and entry into the blood facilitated by the amphiphilic nature of bile salts (Nyblom et al., 2006). The elevated levels of ALP observed in this present study may be an indication of either liver problems or bone diseases, since the two main sources of ALP are the liver and bones. The high values of the activities of these enzymes relative to control values are indicative of severe intra-hepatic cell damage (Nyblom et al., 2006). A high level of ALP is an indicator of obstructive jaundice and intra-hepatic cholestasis.

The results also revealed that serum total protein, albumin, and globulin levels were significantly lower in hepatitis patients as compared with the control group. This agrees with the study of Dalal et al (2018), where they reported significant alterations in serum proteins in HBV and HCV patients with liver cirrhosis and hepatocellular carcinoma. The decrease in serum albumin could be due to altered function of albumin synthesis in liver cells caused by chronic hepatic cell lesions (Dufour, 2006). This is supported by the findings of Thapa & Walia (2007), who stated that decreased levels of albumin are associated with severe chronic liver diseases such as cirrhosis. There have been reports that serum total protein levels are not significantly altered, especially in the acute stage of hepatitis (Ashraf-Uz-Zaman et al., 2010). Furthermore, they reported increased levels of serum proteins in patients with HCV and attributed this increase to the chronic state of the disease on the first visit to the hospital. Malnutrition in hepatitis and liver disorders has a multifactorial origin, which might result from either insufficient food intake or factors related to deficient digestion and intestinal absorption. It might also be associated with protein-losing enteropathies, metabolic disorders, and the constant restrictive dietetic approaches to which these patients are subjected (Sam & Nguyen, 2009). Metabolic disorders, such as changes in carbohydrate metabolism (insulin resistance); proteins, due to increased need and decreased absorption with a reduction in hepatic synthesis; and fat, due to increased lipolysis and lipid oxidation, as well as hypermetabolism, which occurs in 16%-34% of patients with chronic hepatic disease and can favor the development of

malnutrition (Sam & Nguyen, 2009). However, malnutrition has been related to worse clinical evolution and a higher incidence of complications in liver cirrhosis patients, such as ascites, hepatic encephalopathy, infections, hepatorenal syndrome, and diabetes mellitus. It is considered a risk factor for short- and long-term morbidity and mortality.

V.   Conclusion

This study revealed that the serum levels of NF-κB and liver function of hepatitis subjects were altered in a significant fashion. Also, a positive correlation was established between NF-κB, ALT, AST, and GGT levels. Serum NF-κB and liver function parameters in hepatitis patients can be very useful in determining health status and therapy progression in immuno-compromised patients such as hepatitis.

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Physiomorphology responses of spring oat varieties in Silicon and Sulphur application to alleviate drought stress

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Abstract: Oats are an essential crop which are produced worldwide for human and animal consumption. The demand for oat production as a food for human consumption is increased in the last decade due to its nutritional benefits. Its grain is well known as a rich source of dietary fiber, soluble fiber β-glucan, antioxidants, minerals and vitamins. Oats as a crop can be easily adapted and cultivated under extreme environmental circumstances including dry areas and cool wet climates. Sulphur and Silicon foliar application are considered a beneficial elements to enhance oats tolerance to drought stress. The main objective of this study were to determine the influence of S and Si foliar application in oats under drought conditions. To estimate the effect of drought stress under S and Si fertilizers the physiomorphological parameters such as LAI, NDVI, SPAD were measured at different oat stages. LAI was measured with LICOR LAI-2000 Plant Canopy Analyzer, SPAD with a Konica Minolta SPAD-502 plus chlorophyll meter and NDVI with a Trimble GreenSeeker. According to the statistical evaluation the mean values for LAI varied between (3.26-5.47), NDVI (0.46-0.83), SPAD (32.75-58.85) and for the plant height values varied (0.81 cm to 0.92 cm). The positive effect of sulphur and silicon on physiomorphology confirms the importance to incorporate these nutrients in the cultivation technique of some spring oats varieties under drought circumstances.

I.   Introduction

Oats are essential crop as a source for food, feed and industrial purposes where in the last five decades they are grown worldwide specifically in North America, Australia, China and North European countries (Marshal et al., 2013). Food production has become a significant concern because its demand will increase more than 70% in the next three decades (Semenov et al., 2014). Where many changes during the past decades on temperature, drought stress, carbon dioxide and transpiration rate are the main factors to reduce the crop productivity (Lobell et al., 2013). Based on climate conditions and global warming which we are witnessing and they are harming agricultural production it leads the researchers, agronomists and plant breeders to focus on new varieties development which can ensure and increase the agricultural production from biotic and abiotic stresses that may occur (Marshal et al., 2013).

Leaf area index (LAI), and normalized difference vegetation index (NDVI) are considered an important agricultural tools to predict and estimate the nitrogen, chlorophyll content, photosynthesis, yield and the biomass of crops (Mielke et al., 2010; Milan et al., 2018; Jin et al., 2016). The LAI, SPAD and NDVI values are correlated between each other, where NDVI values in maize can be influenced by 22.34% from LAI and SPAD values (Ragán et al., 2018). Furthermore, the NDVI and SPAD can be used to detect the nitrogen deficiency in durum wheat and grain yield in winter barley varieties (Csajbók et al., 2020; Kizilgeci et al., 2021).

The effect of sulphur application in cereals has been investigated by many researchers. Sulphur plays a significant role in formation of different compounds such as of vitamins, cysteine, methionine, sulpholipids and proteins. Furthermore, sulphur application can improve the plants growth and grain yield (Narayan et al., 2022; Sing and Kumar., 2022). A combined application of sulphur and nitrogen as fertilizer has shown great results to improve the nitrogen use efficiency in maize (Szulc et al., 2012).

Drought is the main factor to reduce the crop growth and its production (Farooq et al., 2012). Silicon is a beneficial element for plant growth and his role is crucial in agriculture to alleviate biotic and abiotic stress by many factors such as improving transpiration, photosynthesis rate (Coskun et al., 2018; Wang et al., 2021; Kutasy et al., 2022). Furthermore, using silicon as a fertilizer could generate many benefits on crop sector. Silicon application can increase the fertilizer efficiency which leads to improve the crop quality, growth, yield under the drought conditions (Malik et al., 2021; Kovács et al., 2022; Hu et al., 2022).

II.   Materials and methods

II.1. Description of climatic conditions and soil parameters of the study area

The experiment was carried out in 2022 at the experimental garden of the Debrecen University. Average monthly temperature from August 2021 to July 2022 and the average monthly temperature for the last 30 years from 1990 to 2020 are illustrated in *Figure 1*, while the average monthly precipitation from August 2021 to July 2022 and the average monthly precipitation for the last 30 years from 1990 to 2020 are illustrated in *Figure 2*. The average temperature during the June of 2022 was 16.2 % warmer compared to 30 years average of 1990-2020. Furthermore, the total precipitation rate for May and June was for 64.9 mm lower compared to 30 years average. Additionally, the soil parameters such as sulphur and silicon content of the field experimental location are illustrated in *Figure 3*.
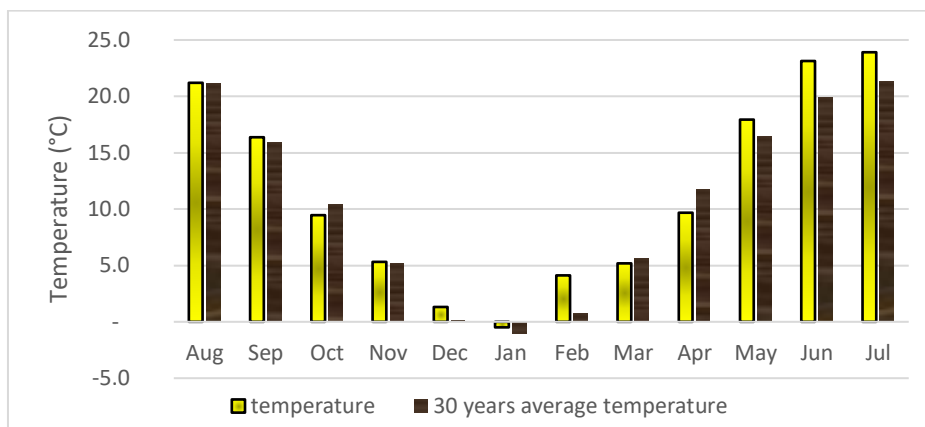
Figure 1. The mean monthly temperature for the period of 2021/22 compared to the last 30 years (1991/2020) in the study area
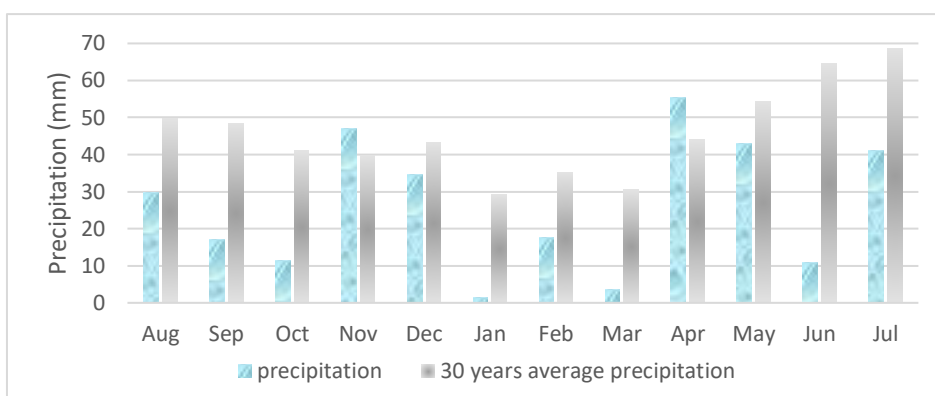

Figure 2. The average amount of monthly precipitation for the period of 2021/22 compared to the last 30 years (1991 to 2020) in the study area
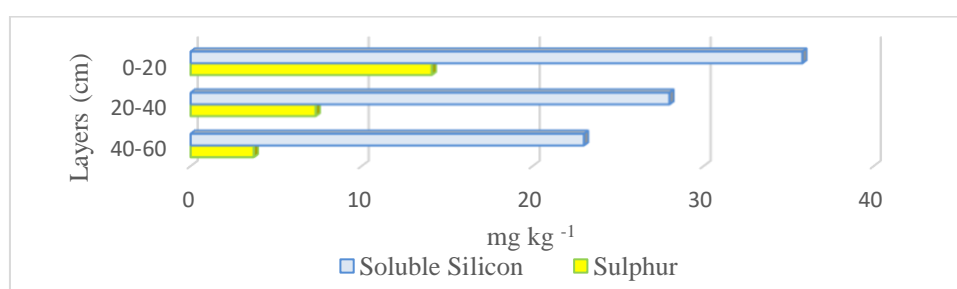
Figure 3. The sulphur and silicon content of the soil in the field experiment area

II.2. Experimental materials, design and statistics

The experiment was conducted in split plot design with four replication and four foliar fertilizer treatmentss such as control, sulphur, silicon, sulphur + silicon. Spring oats were sown in small plots 12 m² on 18 March 2022. Oats were treated during three different developmental phases such as three leaves unfolded phase on 5 May, flag leaf phase on 25 May and early milk phase on 8 June. Sulphur has been sprayed with an amount of 5 l ha⁻¹, silicon 0.5 l ha⁻¹ and a combined amount of sulphur + silicon 5 and 0.5 l ha⁻¹.
The data which were collected from the crop were: leaf area index measured by LICOR LAI-2000 Plant Canopy Analyzer, normalized difference vegetative index by using Trimble GreenSeeker, relative leaf chlorophyll content by Konica Minolta SPAD-502 plus chlorophyll meter, plant height by meter rod from soil to the top of the spike, tillers per plant, tillers per meter square, thousands grain weigh and yield. The data for LAI, NDVI and SPAD were measured at seven different plant developmental phases. In case of LAI, SPAD and plant height five plants were measured for each plot and the average of those data have been used for statistical analysis. Genstat 18ᵗʰ edition software has been used to analyze the collected data and the mean of each leaf characteristics and yield were compared and evaluated between each other utilizing the least significance difference at the level of 5% of significance.

III.   Results

III.1. The effect of nutrients on leaf area index, normalized difference vegetative index and relative chlorophyl content at different developmental stages of spring oat

The normalized difference vegetative index, leaf area index and relative chlorophyl content were measured five times during the crop growing season from 53 to 98 days after sowing (*Table 1*). Treatments has shown similarities to increase at early growing stage where the highest value were measured 62 DAS and then decreased during the other plant growing stages. Statistics revealed that the differences between treatment for LAI were highly significant on 62, 68, 83 and 98 DAS and insignificant on 53, 75 and 89 DAS, where the highest value was at the control (5.47) and the lowest in silicon and sulphur application (3.26). NDVI values were highly significant between treatments except 89 DAS, where the values reached maximum at 60 DAS. The highest value for NDVI were founded in control at 60 DAS with a mean (0.83) and the lowest in silicon and sulphur application (0.46). In all statistical analysis the results for SPAD were insignificant.

Table 1. The effect of nutrients on leaf characteristics at different developmental stages of spring oat (Debrecen, 2022)

Leaf characteristics		Treatments					
		Control	Silicon	Sulphur	Si +S	LSD	CV %
Leaf area index (LAI)	53 DAS	3.92	3.96	4.11	3.92	ns	7
	62DAS	5.47	5.35	5.14	4.83	0.33	4.6
	68DAS	4.86	4.96	4.64	4.47	0.18	3.7
	75DAS	4.54	4.73	4.59	4.62	ns	3.5
	83DAS	4.57	4.83	4.43	4.37	0.23	5.2
	89DAS	4.16	4.28	4.43	4.22	ns	4.2
	98DAS	3.92	3.8	3.61	3.26	0.2	5.7
Normalized difference vegetative index (NDVI)	53 DAS	0.81	0.8	0.79	0.78	0.01	1.1
	60DAS	0.83	0.82	0.82	0.8	0.01	1.2
	68DAS	0.8	0.8	0.78	0.77	0.01	0.9
	76DAS	0.8	0.8	0.78	0.78	0.01	1
	82DAS	0.79	0.78	0.77	0.76	0.01	1.1
	89DAS	0.71	0.71	0.69	0.68	ns	1.4
	96DAS	0.52	0.49	0.5	0.46	0.02	3.9
Relative chlorophyl content (SPAD)	53 DAS	45.86	44.34	45.44	44.28	ns	4.5
	60DAS	51.55	52.17	52.56	51.6	ns	2.4
	68DAS	54.52	53.58	53.53	52.1	ns	3.2
	76DAS	56.56	56.35	57.05	55.79	ns	2.2
	82DAS	56.87	58.18	58.85	57.51	ns	2.5
	89DAS	53.06	53.37	55.53	52.94	ns	4
	96DAS	39.19	36.92	37.18	32.75	ns	10.3

Aberrations: DAS (days after sowing); LSD (least significance difference at 5% significance level); ns (not significant); CV (coefficient of variation)

III.2. The effect of nutrients on the agro morphological traits and yield

The application of silicon has shown negative effect on yield of spring oat which resulted to reduce it by about 53 kg ha^{-1} and to improve plant height, tillers per plant and meter square and thousands grain weight. Furthermore, a combined application of silicon and sulphur significantly improved the plant height, tillers per plant and meter square and the yield specifically by about 14%. That implies foliar application of sulphur under drought conditions can improve the drought tolerance of spring oats. Moreover, sole application of sulphur significantly improved all the agro-morphological traits, but in terms of yield it has reached 3592 t ha^{-1}, by about 27.4% higher compared to non-treated.

Table 4. The effect of nutrients in the agro morphological traits and yield of spring oat

Treatments	Plant height (cm)	Tillers plant^{-1}	Tillers m^{-2}	TGW (g)	Yield t ha^{-1}
Control	0.81	3.356	149.7	24.97	2820.00
Silicon	0.86	3.4	156.4	25.00	2767.00
Sulphur	0.90	3.775	165.7	26.19	3592.00
Si + S	0.92	3.637	159.1	26.51	3224.00
LSD$_{0.05}$	0.03	0.2574	7.99	1.13	174.70
CV (%)	2.5	5.6	4.2	3.7	3.3

Aberrations: TGW (thousands grain weight); LSD (least significance difference at 5% significance level); CV (coefficient of variation)

IV.   Conclusions

Based on our research, the results shows, that the foliar application of sulphur and silicon has different impact on the oats physiomorphology and in reducing drought stress. As long as sulphur and silicon applications are considered as an important factor to increase the physio and agromorphological traits, the crop developmental stages should be followed to achieve the best results. The sole application of sulphur is the most important strategy to increase the grain yield of oats by about 27.4 %. However, one year experiment is not enough to conclude the effect of silicon and sulphur application, so more precise conclusions can be drawn after two or three replication through the years.

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Moiré Fringe Segmentation Tool: szoftveralapú prototípus a scolioticus gerinc moirésávjainak detektálásához

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A scolioticus gerinc legelterjedtebb vizsgálati módszere röntgenfelvételeken alapul. Ezek részleges alternatíváját nyújtja a hátfelszín moiréfelvételeinek elemzése. A scoliosis moiréfelvételeken alapuló diagnosztikájában az általánosan megbízható, gyors és precíz szegmentációs metódus alapvető jelentőségű. Jelen tanulmány projekciós moirétechnika és XOR-logikával generált moiréfelvételek manuális/félautomatikus szegmentációjára kíván szoftveralapú megoldási javaslatot tenni. A jelenleg prototípusként működő szoftver MATLAB App Designer alkalmazásban készült és a Moiré Fringe Segmentation Tool munkacímet viseli. A prototípus képszűrési és morfológiai műveletekkel biztosítja a moirésávok (MS-ok) szegmentációját fényerő- és kontrasztjavítás, 2-D Gauss-féle elmosás, küszöbölés, hisztogram kiegyenlítés, inverzió, valamint szkeletonizáció alkalmazásával. A MS-ok szegmentációját a szoftver kvázi valós időben, manuálisan állítható szűrési és morfológiai képfeldolgozási műveletekkel, valamint előre meghatározott szekvencián alapuló, beépített algoritmussal támogatja. A prototípus alkalmazhatóságát a felvételek MS-jainak nagy részét pontosan lekövető, egyszerű, gyors és felhasználóbarát szegmentálás biztosítja. Az eddigi moiréfelvételek feldolgozásából származó eredmények azt mutatják, hogy a prototípus koncepciója megfelelő alapot nyújt a MS-ok szegmentációjához és további, kiterjesztett képfeldolgozási műveletekkel operáló kutatás-fejlesztéshez. A prototípus továbbfejlesztésével időigényes és komplex szegmentálási módszerek helyettesíthetők.

Kulcsszavak: *moiré topográfia, projekciós moiré, számítógéppel segített képfeldolgozás, szoftver, scoliosis*

Köszönetnyilvánítás

I. Bevezetés

A különféle gerincdeformitások, köztük a scoliosis diagnosztikája már régóta foglalkoztatja az orvostudományt. A gerincdeformitás progressziójának prevenciójában a szűrés esszenciális fontosságú. A szűrés során a testtartás megfelelő diagnosztikája, az esetleges deformitások azonosítása objektív módszereket igényel. A gerincelváltozások diagnosztikájának aranystandardja a radiográfiai (röntgen) vizsgálat.[1,2,3] A röntgen-képalkotás hátrányai, mint az ionizáló sugárzás, az idő- és ismétlésigény, a szükséges infrastrukturális és környezeti feltételek, valamint a felmerülő költségek olyan módszertani megoldásokat indokolnak, amelyek lehetővé teszik a gerinc elváltozásainak költséghatékony, gyors, viszonylag egyszerű eszközöket igénylő és káros sugaraktól mentes diagnosztikáját. A scolioticus gerinc szűrésére a szakirodalomban javasolt nem-ionizáló és noninvazív módszerek között megtaláljuk a moiré topográfiát (MT) is.[4] A MT a moiré jelenségén alapul, amely akkor jön létre, ha két (vagy több) hasonló, repetitív mintázatból álló geometriai struktúra (tökéletlen) átfedésbe kerül. Ekkor egy világos és sötét vonalakból álló eredő csíkozat, az úgynevezett moiréjelenség figyelhető meg (*1. ábra*). Miként bármilyen felületen, az emberi háton létrehozott moirémintázatok a hát egyedi domborzati karakterisztikáját jellemezve válnak alkalmassá diagnosztikai célzatú felülettopográfiai vizsgálatokra (2. ábra).
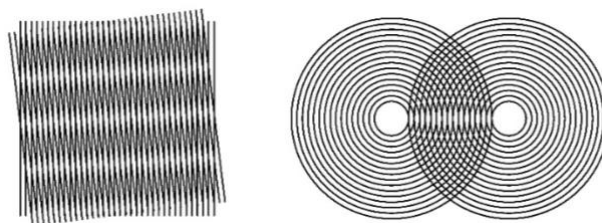
1. ábra: Azonos (jobb), valamint eltérő szögű azonos (bal) geometriájú struktúrák moirémintázatai
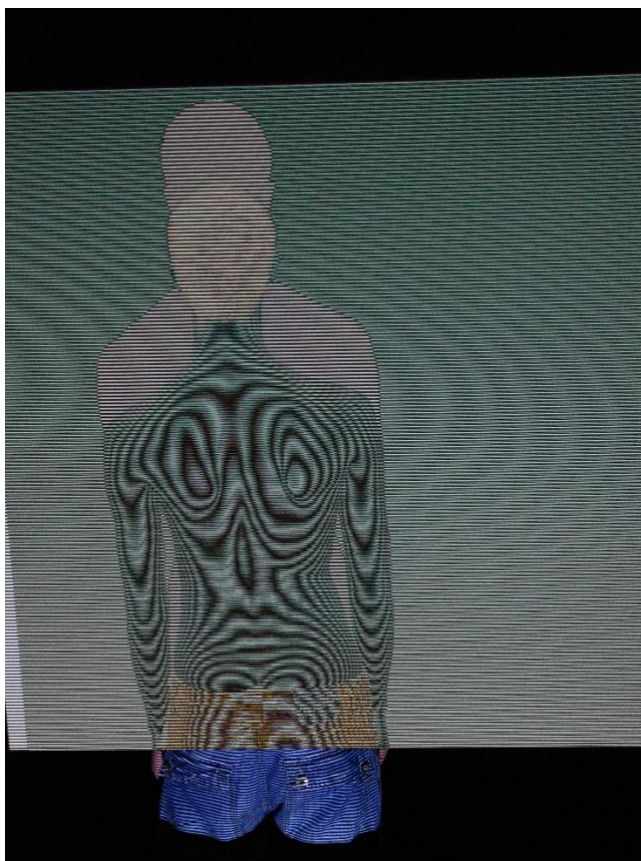
2. ábra: Az emberi hátról készített digitális (projekciós) moiréfelvétel

Az MT szignifikáns előnye az orvostudomány és a népegészségügy számára, hogy noninvazív, káros sugárzástól mentes, tetszőleges ismétlésszámú, gyors, valamint technikai egyszerűsége okán tömegméretekben alkalmazható költséghatékony mérést tesz lehetővé. Másfelől pedig korlátot jelent, hogy scoliosisban alkalmazott felülettopográfiai vizsgálatok esetén általánosan megbízható módszertani standard még nem került kidolgozásra.[5] A további kutatások szükségességét jelenti, hogy a moirémintázat-analízis bizonytalansági faktorainak csökkentésében a moirésávok (MS-ok) precíz szegmentációja alapvető jelentőséggel bír.[6]

Jelen kutatás ezt tűzte ki céljául, méghozzá szoftveres környezetet alkalmazva. A moirémintázatok szegmentációjára egy szoftveralapú alkalmazás, a Moiré Fringe Segmentation Tool (MFST) prototípusa került kifejlesztésre. A prototípus a MS-ok kontúrozását kvázi valós időben (quasi-real-time, QRT) végzi manuálisan beállítható képfeldolgozási műveletek és félautomata algoritmusok alapján. A koncepció célja, hogy ösztönözze a gyakorlati és felfedező jellegű moirékutatásokat scoliosisban azáltal, hogy eszközt ad az egészségügyi háttérrel rendelkező kutatók számára a MS-ok szegmentációs kihívásainak kezelésére. A MFST-n keresztül megvalósuló képszegmentáció célja, hogy bemenetet biztosítson a MS-ok matematikai-geometriai elemzéséhez, gerincgörbületi szögértékek számításához. Ez a tanulmány megegyezik a szerző Interdiszciplináris Doktorandusz Konferencián (2022. november 25-26., Pécs, Magyarország) bemutatott előadásával, amelynek kibővített változata szintén publikálásra kerül[7].

II. Anyag és módszer

A MS-ok detektálása céljából a szoftver manuális/félautomata megoldást követ. A szoftver felépítése és kulcsfontosságú funkciói egy MS-szegmentáló algoritmus kifejlesztésére irányuló előzetes kutatás[8] eredményein alapulnak. Az MFST kódja és grafikus felhasználói felülete a MATLAB App Designer (R2018B) programrendszerben[9] került kifejlesztésre. A felhasználói felület kidolgozása során elsődleges szempont volt, hogy az ablakok a megszokott irodai grafikus szoftverek elrendezéséhez illeszkedjen (pl. Photoshop, GNU Image Manipulation Program). Így az MFST grafikus felhasználói felületének kulcselemeit (1) a szűrési és morfológiai képfeldolgozási műveletek panelje, (2) az algoritmusok lefuttatására szolgáló gombsor, (3) a képfeldolgozás fázisainak QRT vizualizációját megvalósító képernyő és (4) a standard műveletek (betöltés, exportálás, vágás és visszaállítás) gombjai alkotják.

III. Eredmények

Az eredmények alapján az MFST prototípusa lehetővé teszi az XOR logikával és projekciós moiréval létrehozott moiréfelvételek szegmentációját dinamikusan változtatható képfeldolgozás útján. Az alkalmazás által támogatott QRT szegmentálási módszer egyszerű és gyors. A jövőbeni fejlesztések létjogosultságát alátámasztja, hogy a felvételek moirécsíkjainak nagy részét pontosan leköveti. A prototípus grafikus felhasználói felülete (3. *ábra*) négy fő részből áll: (1) a képvászonból, amely az eredeti (referencia) és az éppen feldolgozott képet jeleníti meg, (2) a képfeldolgozó eszköztárból, (3) a szkeletonizált eredmények megjelenítésére szolgáló eszköztárból, valamint (4) a beépített, automatikus szegmentációt kiszolgáló algoritmusokból.

Az MFST grafikus felhasználói felületének jobb oldalán a referenciaként szolgáló eredeti felvétel („Original Image") és a QRT-képfeldolgozás eredményét vizualizáló kép („Processed Image") található. Utóbbi a vásznaktól balra található képfeldolgozó eszköztáron végzett beavatkozások alapján az eredeti moiréfelvétel szürkeárnyalatos változatán végzett szegmentáció aktuális fázisait jeleníti meg.

Az MFST prototípusában elérhető képfeldolgozó eszköztár biztosítja a programba betöltött moiréfelvételek QRT szűrési és morfológiai finomhangolásait anélkül, hogy a felhasználó magasabb szintű szaktudását igényelné. A prototípusba hét különböző, vízszintes skálán (csúszkán) állítható vagy gombokkal aktiválható képfeldolgozási művelet került beépítésre: (1) fényerőszabályzás, (2) kontrasztjavítás, (3) 2-D Gauss-féle elmosás, (4) küszöbölés, (5) hisztogram-kiegyenlítés, (6) inverzió és (7) szkeletonizáció. A szkeletonizáció megjelenítésére három variáció is rendelkezésre áll: (a) csak a szkeletonizált kép jelenik meg („Skeleton Only"), (b) a szkeletonizált kép átfedésben jelenik meg az eredeti moiréfelvétel szürkeárnyalatos másolatával („Skeleton on Gray") vagy (c) a szkeletonizált kép átfedésben jelenik meg az eredeti moiréfelvétellel („Skeleton on Original").

A beépített és bármikor tovább bővíthető algoritmusok célja, hogy a felhasználók képfeldolgozási műveletek előre definiált szekvenciáival végezzenek önálló vagy a manuális szegmentációt kiegészítő delineációt. Az automatikus algoritmusok körét széles körű forrásokból származó moiréfelvételekre adaptált szegmentációs módszerek tanulmányozásával tervezzük bővíteni. Jelen tanulmány praktikus megfontolásokból a prototípusba az automatizált MS-detekció szemléltetésére az előzetes kutatásban alkalmazott statikus megoldást építette be ("Algorithm 1" gomb). Az „Algorithm 2-5" gombok a kutatás későbbi szakaszáig helyőrző (placeholder) szereppel bírnak. Az „Adjust" ![Adjust] („igazítás") gomb megnyomásával az automatikus algoritmusok által adott eredmények finomhangolása végezhető manuálisan.

A manuális szegmentáció fő fázisait a *3-9. ábra* mutatja be. Az „Algorithm 1" gombbal végzett automatizált szegmentálás eredményét a *10. ábra* illusztrálja. A szoftver működésének folyamatát pedig a *11. ábra* vezeti végig. Bár a prototípusban használt megoldás a képszűrési és képfeldolgozási műveletek viszonylag szűk körét alkalmazza, mégis lehetővé tesz vizuálisan követhető és viszonylag pontos, akár diagnosztikához használható MS-delineációt. Az MFST továbbfejlesztett, képfeldolgozási funkcióira nézve kibővített megoldása pedig egyszerűségének és gyors működésének következtében helyettesítheti az időigényes és komplex szegmentálási módszereket is. Ami az automatikus algoritmusok végrehajtási sebességét illeti, ez a képfelbontástól és az alkalmazott szegmentációs metódus összetettségétől és optimalizáltságától függ. Az illusztrációhoz felhasznált moiréfelvétel felbontása 1008 x 1304 px volt, amit a statikus paramétereket alkalmazó automatikus algoritmus mintegy 1 másodpercen belül dolgozott fel. A képfeldolgozás alsó középkategóriás Windows 10 PC-rendszer konfigurációján került végrehajtásra (CPU: Intel® Core™ i5-8300H @ 2.30 GHz, GPU: NVIDIA GeForce GTX 1050 4 GB, RAM: 8 GB).

Az MFST prototípusa tehát egyszerű, gyors, és a felvételek MS-jainak jelentős részét pontosan lekövető szegmentációt tesz lehetővé. Ugyanakkor nem hagyható figyelmen kívül, hogy a prototípusba épített szűrési és morfológiai műveletek, bár biztosítják az adaptív és rugalmas szegmentáció feltételeit, jellegükből adódóan adatvesztéshez, ezáltal pontatlan és/vagy sporadikus delineációhoz vezethetnek. Ezért a prototípus általánosan megbízható használhatósága érdekében az adatvesztést mérséklő és a hatékonyabb adatkinyerést növelő szegmentációs célzatú funkcióbővítés szükséges. Az MFST továbbfejlesztésének lehetséges irányai az alábbiak: (1) a dilatáció (az előtérben lévő pixelek körüli régiók fokozatos növelése) beépítése a MS-ok eredeti formájának hatékonyabb megőrzése céljából; (2) a képélesítéshez alkalmazható felüláteresztő szűrők alkalmazása; (3) adaptív küszöbölés implementálása lokális és globális átlagértékek alapján; (4) mély gépi tanulás útján fejlesztett automatikusan szegmentáló algoritmus (nagy mennyiségű mintaadatot igényel).
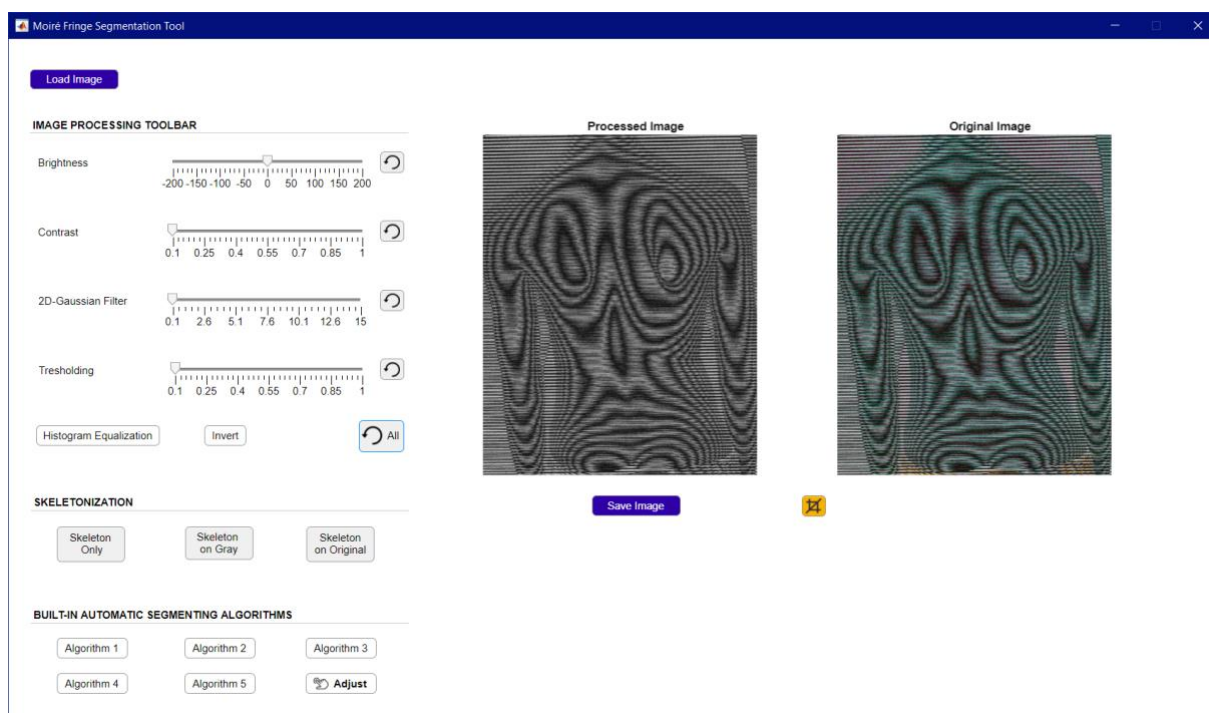
3. ábra: A Moiré Fringe Segmentation Tool prototípusának főképernyője
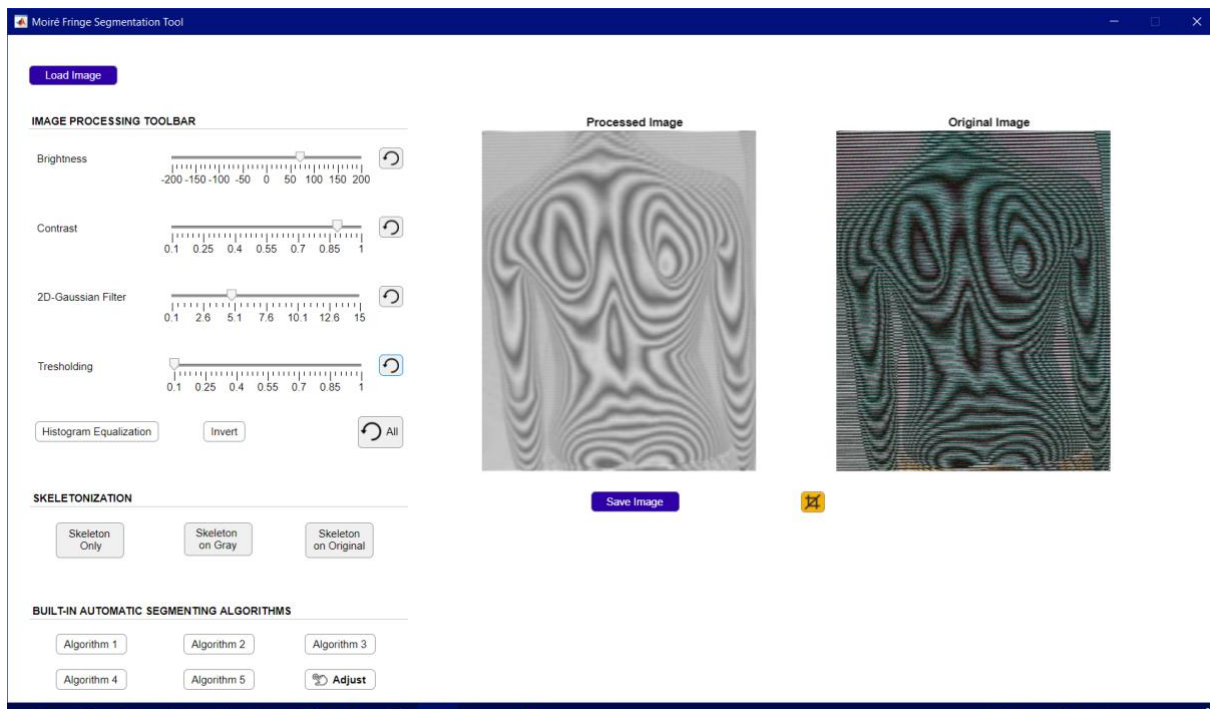
4. ábra: A Moiré Fringe Segmentation Tool prototípusában végrehajtott fényerő- és kontrasztjavítás, valamint a 2-D Gauss-féle elmosás eredménye
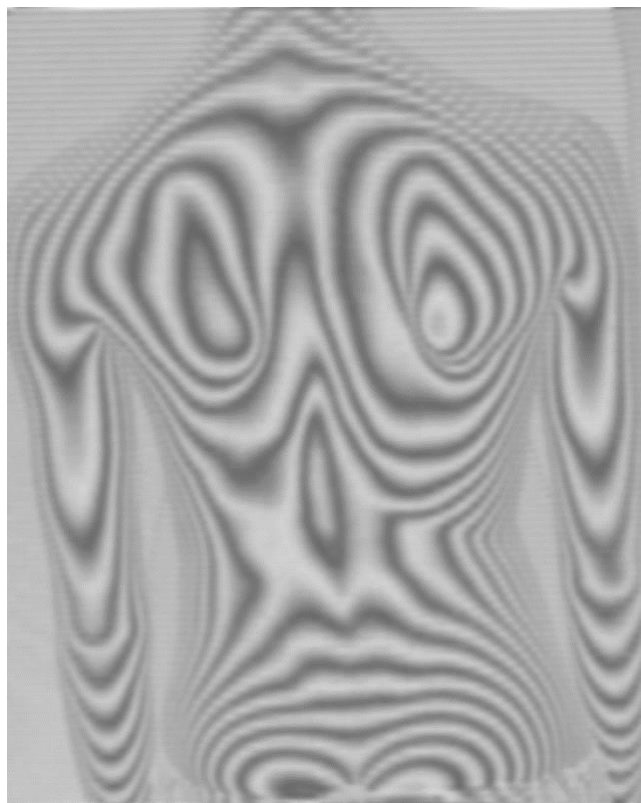
5. ábra: A Moiré Fringe Segmentation Tool prototípusában végrehajtott fényerő- és kontrasztjavítás, valamint a 2-D Gauss-féle elmosás eredménye nagyítva
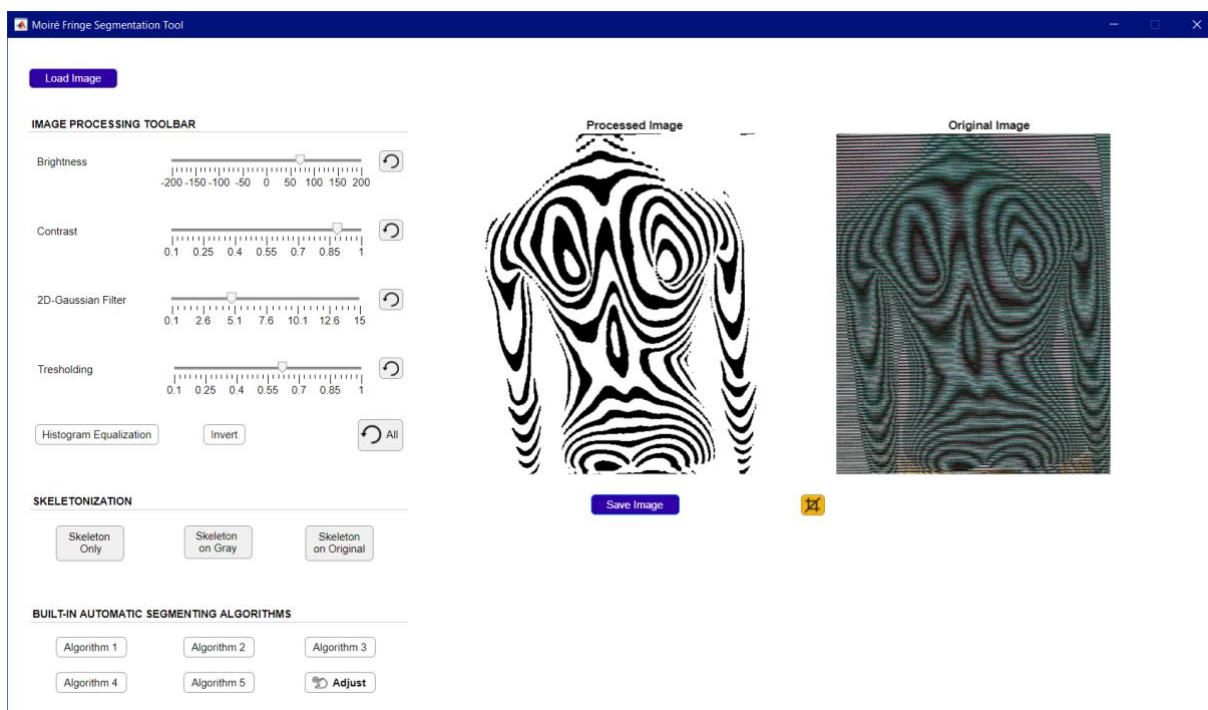
6. ábra: A Moiré Fringe Segmentation Tool prototípusában végrehajtott küszöbölés (thresholding) eredménye
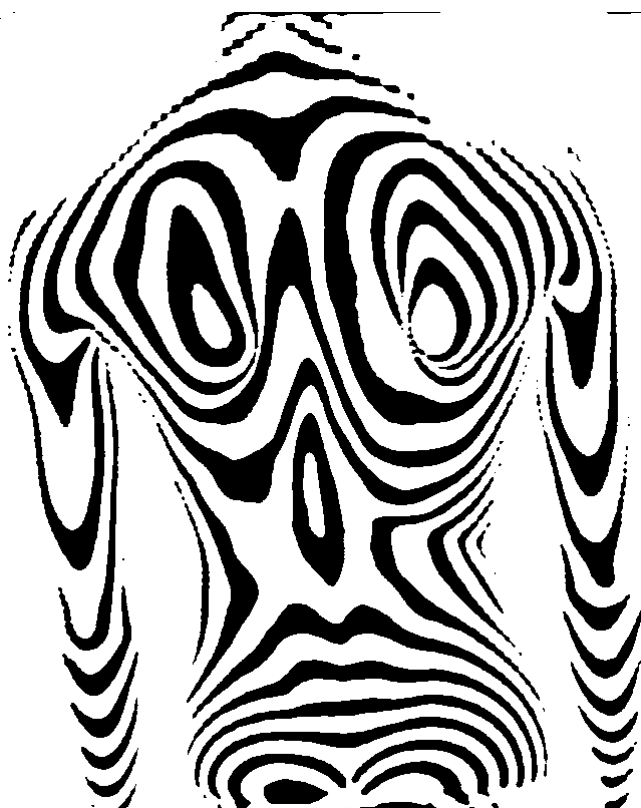
7. ábra: A Moiré Fringe Segmentation Tool prototípusában végrehajtott küszöbölés (thresholding) eredménye nagyítva.
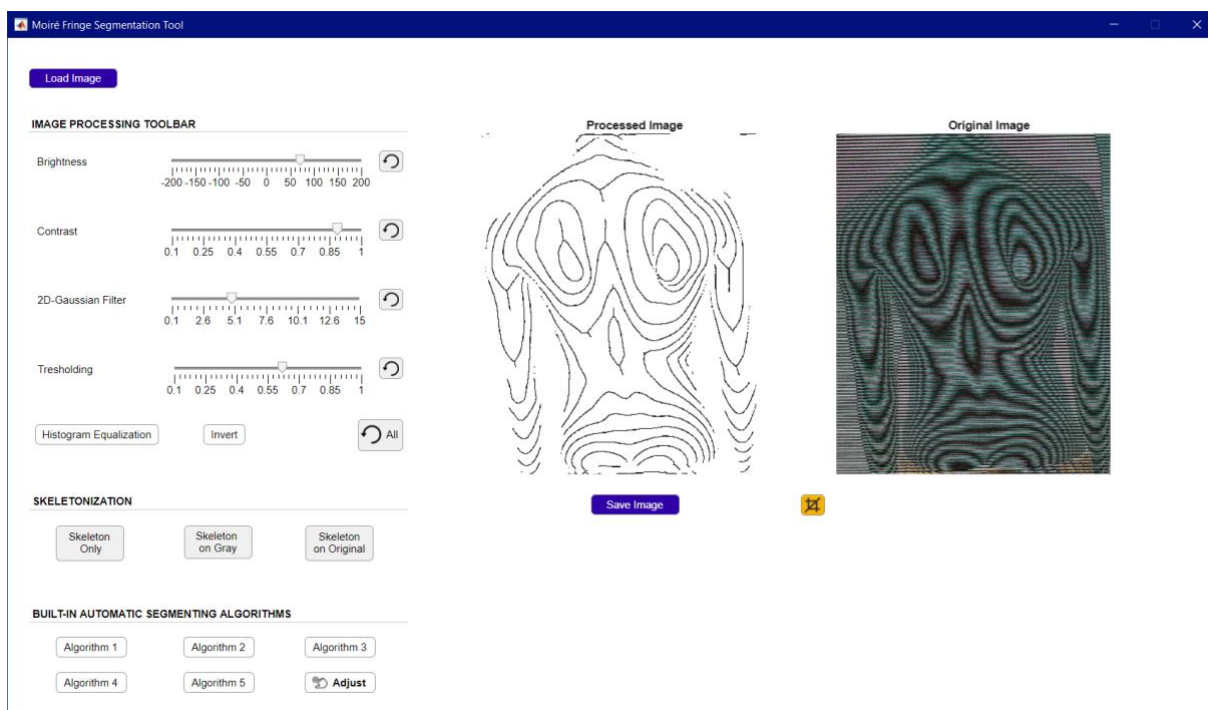
8. ábra: A Moiré Fringe Segmentation Tool prototípusában végrehajtott szkeletonizáció eredménye
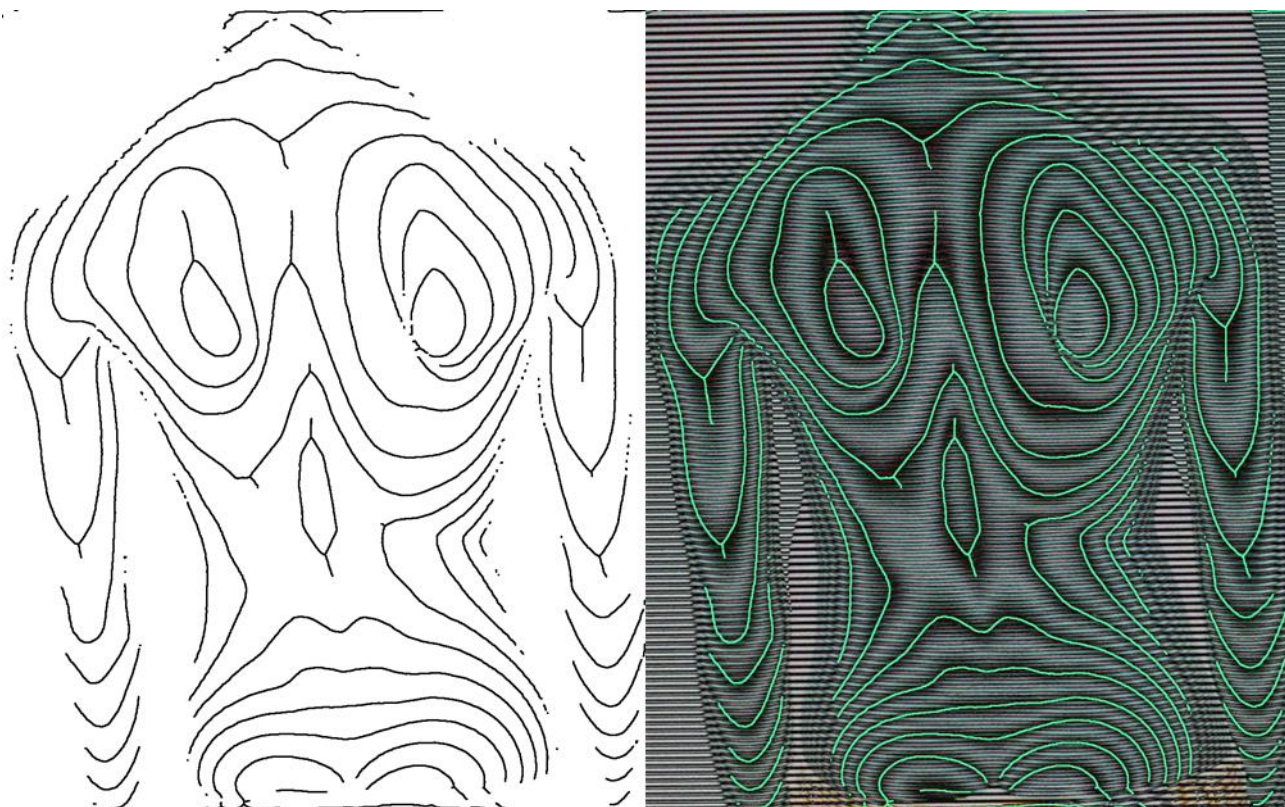
9. ábra: A Moiré Fringe Segmentation Tool prototípusában végrehajtott szekeletonizáció eredménye nagyítva (bal) és átfedésben az eredeti moiréfelvétellel (jobb).
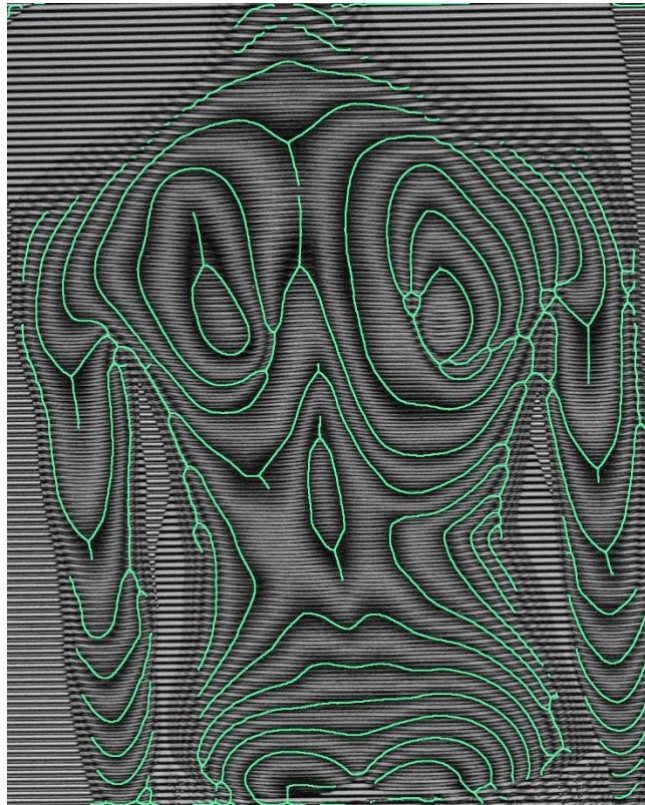
10. ábra: A Moiré Fringe Segmentation Tool prototípusába épített szegmentáló algoritmus eredménye nagyítva (az "Algorithm 1" gomb lenyomását követően).
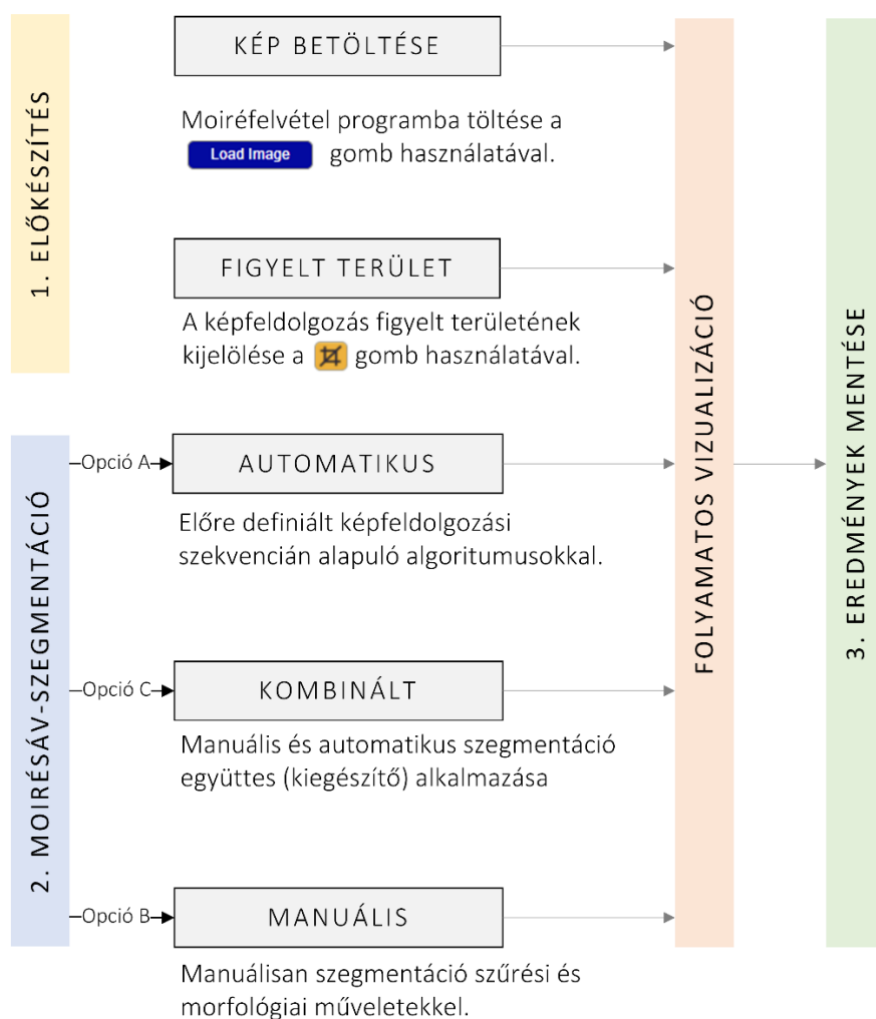
11. ábra: A Moiré Fringe Segmentation Tool prototípusának segítségével történő szegmentáció folyamata.

IV. Összefoglalás

Ez a tanulmány a scolioticus gerinc moirémintázatainak szegmentálására irányuló kutatás második fázisát összegzi, amelynek keretében bemutatásra került a Moiré Fringe Segmentation Tool szoftver-alapú alkalmazás prototípusa, amely MS-ok detektálására és kontúrozására alkalmas. A prototípus a MS-ok szegmentációját kvázi valós időben működő, manuálisan állítható szűrési és morfológiai képfeldolgozási műveletekkel, valamint előre meghatározott szekvencián alapuló, beépített algoritmussal támogatja. A szoftver alkalmazhatóságát egy egyszerű, gyors, és a felvételek MS-jainak nagy részét pontosan lekövető szegmentálás igazolja. Az eredmények arra mutatnak rá, hogy az MFST szoftver prototípusa megfelelő alapot nyújt a MS-ok szegmentációjára irányuló további, kiterjesztett képfeldolgozási műveleteken alapuló kutatás-fejlesztéshez. Egyszerűségének és gyors működésének köszönhetően a prototípus továbbfejlesztett megoldása helyettesítheti az időigényes és komplex, illetve speciális szaktudást igénylő szegmentálási módszereket is.

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Az első világháborút népszerűsítő reklámok – Variációk és változatok a korabeli sajtóban

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Az első világháborús propaganda nem előzmények nélküli, hiszen a 19. század végén megváltozott a propaganda és ez a változás előrevetítette, hogy ezekben az időkben minden addiginál fontosabb lesz a manipuláció és a meggyőzés. Ennek megfelelően a propaganda kontextusába kívánom helyezni az első világháború alatt megjelent hirdetéseket és reklámokat. A háborús lelkesedés terjedését sokan a sajtó szerepének, mozgósító hatásának tulajdonították. Katonailag és pszichológiailag egyaránt szükségessé vált minden hadviselő ország számára a teljes népesség együttműködése, a fegyverek nélküli hadviselés az otthoni vagy hátsó fronton is – ez volt az első világháború egyik fontos következménye.

Írásom az otthoni front propagandájával, ezen belül a korabeli sajtóban megjelenő propagandisztikus reklámokkal és azok változásaival, alakulásaival foglalkozik az első világháború négy éve alatt. A vizsgálat adalék lehet a sajtótörténeti kutatásokhoz, illetve a világháború propagandatevékenységének megrajzolásához.

Kulcsszavak: első világháború, propaganda, reklám, sajtótörténet

I. Bevezetés

A propaganda korábbi funkciójában és értelmezésében az első világháború hozott változást; ekkor változott meg az alkalmazása, a technikája arra irányulva, hogy meggyőzze és manipulálja a nagyközönséget. Az első világháborús propaganda nem előzmények nélküli, csupán a XIX. század végén megváltozott és ez a változás vetítette előre, hogy ezekben az időkben minden addiginál fontosabb lesz a manipuláció és a meggyőzés. A háborús propaganda egyik fő célja az volt, hogy a civilekből kiképzett katonák lelkesedését és harckészségét fenntartsa. Ebből következik, hogy a propagandának reményt, értelmet és célt kellett nyújtania, tehát el kellett érnie, hogy a katonák életüket feláldozva is készek legyenek harcolni a nemzetért, az ellenséges katonákkal szemben. Itt vált igazán fontossá, hogy a propaganda megmutassa a katonáknak a saját részről vívott háború igazságos voltát.[1] A propaganda[2] a latin propagare szóból ered, melynek jelentése „terjeszteni". A propaganda célja bizonyos nézetek elterjesztése, a befogadók véleményének befolyásolása, meggyőzése.

Figyelmem a hátországra, a háborút népszerűsítő korabeli sajtóra, azokban található propagandareklámokra és azok változásaira irányul. Az első világháború kutatása az utóbbi évtizedben az úgynevezett otthoni frontra fókuszál;[3] munkám ehhez az irányzathoz kapcsolódik. A vizsgálat adalék lehet a sajtótörténeti kutatásokhoz, illetve a világháború propagandatevékenységének megrajzolásához.

A korabeli sajtóban megjelenő hirdetések széles olvasóközönségnek szóltak, így egyfelől igyekeztek az olvasok igényeit szem előtt tartva, tökéletesen rezonálni a néplélekkel. Másfelől a reklámok valójában az emberek felett a fogyasztói kontrollt igyekezett megszerezni és megtartani, melyet a Nagy Háború alatt legegyszerűbben és célravezetőbben a világháborús mozgósítás és tettvágy, a hősiesség kultuszának propagandájával tudott elérni.

A vizsgálatom középpontjában olyan sajtóhirdetések állnak, amelyek általában a háborúra hivatkoznak, szenzációs eseményekre vagy éppen a világégés következtében a hátországban bekövetkező változásokra/nehézségekre. A világháború négy éve alatt, ahogy a frontok nyíltak, bővült a hadszíntér és ezzel egyenesen arányosan nőtt a lelkesedésre és kitartásra buzdítás igénye, a háborút a részvénytársaságok és cégek azon nyomban eladásaik szolgálatába állították.

A korabeli sajtóorgánumokban megjelenő, háborút népszerűsítő hirdetések, melyek vizsgálatával a tanulmányban foglalkozom, egyszerre vizuális és írott források is, tudniillik általában a reklám középpontjában egy kép vagy karikatúra látható, amihez kapcsolódik egy anekdotikus történet és egy ismétlődő szlogen.

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[1] Pollmann, F.: A hadviselés átalakulása az első világháborúban: Haditechnika, stratégia és propaganda. In.: Tomka, B. (eds.): Az első világháború következményei Magyarországon. Országgyűlési Hivatal. Budapest, 2015. p. 51.

[2] A propaganda „Szimbólumok (szavak, jelszavak, jele, zenei és látványelemek) manipulatív használata, amelynek célja, hogy a kívánt irányba befolyásolja a befogadók attitűdjét és viselkedését. A kifejezésnek ma már pejoratív mellékzöngéje van, és a céltudatos politikai kommunikáció egyes formáinak semlegesebb elnevezésére a meggyőzés, ügypártolás és politikai hirdetés fogalmait használják. A propaganda kifejezés a lenini szóhasználatban terjedt el. Lenin a fogalmat a művelt emberek befolyásolására alkalmas, érvekkel alátámasztott okfejtésként határozta meg, a tanulatlan tömegek érzelmi alapú mozgósítására az agitáció terminust tartotta fenn. (...) A nemzetközi propaganda napjainkban legfőképpen a „kulturális diplomácia" és az országos „információs" szolgáltatások intézményein, illetve az államilag ellenőrzött rádió- és tévéprogramokon keresztült zajlik. Mindezen tevékenységek csak erősítik a régi szólás érvényét, miszerint ami az egyiknek oktatás, a másiknak propaganda." Politikatudományi enciklopédia. Bogdanor, V. (eds.) Osiris Kézikönyvek. Budapest, 2001. pp. 570–571.

[3] Lásd például Bihari, P.: Lövészárkok a hátországban. Középosztály, zsidókérdés, antiszemitizmus az első világháború Magyarországán. Napvilág. Budapest, 2008.

A propagandareklám kutatásnak a huszonegyedik században nagyobb relevanciája van, mint valaha, amikor minden második sarkon óriásplakátok köszönnek vissza ránk és elárasztanak minket a hirdetések a közösségi mediában.

II.   Hirdetés- és sajtótörténet

Az 1900-as évek elején a tájékozódás csaknem egyetlen formájának az újságolvasás tekinthető. A modern tömegsajtó Magyarországon a dualizmus korában alakult ki.[4] A korszakban, már a dualizmus óta létező lapok mellett, számos új sajtóorgánum jelent meg, ezen sajtóorgánumok a politika teljes palettáját lefedték. A századfordulóra kifejlődtek a nagy sajtóbirodalmak, a világ sorsát meghatározó hatalmak pedig rájöttek, hogy a tömeg egészét kell megszólítani, vagyis a képek, röpiratok és plakátok már nem elegendőek: a nagy példányszámú, országos vagy regionális szinten terjesztett és olvasott újságokon keresztül juttatják el a „népnek" szánt mondanivalójukat.[5] A reklám nemcsak termékeket mutat be és azokat népszerűsíti, hanem az adott kultúra, értékrendszer pillanatnyi tükre is.

Mindennek a feltételeként a XIX. és a XX. század fordulójára erőteljesen bővült az írni-olvasni tudók száma,[6] és ezzel kiszélesedett az újságolvasó közönség. A hirdetések jelentősége a XIX. század végén változáson ment keresztül, ami magával hozta az üzleti szemléletű lapkiadás kialakulását is, tehát a két tényező elválaszthatatlanul összefüggött. Azaz az üzleties sajtó egyik alappillérje a hirdetések térnyerése az újság hasábjain, másfelől pedig a lap tartalmában való változás: kulturális könnyítés és a kapcsolattartás igénye az olvasókkal.

A XIX. és a XX. század fordulóján indult meg Magyarországon a kereskedelmi célú reklámok és hirdetések számának rohamos növekedése.[7] A robbanásszerű változásnak a hátterében olyan okok húzódtak meg, mint a gazdasági fejlettség, a cégek számának gyarapodása, de ezenkívül az is oka volt, hogy fél évszázad után a naptárak, hirdetmények, hírlapi beiktatások, külföldi hírlapok és időszaki lapok bélyegkötelezettségének megszüntetéséről szóló 1900:X. törvénycikk megszüntette a hirdetési bélyeg formájában kirótt különadót.[8] Az addig legfeljebb egy, maximum két oldalt kitevő (voltak lapok, ahol egy-két hirdetésénél több nem is jelent meg), hosszú ideig ismétlődő sajtóhirdetések helyett a gyorsan változó, aktuális hirdetések mennyiségi térhódítása következett be.[9] Magyarországon az első fontos újítás a sajtóhirdetések

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[4] Takács, R.: Sajtó és propaganda a háború idején. In.: Kaba, E. (eds): Háborús mindennapok – mindennapok háborúja. Magyarország és a Nagy Háború – ahogy a sajtó látta (1914-1918). Politikatörténeti Intézet - Napvilág Kiadó. Budapest, 2017. p. 11.

[5] Lénárt, A.: Újrahasznosított propaganda. Az első világháború tanulságainak beépülése a politikai praxisba. Jel-Kép. Kommunikáció, közvélemény, média. 2016. Vol. 6. p. 6.

[6] A közoktatási rendszer, amely tankötelezettségen alapult radikálisan növelte az olvasni tudó lakosság számát az Osztrák–Magyar Monarchia területén. 1867 óta az írni-olvasni tudás valamivel több, mint 60%-kal nőtt. 1880-tól tíz évenként 8-10%-kal, mintegy kétmillió fővel nőtt ennek aránya. 1880-ban a Monarchia lakosságának 43,5%-a tudott írni-olvasni, ami 1900-ra 61,2%-ra nőtt, a törvényhatósági jogú városokban pedig 79,7% lett. 1910-ben a kereső lakosság 71,1%-a, az összlakosság 58,2%-a írt és olvasott. In.: Buzinkay, G.: A magyar sajtó és újságírás története a kezdetektől a rendszerváltásig. Wolters Kluwer. Budapest, 2016. p. 231.; „1910-re a népesség 68%-a tudott olvasni és írni."
Vö.: Dr. Dányi, D.: Az írás-olvasás elterjedése Magyarországon. Demográfia. 1964. Vol. 2. pp. 310-313.

[7] Szabó, D.: Reklám és politika 1906-ban. História. 1992. Vol. 2. p. 27.

[8] Buzinkay, G.: A magyar sajtó és újságírás története a kezdetektől a rendszerváltásig. Wolters Kluwer. Budapest, 2016. p. 267.

[9] Buzinkay, G.: A magyar sajtó és újságírás története a kezdetektől a rendszerváltásig. Wolters Kluwer. Budapest, 2016. p. 267.

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terén az apróhirdetések alkalmazása volt, amely a Légrády Testvérek 1878-ban induló *Pesti Hírlap*jához köthető; a lap létrejöttével kezdődött el az „*üzleti szellemű*"[10] sajtó korszaka.

A világháború kirobbanását követően gyorsan nőtt a lakosság körében a hírek utáni érdeklődés. A sajtópiac ezen tényezők mentén bővülni kezdett. A háborús erőfeszítéseket támogató, vagy csak elfogadó ember, ahogy a sajtó is, egyre többféle érvet talál arra, hogy miért kell támogatnia háborút. A cenzúra nem kifogásolta a háború melletti kiállást (sőt!), azaz ezen elemeket nem kellett rejtegetni a mondandó mögött.[11] Kemény Ferenc pedagógus 1915-ben vizsgálta a sajtóorgánumokat, és arra jutott, hogy a sajtó olyan újságírói eszközökhöz folyamodott, amelyek apránként emelték az olvasók ingerküszöbét. Ennek következtében a háborús híreket félkövér, kövér vagy egyre vastagabb szedéssel emelték ki, ami azzal járt, hogy az emberek a rendes szedésű szövegeket már alig méltatták figyelemre.[12]

A világháború időszakában a legnagyobb országos lap, Az *Est* elérte a fél milliós (476 ezres) példányszámot[13], a *Kis Ujság*, *Friss Ujság* 150–200.000 példányban, a *Pesti Hírlap* 109-180.000 példányban,[14] *Az Ujság*, a *Magyarország* 50–60 000 példányban jelent meg.[15]

1914 és 1918 között a „leleményes" kereskedők a háborút használták fel „hívószóként", jórészt a termékeik eladására. Az, hogy ekkortájt ki hirdetett, nem tartogat meglepetést: a kis- és középüzemek, továbbá a kereskedők használták a reklámot áruik népszerűsítésének érdekében.[16]

Az első világháború többféle módon alakította a média működését, ezáltal megváltozott a média és társadalom viszonya. A háború minden országban megnövelte a hírek iránti érdeklődést, így a média befolyásoló hatása a világháború alatt tovább fokozódott.[17] Kialakult egy úgynevezett „*háborús tömegpszichózis*",[18] amely kialakította a maga háborús sajtóját, s ez a sajtó mindenben igyekezett kiszolgálni ezt a tömegigényt, illetve gerjesztette is ezt a háborús pszichózist.

Emiatt a háborús lelkesedés terjedését sokan a sajtó szerepének, mozgósító hatásának tulajdonították.[19]

A sajtópropaganda sajátossága, hogy a lapokban együtt jelenik meg a propaganda és a propagandán kívüli tartalom is, ezek mellett pedig az „álpropaganda". Propagandaszempontból e sajátosságok miatt a sajtó nem homogén, úgy, mint a levelezőlapok vagy plakátok, továbbá a sajtóban el lehetett könnyedén leplezni a propagandisztikus célokat is.[20]

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[10] Buzinkay, G.: A magyar sajtó és újságírás története a kezdetektől a rendszerváltásig. Wolters Kluwer. Budapest, 2016. p. 267.

[11] Szabó, D.: A magyarországi sajtó a háború kitörésekor. In: ifj. Bertényi, I.- Boka, L.- Katona, A. (eds.): Propaganda - politika, hétköznapi és magas kultúra, művészet és média a Nagy Háborúban. Országos Széchényi Könyvtár. Budapest, 2018. p. 251.

[12] Klestenitz, T.: A nagy háború propagandája és a magyar sajtó. In medias res. 2015. Vol. 2. p. 408.

[13] Kókay, Gy.- Murányi, G.- Buzinkay, G.: A magyar sajtó története. Magyar Újságírók Országos Szövetsége- a Bálint György Újságíró-iskola. Budapest, 2001. p. 167.

[14] Kókay, Gy.- Murányi, G.- Buzinkay, G.: A magyar sajtó története. Magyar Újságírók Országos Szövetsége- a Bálint György Újságíró-iskola. Budapest, 2001. p. 153.

[15] Olasz, L.: Sajtóirányítás és háborús propaganda az I. világháború időszakában. Belvedere Meridionale. 2019. Vol. 2. p. 105.

[16] Szabó, D.: Reklám és politika 1906-ban. História. 1992. Vol. 2. p. 27.

[17] Sipos, B.: Az első világháború médiahatásai. Médiakutató. Vol. 2. pp. 103 – 108. https://mediakutato.hu/cikk/2010_01_tavasz/10_elso_vilaghaboru_mediahatasai [letöltés ideje: 2023. 01. 04.]

[18] Mucsi, F.: Sajtó, cenzúra Magyarországon az első világháború idején. Történelmi Szemle. 1984. p. 196.

[19] Mucsi, F.: Sajtó, cenzúra Magyarországon az első világháború idején. Történelmi Szemle. 1984. p. 247.

[20] Mucsi, F.: Sajtó, cenzúra Magyarországon az első világháború idején. Történelmi Szemle. 1984. p. 239.

III. Első világháborút népszerűsítő reklámok

Az első világháború négy éve alatt megjelenő reklámokat különböző kategóriákra osztottam. Vannak állandó reklámszlogeneket alkalmazó hirdetések, olyan hirdetések, melyeknek szövegezéseik és rajzaik időközönként megváltoztak. A variábilis reklámokat két eltérő csoportba soroltam: ezek az időszakosan több variánsban visszatérő hirdetések, melyek esetenként két-három hetente vagy több havonta jelentek meg eltérő felfogású és funkciójú lapokban váltakozva, és az állandóan változó hirdetések. A továbbiakban ezekre a típusokra hozok példákat – ami nem azt jelenti, hogy nem léteztek más reklámozó cégek, akik a háborút használták fel a termékeik népszerűsítésére. Jellegzetesnek gondolt példáimon keresztül azonban az olvasó betekintést nyerhet a Nagy Háborút propagáló reklámok világába.

Tanulmányomban vizsgálni kívánom továbbá a hirdetések (és hirdetők) alapvető célját is, az eladás mellett megmutatkozó tevékenységeket és azok jellegét. Kitérek a többféle kontextusban újra és újra felbukkanó, vagy csupán egy adott esemény kapcsán, illetve egy-egy periódustól eltekintve máskor elő nem forduló szimbólumokra és motívumokra. Szeretném szemléltetni, hogy a hirdetésekből hiányoztak bizonyos momentumok. A hirdetések ugyanis egyrészt nem reálisan ábrázolják a háborút, másrészt gyakran úgy állítják be, mintha ez valami tréfa lenne, valami jó móka, mintha nem is „velünk", a „mi-csoporttal" történne, mintha emberek ezrei nem is halnának meg. Ami alapvetően hiányzik a hirdetésekből, az a szenvedésre való reflektálás, a halál, a nyomor vagy épp az éhezés; ezekben a reklámokban nem lehet rokkantakról olvasni (kivételt jelentenek egyrészt a háborús sérültek /ábrázolásai/, akik azonban mindig vígkedélyűek, másrészt olyan speciális termékek hirdetői, mint a műlábtagok), nem szól épületek pusztulásáról. A Monarchia és azon túl az ellenséges Antant-hatalmak országainak említésekor se jelennek meg a szenvedés momentumai.

Magyarázható azzal a „hiány", hogy a háború emberi nyomorának ábrázolása nem mutatott volna jól a hősiesség és dicsőséges történetekkel és az országok háborús propaganda céljaival együtt.[21] (Ezért láthatunk viszont gyógyuló és vidám katonákat leggyakrabban kórházi ágyon.) Feltételezhető, hogy a hiány magyarázható továbbá az (ön)cenzúra tényével is. A háborús cenzúra bevezetésének jogi alapjait már az 1912. évi LXIII. törvénycikk (*A háború esetére szóló kivételes intézkedésekről*)[22] megteremtette, ennek a törvénycikknek a megjelenésével egy időre esik a miniszterelnök által kibocsátott 5482/1914. M.E.[23] számú rendelet a közlési tilalom alá eső tartalmakról.[24]

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[21] Buzinkay, G.: A magyar sajtó és újságírás története a kezdetektől a rendszerváltásig. Wolters Kluwer. Budapest, 2016. p. 314.

[22] Buzinkay, G.- Kókay, Gy.: A magyar sajtó történet I. A kezdetektől a fordulat évéig. Ráció Kiadó. Budapest. 2005. p. 189.

[23] *„A m. kir. ministerium 5,482/M. E. számú rendelete, a katonai intézkedések közlésének eltiltásáról. A m. kir. ministerium Magyarország egész területén az osztrák-magyar monarchia két állama fegyveres erejének állásáról, mozdulatairól, erejéről és működéséről, az erődök és erősítvények állapotáról, úgyszintén az e fegyveres erő számára szolgáló fegyverek, hadiszerek és szerelvények mennyiségéről vagy élelmiszerek hollétéről, mennyiségéről és minőségéről vagy szállításáról a sajtó útján történő közléseket ezennel eltiltja. Az ily tartalmú közleményeknek sajtó útján való közzétételét az 1878: V. t.-c. 456. §-a (illetve az 1912: LXIII. t.-c. 23. §-a) öt évig terjedhető államfogházzal és nyolc-ezer koronáig terjedhető pénzbüntetéssel sújtja. Ez a tilalom nem vonatkozik azokra a közleményekre, amelyek a m. kir. ministerelnökség sajtóosztálya, a horvát-szlavón-dalmát országos kormány elnöksége, vagy a hivatalos lapok útján, — továbbá amelyek a m. kir. honvédelmi minister, a cs. és kir. hadsereg főparancsnokság hadisajtó szállása vagy a cs. és kir. hadügyministerium sajtó-irodája engedélyével jutnak nyilvánosságra. Ez a rendelet azonnal hatályba lép. Budapest, 1914. július 27."* In: Belügyi Közlöny. 1914. július 27. Vol. 35. p. 484.

[24] Pruzsinszky, S.: Inter arma silent leges - Szólásszabadság és háborús pszichózis az első világháborúban. Katonai Jogi és Hadijogi Szemle. 2014. Vol. 2. p. 20.

III. 1. Az állandó reklám

Általánosságban a reklám szubjektív, nem pusztán tényeket közvetít, meggyőző is próbál lenni. Az üzenetek rövidek, tömörek, lényegretörők. A befogadó számára is egyértelmű a reklám szándéka, az, hogy a felkeltse és megtartsa a figyelmet. Az újságokban publikált hirdetéseket sokszínűség, változatosság és egyediség jellemezte. Voltak azonban olyan cégek, akik állandó reklámszlogeneket alkalmaztak a hirdetés rovatban, mint a Benz.

A hadüzenet után a Benz a háborúhoz kapcsolódó reklámot adott közre (megjelentetett továbbá más hirdetéseket is, ám ezek nem reflektáltak a háborúra), mellyel napi szinten több sajtóorgánumban találkozhatott az olvasó. A háború előrehaladtával a hirdetés gyakorisága csökkent. A trónörököspár meggyilkolása és a fegyverletétel között összesen 73 hirdetésben reklámozta magát a cég, ebből 11 reflektált a háborúra – a képen is látható reklám. A hirdetés a formáját, szövegezését és szlogenjét tekintve állandó volt (és állandó maradt). A hirdetést egy fekete (vagy díszesebb fekete motívumos) keret „ölelte körebe", a szlogen pedig benne volt olvasható: „*Ne vásároljunk ellenségeinktől automobilt! A legjobb Németországi márka: »BENZ« segít egyedül diadalra.*"[25]

A Benz reklámja a világháború alatt több sajtóorgánumban is megjelent (a teljesség igénye nélkül) olyan lapokban, mint a Budapesti Hírlap, Pesti Hírlap, Világ, Az Ujság, Pesti Napló, Magyarország.

1. ábra. Forrás: Budapesti Hírlap. 1914. augusztus 8. Vol. 192. p. 13.

2. ábra. Forrás: Az Ujság, 1914. november 01. Vol. 273. p. 48.

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[25] Benz-reklám. Pesti Hírlap. 1914. november 01. Vol. 273. p. 30.

III.2. Az időszakosan változó reklámok

Az időszakosan változó reklámok példájaként a Diana-sósborszesz (A sósborszesz kevés sós vízzel kevert valódi borszesz, sós vízzel hígított alkohol. Erényi Béla gyógyszerész 1907-ben kikeverte és piacvezetővé tette a sósborszesz mentolos változatát a Diana sósborszeszt.) első világháborús hirdetéseit kívánom bemutatni. A termék népszerűsítése (és vele együtt a háborúé is) végigkísérte a világégés mind a négy évét, különböző frappáns szövegezéssel és ábrázolásmóddal. 1914. júniusa és 1918 novembere között összesen 1401 Diana-sósborszesz hirdetés jelent meg több, mint 50 sajtóorgánumban, ezek közül 847 reklám kapcsolódott a háborúhoz. A rámenősség jellemző volt a szövegekre, míg a rajzokon az alakok valamilyen viszonyban voltak hozhatók a termékkel, de mindig a terméken volt a hangsúly. A Diana-sósborszesz reklámjai érvelésekre épültek, a figyelem a termék különleges tulajdonságaira irányult. A szöveg rendszeresen, mondhatni időszakosan változott, nemcsak a front alakulásának függvényében, hanem különböző gazdasági és társadalmi történések mentén is, például: a kolerajárvány, zord tél, közellátási nehézségek, reflektál a különbéke kérdésére.

A háborút a részvénytársaság azon nyomban az eladás szolgálatába állította. Három nappal a Szerbiának küldött hadüzenet után a Friss Ujságban megjelent a háborúhoz kapcsolódó első hirdetése: „*Háborúba Diana sósborszeszt visz, és győzni fog a magyar katona, mert a Diana sósborszesz hőség ellen, kimerültség ellen, sebesülés okozta fájdalmak ellen első segítség. Kapható mindenütt.*"[26]

3. ábra. Forrás: Friss Ujság. 1914. július 31. Vol. 183. p. 4.

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[26] Friss Ujság. 1914. július 31. Vol. 183. p. 4.

4. ábra. Forrás: Az Ujság. 1914. augusztus 06. Vol. 186. p. 15.

1914. augusztus 06.

Az Ujságban (továbbá a Pesti Hírlapban, a Friss Ujságban, Az Estben stb.) megjelent reklám a háború anyagi áldozataihoz kapcsolódik; ez a részvénytársaság szerint már nem is fontos, hiszen a sikeres háborúhoz csak Diana-sósborszesz kell.

1915. május 23.

A Pesti Napló 1915. május 23-ai számában (is) a részvénytársaság teljes oldalon hirdette, hogy a sósborszesz sokféle ember sokféle baján képes segíteni, és ezt képeken ábrázolta. Kilenc különböző rajzzal és a hozzájuk illő ütős szöveggel próbálta az olvasókba sulykolni, hogy okvetlenül meg kell vásárolniuk a terméket.

5. ábra. Forrás: Pesti Napló. 1915. május 23. Vol. 142. p. 25.

III.3. Az állandóan változó reklám

Az általam választott Kotányi-paprika reklámok alapján kívánom ismertetni az állandóan változó szövegezésű hirdetéseket. Az első világháború négy éve alatt a *Borsszem Jankó* hasábjain jelentek meg a Kotányi cég hirdetései, összesen ez 133 reklám. A hetente megjelentetett Kotányi-hirdetések közül olyanokat választottam ki, amelyek az első világháború eseményeire utalnak, egyidejűleg pedig kapcsolódnak a propaganda tevékenységéhez és igyekeznek fenntartani a háborús közhangulatot.

Az élclap jellegéhez is alkalmazkodva egészen különleges reklámsorozatot indított Kotányi János. A szöveg változatos volt, hétről-hétre változott, maga a hirdetés formáját tekintve

azonban állandó volt: vastagon szedett, fekete betűkkel a „Kotányi Paprika" név, mellette magyaros ruhába öltöztetett kis alak, akinek vállán paprikalánc volt átvetve. Minden héten megjelentetett valami kis történet-szerűséget a reklámjaiban, amelyhez meglehetősen morbid vagy épp vicces módon, de minden esetben kapcsolódott a szegedi őrölt paprika.

A történet mindig valamilyen pár nappal korábbi, nagy visszhangot keltő háborús eseményre utalt, s ebben teljesen egyéni volt, hiszen nem általában a háborúra hivatkozott, nem egy eseményt „aknázott" ki többször, ahogy az állandó reklámoknál már említésre került, hanem mindig újabb eseményt keresett és ahhoz kapcsolta hozzá reklámszövegét és paprikáját.

1914. augusztus 9.

6. ábra. Forrás: Borsszem Jankó. 1914. augusztus 09. Vol. 32. p. 10.

Az 1914. augusztus 9-ei Kotányi-reklámban (és sok másikban), valamint a *Borsszem Jankó* karikatúráin is éles kontraszt érzékelhető: visszatérő elem, hogy az Antant-országokat animizálva, a központi hatalmakat pedig emberként jelenítették meg.[27] Ezek az állatfigurák mindig szimbólumok: jelen esetben a barna medve egyértelműen Oroszországra utal. Ez a fajta szimbólumhasználat a propagandatevékenység egyik állandó jellemzője. Amit az indokol, hogy a szimbólumok az örök igazság kifejezésére szolgálnak, hosszú múlttal rendelkeznek, az ismert szimbólumok fejlődési szakaszokon estek át, így válnak adott társadalom elfogadott kollektív jelképeivé. Az ismert szimbólumok (melyek a reklámokban is megtalálhatóak) Carl Gustav Jung szerint megtartották régi jelentésüket is, és a lelki töltés révén ezek a szimbólumok az előítéletekhez nagymértékben hasonló módon működnek.[28]

E propagandatechnikák mellett megemlíthetjük még a hirdetések sokszor, általánosságban egyszerű, érthető szimbólumhasználatát és a szöveges részek hétköznapi nyelvezetét, ami hozzájárulhatott a könnyebb megértéshez. Hiszen „*ha kevés, vagy csak egy ellenséget állítanak az olvasó fókuszába, a közönség talán jobban tud azonosulni azzal az érzéssel, hogy őt le kell győzni, ezáltal a bűnbakképzés mechanizmusai szélesebben tudnak kibontakozni, jobban működhetnek, mintha több ellenségkép ábrázolásánál.*"[29] A háború elhúzódása, vereségek, nélkülözés, béke reménytelensége erősítette a gyűlölködést.

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[27] Tamás, Á.: A Nagy Háború. A Borsszem Jankó karikatúráin. Alkotók és alkotások a propaganda hálójában. Jelkép. Kommunikáció, közvélemény, média. 2016. Vol. 1. p. 35.

[28] Jung, C. G. Az ember és a szimbólumai. Göncöl. Budapest, 1993. p. 231.

[29] Tamás, Á.: A Nagy Háború. A Borsszem Jankó karikatúráin. Alkotók és alkotások a propaganda hálójában. Jelkép. Kommunikáció, közvélemény, média. 2016. Vol. 1. p. 46.

Maga a reklám az 1914. augusztus 6-ai eseményhez kapcsolódik, amikor az Osztrák–Magyar Monarchia hadat üzen Oroszországnak.[30]

1914. október 11.

7. ábra. Forrás: Borsszem Jankó. 1914. október 11. Vol. 41. p. 11.

Az 1914. október 11-ei reklámban Paul Ludwig Hans Anton von Beneckendorff und von Hindenburg neve szerepel: ő 1911-ben 52 éves katonai pályafutása után nyugállományba vonult,[31] de 1914. augusztus 23-án visszahívták,[32] hogy vezérkari főnökévé kinevezett Erich Ludendorff tábornokkal vegye át a kelet-poroszországi 8. hadsereg parancsnokságát. Ludendorff stratégiai zsenialitásának köszönhetően a nagy orosz túlerővel szemben a Hindenburg vezette német hadsereg briliánsan védekezett.[33]

Az 1914. október 11-i reklám különlegessége, hogy a hőskultusz, a hősiesítés jelenik meg benne, ami egy olyan mozzanat, melyet a propagandából vett át a hirdetés. Kotányi egészen korán felismerte a harctereken népszerű tábornokokban (és a hőskultusz övezte katonákban) rejlő „kommunikációs" lehetőséget, és (mint már láttuk) nemcsak a hőskultusz propagálására, hanem saját termékeinek népszerűsítésére is felhasználta ezeket. Az első világháború alatt Hindenburg arcképével ellátott tárgyakat is lehetett kapni,[34] aminek érdekessége abban rejlik, hogy nem volt általánosan jellemző, hogy tábornokok és vezérkari főnökök arcképe díszelgett hétköznapi tárgyakon – ellentétben például a lóháton ülő magyar bakával, az idős királyi párral, a halott trónörököspárral vagy épp a szövetséges uralkodók portréival.

A tannenbergi csatában (1914. augusztus 26. – 1914. augusztus 30.)[35] aratott győzelem Hindenburgot nemzeti hőssé tette, és megbízták a keleti front főparancsnokságával. Itt erős

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[30] Bihari, P.: 1914 A Nagy Háború száz éve. Kalligram. Budapest, 2014. p. 143.

[31] Magyarország az első világháborúban. Ravasz, I. (eds.): Lexikon A-Zs. Petit Real Könyvkiadó. Budapest, 2000. p. 289.

[32] Galántai, J.: Az I. világháború. Korona Kiadó. Budapest, 2000. p. 193.

[33] Westwell, I.: Az I. világháború napról napra. Hajja Book KFT. Budapest, 2001. p. 21.

[34] Csunderlik, P.: Egyenruhát öltő Lysoform-reklámfigura – A háborús reklámkultúra. In: Kaba, E. (eds): Háborús mindennapok – mindennapok háborúja. Magyarország és a Nagy Háború – ahogy a sajtó látta (1914-1918). Politikatörténeti Intézet - Napvilág Kiadó. Budapest, 2017. p. 92.

[35] Galántai, J.: Az I. világháború. Korona Kiadó. Budapest, 2000. pp. 193-195.

befolyása volt az osztrák–magyar csapatokra is.[36] Ezért is lehet, hogy magyar részről is kihangsúlyozták szerepét a hőskultuszban.

1915. május 23.

8. ábra. Forrás: Borsszem Jankó. 1915. május 23. Vol. 21. p. 13.

Az 1915. május 23-ai hirdetés arra a tényre utal, hogy – a Pesti Hírlap május 21-ei vezércikkének címét idézve – „Az olasz parlament a háború mellett döntött". Ekkor már egyértelmű volt, hogy Olaszország az Antant oldalán lép be a háborúba. 1915. május 23-ánhadat is üzent az Osztrák–Magyar Monarchiának, ami egy újabb front megnyitását eredményezte, ez pedig a központi hatalmak haderejének további lekötését jelentette. Olaszország 1915. májusi hadba lépése az antant oldalán akkora döbbenetet váltott ki a központi hatalmak részéről, hogy a későbbiekben ezt a lépést mindenhol árulásként interpretálták.[37] Értelemszerű a sokk, hisz Olaszország tagja volt a hármas szövetségnek.[38]

Kotányi-paprika hirdetésében is olvasható, hogy „*Velencében nem eszünk az idén hamisitott csirkepaprikást, hanem Kotányi paprikával készített becsületes magyar paprikást a Balaton parton.*" A reklámszövegében a „*hamisított*"–„*becsületes*"-ellentétpár jelenik meg. Utal egyszer a két nemzet jellemére (a magyar a becsületes, vele szemben helyezkedik el az áruló olasz), illetve az ételre („*becsületes magyar paprikás*"), amely hazai receptúra alapján Kotányi-paprikával készül, míg az olaszok – mivel a háborúba való beugrás miatt nem kapnak igazi Kotányi-paprikát – csak „hamis" paprikával tudnak ételeket készíteni. Továbbá található benne még egy utalás a hazai turizmusra (Velence vs. Balaton). Ez a rész ráadásul mintha a „*Mire a levelek lehullanak*" kijelentésre utalna, arra játszana rá, hiszen szerinte csak egy szezonban nem lehet Velencébe utazni (miközben egy „őszi szezon" már elmúlt ekkorra). Az olasz hadüzenet után a Monarchia Kotányi által megelőlegezett gyors győzelméig a magyaroknak nem kellene Velencében „hamis paprikást" fogyasztaniuk, hanem hazatérhetnek és a Balaton partján élvezhetik a magyar fűszerpaprikával készült fogást.

Egyébiránt Olaszország ekkor még nem üzent hadat Németországnak.[39] Ennek oka lehet, hogy az Osztrák–Magyar Monarchiával szemben volt területi követelése (Dél-Tirol, illetve az Adriai-

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[36] Németh, I.: Az első világháború „elfelejtett" keleti frontja. Grotius E-könyvtár. 2015. p. 23.

[37] Galántai, J.: Az I. világháború. Korona Kiadó. Budapest, 2000. p. 263.

[38] Horváth, J.: Olaszország a Nagy Háborúban. A semlegesség időszaka 1914–1915. Grotius E-könyvtár. 2015. p. 3.

[39] Ignácz, K.: Olasz hadüzenet és a kölcsönös internálások.
https://elsovh.hu/olasz-haduzenet-es-a-kolcsonos-internalasok/ [letöltés ideje: 2023. 01. 04.]

tenger dalmát kikötővárosai) az olasz kormánynak.[40] Az olaszok célja az volt, hogy benyomuljanak azokra a területekre, amelyeket az 1915. április 26-án megkötött londoni egyezmény[41] (Olaszország hadba lepésének előkészítő dokumentuma[42]) garantált az ország számára.[43]

VI.   Összegzés

Az első világháborút népszerűsítő hirdetések remekül alkalmazkodtak az első világháborús befelé forduló propagandába, mint kontextusba, hisz olyan alapvető „húzások", mint a kitartásra buzdítás és sorsközösségvállalás rendszeresen visszatérő elemei voltak, függetlenül attól, hogy a reklám állandó vagy változó volt. Az, hogy a cégek milyen megfontolásból választották a megszokott egy eseményt kiaknázó vagy több eseményt folyamatosan felhasználó reklámokat, a források hiányában nehezen meghatározható. Az viszont elmondható, hogy a reklámok tekintetében mindenféleképpen beszélhetünk egyfajta kettőségről, hiszen egyszer szolgálja a propagandát mint olyat, és szolgálja „saját magát", elvégre a végső cél a cégek számára akkor is az eladás volt.

Elmondható továbbá, hogy az első világháború propagandája komplex jelenség, mert nem csak valamely hatalmi elitcsoport vagy a kormány irányította, hanem megjelent az alulról induló, a hátsó frontra irányuló propaganda is, és így általánossá vált a „propagandista"-szerep. *„A befelé forduló propaganda hatékony támogatókra lelt a háború kitörésekor, az alulról építkező kezdeményezésekben, a lelkesedést meggyőződésből elősegíteni akaró, fenntartani igyekvő civil törekvések által."*[44] Amihez azt tehetjük hozzá: a civil törekvések részét képezték a cégek háborús hirdetései, amelyek a társadalom háborús lelkesítését, mobilizálását célozták.

Ehhez tartozik, hogy a propaganda megítélése alaposan átalakult a világháború következtében. Már olyan eszközzé vált, ami a kortársak túlzó véleménye szerint hatékonyabb a legmodernebb fegyvereknél is. Jól példázza ezt a Budapesti Hírlap 1920 szeptemberében megjelent írás is: *„Bizonyára el is hiszi ezt mindenki, a ki visszaemlékszik ennek a propaganda-hadjáratnak a megindulására, egyes részleteire és arra a csodálatosan átkozott hatásra, a mellyel eldicsekedhetett. (…) Mennyivel kevesebbe került a propaganda, mint a hadakozás fegyverrel, fojtó gázokkal, repülőgépekkel, tankokkal és mégis mennyivel nagyobb volt a hatása! Mily tanulság rejlik ebben is: a szó és a nyomtatvány ereje mennyire felülmúlja a leggyilkosabb szerszámokat is, ha népek megöléséről van szó."*[45]

V. Irodalomjegyzék

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[40] Westwell, I.: Az I. világháború napról napra. Hajja Book KFT. Budapest, 2001. p. 66.

[41] Szabó, D.: Az első világháború. Osiris Kiadó. Budapest, 2009. p. 82.

[42] Magyarország az első világháborúban. Ravasz, I. (eds.): Lexikon A-Zs. Petit Real Könyvkiadó. Budapest, 2000. p. 431.

[43] Galántai, J.: Az I. világháború. Korona Kiadó. Budapest, 2000. pp. 262-263.

[44] Boka, L.: „Énekek a nagy időkből?" – Népszerű irodalmi antológiák a Nagy Háború idején. In.: ifj. Bertény, I.- Boka, L.- Katona, A. (eds.): Propaganda - politika, hétköznapi és magas kultúra, művészet és média a Nagy Háborúban. Országos Széchényi Könyvtár. Budapest, 2018. p. 337.

[45] Creuwe House titkai. Budapesti Hírlap. 1920. szeptember. 17. Vol. 220. p. 4.

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Cyber threats during distance learning

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Distance learning has become more popular over the last few years, especially due to the Covid-19 pandemic that challenged the education system worldwide and forced educators to shift to an online mode of teaching (Dhawan, 2020). Moving the teaching-learning process to cyberspace was an obvious solution as it enabled the schools to continue providing education while keeping the teachers and students safe. Undoubtedly it provides many benefits, such as increased flexibility in teaching and learning and improved accessibility to education (Kirkwood, 2013). However, it is essential to note that e-learning has many disadvantages, too; one of them is that they are more vulnerable to cyberattacks compared to traditional classes (Glorin, 2022). Among these disadvantages, the study mainly focuses on e-learning security.

Keywords: cyber security threats, e-learning security, online safety, digital education, security awareness

I. Distance learning and it's disadvantages

I.1. What is distance learning?

The concept of distance learning sounds familiar these days. Many schools, universities, and educational institutions have offered various online courses. In addition, millions of students were forced to switch to online education during the Covid-19 pandemic.

King defined distance learning as „improved capabilities in knowledge and/or behaviours as a result of mediated experiences that are constrained by time and/or distance - such that the learner does not share the same situation with what is being learned" (King et al., 2001). He mentioned two categories of distance educations: synchronous and asynchronous. Synchronous allows "real-time" interaction between student and instructor. It is time sensitive but geographically insensitive, meaning that participants must be virtually present simultaneously. Involved technologies are web conferences, video conferences, online chats, and live streaming. Asynchronous learning does not allow "real-time" interaction between student and instructor. It is time and geographically insensitive, meaning students are not required to meet simultaneously. They can access the training material whenever they want to. Involved technologies are e-mail, video, and audio recordings (King et al., 2001).

Molnár mentions the practical methods of distance learning, such as virtual reality, networked-based community learning, and modern digital instruments (Molnár, 2015). The concept of distance learning typically involves but is not limited to online education, where the widespread Internet connects the participants of the teaching and learning process.

Technologies may be involved in distance learning:

- Learning Management Systems
- Collaboration applications
- Cloud services
- Data network
- User devices

I.2. Cyber threats during distance learning

Distance learning, however, represents disadvantages from a cybersecurity perspective. Online classes are more vulnerable to cyberattacks than traditional classes, specifically from an endpoint security, privacy, and process perspective. A cyber threat can risk the safety of online learners (Glorin, 2022). U.S. National Institute of Standards and Technology (NIST) defines cyber threat as "Any circumstance or event with the potential to adversely impact organizational operations (including mission, functions, image, or reputation), organizational assets, or individuals through an information system via unauthorized access, destruction, disclosure, modification of information, and/or denial of service." (NIST, 2022)
Cybercriminals are generally interested in – for example – stealing students' and employees' personal data, destroying, or taking control of devices and resources or gaining personal accounts by using impersonation attack methods. (Alexei et al., 2021).

There have been many data breaches in recent years within the education sector. Red Team Collaborative, LLC., an information security consultancy firm, already reported that from 2014 through the first half of 2018, education was the fifth greatest number of data breaches.

Educational institutions are targeted for valuable intellectual property from campus research, student and employee personal information, and computer processing power. Between 2005 and 2015, higher education was among the highest hit, with a total of 539 breaches involving nearly 13 million records (RedTeam Security, 2022)

The 2021 Threat Landscape Retrospective report by cyber security company Tenable found that 1,825 breach data incidents happened between November 2020 and October 2021 and pointed out that almost 13% of breaches were linked to the education sector worldwide (Thepienews, 2022).

Therefore, it is easy to see that the security of distance learning is an important and actual topic nowadays, given the nature of distance learning and the technologies that are being used.

II. Types and trends of cyber threats related to education

ENISA, the European Union Agency for Cybersecurity, publishes the cybersecurity threat landscape annually. Threat landscapes show the potential and recognized cybersecurity threats affecting specific industries. The latest report published in October 2022 showed that ransomware, malware, social engineering threats, and denial of service were the top cyber threats in 2022 (ENISA, 2022). However, new cyber threats emerge daily; therefore, threat landscapes change frequently.

II.1. Denial of service

The U.S. Cybersecurity and Infrastructure Security Agency (CISA) defines Denial-of-Service as "an attack when legitimate users are unable to access information systems, devices, or other network resources due to the actions of a malicious cyber threat actor. A denial-of-service condition is accomplished by flooding the targeted host or network with traffic until the target cannot respond or simply crashes, preventing access for legitimate users" (CISA, 2009).

Distributed denial-of-service (DDoS) attack is a sub-category of a denial-of-service attack and involves multiple – usually already compromised – machines to attack one specific target.

Distributed denial-of-service (DDoS) attacks in 2021 showed a significant increase, as reported by F5 Inc. Although banking, financial services, and insurance (BFSI) organizations were the most targeted, education is the third most targeted industry with DDoS attacks in 2021 (Warburton, 2022). With a successful DDoS attack, the targeted institute can be overwhelmed with unnecessary traffic, which could block the teaching-learning process.

II.2. Malware

Cisco Systems Inc. defines malware as "intrusive software that is designed to damage and destroy computers and computer systems. Malware is a contraction of malicious software. Examples of common malware include viruses, worms, Trojan viruses, spyware, adware, and ransomware." (Cisco, 2023).

Microsoft Security Intelligence reported that the education industry accounted for 81 percent of the 7.4 million malwares encountered by businesses in the last 30 days worldwide - more than any other sector as of November 22, 2022 (Microsoft, 2022).

Fig.1: Most affected industries reported enterprise malware encounters in the last 30 days –
accessed November 22, 2022

Source: microsoft.com [2022]

Between November 2020 and October 2021, the professional sector ranked first among the global industry most targeted by malware attacks. During the measured period, 1,234 malware incidents occurred within the industry. The education sector was sixth, with 437 such incidents (Statista, 2022).

II.3. Ransomware

Ransomware is a type of malware. Microsoft Inc. defines ransomware as "a type of cyber security attack that destroys or encrypts files and folders, preventing the owner of the affected device from accessing their data. The cybercriminal can extort money from the business owner in exchange for a key to unlock the encrypted data." (Microsoft, 2022) It is, however, important to mention that even when paid, there is no guarantee that the victim gets the unlock key from the attacker.

The U.S. Cybersecurity and Infrastructure Security Agency (CISA) reported that it had seen an increase in malicious activity with ransomware attacks against K-12 (publicly supported primary and secondary) educational institutions in the United States (CISA, 2020).

Sophos Group plc, a British-based security software and hardware company, reported that ransomware attacks on education have increased – 56% in lower education and 64% in higher education in 2021 from 2020. This increase in attacks is part of a global, cross-sector trend. Education is the sector least able to stop data from being encrypted in an attack. (Mahendru, 2022).

II.4. Social engineering and human aspects

Evans defined a social engineering attack as "an attack that uses social means such as deception and manipulation to gain access to information technology" (Evans, 2009). One of the biggest reasons why the cyber risk level could be high in education is because the participants often

make shortcuts to circumvent security controls during the teaching-learning process. For example, using insecure networks (e.g., public wi-fi hotspots) to access learning materials makes it relatively easy for attackers sharing the same network to steal any data that is being transferred on the network, including sensitive information.

A 2022 survey conducted by PurpleSec from many sources mentions that in the U.S.:
- the education industry is ranked last in cybersecurity preparedness out of 17 industries
- 41% of higher education cyber security incidents and breaches were caused by social engineering attacks (PurpleSec, 2022).

The main conclusion of this review is that education already faces with the major threat types in cyberspace.

III. Security challenges and potential defense methods

This chapter discussed the standard technologies used in distance learning, listed the main functional benefits, identified some security challenges, and recommended a few defense options.

III.1. Learning Management Systems (LMS)

An LMS provides a virtual platform for e-learning by enabling the management, monitoring of students, delivery, tracking of learning, testing, communication, registration process, and scheduling (Cavus, 2015). The widespread use of the internet accelerated the adoption of these systems.

One of the few security challenges with these systems could be that students may share their access credentials among them. Without a robust identity and access management, it could be easily misused. Another is the upload of unwanted file formats or oversized files. Without input validation control, the system could be compromised or stop functioning. The same effect could happen if inserting malicious code from the client, and there is no proper control on the server side. No proper encryption of the data stored in the system may result in data disclosure if the system is compromised.

The following table summarizes some of the functional benefits, security challenges, and potential defense options of the learning management systems.

1. table: Learning Management Systems' functionalities, security challenges, and protection

LEARNING MANAGEMENT SYSTEMS	
Functions / benefits	• Upload and store training materials on the server • Delivering assignments to students • Participation in discussion forums • Checking the students' knowledge online
Security challenges	• Identification of students – e.g., shared user accounts • Availability – uploading unwanted or oversized files • Execution of malicious codes from client side – e.g., malware

	• Unencrypted storage of sensitive data
Defense examples	• Secure programming – e.g., input validations • Robust identity and access management • Vulnerability and patch management • Continuous product life cycle • Data encryption, backup • Security awareness / preparedness • Service continuity or disaster recovery process

Source: own edition

III.2. Cloud services

The NIST definition of Cloud computing is „a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction." NIST also defines three service models: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS) (NIST, 2011).

Depending on the service model used, some resources are shared between clients. From a security perspective, the risk is that multiple tenants could be affected if an exploited vulnerability could overcome the separation controls. Another consideration is the availability of these solutions. Cloud services are accessible through the internet, therefore, vulnerable to denial-of-service attacks, which could lead to outages of learning resources. Therefore, proper contingency and backup plans must be in place. It is also important to mention that the client has no direct control over maintenance, security, operations, or compliance. These are usually with the cloud service provider and may be addressed in the Service Level Agreement (SLA) between the institution and the provider.

The following table summarizes some of the functional benefits, security challenges, and potential defense options of cloud services:

2. table: Cloud services' functionalities, security challenges, and protection

CLOUD SERVICES	
Functions / benefits	• Homogeneous computing platforms • High-level scalability • Greater availability on servers' side • Robust backup techniques • Allows mobile endpoints
Security challenges	• Shared resources – exploited vulnerabilities could affect multiple tenants • Availability – access through internet vulnerable to DDoS attacks and outages

	• Responsibility – transfer of control to the cloud provider • Compliance – data protection laws and regulations
Defense examples	• Contingency, data backup plans, proper incident management • Robust identity and access management • Tenant / application separation • Security awareness / preparedness • File level encryption in the cloud

Source: own edition

III.3. Collaboration applications

Electronic collaboration is "a collaboration using electronic technologies among different individuals to accomplish a common task" (Kock, 2005). It is usually performed through computer-based systems.

One of the most significant security concerns is that uninvited people joining, or disturbing content sharing can disrupt an online meeting that is in progress; therefore, validation of the participants is always necessary. Like cloud services, collaboration applications are also vulnerable to denial-of-service attacks, which could stop the teaching-learning process. Technically weak encryption could lead to sensitive data breaches, access credential leakage, or insecure sessions; therefore, it is essential to consider the encryption type when choosing collaboration applications.

The following table summarizes some of the functional benefits, security challenges, and potential defense options of the collaboration applications:

3. table: Collaboration applications' functionalities, security challenges, and protection

COLLABORATION APPLICATIONS	
Functions / benefits	• Online class meetings in real time and recordings • Chat function between participants • Screen sharing, virtual presentations, file sharing • Further integrated tools (e.g., tests, polls)
Security challenges	• Availability – access through internet vulnerable to DDoS attacks and outages • Compromised, uncontrolled sessions – uninvited persons • Weak encrypted connections • Compliance – data protection laws and regulations
Defense examples	• End-to-end encryption (text, voice, video, data) • Validation of students' identities • Limit access to collaboration sessions, waiting rooms, session logins, strong passwords

	• Security awareness / preparedness • Minimum security requirements for connecting devices

Source: own edition

III.4. Data network and user devices

A network is a set of devices (nodes) connected by communication links. A node can be a computer, phone, or any device capable of sending and receiving data generated by other nodes on the network (Forouzan, 2007).

The most complex security consideration comes about data networks and user-owned devices. Bad actors can gain access to the user's device and compromise sensitive data if it is stored locally on the device, steal network access credentials, or use it as an entry point to cause other harm to the institution. It is, therefore, essential to have clear device management strategies and security considerations. Connection to insecure public networks should be avoided, and secure Wi-Fi settings with strong keys must be set on the routers, which helps to be safe from intrusions.

The following table summarizes some of the functional benefits, security challenges, and potential defense options of the data network and user devices:

4. table: Data network & end user devices functionalities, security challenges, and protection

DATA NETWORK & USER DEVICES	
Functions / benefits	• Accessing and using LMS, VC or CC resources • Sending receiving study materials – e.g., via e-mail
Security challenges	• BYOD concerns – compromised clients, insecure devices, • Insecure, public networks • Browser security • Wi-Fi security • Weak authentication, password management • E-mail security
Defense examples	• Up-to-date system and applications • Anti-virus software, firewall, spam filters • Well-chosen passwords • Strong Wi-Fi security settings • Safe network connection and browsing • Security awareness / preparedness • Data Leakage Prevention (email and web security) • Advance Threat Protection

Source: own edition

IV. Summary, conclusions

After reviewing trends nowadays and analyzing several reports published by security actors in the market, we can conclude that education faces an increasing number of cyber threats (e.g., DDOS, malware, ransomware, social engineering), especially since COVID-19. Depending on the type of technology involved in distance learning, some security challenges, recommendations, and a few defense options per technology type have been collected and put into a structured format.

As per general mitigating actions, I recommend the following for further improvement.

Strengthen the governance of cybersecurity throughout education. With a top-down approach, this is usually the responsibility of executive leaders. Cybersecurity governance not only shows commitment but establishes a structure for managing risks and security measures aligned with common educational goals. It also helps to be compliant with laws and regulations.

Update and enforce security policies and procedures. Policies are essential because they are designed (how) to protect information assets and may prevent security breaches or mitigate their impact by ensuring the confidentiality, integrity, and availability of data.

Assess the capability of responding to any unwanted events. It includes the routine and tasks to respond to an incident, failure, or breach to maintain continuous operations and security. Responding within a reasonable time may reduce an event's impact; therefore, preparing for such events is necessary.

Improve the ability to recognize possible threats and the way to handle them. Continuous threat and risk assessment help to determine the pattern of defense. It enhances the awareness to look at how an attacker would and discover the weaknesses that could be exploited.

Provide regular security awareness training to teachers, students, and staff. Most incidents nowadays are caused by human error or lack of awareness. Security awareness training helps to be mindful and educates people about the secure use of technology and the protection of data. There needs to be more than technical security solutions; awareness is key to defense.

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The copyright aspects of NFTs

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Abstract: The renaissance of crypto began in 2018 with the release of the ERC-721 technical standard, which allows the creation of non-fungible tokens (NFT).

The reason for the creation of NFTs can be mainly found in the problems in the art and design sector, such as proper pricing of works, guaranteeing fair use and preventing the distribution of counterfeits. However, the emergence and practical use of NFTs is a more wider category. In fact, in the early days of the NFT era, the market was dominated by NFTs in the form of different images. But nowadays, for example, NFTs are appearing in play-to-earn blockchain games, and NFT music tracks are also spreading, which could fundamentally change the present royalty system and the way music tracks are distributed and promoted in the music sector.

In the near future, the trend towards NFT is expected to rise, which may lead to an increasing number of objects appearing in the metaverse, for example, the purchase of a property in the metaverse will challenge the legislation.

At present, trading and auctions of NFTs also present challenges of interpretation and application of the law. Consider that, when NFTs are sold natively or on the secondary market, the position of the owner and the copyright holder of the NFT needs to be clarified, given the apparent conflict between the two different subject positions. Indeed, as in the case of traditional offline artworks, there is a separation between the owner of the work and the copyright holder in relation to NFTs.

For the reason mentioned as an example, the present study is limited to the examination of the question of copyright of non-fungible tokens (NFTs), focusing primarily on national legislation. Secondarily, taking into consideration the guiding provisions of continental copyright law in the EU and US Anglo-Saxon copyrights law regarding NFTs.

Keywords: Crypto law, NFT policy, copyright law, copyright ideas

I. The main historical milestones of copyright

The aim of this paper is not to provide a complete overview of the historical development of copyright law, therefore in this part, I will limit myself to indicating the main points of the evolution of copyright law. Intellectual property law, as we understand it today, emerged in the late 15th and early 16th centuries.[1] Even before that date in human history, however, neither society nor the legal system was at a stage of development capable of protecting individual works.[2] As a consequence, there was a lack of adequate protection of copyright in the field of intellectual works. The general inconsistent situation in the field of copyright protection was broken by the rise and spread of the book printing industry,[3] which was followed by the emergence of copyright and publishing enforcement groups.[4] Then, under the influence of natural law thinking, the theoretical foundations of copyright protection - by analogy with the legal aspects of property law - were laid down in the 18th century.[5] Subsequently, the era of copyright and patent law began, followed by the codification of intellectual property law in Europe and the United States of America.[6]

After the consolidation of copyright, the problem of territoriality became a new challenge. Because of the territoriality of copyright law, it was only applicable in the country of origin, so that cross-border infringements could not be handled.[7] States initially tried to solve this problem by concluding bilateral treaties, but the final solution was the conclusion of international multilateral treaties. The Paris Convention for the Protection of Industrial Property[8] (PUE), established in 1883 to guarantee the protection of industrial property[9] in all its aspects, was one of the most important of these. On the other hand, the Berne Convention for the Protection of Literary and Artistic Works of 1886[10] (BUE), a multilateral treaty that broke with the territoriality of copyright by establishing the principle of national treatment,[11] is also relevant. On the basis of the principle of national treatment, the contracting states grant each other's nationals the same legal status on their own territory as their own.[12] It is worth mentioning here that the BUE has established a system based on three important principles: 1) national treatment, 2) informality and 3) independence of protection.[13]

The conventions have been revised several times to date, ensuring that their texts are kept up to date.[14] It should be noted that, in order to ensure effective and adequate protection of commercial intellectual property rights, there are still differences between national legal systems and the establishment of minimum standards to combat counterfeiting, as well as other conventions and agreements which aim to ensure the protection of trade mark rights, which are essentially territorial in nature,[15] and which have an international dimension.[16] Then, in 1948, the Universal Declaration of Human Rights (UDHR), adopted by the United Nations (UN), established copyright as a fundamental human right,[17] thus ensuring the highest level of recognition of copyright and at the same time establishing the requirement for all states in the world to respect copyright universally.[18]

Nowadays, copyright regulation is characterised by complexity, both at national and international level.[19] Therefore, the World Intellectual Property Organization (WIPO),[20] as a specialized agency of the United Nations, in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO), ensures the proper functioning and coordination of conventions in the international arena.

II. Different approaches to copyright in common-law and continental law

In this part, the differences in the theoretical approach of copyright and droit d'auteur (author's rights) from the modern legal systems of two large families of law, common law and continental law,[21] which may also be relevant for the copyright aspects of the NFT, will be briefly discussed.

Before this, however, the paper will be extended with an exemplary indication of the first copyright laws in the United States of America, England and France.

II.1. The first main copyright acts in common-law and continental law

In the common law system of the United States of America (USA), legislation is made at the federal and state level in parallel, with a separate state and federal court system.[22] Within this two-tier regulatory system, copyright laws have also appeared at different times. However, in the period before the creation of the specific legislation, copyright law was already in a dynamic phase of development, which guided later legislation.[23]

Prior to the federal level, the first state law appeared in the state of Connecticut in 1783, under the title "An Act for the Encouragement of Literature and Genius". The relevance of this legislation was basically that it provided authors with the means of receiving income from the sale of their works by copyright, thus increasing the economic interest of authors, which ultimately encouraged them to be active in publishing.[24] At the same time, the hidden aim was to make the author's work available to the "consuming public" and to enrich the intellectual level of the country.[25] In other words, the aim is to encourage the creation of works and to make them easily accessible to society. It is worth noting here that the legislation also established, for example, the principle of reasonable pricing to promote accessibility for the general public.[26]

In the following period, several copyright laws were passed in states such as Massachusetts (1783), Maryland (1783), New Jersey (1783), New Hampshire (1783), Rhode Island (1783), Pennsylvania (1784), South Carolina (1784), Virginia (1785), North Carolina (1785), Georgia (1786) and New York (1786), following the example of Connecticut.[27]

At the federal level, the first copyright law was enacted in 1790 under the title "An Act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned". The act filled a gap in federal copyright law. The relevance of the law was that it provided authors with a term of protection of 14 years, which could be extended for another 14 years.[28] However, copyright protection did not automatically arise when the original work was created, but was dependent on the author registering the original work in the local court of the author's place of residence, together with payment of a nominal fee.[29] It is also interesting to note that the scope of copyright protection was at first limited to books, maps and other cartographic works, and then, evolved over time, broadening the scope and duration of protection.[30]

The US copyright laws identified above were, in effect, modelled on the first copyright law in Europe, the Statue of Anne, which came into force in 1710 in the common law system of England.[31] The significance of the Statute of Anne is that it essentially created an alienable copyright which protected authors and publishers as heirs.[32] Subsequently, France, which was integrated into continental law, can be cited as a legal history example. As regards French copyright law, a distinction can be made between the pre-revolutionary and revolutionary periods. The main difference is that, before the Revolution, copyright law was mainly governed by the various royal privileges, which favoured publishers to the disadvantage of authors, sometimes creating a monopolistic situation,[33] whereas in the revolutionary period, privileges were abolished and a specific legal regime began to take shape.[34] Hence, the first strict copyright laws can be considered to be the laws of 1791[35] and 1793.[36]

The Decree of 13-19 January 1791, which acknowledgedthe right of performance was essentially concerned with dramatic works and, among other things, recognised the personal rights of authors[37] and granted the author the right to perform dramatic works in public. [38] The right of public performance of a work was, as a general rule, forbidden to third parties during the life of the author and for five years after the author's death, except with the written consent of the author or the author's heirs. [39] The novelty of the Decree of 19-24 July 1793 was that it

extended the scope of the author's right to include all authors, including for example writers. It also extended the term of protection from five years to ten years. [40]   While it is true that the role of moral rights has increased in the legislation, the dominant role has remained that of the economic rights of the author, [41] leaving the task of confirming moral rights to the courts.[42]

II.2. Different theoretical approaches in common-law and continental copyright law

With regard to the families of law described above, apart from the difference in the date of origin of the initial copyright laws, there is a further copyright dichotomy in the relationship between common law and the continental family of law, which is mainly due to the different theoretical approach. The two regimes have in common that both moral and economic rights are involved, but in the continental regime the author's right is focused on the moral rights of the author, whereas in the common-law regime copyright is focused on the economic rights of the author.[43]

In the Anglo-Saxon common-law system, copyright is basically economic in its approach, so in addition to providing copyright protection, this concept is mainly concerned with the distribution of the original work, focusing on its commercialisation, whereas the continental author's right approach aims to give the author as much power and control over the original work as possible. [44]

There is also a further difference in the principles that underlie the distribution of the original work to the public. For example, in the copyright approach, the public is privileged over the author and the aim is to ensure the widest possible use of the original work, with the inevitable side effect of providing the author with an income from the sale of the original work. In the author's right approach, on the other hand, the relationship between the author and his work is emphasised, the author still receives revenue from the sale of the work, but the role of the public is marginalized.[45]

There is also a difference in the approach to copyright protection, since in the common-law system, copyright basically provides protection against copying the whole or a substantial part of an original work, or the adoption of essential elements of the original work, whereas in the continental system, protection is aimed at preventing - subject to statutory exceptions - unauthorised uses without the author's consent.[46]

Further difference can be detected in the limits of copyright, namely the exceptions relating to certain forms of use. In the continental system, copyright law generally provides an exhaustive list of cases of free use (e.g. quotation, adoption, private copying, etc.), [47] whereas the common law system is known as fair use,[48] which allows for the use of copyrighted material without a prior authorisation in certain cases, [49] and in the case of a conflict of interest, it allows for the examination of the contested uses in the individual case by the fair use test.[50]

On the basis of the theoretical differences between the two legal families, as described above, we can formulate the fundamental difference between the two systems in a nutshell as follows: the author's right (droit d'auteur) favours the author while copyright favours the right of utilization linked to the work itself.[51]

The above outlined differences in the theoretical approach to copyright are, in my view, not unreasonably brief in the case of 21st century technological solutions such as NFT. On the one hand, the differences in the theoretical basis behind the concepts are timeless. On the other hand, the relationship between copyright and author's right is repeatedly under analysis in the contemporary literature, in the sense that copyright is a part of the broader concept of author's right.[52]

III. The appearance of NFTs

In my opinion, the emergence of BTC blockchain technology is relevant, because it marked the birth of the first generation of blockchain technology. Then the second generation of blockchain technology, in the form of Ethereum (ETH), appeared in 2014.[53] One of the major advantages of this 2nd generation technology was that it allowed users to create different applications (dApps), programs on a global distributed system.[54]

There is no doubt that Ethereum has opened new doors for the crypto sector. The next milestone was the creation of the so-called ERC-20 technical standard for smart contracts in 2015.[55] Tokens issued on the Ethereum blockchain are based on the ERC-20 technical standard. The ERC-20 technical standard plays an unquestionable role in the tokenisation process and in building and consolidating the token economy[56] and dApps.[57] Its importance was first demonstrated in 2017 during the golden age of token-based community financing, also known as initial coin offerings (ICOs).[58]

Another characteristic feature of the ERC-20 technical standard is, that it's a so called fungible token. The fungibility is not only present in the crypto sector but also in the traditional financial sector.[59] For example, our domestic currency, the Hungarian Forint (HUF), is also a fungible fiat currency, because for a banknote with a denomination of HUF 5,000 we can get a banknote with the same denomination, or a banknote with several smaller denominations, for example 10 banknotes with a denomination of HUF 500. Consequently, neither the Hungarian domestic currency nor any other fiat money is unique in the way the ERC-20 based tokens are. There is no problem with this as long as tokens are used for transactions and other services in the crypto ecosystem.

Over time, however, there was a market demand for tokens containing unique data. As a result, the so-called ERC-721 technical standard was appeared in 2018, which allowed the creation of non-fungible tokens (NFT).[60] I think, that the emergence of the ERC-721 technical standard marked the beginning of the 'crypto renaissance'. This era is characterised by the trading of various crypto collectibles on NFT marketplaces and the spread of NFT objects in the metaverse. This is where the trading of different crypto collectibles on NFT marketplaces and the spread of NFT objects in the metaverse is typical.

In this paper, I will focus on the functioning of NFTs and NFT marketplaces, the copyright aspects of NFTs, and the legal aspects of NFTs as new alternative investment crypto-assets, without discussing the technical standards. Regarding the technical standards, I would like to note that although ERC-721 based NFTs have conquered the crypto sector, at the same time market needs have required further technical development. The common feature of the enhanced technical standards is that they always offer some additional functionality that can combine the features of both ERC-721 and the traditional ERC-20 technical standards. An example of a practical manifestation of this evolution is the Enjin Marketplace, or the team behind Enjin, which developed the ERC-1155 technical standard.[61] The ERC-1155 enables the bulk transmission of multiple fungible tokens and non-fungible tokens (NFT) faster than ERC-721.[62]

III.1. The definition of NFTs

Despite the fact that historically the first NFT called "Quantum" was created in 2014[63] by digital artist Kevin McCoy and tech entrepreneur Anil Dash,[64] the NFT sector is still in a grey area, in other words at the crossroads of self-regulation and non-regulation. Hence, there is no universal legal definition of non fungible tokens at present. Due to the lack of an ex lege definition of NFTs, I will operate in the following with a definition developed by my own experience in the NFT market.

In my approach, the non-fungible token (NFT) is a unique set of data that is recorded on the blockchain network, so the NFT as a digital asset can represent either physical or digital objects or artworks.[65]

In addition, we can make a distinction between on-chain and off-chain NFTs depending on the location of the data. In the case of on-chain NFTs, all data, such as metadata and the image, video or other media file that visually represents the NFT, are located on the blockchain. In contrast, in off-chain NFTs, all or part of the data is not located on the blockchain, but for example on a centralized (web) storage or on a decentralised server such as IPFS (Inter Planetary File System). In practice, in off-chain NFTs, metadata is typically hyperlinked to the file that visually displays the NFT, which is stored on external storage. [66]

IV. The awakening of legislation (EU, USA, Hungary)

With the market capitalisation of the non fungible tokens exceeding US$16 billion in 2021,[67] it is understandable that legislative interest has been awakened. Therefore, this section briefly reviews ongoing efforts in the EU and the US, focusing on the copyright implications of NFTs. Finally, the main provisions of the applicable Hungarian copyright legislation regarding the use of the original work, which is relevant to NFTs, will be presented. However, the national regulations have been included without the aim of being exhaustive, but in order to raise some ideas on the copyright aspects of NFTs.

IV.1. The evolving NFT copyright in the EU

In the EU, there is currently no specific legislation governing the copyright status of NFTs. For this reason, in the following, I briefly outline the findings of a study commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs, at the request of the JURI Committee, on the copyright aspects of NFTs and related legal challenges. The study is divided into three major chapters, the first two of which provide a general conceptual and terminological clarification, while the third deals with the current copyright aspects of NFTs.

The authors, within the general conceptual framework, make a functional distinction between off-chain and on-chain NFTs, and also a differentiation between NFTs according to their application in the art sector, whether the NFT represents exclusively digital content, or whether it represents an existing offline (traditional) work digitally, or whether the NFT constitutes a right in relation to a traditional work.[68]

The authors focused on the copyright aspects of NFTs, mainly copyright infringements against the NFT as an original work of art to the disadvantage of the creator. In this approach, the original nature of the NFT is presumed, since copyright protection is conferred on the basis of the original individual character of the work resulting from the intellectual activity of the author. This protection does not depend on any quantitative, qualitative, aesthetic characteristics or value judgments concerning the quality of the work, but the authors point out that in the case of NFT works produced by an algorithm (generative art), the originality and individual character of the work must be tested.[69]

According to the authors' interpretation, copyright infringements may occur in different ways according to the life cycle of NFTs ("minting-first transaction"), and further abuses may arise when NFTs are traded in the secondary market. The authors identify three life-cycle phases of NFTs, such as minting, the first transaction and the exercise of the rights acquired by the purchase of an NFT.[70] In the first stage, which covers the process of creating the NFT, the authors identify the occurrence of an infringement in a different way between off-chain and on-

chain NFTs, due to the different location of the data represented by the NFT. In the case of off-chain NFT creation, copyright infringement occurs when the data displayed by an NFT is placed on a repository by a third party who is not the rightful owner of the original work or does not have permission from the author. In the case of on-chain NFT creation, the lack of consent from the author also results in an infringement situation, regardless of whether the content displayed by the NFT is then stored on the blockchain.[71]

The second stage involves the first sale of the NFT on the secondary market, where the right of reproduction and of communication to the public of the NFT may be infringed if the author's permission is not available and the NFT displays only digital content. If in the secondary market the content displayed by the NFT, for instance as an image, is only a visual representation of an underlying traditional work, it should then be examined,[72] whether the Member State in which the concerned NFT is located has implemented an exception allowing for the use for the purpose of advertising the public exhibition or sale of artistic works, to the extent necessary to promote the event, excluding any other commercial use.[73]

In the third stage, regarding the exercise of the rights acquired by the purchase of the NFT, the authors state that the purchaser of the NFT will not become a copyright holder, but will merely be placed in a position of uncertain quasi-ownership, entitling the purchaser to keep the NFT in its wallet and to sell it. For further types of use, the purchaser of the NFT becomes entitled if it is laid down in the licence agreement with the author or in the NFT Marketplace's terms of use or in the content of the smart contract or in the individual NFT project's licence and other related legal documentation..[74]

In addition to this secondary market, in other words the NFT marketplace, authors also identify other copyright dissonances, such as the existence and the amount of the droit de suite (royalty) that the creator is entitled to in the context of the resale of NFTs. Lastly, the study also identifies as a copyright infringement the reproduction of an existing NFT work, with minor modifications, and its publication for sale on the NFT marketplace, which may, for example, lead to trademark infringement.[75]

However, the authors note that the obligation to prevent such infringements in the digital[76] single market is imposed on online content sharing service providers by the Copyright and Related Rights Directive.[77] Thus, where NFT marketplaces are considered to be online content-sharing providers, this obligation falls on the NFT marketplaces to comply with it by building and applying self-regulatory security mechanisms.[78] Last but not least, the authors identify the InfoSec[79], Rights[80] and Digital Copyright[81] Directives as guiding legislation for the copyright aspects of NFTs. At the same time, they point out that copyright laws in the EU are not fully harmonised[82] across nations, which can lead to conflicts of interpretation.[83]

IV. 2. The evolving NFT copyright in the USA

Currently there is no specific copyright legislation for NFTs in the United States (USA), but the United States Copyright Office published a summary[84] of its basic rules, which is useful for any NFT investors and enthusiasts.[85] In general NFTs can be linked to a variety of different assets and represent numerous rights and obligations, that is the reason why certain types of NFTs may fall under existing federal and state securities regulations,[86] and in this approach, an NFT may be classified as securities or commodities,[87] but examining this is not part of this study.

In the United States, copyright is also relevant mainly in the context of transactions involving NFTs, since these transactions involve up to three parties 1) the author of the original work, 2) the issuer (seller) of the NFT and 3) the buyer of the NFT purchased.[88] In general, the rights associated with NFTs are determined either by the author or the issuer (seller) of the NFT. For the NFTs available on the market, the author owns the intellectual property rights to the asset and can decide what rights to grant to the buyer of the NFT. However, the NFT may be created

and offered for sale by someone other than the original author. In this case, the buyer's right to use the NFT after the acquisition differs as follows. If the issuer of an NFT is the author of the original work, the issuer owns all rights to the NFT and any of these rights may be transferred to the buyer. If the issuer acquires the NFT from the author of the original work, the issuer obtains only those rights that the author has licensed and may transfer only those limited rights to the buyer.[89]

Indeed, in practice, it is often difficult to identify the boundaries between the different identified legal positions, which leads to legal uncertainty. And in the case of copyright infringement, authors and artist is currently limited to submit a Digital Millennium Copyright Act takedown request to NFT platforms in order to enforce copyright violations.[90] Meaning that NFT owners must constantly monitor countless websites to identify unauthorized productions of their works,[91] which represents a disproportional burden on them.[92] Among other things, to prevent the previously mentioned infringements and to understand how NFTs fit into the world of intellectual property rights, in 2022 two senators sent a letter to the Directors of the US Patent and Trademark Office (USPTO) and US Copyright Office requested that the agencies jointly undertake a study of intellectual property (IP) rights considerations with respect to non-fungible tokens.[93] The arrival of the statement could be relevant for copyright aspects of NFTs on a global basis.

IV. 3. The evolving NFT copyright in Hungary

Intellectual property law, in general terms, covers the legal institutions that form the body of law governing the creation and use of original work.[94] Intellectual property can be divided into two main areas: industrial property and copyright. Industrial property provides legal protection for intellectual works of a technical nature and for signs (trade marks) used to distinguish goods and services. Copyright, on the other hand, protects literary, scientific and artistic works and the performances associated with their use. Intellectual property itself is a legal relationship with an absolute structure,[95] similar to property rights, whose system of rules under civil law protects the creator of the intellectual property by granting exclusive economic and moral rights [96] Therefore, the critical point in copyright law is whether an original work is used lawfully or unlawfully.

In the national legislation, under the applicable Act LXXVI of 1999 on Copyright, the use of a traditional "offline" work is subject to a licence agreement,[97] and the cases of use are set out in an illustrative list.[98] In the case of NFTs, the following observations can be made regarding the use and resale of the work in the light of the provisions of the applicable national copyright law. As a general rule, the use of the original work is subject to payment of a fee. However, the existing national copyright legislation allows the parties to freely determine the content of the licence agreement or to differ from the provisions of the licence agreement by mutual consent, if the law or other legislation does not prohibit such a difference. [99]. Based on the logical interpretation of the law, it is possible to use the work free of charge, which is also the opinion of the academic literature.[100]

According to the legislation, one type of use for a fee or free of charge is distribution. Distribution is effected by transferring the ownership of the original work, the limit being the exhaustion of the distribution right, which occurs when the work is transferred to the owner, with the consequence that the author gives up his right to control the original work[101]. One example of a typical practical use is the auctioning of a painting.[102] To continue with the example, the sale of the painting exhausts the distribution right, so the owner of the original work is not restricted from reselling it, even at a higher price. The party who legally owns the work cannot be restricted in the exercise of his/her rights by the copyright owner, nor, in the context of the tradability of the original work.[103]. However, notwithstanding the fact that the

owner of the work has the right to resell it, [104] the sale of the work does not result in the transfer of copyright with ownership.[105]

From the above, it is my view that the rules on lawful use and royalties for NFTs are framed as follows. After the native sale - lawful distribution - of NFTs, the secondary sale of NFTs on the NFT marketplaces can begin. In this process, the legal owner of the NFT is given the opportunity to resell[106] the NFT - for distribution - at a higher price, which could be achieved by auction. The resale of the NFT will have different property and copyright consequences, whereby the identity of the owner changes - the seller is replaced by the buyer - while the copyright holder remains the authorIn addition, in the current practice of NFT projects, the tendency to apply different royalty schemes on a case-by-case basis or to allow free use is in harmony with national copyright legislation.

Finally, with regard to the payment of royalties, I would highlight the fact that, in the case of resale of a given NFT on the secondary market, the royalty goes directly into the wallet of the beneficiary party (who is lawfully the author or a party acting on behalf of the author) and does not pass through intermediaries such as offline collective management organisations (CMO). [107]

V. Final thoughts

The copyright protection is crucial in many industries, such as music, software and film. In this respect, my view is that copyright is no less relevant for non fungible tokens, which represent a distinct market segment in the crypto sector, given their unique and original nature.

In my view, we can apply the existing copyright rules regarding NFTs if we accept the original and unique nature of NFTs, if we accept their status as original works. My opinion clearly argues in favour of classifying NFTs as original works, for the reason that this would ensure the protection of the author of the NFT. Finally, it is important to emphasise that effective action against copyright infringements is needed, and I am thinking in particular of the male fide copying of successful NFT projects. Furthermore, I also believe it is important to revise and if necessary amend previously signed licence agreements, including provisions on NFTs.

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L3 French teachers' perceptions of the role of L2 English in their teaching practices

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Abstract:

Introduction
In the Hungarian educational system, multilingualism is a goal, therefore, most students arrive in L3 classrooms with prior L2 knowledge. One common language pairing is English-French, where prior knowledge might be exploited to enhance the learning process. However, teaching practices vary vastly among L3 teachers based on their teaching methods and views of multilingual teaching.

Objective
This research focuses on how L3 French teachers perceive the role of English in their work and how they use students' prior L2 knowledge to facilitate L3 learning. The research questions were the following:
1. How do teachers perceive multilingual teaching methods and how do they use it in their teaching practices?
2. How do teachers use students' prior knowledge of L2 English grammar to teach L3 French grammar?
3. How can teachers use students' English vocabulary knowledge to teach French vocabulary?
4. How can teachers use students' L2 learning experience to motivate them in their L3 learning process?

Method
In the summer of 2022, I conducted semi-structured interviews with ten Hungarian high school teachers teaching French in grades 9-12 in Hungarian grammar schools. All teachers in the study were English-French trilinguals, with B2-C1 English levels. The participants' teaching experience ranged from five to thirty-eight years. The interview aimed to gain an insight into what multilingual teaching methods they use in grammar and vocabulary teaching, and how they view the L+ French learning motivation of their students.

Results
L3 teachers argued for the importance of exploiting prior knowledge, highlighting the efficiency of teaching, the speed of learning and student autonomy. Both L2 grammar and L2 vocabulary knowledge were said to be an important basis for further L3 learning, and prior learning experiences were also said to be essential factors that shape L3 learning motivation.

Conclusion
Multilingual teaching practices are present in Hungarian schools, although the lack of such teaching was also brought forward as a problem. In order to help teachers construct a multilingual classroom, multilingual teaching materials would be beneficial in order to exploit the prior knowledge of students in the L3 learning process.

Keywords: multilingual teaching, crosslinguistic influence, third language acquisition, prior knowledge

I. Introduction

The Common European Framework of Reference (CEFR, 2001) has been promoting multilingualism since the early 2000s, arguing that multilingual speakers, unlike monolingual speakers, have the useful ability to switch between the different languages they speak, and they use the languages differently than their monolingual peers. It is stated that multilingual speakers' competence includes a full linguistic repertoire (Council of Europe, 2001).

In the current education system in Hungary, a significant proportion of secondary school (and in some cases, primary school) students learn two foreign languages simultaneously or consecutively. Multilingualism as a main goal of education has been present in the school-leaving exit requirements for decades.

The Hungarian National Core Curriculum (2020) sets out the learning and teaching requirements of a second and third language in detail, stating that the teaching of the first foreign language starts in the 4th year of primary school at the latest. In Hungary, English is the first foreign language in the vast majority of cases, and the National Curriculum adopted in 2020 allows students to start learning a second foreign language in grade 9, although this is not compulsory in all types of secondary schools. French is one of the most commonly chosen third language in Hungarian high schools, along with German, Italian and Spanish. The core curriculum also sets out the exit requirements, which are based on the levels of the Common European Framework, stating that pupils should reach the CEFR A1 level by the end of year 6 and (ideally) CEFR B2, but at least intermediate level (B1), which is the level of the school leaving exam, by the end of their secondary education (year 12). As for the third language, learners should reach level A2 by the end of secondary education.

Despite the presence of these goals in the National Core Curriculum (2020) for years, in the Hungarian language teaching legislation there are no specific and clear-cut guidelines for the organisation of multilingual education in Hungarian public education, therefore, teaching practices may vary vastly among different L3 teachers. The only reference to multilingual education in the National Core Curriculum (2020) is in the paragraph that elaborates on L1 teaching and mother tongue skills, where the document suggests comparing the characteristics of the mother tongue and the first foreign language based on several criteria (p. 308). This can be interpreted in a way that the mother tongue, and the knowledge acquired from it can, and is promoted to be used in the acquisition of a first foreign language. However, there is no such recommended comparison between the L2 and L3, therefore, multilingual ideas focusing on the relationship between the L2 and the L3 are not present. The document also suggests that learners should strive for pronunciation, rate of speech and intonation similar to the norms of the target language, and they should follow the authentic norms of the target culture when using the second (and third) language (p. 320).

As can be seen from the above, although the National Curriculum mentions the concept of multilingualism, it does not provide teachers with specific guidelines for developing a multilingual approach to their teaching practice and for organising teaching methods. Thus, teachers have a major role in choosing the methods they use in the classrooms to support students in their third language learning and deciding how to use students' prior knowledge in the teaching of the third language. In my research, I interviewed ten French teachers with the aim of taking the first step towards gaining an insight into the methods of third language teaching in Hungary, with a particular focus on how students' prior knowledge of their second language is used in the process of third language acquisition and teaching. In the semi-structured interviews, I inquired about prior teaching experiences and the importance of grammatical comparisons, as well as the methods and challenges of vocabulary learning and the motivation of students.

II. Topic discussion

II.1. Background

The idea that languages interact in the language-learning process is not new. Cook (1991) defines languages as a kind of complex system, where they also interact in complex ways in the minds of learners, who differ in their abilities from their monolingual peers. Cook (2001) uses the term 'multicompetence' to describe this skill, which refers to the assumption that learners have their own way of dealing with languages, i.e. that there is an 'interlanguage' for them. This inner language is not just the sum of the learner's knowledge of the individual languages, but the sum and interplay of languages that are inseparable in the learner's mind. This also means that the learner creates his own language based on his prior knowledge, and that the learning process is not a mere repetition mechanism but a complex process. Learners build a language by using the different resources and methods available to them: their learning strategies, the language of their teachers and, of course, their mother tongue is also a part of this process. It is, therefore, important to ask how this prior and inner knowledge can be put into practice in order to facilitate the learning process.

Neuner (2004) identifies four key aspects that we have to consider when designing classroom practices in multilingual education. The most important one is the learners' prior language proficiency, i.e. what prior experience and knowledge they bring with them. Since the main aims of multilingual education according to Neuner (2004) is to build on these skills and knowledge, it is essential to gain detailed insights into the information that is already in the learners' minds. Language needs are also important: as each individual has different ideas, goals and possibilities for using a foreign language, the knowledge and learning material required will be different for each group. Language learning experiences should also be taken into account, as previous language learning experiences shape current learning behaviour. Of course, these aspects need to be understood in the context of complex language profiles: teachers need to consider the goals of each learner in order to find the most useful methods and practices to help students in a way that is appropriate to their profile.

Wichser-Krajcik (2021) also stresses the role of previously learned languages, and emphasises that not only is the second language a key element in the learning process, but the mother tongue also plays an important role as it acts as a reference point in the acquisition of the foreign language. Both languages should, therefore, be actively involved in the learning process. The author also notes that, in practice, great emphasis should be placed on developing linguistic attitude and awareness, with the main focus on communicative goals: teachers should enable learners to use all languages that they speak in everyday situations because teaching should imitate everyday situations and should provide learners with practical knowledge. This means that, contrary to previous thinking, we need to break with strictly language-focused teaching methods, otherwise, we leave the knowledge that students have already acquired through their prior language learning, unexploited. Thus, according to Wichser-Krajcik, students should be encouraged to use all the languages they know in class, and teacher's instructions and the language of the class might also be organised in a multilingual way.

According to Wichser-Krajcik (2021), multilingual pedagogy also has intercultural objectives: learning a foreign language enables learners to make themselves understood in everyday situations and should lead to a better and deeper understanding of the way of life and the way of thinking. Cultural heritage of the people living in the target language community is also an important aspect. This understanding, however, should not appear as a separate entity in the learner's mind: it must be closely linked to the learner's own world and understanding of his or her own culture. Therefore, students must develop their own understanding of the world that includes their own mother tongue and culture, but also the

culture of the target language, with the two interacting with each other. Therefore, multilingual teaching methods might help students to construct a complex word view where all the languages they speak interact with each other.

New teaching methodologies, such as the plurilingual method (Lin, 2013) have emerged in response to the theory of multicompetence, where the L2 and L3 interact with each other in the learning process, and where previous experiences with the L1 or L2 are no longer ignored or left unexploited. In the recently emerging plurilingual pedagogy learners' multilingualism and multicompetence is of significant importance, stating that it can be treated as a basis for further language learning which accelerates the learning process. Recent research has also introduced the perspectives of translanguaging (Creese & Blackledge, 2010; García, 2009; Conteh, 2018), codemeshing (Canagarajah, 2011; Schreiber &Watson, 2018), and heteroglossia (Bailey, 2012; García, 2009; Waring, 2021).

As it has been stated previously, the role of previous language knowledge in third language acquisition, and the methods French teachers use in order to exploit this prior knowledge in third language classrooms are not widely researched in Hungary. A study conducted in 2007 (T. Balla, 2007) with English (L2) and German (L3) language pairing found that those language learners who learnt the English-German word pairs in a systematic, multilingual way, (focusing on the differences and similarities between the two languages) remembered more words than the control group who learnt the same words in a traditional way, where prior language knowledge was not taken into consideration. By making students rely on their L2 in their learning process, multilingual teaching uses both languages in the classroom, by comparing and contrasting the L2 and L3. Based on the results of this study, students benefit from multilingual teaching methods, as the L3 vocabulary learning process becomes quicker and more efficient. T. Balla (2012) also found that L3 German learners attribute greater facilitating roles to their L2 English than to their L1 Hungarian, which means that students rely heavily on their L2 vocabulary knowledge when reading unknown L3 German text. T. Balla (2012) argues that the learning process can be enhanced with special multilingual instruction that compares the learners' L2 and L3, as the L2 is more likely to be treated as a point of reference (in comparison with the L1). The results show that the comparative instruction has different roles at the various stages of instruction, and that it facilitates L3 learning especially at an earlier stage of instruction.

As students arrive in L3 classrooms with little knowledge of the language they strive to learn, we might assume that they do not have a complex understanding of their L3. T. Balla (2008a, 2018b) provides us with a picture of how students who have been learning their L2 German for years, approach a text written in an unfamiliar L3. The results of the research show that Hungarian subjects with L2 English are able to understand – at least partially –an L3 German text, based on some factors: (already existing) knowledge of the world, L2, L1 Hungarian and the context. The difference in the extent of the accomplishment of the translation task seems to be solely which L2 the subjects had previously studied, meaning that all students have some existing prior knowledge of L2 that might be used to facilitate the L3 learning process.

Dégi (2018) also researched the role of multilingualism with Hungarian-speaking students within the Transylvanian school context. Her aim was to investigate the ways in which multilingualism is incorporated in the English foreign language classrooms in Transylvania, by conducting a multi-perspective analysis of classroom language use. She focused on instances of codeswitching and the factors that might influence the linguistic behaviour and code choice within the EFL classroom. The results of this study show that teachers use three types of language modes, namely, monolingual language mode using only English, bilingual language mode using non-target languages besides English, and monolingual language mode using only their own (the teachers') mother tongue. These modes

were connected to different pedagogic situations. The study also highlighted that teachers use non-target languages for several purposes (grammar explanations, vocabulary translation and maintaining discipline), but on the other hand, they require an exclusive target language mode from their students.

Although these studies provide us with invaluable results about how multilingual education is viewed in Hungary, in order to gain a more detailed insight into multilingual teaching with different language pairings, more research is needed to be done.

II.2. Participants

In order to get an idea of how Hungarian native teachers of French perceive the role of prior knowledge in their teaching process, semi-structure-structured interviews were conducted with ten language teachers in the summer of 2022. The teachers all teach French to students in a secondary school setting, therefore, they are in the position of teaching French as a third language to students who already have a pre-existing English knowledge. The teachers were contacted online, and this made it possible to select participants from schools and cities across the country. An important factor in the pre-selection process was the teachers' own knowledge of English and French. All of the teachers in the study (based on their self-rating) speak English themselves, with five teachers having a B2 level of proficiency, two teachers positioning their own proficiency at B1 level, and three teachers having a C1 level of proficiency, one of whom indicated that they also teach English in a secondary school setting.

All the participating teachers stated that they speak French fluently (level C1), with teaching experience ranging from five to thirty-eight years. All of the ten participants are currently teaching French in a secondary school in Hungary, in a grammar school setting, in 9th through 12th grades. Two teachers indicated that they teach in special language preparatory classes with increased teaching hours. As the target group were secondary-school teachers of French, teachers who work in primary schools, private schools or universities were not involved in this project.
Teachers participated in the interview voluntarily, answering Hungarian questions in a semi-structured format, within the framework of an online interview, where they were given the questions in advance, giving them the opportunity to think the topics over in advance. The questions present in this study (see: appendix) were translated from the original Hungarian questions. Stated that the development of students, both linguistically and culturally, is important in their teaching practices.

II.3. Research questions and hypotheses

The main aim of my research was to gain insights into how language teachers who teach French as a third language perceive the role of English in their work, whether they consciously use students' prior knowledge of English in their school work, and if so, what methods they use. The interview consisted of four main parts, the sections were structured around the following four research questions:

1. How do teachers perceive multilingual teaching methods and how do they use it in their teaching practices?

2. How do teachers use students' prior knowledge of L2 English grammar to teach L3 French grammar?

3. How can teachers use students' English vocabulary knowledge to teach French vocabulary?

4. How can teachers use students' L2 learning experience to motivate them in their L3 learning process?

My hypothesis was that, since all the teachers involved speak the three languages in question (they are multilinguals), they are able to see the relationship between L2 English and L3 French. I assumed that this multilingual approach would be present in the teaching process, consciously or not. I also hypothesized that prior (English) grammatical knowledge would speed up and simplify the learning process in the third language as well, and I expected confirmation of this in the teachers' responses. Based on T. Balla's study (2007) I expected teachers to highlight the benefits of multilingual teaching regarding vocabulary, but I also expected them to articulate the difficulty that arises from the fact that although the words of the two languages are similar or identical in many cases, their pronunciation is (almost) always different. As regards students' motivation, I assumed that teachers would report that students who experience a sense of achievement will associate positive feelings with their third language, and that students who are 'good learners' of English will, therefore, be more willing to learn the third language.

II. 4. Procedure

The interviews consisted of four main parts: the first two questions focused on teaching experience and the background English knowledge of teachers. Here, I also asked how many years the participating teachers had been in the profession and asked about the teachers' knowledge of English and the extent to which they used English in their teaching methods. The following three questions inquired about the ways how teachers incorporate multilingual tasks in their teaching practices, and the extent to which language tasks and tools using prior knowledge are reflected in their teaching methods. This raised the question of whether these methods and tools were conscious: whether they used any resources or tasks to teach the two languages together, and to what extent they drew on similarities or differences between English and French in their explanations. I also asked about the impact of prior knowledge of English in the lessons: to what extent students rely on this knowledge, and whether this prior knowledge is transferred to French without problems, or whether it causes problems within any areas (grammar or vocabulary, pronunciation).

I have formulated four questions connected to grammar teaching. Firstly, I found it important to assess the teachers' subjective opinions on what the difficult parts are to teach in French and for what purposes these parts that are related to English (similar, identical elements) are used in the teaching method. In a separate question, I have addressed the difficulties, assessing whether similarities or major differences in English cause major problems for students in the learning process. Here, the aim was to assess whether, apart from identical grammatical items, it is easier to learn it if the item is not related to English at all, or if it is related but there are some differences between the two languages. For instance, is it easier to learn the French word 'chien' (which is completely different from its English meaning 'dog')

In the seven questions related to vocabulary, I covered pronunciation, vocabulary size and also the students' awareness. I considered it important to highlight the question of the extent to which English helps or hinders students in pronunciation, as I hypothesised that this could be a source of problems in the learning process in this English-French language combination. The learners' vocabulary size was judged subjectively by the teachers, here I focused on whether the vocabulary of students who are 'good learners' of English (have higher grades) is larger in French, and how consciously and in what proportion they use it successfully. Since the role of the mother tongue is also emphasised in the related literature, I also asked whether this influence is noticeably present in third language lessons: whether students use Hungarian words (adopted or transformed from Hungarian). Furthermore, on the topic of vocabulary, I also asked whether teachers use materials that actively use English in

the classroom, in order to draw students' attention to any differences or similarities between the two languages.

Five questions were asked on the topic of student motivation and attitude. Here, I was mainly interested in how teachers view the motivation of their students, whether it is balanced between the two languages, for example, if the motivation from a successful second-language acquisition experience is transferred to the third language. Evidently, L3 teachers do not have a first-hand experience of their students' L2 motivation, therefore, I used grades and general impression of students' achievement to assess the relationship between L2 and L3 motivation. Another question was whether it can be said that an unsuccessful second-language learning process has a fundamentally negative impact on the motivation to learn a third language? Here I also asked to what extent the teacher motivates the students by the usefulness of the languages: if it can be said that languages are useful in general, or if there is a hierarchy between the two languages that has a noticeable effect on the motivation and attitude of the students to learn a language. The last question focused on the L3 motivation of the students, comparing those who had a good experience of learning a previous language with those who had a bad one: whether there is a difference between the two groups, and if the student who had a bad L2 learning experience, arrive with a preconception to his/her L3 classroom as well.

At the end of the interview, I used an open-ended question to give teachers the opportunity to share any other experiences they had connected to the questions or to elaborate on any topics that I might not have mentioned as interview questions but that they considered important.

III. Results

III.1. Teachers' general perception of multilingual teaching

The teaching experience of the participants varied vastly: the shortest was 5 years, and the longest, 38 years, and all participants speak English at least on B2 level. Ten of the respondents indicated that they consider prior knowledge of students important and that it is reflected to some extent in the teaching process. However, this did not always mean that they used multilingual methods within their teaching practices: only half of the respondents said that they have already used tasks in class that built on prior language knowledge. These tasks usually included English-French word pairs with similar forms, or verb tenses which are used in the same way in both languages. The other half of the respondents indicated that although they consider this important and the influence of the second language is visible in the lesson, they do not use specific tasks to encourage students to use their prior languages. One teacher replied that she had already prepared exercises based on English, which she said were mainly useful for vocabulary learning. In conclusion, from the first part of the interview, focusing on the general perception of teachers of multilingual teaching, it can be highlighted that teachers are aware of the usefulness of prior knowledge in third language learning and feel the need to include it in the methodology as a support tool for students, but in many cases, they reported that they do not have adequate support, methodological tools, tasks and guidance to realize this potential. his is also closely related to the motivation of students: seven of the interviewed teachers mentioned that methodological tools and tasks that are different from the usual ones can motivate students who have not been successful in their second language learning before. This also means that multilingual teaching methods may be useful in helping students to move away from previous, unsuccessful language learning experiences and to use new ways of learning a third language.

III.2. Prior grammatical knowledge

The section on teaching grammar revealed that according to the teachers, the most difficult grammar sections to teach are those where the material was not directly related to English or Hungarian (six respondents). According to the interviewees, when teaching grammar, the first thing they try to do is to use students' knowledge of English (n=6). Still, if that fails, grammar explanations and exercises can also refer to Hungarian (n=3). All of the participating teachers indicated that they had already used students' prior grammatical knowledge of English in order to facilitate their understanding of a French grammatical item in the lesson. Still, all of them had only used it in their explanations, no grammar tasks involving English had been used yet. All of the teachers who were interviewed said that they would prefer to use aids where the two languages appear together in the tasks, as they said that students find it easier to understand grammatical explanations if they are linked to their prior second language knowledge, or their mother tongue. Regarding the difficulties of teaching French, different answers were given. Eight participants mentioned that in cases where French is partly similar to English, students often confused the two languages. Also, three teachers replied that they had difficulties in teaching verb tenses. The general conclusion here is that students find it more difficult to learn French grammatical items that are partially different from English than those that are not similar at all in the two languages. Prior knowledge of English was reported to facilitate the teaching of the same verb tenses, and teachers reported that the learning process could be accelerated in practice by highlighting the connections between the two languages. One example of this was the verb tense 'past perfect' (plus que parfait) where both languages work in the same way.

Therefore, according to the teachers surveyed, prior grammatical knowledge from another language plays a significant role in third language acquisition. They stated that French grammar is easier and quicker to learn in the case of grammatical elements where the two languages are the same (examples of this were the same verb tenses and smaller grammatical structures, e.g. the structure 'there is' can be used successfully as a starting point for teaching the structure 'il y a'). In cases where the grammatical elements are similar but there is a smaller difference between the two languages, respondents found it more difficult to use transfer smoothly between the languages: they stated that negative influence of their students' prior knowledge of English may be involved. Two teachers mentioned that they would not like to use multilingual tasks focusing on grammar either because of the fear that their students might 'mix' the two languages or because they are afraid of the influence this teaching process might have on students' L2 grammar knowledge. Nevertheless, most (n=7) teachers reported that they would like to use tasks that build on prior knowledge and encourage their students to integrate their English knowledge into the classroom work, even if it is only at a theoretical level, in order to increase their linguistic awareness.

III.3. Prior vocabulary knowledge

The ten teachers participating in the study said that they had used mostly vocabulary tasks in their L3 teaching practices: all participants said that they had already referred to English when teaching vocabulary to their groups. Six teachers responded that they regularly remind students when a word is similar to its English equivalent or when the two words are the same. Four teachers responded that in vocabulary learning they highlight words that are different in the two languages: words with the same form but different meanings were mainly mentioned as a source of problems. For example, teachers highlighted that their students usually use the French word 'location' incorrectly (as in French, it means 'rental'). They explained that students have difficulties with their prior knowledge, if they transfer these words into French unconsciously. Eight of the teachers interviewed were positive about this kind of "experimenting with languages" when students try to create French words on the basis of their prior knowledge of English, but two teachers indicated that this could cause potential

problems in the long term, as the word learned with a mistake could be embedded in the students' knowledge for a longer time period. For example, teachers mentioned the hardship of correcting mistakes deriving from false friends, where a word exists in both languages in the same form, but with different meanings. One example of this was the word 'assist', as in French, it means 'to attend', but students who know the English word 'assist' will transfer its meaning into their L3, incorrectly.

In the area of pronunciation all teachers indicated that they had experienced difficulties in teaching due to the influence of English (probably due to the specific differences between the two languages). Here, most teachers expressed a similar view to that of grammar teaching: the influence of English is most noticeable when it leads to incorrect use of the language, and words are most difficult to learn where the written form is the same as in English but the pronunciation is different. Seven teachers responded that they would find it useful to use English language tasks, but none of them had ever done one for their group in the course of their work. Some of the reasons they mentioned was the lack of time (n=4) to produce such tasks, and others (n=3) highlighted that they found it more difficult to draw students' attention on the similarities of the L2 and L3 in the field of grammar. The influence of Hungarian was less of a source of problems: only two respondents said that the influence of Hungarian on third language use had already caused problems in the learning process. Eight teachers said that they rarely used Hungarian as a reference, especially for vocabulary learning, stating that it is effective for words that are the same in Hungarian and French (for example 'aperitif') or so they stated that the role of the mother tongue is not significant in the learning process.

When asked about the vocabulary of students who have successfully mastered their second language compared to those who are not considered 'successful learners' of English, most teachers (n=6) said that those who are perceived to be more successful learners with a larger perceived vocabulary have a larger vocabulary in French as well. Two teachers reflected on the controversy that these students have a higher vocabulary than their "less successful learner" classmates, but they also have a higher rate of errors. This is probably due to the stronger influence of English, where pronunciation differences also appear as a source of problems. Overall, we can conclude that students with a higher level of English have a larger vocabulary in French, but this greater prior knowledge also means that they have more problems with using L3 French vocabulary correctly. Respondents did not indicate a correlation with Hungarian, i.e. in their teaching experience, students who have better grades at their L1 (Hungarian) grammar and literature at school do not seem to have a significantly higher French vocabulary. Therefore, the role of the native language was not highlighted by the teachers as a source of transfer when learning L3 French.

In conclusion, the main advantage highlighted by teachers is the ease of vocabulary acquisition in cases where words are the same in both languages. The differences between the two languages are most problematic for students in pronunciation: the influence of English is strongly felt here and often leads to incorrect use of the third language. It is also important to highlight that students who have a bigger vocabulary in their second language will also have a larger vocabulary in French, although the rate of incorrect solutions increases here. Overall, teachers used bilingual vocabulary teaching tasks and explanations more often than grammar-focused methods, and the usefulness of the multilingual approach was clearly highlighted by all participating teachers.

III.4. Motivation connected to L2

In terms of motivation, the majority of the participants (n=9) highlighted the role of prior learning experiences and also, the experiences in third language acquisition. Here, they stated that those students who have previously mastered a second language successfully,

(meaning, they have good grades, higher inner motivation) transfer this positive experience and the motivation that arises from it, into their third language learning process. These students are reported by teachers to be more motivated, more enthusiastic and more likely to overcome learning obstacles than their less successful peers in a second language. This crosslinguistic phenomenon shapes students' understanding of languages and motivation towards learning in a complex way.

When asked what motivates students to learn French, teachers mentioned the general motivation of students who reported that they learn a language because they like the language and the fact that they are successful at it. The role of English is also important here: teachers reported that students who learn English because they like it are motivated by intrinsic motivation, therefore, they are more likely to be successful in the third language as well. As an external motivation, the labour market benefits of languages were highlighted by five teachers: they claimed that students were motivated by the value of languages for work and the fact that language skills might help them in their future careers. Four of the five teachers also highlighted that English is perceived differently by students than French: the former is seen as much more useful, while French is seen as a less beneficial language. Other reasons for learning L3 French were the need to communicate when travelling abroad (n=2) and the advantages of studying abroad (n=3). The teachers also reported on the correlation between the motivation of students and their aims with the given language, meaning that students who had a clear plan with the languages were more motivated to learn them in general.

In conclusion, a large proportion of participating teachers said that there is a cross-linguistic motivation among students to learn languages, i.e. that the second language has a clear impact on the third language. Students who have had a successful experience of learning a second language carry this experience and the motivation that comes with it into their third language: it is part of their prior knowledge and experience and student biography. If effective third language teaching is to be achieved, we cannot ignore these experiences: students' basic motivation is shaped by their background in other languages. The presence of three important motivating factors among students was highlighted by the participants: the four most common were affective factors, future employment, communication with foreign and native speakers, and facilitating further learning.

IV. Conclusions

The aim of this research focuses on how L3 French teachers perceive the role of English in their work and how they use students' prior L2 knowledge to facilitate L3 learning. The general conclusion from the experiences of the teachers interviewed is that third language teachers are aware of the benefits of exploiting prior knowledge in their teaching. Arguments in favour of this included the efficiency of teaching, the speed of the learning process and student autonomy, and that this knowledge is part of the students' autonomous use of the language. All of the teachers involved were open to the idea of bilingual education and would be open to receive materials written in this view. However, the problem of the lack of such materials was also apparent: although teachers see the potential of multilingual teaching, several indicated that they lack the time to produce such tasks, and that prior knowledge is only theoretical in the teaching process.

It is a clear limitation of this study that I was able to include a small sample of teachers in my study, and a survey of more teachers (and students) would be extremely helpful to gain a deeper insight into the field of multilingual education in Hungary. Therefore, in addition to emphasising the importance of multilingual education, I believe that there is a great need for teaching aids where teachers use two languages simultaneously, thus facilitating the learning process. Exercises and teaching aids written in this spirit would greatly contribute to ensuring

that students' prior knowledge is not left untapped but is presented as real and relevant knowledge in the course of third language learning in the classroom.

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Appendix

Questions asked during the interview:

a) Teachers' views and practices connected to multilingual teaching

1. How many years have you been teaching French?
2. How would you rate your English skills?
3. In what ways do you use English in your teaching of French?
4. Do you use tasks specifically designed for this purpose (focusing on the differences and the similarities between English and French)?
5. For what purposes are English and French used in the language classroom?

b) Prior grammatical knowledge

6. What are some of the most difficult grammar parts to teach?
7. In what ways is English (grammar) present in the classroom? Comparison, analysis, differences?
8. How much is prior knowledge of English a problem?
9. How does it help?

c) Prior vocabulary knowledge

10. To what extent do differences and similarities in pronunciation help/disrupt students' performance?

11. Do students at a higher level in English (with better grades) have a higher French vocabulary?

12. How much is the influence of English on students' vocabulary?

13. How is English language proficiency reflected in students' French vocabulary? Pronunciation, passive knowledge, experimentation, translation?

14. How often do students take words from English? Are they used correctly in French?

15. To what extent do the errors come from the influence of the English language?

16. Do you use exercises where you point out the differences and similarities between the vocabulary of the two languages?

d) Motivation connected to L2

17. How does the students' achievement in English (grades) relate to their achievement in French?

18. To what extent is motivation to learn transferable from one language to another?

19. What motivates your students to learn French and what do they want to achieve?

20. How does this differ from their goals for English?

21. How can you motivate a student with a good previous experience of language learning and one with a worse one?

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Az állati fordulat

Csonka Liberta, *Pécsi Tudományegyetem Filozófia Doktori Iskola*

Harriet Ritvo amerikai történész 2007-ben állati fordulatnak nevezte azt az akadémiai fókuszváltást, ami a tudományos világban az ezredfordulón végbement. Ritvo Richard Rorty nyelvi fordulatához és W. J. T. Mitchell képi fordulatához fogható gondolati váltásként beszél az állati fordulatról. Az azóta eltelt 15 évben a kérdéskör tovább bontakozva diszciplínává formálódott. Az ember-állat tanulmányok, kritikai állattanulmányok, vagy másként nevezve, az antrozoológia számtalan új fogalmat, teóriát, nézőpontot kínál a téma iránt egyre több érdeklődőnek. Az állati fordulat egyik fontos eredménye, hogy felismeri a nyugati gondolkodás korlátait és azok feloldását keresi, próbára téve ezzel a tudományos, pozitivista világlátást.

Az kutatásom központjában e gondolkodásban beállt fordulat áll, ami a XXI. századi nyugati társadalom tagjainak cselekvéseit, döntéshozatalát a korábbitól markánsan eltérő módon befolyásolja. Egy újfajta viszonyulás érzékelhető az állatokkal kapcsolatban, amely jelenség addig az emberi környezetben értelmezhető olyan alapvető fogalmainkat írja újra, mint például a család, a társ, a gyász vagy a szeretet.

Tanulmányomban kifejtem a nyugati filozófiára jellemző ember-állat kapcsolat gondolkodásbeni struktúráját. Majd az állati fordulatra jellemző gondolati logikát vázolom. Ezt követően a ritvói állati fordulatot elemzem, az általa idézett nyelvi és képi fordulatokat vizsgálva következtetéseket vonok le az állati fordulat indokaira vonatkozóan, és felrajzolom azt az új emberképet, amelyet e fordulat megteremt. Itt kitérek kutatásomra, melynek címe: Az állatok, kiemelten a kutya szerepe a filozófiában. Platón „barlang hasonlatához" visszatérve, valamint Thomas Nagel Milyen lehet denevérnek lenni? című művére támaszkodva mutatom be azt a kiindulási pozíciót, ahonnan magyarázatot találok kutatásom témájának, a kritikai kutyatanulmányok – röviden kutyizmus – jelenségére. Konklúzióként megállapításokat teszek arra a paradigmaváltásra vonatkozóan, amit a XXI. századi állati fordulat magával hoz a nyugati társadalom gondolkodásában.

Kulcsszavak: állati fordulat, ember-állat tanulmányok, antrozoológia, alkalmazott filozófia, Harriet Ritvo, kutya, Byung-Chula Han

I. A nyugati filozófiára jellemző ember-állat kapcsolat gondolkodásbeli struktúrája

Az állat fogalma meghatározó szerepet tölt be a nyugati gondolkodásban. Közismertek azok a történeteket, közmondások, ahol az állatok a gondolkodás segítői voltak, amikor az ember számára ismeretlent kellett megfogalmazni, például Róma alapításakor a farkas által táplált Romulusz és Rémusz legendája, vagy a már a középkorban is használt, de a filozófiában Hobbes nevéhez kapcsolódó kép, a *homo homini lupus est*, ember embernek farkasa vagy Friedrich Nietzsche műveiben megjelenő állati metaforák, allegóriák is beleillenek ebbe a képbe. A XX. századból Wittgenstein híres mondatát emelném ki, amikor egy állati képpel magyaráz a filozófiáról: „Mi a célod a filozófiában? – Hogy megmutassam a légynek a kiutat a palackból."[1]

A felsorolásból jól látható, hogy a filozófiatörténet jelentős alakjainál az állat fogalmának kiemelt szerepe van. Egyfajta szemléltető eszközként, általuk könnyen elképzelhetők voltak az emberi megismerés számára ismeretlen, irracionális dolgok, akár meg is testesítették azokat. Ezt a gondolkodási pozíciót nevezzük antropocentrikus viszonyulásnak.

Az antropocentrikus gondolkodásban az ember a centrum, így az állat a körív, amelynek minden pontja a körív sugaraként az emberre mutat. Az állat számtalan ellenpontot ad ahhoz, hogy az ember fogalmát, az emberi világ, az emberi megismerés határát bekerítse. Immanuel Kant ezt a viszonyt így fogalmazza meg: „Eszünk nem valamiféle, meghatározatlan messzeségbe kiterjedő síkság, melynek határairól csak úgy általánosságban szerzünk tudomást; inkább gömbhöz hasonlítható, melynek sugarát megkapjuk a felszínén lelhető ív görbületéből (a szintetikus a priori tételek természetéből); ennek alapján biztonsággal megadható a gömb beltartalma és az azt korlátozó felület. E gömbön (a tapasztalat körén) kívül az ész számára nincs objektum; még a kérdések is, melyek az efféle vélt tárgyakra vonatkoznak, valójában a gömbön belül – az értelem fogalmainak alárendelődve – fennálló viszonyok átfogó meghatározásának szubjektív elveit firtatják."[2]

Az antropocentrikus gondolkodás tehát az embert e gömb középpontjába helyezi, és hozzá képest nevezi másnak, jelen esetben állatnak, a világot.

II. Az állati fordulatok

A nyugati filozófia első nagy „állati fordulata" ezen a gömbön lukat ejtett, amikor 1859-ben, Darwin műve, A fajok eredete napvilágot látott. A korában megdöbbentő elmélet, miszerint az ember is állat, máig olyan erős gondolati struktúrát kínál a nyugati ember számára, hogy az ebből való kilépés, azaz azt állítani, hogy nem állat vagyok, hanem ember, folytonos magyarázatot kíván, és egy újfajta ember-állat értelmezést eredményez.

A XX. század közepén, a természettudományos gondolkodás csúcspontján, a második „állati fordulat" során az állat az addigi ember helyébe került. Az állatot emberi, antropomorf helyzetekben kezdték szemlélni, és vontak le következtetéseket természetével, intelligenciájával, megismerésével, észlelésével, érzékelésével, tudatával kapcsolatban.[3] A gondolkodás alapjaiban nem változott, a vizsgálódás tárgya változott, az emberről az állatra. A megismerés szempontjából az antropocentrikusság továbbra is fennmaradt, hiszen az ember kíváncsisága kutatta a területet, azonban az addig kizárólag az ember számára használt

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[1] Wittgenstein, L.: *Filozófiai vizsgálódások.* Atlantisz Kiadó. Budapest, 1998. pp. 154.
[2] Kant, I.: *A tiszta ész kritikája.* Atlantisz Könyvkiadó. Budapest, 2018. pp. 598.
[3] Elsősorban Konrád Lorenz etológiai, Peter Singer állatetikai és Thomas Nagel állati tudattal kapcsolatos munkájára gondolok.

szubjektum-fogalomtár köntösét a különböző állatfajok egyedeivel is felpróbáltatták, ezáltal újabb ismereteket nyerve (az ember számára) róluk. Ez az ismeret azonban továbbra is antropocentrikus maradt, mivel egyedül az ember számára értelmezhető.

Elmondható tehát, hogy a természettudományos vizsgálódás az állatok irányába az ismeretszerzés szempontjából mindig egyirányú marad, e következtetés tautologikus természetű, hiszen a tudomány éppen az ember racionális megismerésének axiómáin alapul.

III. A ritvói állati fordulatra jellemző logika

A harmadik, ritvói „állati fordulat"[4] célja egy újabb lyukat ejteni azon a gömbön, ami az embert saját megismerésének korlátaival azonosítja és ezáltal meghaladni az antropocentrikus világlátást. Ritvo az akadémiai világban lezajló változásról ír, ami az elmúlt pár évtizedben az állat fogalma körül történt. Állítása szerint, egyszerre a humán és a társadalomtudományokban, megnövekedett az állati témával foglalkozó kutatások száma, és ebből a kvantitatív növekedésből egy kvalitatív átalakulás is érzékelhető a kutató, azaz az ember és a kutatás tárgya, az állat kapcsolatában. Ez a minőségi módosulás az állat korábbi és jelenlegi szerepének újra értelmezésével jár, ami maga után vonja e kapcsolat másik szereplőjének, az ember fogalmának felülvizsgálatát is. Ritvo Richard Rorty nyelvi fordulatához és W. J. T. Mitchell képi fordulatához fogható gondolati váltásként beszél az „állati fordulatról".

Margo DeMello 2012-es könyve szisztematikusan láttatja az új „kopernikuszi fordulatot". DeMello az ember-állat tanulmányokat egyfajta világlátásként fogalmazza meg, C. Wright Mill szociológust segítségül hívva, azt mondja, hogy a szociológusok a világot egy szociológus képzelettel látják, ami által az életünkre úgy tekintünk, mint ami egy társadalmi kontextusba van beágyazva. DeMello úgy gondolja, hogy az ember-állat tanulmányokra is hasonló látásmód jellemző, a témája – az ember és állat kapcsolatok – meghatározza, de fontos része az a sokféle világlátás, ahogyan az állatokat szemléljük, és hozzájuk viszonyulunk.

Az ember-állat tanulmányok szerint a klasszifikáció sokkal inkább meghatározó az emberi kultúrában, mint maga a biológia. Az állatok fizikai, biológia azonossága sokkal kevésbé döntő státuszukra és az ember velük való bánásmódjában, mint szimbolikus és társadalmi meghatározottságuk.[5]

Ezen hangsúlyváltást figyelembe véve érdemes megvizsgálni az ember-állat tanulmányokra jellemző logikát, amely gondolkodás során a természettudományban elfogadott kategorikus következtetések helyett a diszjunktív viszonyú ítéletek hoznak eredményes ismeretet. Ez a viszony Kant szavait használva így írható le: „A diszjunktív ítéletekben foglalt ismeretek tehát tartalmaznak valami közöset, és ez a közös abban áll, hogy kölcsönösen kizárják egymást, ám ezáltal egészében mégis meghatározzák az igaz ismeretet, amennyiben együttvéve kiadják valamely adott ismeret egész tartalmát."[6]

DeMello ezt a logikát így fogalmazza meg, „Az ember-állat tanulmányok célja az, hogy megértsük az állatokat az emberi kontextusban. Fókuszában az állat áll az emberi világban, az állatra, mint társadalmi konstrukcióra tekint. Mert mi az állat az emberi kultúra nélkül?" – teszi fel a költői kérdést.[7]

Ebből a kérdésből pedig adódik a következő: mi az emberi kultúra az állat nélkül?

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[4] Ritvo, H.: *On the Animal Turn*. 2007. Daedalus 136:118-122.
 https://www.jstor.org/stable/20028156?seq=1 (letöltés ideje: 2022.06.20.)
[5] DeMello, M.: *Animals and Society: An Introduction to Human-Animal Studies*. Columbia University Press. New York, 2012. pp. 9.
[6] Kant, I.: *A tiszta ész kritikája*. Atlantisz Könyvkiadó. Budapest, 2018. pp. 122.
[7] DeMello, M.: *Animals and Society: An Introduction to Human-Animal Studies*. Columbia University Press. New York, 2012. pp. 10.

IV. A ritvói állati fordulat emberképe

Byung-Chul Han dél-koreai származású filozófus A kiégés társadalma című könyvében a kor emberét elmagányosodott, elgépiesedett személyként írja le, aki a Föld, az idegen kultúrák, a másik ember kizsákmányolása után most saját maga kizsigerelését kezdte meg. E gondolkodás okát a figyelem fókuszváltásában látja, ami az individuumra szűkült. „A neoliberális boldogságfogalom eltereli figyelmünket a fennálló uralmi összefüggésekről, amennyiben csak lelki önvizsgálatra kényszerít. Gondoskodik róla, hogy mindenki egyedül saját magával, önnön pszichéjével foglalkozzon, ahelyett, hogy kritikusan rákérdezne a társadalmi viszonyokra. A szenvedést, amelyért a társadalom volna felelős, privatizálják és pszichologizálják."[8] A Han által leírt tendenciákat összevetve a jelen társadalomban megfigyelhető kutyatartás minőségi és mennyiségi változásával, az ember kutyához fűződő kapcsolatának átalakulásával elvezet ahhoz a kérdésig, hogy vajon a ma embere nem a kutyákban/kutyatartásban keresi-e azon emberi értékek gyakorlását, amelyeket a fent lefestett emberi világban már nem gyakorolhat, vagy ezek eleddig szokványos gyakorlása értelmezhetetlen.

A kérdés megválaszolásához érdemes a ritvói történelmi láncot mélyebben megvizsgálni, hiszen a nyelvi, a képi és az állati fordulat egymásból adódó reflexióként való értelmezése további következtetésekre adhat alapot az emberi gondolkodás fejlődésével kapcsolatban. A XX. század eleji nyelvi fordulat a gondolkodás és a nyelvhasználat közötti kapcsolatot rendkívül szorosan határozta meg, akár ontológiai következtetéseket is levonva.[9] Gondoljunk itt Wittgenstein egy másik híres mondatára: „Amiről nem lehet beszélni, arról hallgatni kell.[10] Az analitikus filozófia darabjaira, betűire szedte az embert, és ezáltal egy tömegesen írni és olvasni tudó, alapvetően a nyelvi rendszerben gondolkodó analitikus ember született. A nyelvi fordulat eredményeképp az emberi nem szubsztanciája az írás-olvasás képessége. Ennek alapja, azaz az emberi szubsztancia itt a nyelvi képesség volt, az emberi beszéd, annak írott, olvasott, könyvekből, szövegből tanított minősége normává vált.

Ebből a szigorú, zárt, nyelvi határokat szabó, az értelmes gondolkodást a nyelviségre korlátozó rendszerből való kilépés igényeként is értelmezhető a képi fordulat.[11] A képi fordulat nem azt tudja megfogni, fogalmazni, amit a nyelv, a grammatika, az írástudó, a lineáris tud. Egy kép egyszerre tud elmondani több üzenetet, amely üzenet sokkal függetlenebb a szerzőtől, és inkább szól egy irracionális kapcsolódásról, egy impresszióról, az érzésről, mintsem az értésről. A képi fordulat emberi szubsztanciája a látás képességében összpontosul. A látás, mint érzékelés kiemelkedően fontossá, az ember számára meghatározóvá vált. Az emberi tekintet elsődleges infomációszerző szerv, tudásforrás, amely lehetőséget ad olyan következtetések levonására, amit a nyelvi keretek nem tesznek lehetővé. A képi fordulat során a megjelenés, a test új fókuszt kap, az emberi gondolkodás a képiségben kezdi el keresni a jót, az ideálisat. A nyelvi fordulat szigorú szabályrendszere után a képi fordulat kaotikus, gyors, benyomásszerű jegyei felszabadítóak lehettek, de éppen ezek a karakterjegyek ugyanannyira le is szűkítették az új ember gondolkodási rendszerét. A szép redukálódott azzá, ami jól néz ki, a jó pedig azzá, ami jónak tűnik.

Erre a külsőségekre épülő, az emberi tekintet által meghatározott világra válasz a ritvói állati fordulat, ami a nyelviség kereteiből kilépve a tekintet elsőbbségéről is lemond.

Az állati fordulat új emberének gondolkodását sem a nyelviség, sem pedig a tekintet axiómái nem korlátozzák döntései meghozatalakor. Ez az ember azonban még eszköztelen:

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[8] Han, B.: A kiégés társadalma. Typotex. Budapest, 2019. p. 22.
[9] Rorty, R.:*The Linguistic Turn: Recent Essays in Philosophical Method*. Chicago University Press. Chicago, 1967.
[10] Wittgenstein, L.: *Logikai-filozófiai értekezés*. Atlantisz Könyvkiadó. Budapest, 2004. p. 103.
[11] Mitchell, W. J.T.:*Picture Theory*. Chicago: University of Chicago Press. 1994.
https://fdocuments.net/document/mitchell-wtj-the-pictorial-turn.html?page=3 (letöltés ideje: 2022. 05. 03.)

nyelvtelen, vak. Ez az ember pedig társra egy kevésbé racionális – látására részben, más érzékeire azonban nagyobb mértékben támaszkodó – lényben talál.

V. A magány barlangja

Elfordulva az embertől, a XXI. századi elmagányosodott ember az állat felé fordul azzal a céllal, hogy egy olyan új, a természettel harmonikus együttlétet alakíthasson ki, amiben megtalálhatja az emberi létezésnek egy természetesebb formáját.

Az antropocentrikus gondolkozásból való kilépés lehetőségét keresve, Platón barlanghasonlata megfelelő eszköz arra, hogy a látására részben, más érzékeire nagyobb mértékben támaszkodó lény és az ember találkozását bemutassam.

Platón barlanghasonlatában a félhomályában lekötözött ember szabadulása után fokozatosan rálát a fényes világra, és ennek a folyamatnak eredményeképp különbséget tud tenni a között, hogy mi a barlang és a barlangon túli világ, és mi az árnyék és mi a hozzá tartozó valóság. Platón ezzel a hasonlattal mutatja meg azt a momentumot, amikor az ember a gondolkodás képessége által absztraktan tud a világra tekinteni. A felszabadult ember egyszerre képes szemlélni a valós dolgokat és a rajtuk túlmutató, de bennük is megnyilatkozó elvont ideákat.[12]

A Byung Chul Han által megidézett, XXI. századi, szabad ember a magány barlangjában ül. A barlang a XXI. századi társadalom, ahol az ember közvetlen emberi kapcsolatokra nehezen tesz szert. A láncoktól megszabadított ember körbe tekint és azt látja, hogy emberként egyedül van a barlangban, mellette kutyája ül. A barlangot az ember a kutya szükségletei miatt hagyja el. Azaz a kutyájához fűződő kapcsolata az, ami arra készteti, hogy elhagyja a megismert barlangot, és azon túlra, a mögé nézzen.

Ha elfogadjuk azt a tézist, hogy a kutya mindig jelen volt az ember/iség mellett, akkor releváns a kérdés, hogy most miképp van jelen az ember életében, s amennyiben másként, mint korábban, akkor ennek mik lehetnek szerteágazó okai.

Platón „barlanghasonlata" után Thomas Nagel Milyen lehet denevérnek lenni? című művét hívom segítségül. Nagel cikkében a test-elme problémát a tudat és a tapasztalat összefüggésein keresztül vizsgálja. Problémafelvetése abban áll, hogy a címben feltett kérdés egyáltalán megválaszolható-e, azaz tudatunkkal képesek vagyunk-e megtapasztalni a „denevér létét". A tudat és a tapasztalat kapcsolatát a létezéssel összefüggésben így fogalmazza meg: „Ám alapvetően egy organizmusnak akkor és csakis akkor vannak tudatos mentális állapotai, ha az illető organizmusnak *lenni* valamilyen – éspedig az organizmus *számára* valamilyen."[13] Szerinte minden tapasztalás szubjektív, és az, hogy az ember ezeket a szubjektív tapasztalatokat megpróbálja elképzelni, ahhoz nem visz közelebb, hogy ténylegesen megtudja és egyszerre megtapasztalja, milyen denevérnek lenni. Nagel gyorsan eljut arra a következtetésre, amit a tanulmány első fejezetében tárgyaltam Kant sorait idézve. Az antropocentrikus gondolkodás korlátait a denevér példáján így mutatja be: „Azt szeretném tudni, hogy milyen denevérnek lenni a *denevérnek*. És ha ezt próbálom elképzelni, rá vagyok szorítva saját elmém erőforrásaira, azok viszont nem elégségesek a feladathoz."[14]

Belátva e következtetést, doktori értekezésem központi kérdése Thomas Nagel „Milyen lehet denevérnek lenni?" kérdésfeltevésével szemben nem az állati létezésre világít rá, hanem az emberire, azaz nem arra próbálok válaszolni, Milyen lehet kutyának lenni?, hanem arra: Milyen lehet olyan embernek lenni, aki kutyának képzeli magát? Továbbá milyen hozománya van ennek a gondolkodásnak és életmódnak az emberre és a kutyára nézve egyaránt? *Kritikai kutyatanulmányoknak*, röviden *kutyizmus*nak nevezem azon hitvilágokat és cselekvéseket,

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[12] Platón, szerk. Sándor Pál.: *Állam, részletek*. Gondolat Kiadó. Budapest, 1970.
[13] Nagel, T. *Milyen lehet denevérnek lenni?* [What is It Like to Be a Bat?]. Vulgo ötödik évfolyam. 2. p. 4.
[14] U.o. 5-6.

amelyeket kutyánk köré építünk, s valamilyen módon belé projektálunk. A jelenség során új jelentést nyerő fogalmainkat, mint például a család, a társ, a gyász, a szabadság vagy a szeretet, szőrmébe bújtatott fogalmaknak nevezem. E filozófia létezését valósnak gondolom, annak megfogalmazása kutatásom célja, amelynek tervezett hozománya egy gondolkodásbeni lépést tenni az embertől az állat felé, egyszerre a szubjektívtól az objektív, az elmétől a test felé a XXI. századi „állati fordulat" keretein belül. Ezen elmélet eszközt teremt arra, hogy a Nagel által fent vázolt elme-test problémából adódó szakadék áthidalható legyen. Ennek a lehetőségnek a realitását maga Nagel sem cáfolja:

„Szép volna, ha valaki egyszer nekiállna, hogy kialakítsa azokat a fogalmakat és azt az elméletet, ami lehetővé tenné, hogy elgondoljuk mindezeket; ám az efféle megértés elől természetünk határai alighanem mindörökké elzárnak minket. Viszont megtagadni a realitást vagy a logikai jelentést attól, amit soha nem írhatunk le és nem érthetünk meg, ez a kognitív disszonancia legdurvább formája."[15]

A kutyizmus filozófiájának kidolgozása kettős célt szolgál: egyfelől a kutyatartói magatartás vizsgálatának a tudományos diskurzus témaköreibe emelése hozzájárulhat a tudatosabb cselekvésekhez, mely másodsorban hosszú távon akár elő is segítheti az emberi életminőség javulását, fejlődésünk forrásává téve azt.

Összefoglalás

Az állati fordulat egyik fontos eredménye, hogy felismeri a nyugati gondolkodás korlátait és azok feloldását keresi, próbára téve ezzel a tudományos, pozitivista világlátást. Éppen ezért is jellemző rá az interdiszciplinaritás, a diszjunktív viszonyú gondolkodás, és fontos kiindulási területe a filozófia.

Az állati fordulat várható eredményei amellett, hogy még több információt fognak szállítani az állatokról a tudomány számára, egy alapvető paradigmaváltást hoznak magukkal, ami gyökeres változást hoz a figyelem, a gondolkodás és az együttélés fogalomkészletében, ahogy azt a nyelvi, majd a képi fordulat is tette. Azaz egy olyan kilépőt tartogat magában a tudományos racionalitásból, ami hidat épít a ráció és az intuíció, az értelmes és az ösztönös, az elme és a test között. Ez a paradigmaváltás pedig kiolvasható abból a viszonyulásból, amelyet a XXI. századi nyugati ember gyakorol ember és kutya között.

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[15] U.o. 7.

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Examination of the cutting temperature-cutting speed relationship of C45 steel

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Abstract

I fulfilled two goals with the study. On the one hand, it presents several factors during turning that lead to an increase in temperature. We examined the two most significant factors: cutting speed and feed speed. Thanks to the thermal camera measurement method, the tests were carried out in dry operation. During the investigation, it can be concluded that both the cutting speed and the feed are very important factors in terms of temperature, but the feed was more dominant during the measurements. At a feed rate of 0.14 mm/rev, the 250-330 m/min section is almost linear, so this is an optimal technological value pair in terms of cutting temperature. The cutting temperature measurements with a thermal camera gave a satisfactory result, even though the post-processing time was considerable in some cases, and with the current equipment park, the thermal camera could not be continuously in the workspace.

Keywords: machining, C45, thermal camera, cutting temperature, technological parameters

I. Introduction

I.1. The requisitions of the study

Parts made with metal technology often require post-processing. In most cases, this subsequent work means cutting. Cutting gives the workpiece its final shape, dimensional accuracy and surface roughness, so the cutting conditions must be examined, which can optimize the surface roughness, the degree of allowance and, of course, the lifetime of the tool (according to the technological parameters). The tool life is greatly affected by the temperature during cutting. High temperature prevails in the cutting zone according to the characteristics of the process, but this can be optimized with the help of technological parameters, including tool wear and characteristics of the prepared surface.

The cutting process begins with elastic deformation, then as the tool continues to advance, the chip compact and close with a tear. During the process, mechanical energy is almost completely converted into heat (Stampfer). In the simplified model, three heat sources can be distinguished, these are shown in Figure 1.

1. Shear zone
2. Tool front surface and the cutting friction zone
3. Tool interface and the machined surface friction zone
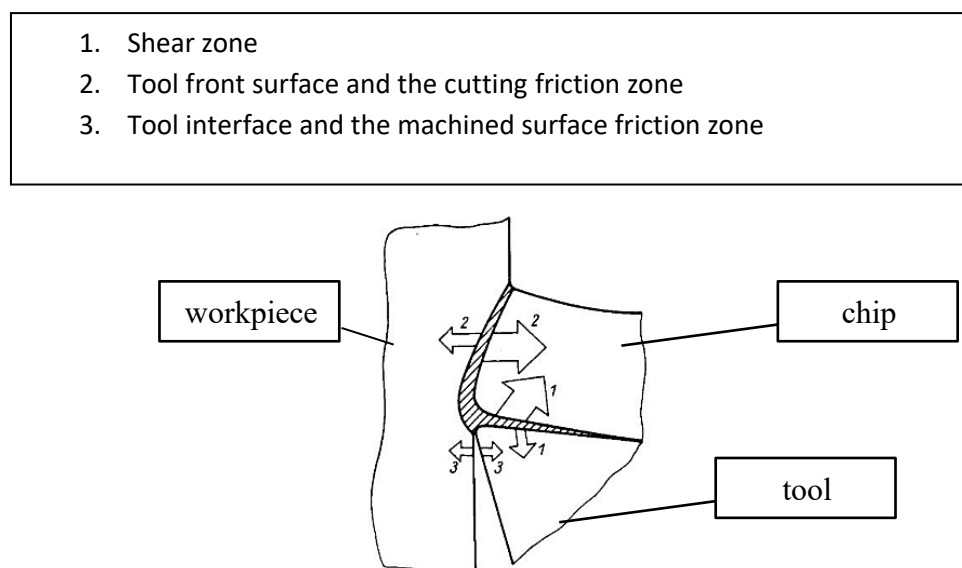
Figure 1. Heat sources in the cutting zone Source: Stampfer, [2012]

The possibility of measuring the cutting temperature is reported by Ihsan Korkut et al., where a thermocouple temperature measurement method is used (Ihsan Korkut). According to the article, the thermocouple temperature measurement method can be used well for measuring the cutting temperature.

New trends have also emerged for temperature measurement and cutting zone temperature measurement. The new trend was brought to life by the developing thermal cameras, as we can read in the article by R. M'Saoubi et al., where the temperature distribution was monitored as a function of the tool's coatings (R. M'Saoubi). In the review article by Jinfu Zhao et al., the authors presented perhaps the two most important methods of cutting temperature measurement. The non-contact temperature measurement method with an infrared thermometer and the temperature measurement method with a thermocouple. In the case of measurement with an infrared thermometer, they have already pointed out that the emissivity of the material affects the accuracy of the temperature measurement (Jinfu Zhao).

In the work of J Pujana et al., it was presented that temperature measurement is increasingly important in technical life and that the temperature depends, among other things, on the emissivity factor, the surface roughness, and the oxidation state (J Pujana).

During the study, I established two objectives. One is to examine the temperature change during cutting, which can be used to optimize the quality characteristics of the workpiece as well as the amount of tool wear. The second task, which is not to be neglected, is to test the currently available devices and the measurement system for my further research.

II. Materials and methods

All elements of the W-D-M-T-I (Workpiece-Device-Machine-Tool-Information) system will be needed during the pilot test. These elements are presented in this chapter.

II.1. Material

In the machinery industry, there are many places and opportunities available in the ISO marking system for C45 carbon steel (Werkstoff-nummer: 1.503) as a designated, non-alloyed structural, heatable and hardenable carbon steel. Its field of use is very wide in the mechanical industry, from the production of screws to the production of machinery and equipment as a wear-resistant component and even as a pressure-bearing component (HEINRICH KIPP WERK GmbH & Co. KG). Table 1 shows the composition of C45 steel.

Table 1. Chemical composition of C45 steel [%]

C	Si	Mn	P	S	Cr	Mo	Ni	Cr+Ni+Mo
0.42-0,5	≤ 0.4	0.5–0.8	≤ 0.045	≤ 0.045	≤ 0.4	≤ 0.1	≤ 0.4	≤ 0.63

Source: Saarstahl, [2022]

In the case of C45 steel, a characteristic that cannot be neglected is that it can be easily machined with a cutting process. It can be heat-treated well, with which the mechanical properties can be changed within wide limits.
The mechanical characteristics of C45 steel are listed in Table 2.

Table 2. Mechanical properties of C45 steel (Saarstahl, 2022)

Tensile strength	0,2% proof stress	Fracture elongation	Reduction of area
R_m [N/mm²]	$R_{p0,2}$ [N/mm²]	A_5 [%]	Z [%]
630-780	min. 370	min. 17	min. 45

Source: Saarstahl, [2022]

II.2. Machining machine

An Opti Turn L44 lathe was available during processing. One of the important features of the machine is that it is a closed technology, program-controlled machine with a horizontal bed.

Table 3 Characteristics of the Opti Turn L44 lathe (excerpt)

Spindle speed	Feed rate X-axis	Feed rate Z-axis
n[min^{-1}]	X [mm/min]	Z [mm/min]
0-3000	15000	15000

Source: Optimum *[2012]*

Based on Table 3, it can be said that the rate of feed rates does not, but the rate of spindle speed can narrow the experimental window. In the case of materials that can be easily cut, it is not

uncommon to require 4-5,000 min^{-1}, for which, of course, catalogs make recommendations based on the material and technology of the cutting tool. The speed of the machine must be considered here.

A three-jaw hydraulic chuck is responsible for clamping the workpiece of the machining machine. The overhang of the workpiece does not exceed the critical ratio of l/d<3...4 (where l: length of the workpiece, d: diameter of the workpiece), so no support is necessary.

II.3. Tool

The use of a chipping tool is essential for chip separation. The tool used during the experimental test was made with the knowledge of the tool holder of the machine and the material quality of the workpiece. The chosen tool consists of a holder and the carbide insert. The tool holder is Optimum SDJC R 1616J11 and the insert type is DCMT 110204-F1 TP3500, the insert is CVD coated. The construction of the tool is shown in Figure 4.
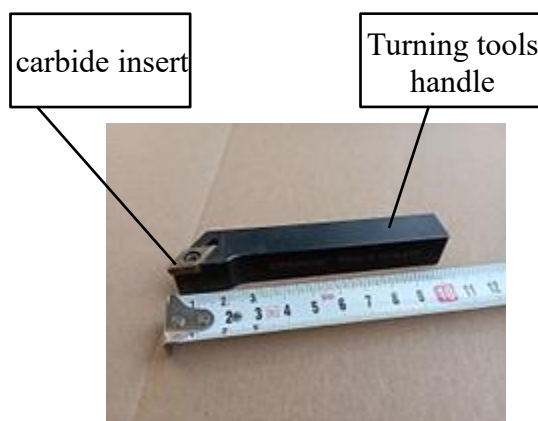
Figure 4. Lathe tool Source: (own editing) [2022]

II.4. Thermal camera

A testo 882 thermal camera was used during the experiment. The instrument is easy to use, which is facilitated by the 320x240 pixel resolution display. The device has a built-in digital camera, which saves real images in addition to thermal images. When taking pictures, it is possible to focus manually or with a motor, following the recommendations, I worked with manual focus during the tests.

I performed the post-processing of the images on a computer using the IRSoft PC software. It is also possible to recognize cold/hot spots on the thermal image itself, which facilitated the processing. Table 4. contains the technical data of the thermal camera.

Table 4 technical data of the testo 882 thermal camera (excerpt) (testo)

Infrared resolution	320 x 240 pixels
Thermal sensitivity	<50 mK at +30 °C
Minimum focus distance	0.2 m
Image refresh rate	33 Hz
Focus	manual and motorized
Display options	only IR image; real picture only; infrared / real image
Measuring range	-20 … +100 °C; 0 … +350 °C (switchable)

Source: (own editing) *[2022]*

II.4. The processing

Turning technology was used during machining. Figure 5 shows the composition of the machining.
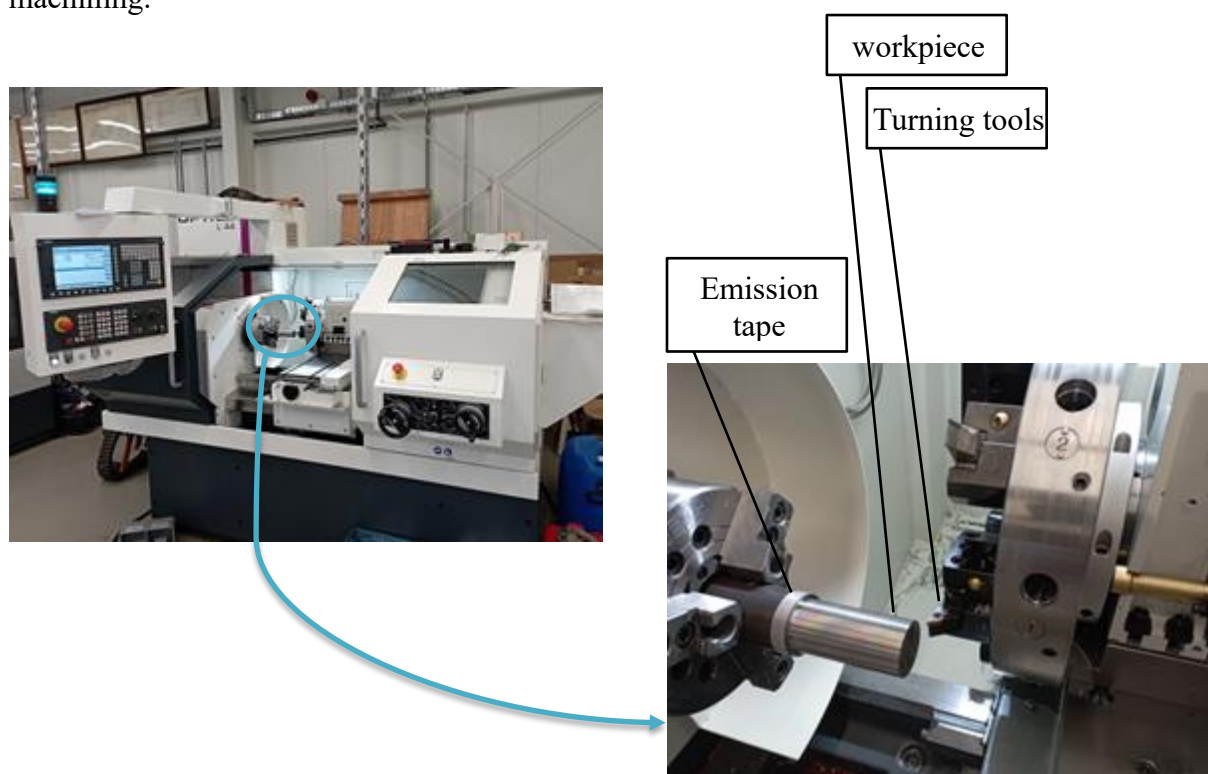
Figure 5. The set-up of the experiment Source: (own editing) [2022]

The technological characteristics of the individual machining steps were pre-programmed into the CNC machine controller, during the machining the movements created because of the program run were realized. No cooling water was used during cutting.

Table 5 contains the values of the individual technological characteristics that were set during the experiment.

Table 5. Values of the technological characteristics of the experiment

Spindle speed	Depth of cut	Cutting speed	Feed rate
n [1/min]	a [mm]	v_c [m/min]	f [mm/rev]
800	1	113	0,08
1500	1	240	0,08
2000	1	330	0,08
2500	1	342	0,08
800	1	113	0,14
1500	1	240	0,14
2000	1	330	0,14
2500	1	342	0,14
800	1	113	0,2
1500	1	240	0,2

| 2000 | 1 | 330 | 0,2 |
| 2500 | 1 | 342 | 0,2 |

Source: (own editing) *[2022]*

I chose the depth of cut shown in the table to be 1 [mm] until the end of the experiment, thereby concentrating on my main research area, where post-processing must be performed. I adjusted the other parameters to the recommendations of the tool manufacturer and the speed range of the lathe.

III. Results

In the case of the results, as well as the objectives, I perform the deduction of two types of results. One is the observations that can be set up in the light of measurements and measurement results, and the other is the possibilities of using the measurement system.

After the measurement and the necessary post-processing, the results are presented in Figure 6.
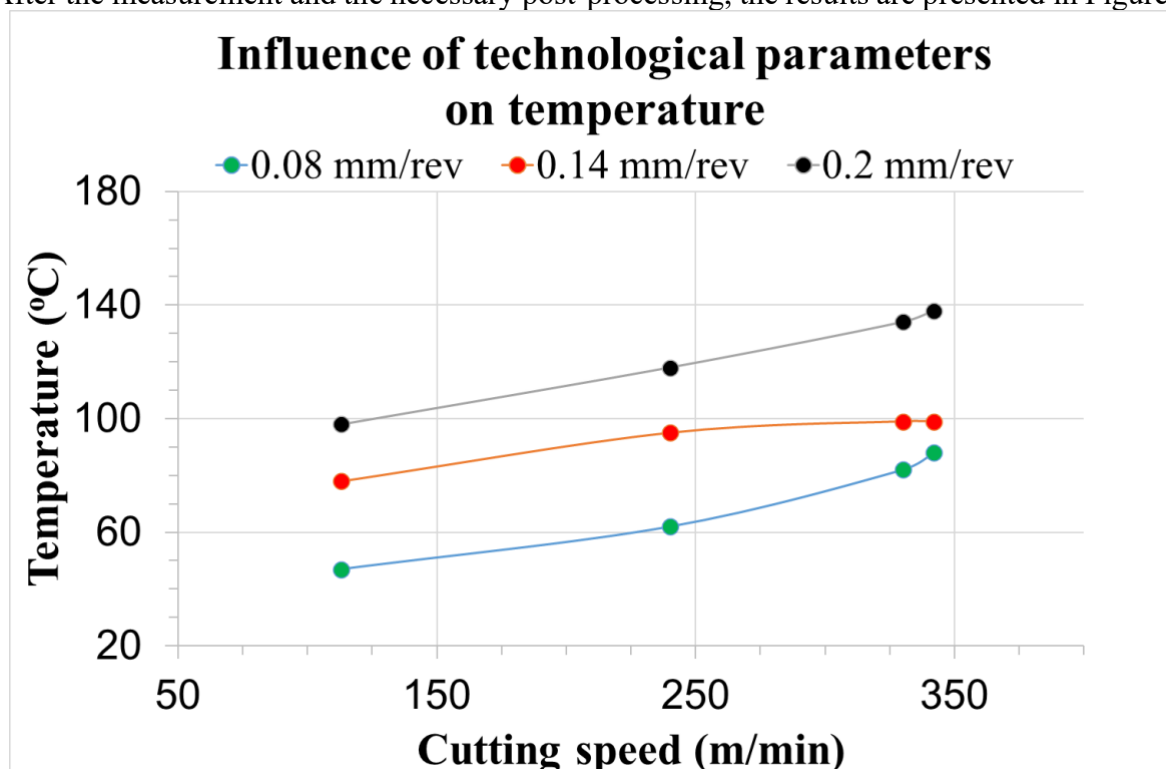
Figure 1. Influence of technological parameters
on temperature Source: (own editing) [2022]

Based on the results, it can be said that the tendencies of my measurement results show a good similarity with the results of other researchers (Ghodam), even though other researchers used a different measurement method.

Based on Figure 6, it can be said that

- by increasing the cutting speed, the cutting temperature increases, its increase is intensively observed at speeds of 330 and 342 m/min, mainly at feed speeds of 0.08 and 0.2 mm/min
- by increasing the feed rate, the cutting temperature increases by leaps and bounds, this dynamic was maintained in the individual measurement series
- based on the measurement results and the established technological parameters, the feed speed of 0.14 mm/min and its 250-330m/min section is almost linear, so it can be used

expediently, even with these parameters, a very good surface quality can be achieved, but no measurements were made for this.

On the other hand, the measurement conditions and the measurement procedure must be mentioned in the results.

- − The processing machine is a closed technology machine, in this regard, when recording with the thermal camera, the machine must be stopped, the door opened, focused, and exposed. This is a time-consuming process and may affect the measurement results.
- − The focus distance had to be set big, so there are several details in the images that are not relevant from the point of view of the present measurements but had to be taken into account in the post-processing.
- − The emissivity of the surface also changed as a function of temperature and surface roughness.
- − The camera is only suitable for recording images; the temperature could be checked at several points in time by making a video.
- − The object-lens can be protected with a special replaceable germanium protective glass, using this the lens could remain in the machine housing until the end of the experiment, thus significantly reducing the measurement uncertainty.

IV. Summary

The measurement results confirm the effect reported in the literature, i.e., the process of heat production increases intensively depending on the cutting speed and the feed speed, and of the two, the cutting speed is the most decisive. The accuracy of the observation is important to influence the tool life and to optimize the surface roughness.

During the study and the experiments, I gained practical experience in the field of measuring with a thermal camera. During the measurements, I concluded that I will switch to the thermocouple measurement method during my next experiments in order to avoid the inconveniences that occur during the measurements.

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Szilícium és kén állománykezelés hatása az őszi zab genotípusok levélterületére és produktivitására eltérő évjáratokban

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A globális felmelegedés generálta klímaváltozás okán egyre gyakoribbá válnak egyes időjárási anomáliák, melyek a szántóföldi növények biomassza-, valamint terméscsökkenését okozhatják. A zab (*Avena sativa* L.) fontos emberi táplálékként és állati takarmányként világszerte termesztett növény.

Kutatási eredmények igazolták, hogy a szilíciumnak és a kénnek számos jótékony hatása ismert a növények növekedésére, fejlődésére és termésére, valamint enyhítik a különböző abiotikus stressz hatások (pl. a szárazság) negatív hatásait. Kutatásaink során a szilícium és kén kezelések hatását vizsgáltuk az őszi zab genotípusok levélterületére és termésére. További célként tűztük ki a hazánkban nemesített őszi zab genotípusok vizsgálatát a Hajdúságban, és az adott agroökológiai feltételek mellett biztonságosan termeszthető fajták meghatározását.

A két vizsgálati évben a kisparcellás kísérlet a Debreceni Egyetem Böszörményi úti Campusán, csernozjom talajon valósult meg. A kutatás során 5 őszi zab fajtát vizsgáltunk 4 kezelés mellett (kontroll, Si, S, Si+S), 3 ismétlésben. A szilíciumos kezelések során a Prosilicon, a kénes kezelések esetén a Jello Fluid nevű készítményeket juttattuk ki lombtrágya formájában. A kezeléseket 3 fenofázisban végeztük el.

Az első évben a 3 mérés összesített átlaga alapján az Mv Imperiál fajtánál mértük a legnagyobb levélterület index értékeket. A kezelések szempontjából statisztikailag igazolhatóan nagyobb levélterületet mértünk a kezeletlen parcellák esetén a kezelt területekhez képest. A második év során a legmagasabb értékeket a GK Arany fajtánál mértük, a kezelések esetén pedig a mérések többségében szignifikánsan magasabb értéket eredményezett a kombinált (Si+S) kezelés.

A vizsgált genotípusok közül mindkét évben a GK Arany, Mv Istráng és az Mv Hópehely fajták érték el a legmagasabb termést. 2021-ben mindhárom kezelés hatására szignifikánsan magasabb termésátlagokat kaptunk a kontrollhoz képest, míg 2022-ben a kombinált kezelést kapott parcellák szignifikánsan magasabb terméshozammal rendelkeztek. Két év eredményei alapján megállapíthatjuk, hogy a kombinált kezelés statisztikailag igazolhatóan pozitív hatással volt a termésátlagokra.

Kulcsszavak: őszi zab, szilícium, kén, LAI, termés

I. Bevezetés

Magyarországon 2021-ben 25 038 hektáron (ami a hazai szántóterületnek 0,60%-a) termesztettek zabot 3 t/ha-os termésátlaggal, vetésterülete azonban évről évre csökken. Termesztése elsősorban az Alföldi régióban történik, annak ellenére, hogy a klimatikus viszonyok alapján nem ebben a térségen lenne a termesztési körzete (KSH, 2021). A statisztikai adatgyűjtés módszeréből adódóan azonban nem tudjuk megállapítani, hogy ebből valójában mennyi a tavaszi, s mennyi az őszi változat vetésterülete és termésátlaga. Világviszonylatban elmondható hogy termesztése az északi mérsékelt égövben a gyakoribb, 2021-ben 9,56 millió hektáron termesztették, 2,4 t/ha-os termésátlaggal. Vetésterülete ez elmúlt 10 évben viszonylag stagnált, de hosszú távon vizsgálva csökkenést figyelhetünk meg. A globális zabtermesztés 60%-a Európában található (FAOSTAT, 2021).

A zab az egyik legtáplálóbb gabonaféle, nagymértékű szénhidrát tartalma elsősorban keményítő formájában van jelen, emellett többféle B-vitamint tartalmaz, továbbá oldható élelmi rostokban és lipidekben gazdag, s ideális fehérje összetétellel rendelkezik. (MARTÍNEZ-VILLALUENGA - PEŇAS, 2017).

A szilíciumnak sokáig nem is tulajdonítottak jelentőséget a növénytáplálás szempontjából, csak az 1980-as évektől kezdtek el komolyabban foglalkozni vele (DEBONA et al, 2017). Az, hogy a növény szempontjából mekkora a jelentősége, máig vitatják, az azonban bizonyos, hogy jótékony hatását számos szakirodalomban megemlítették már. PAIS (1980) részleges biológiai fontosságú mikroelemként hivatkozik rá, EPSTEIN (1999) pedig kvázi-esszenciális tápelemként említi. Azért érdemelte ki ezt a titulust, mert habár stresszes körülmények között számos jótékony hatása ismert, ideális esetben csak minimális hatást fejt ki a növényre (EPSTEIN, 2009). Ennek ellenére számos tanulmány született a szilícium termésnövelő hatásáról optimális és stresszes körülmények között is (Lewin, 1969; Liang et al, 2015). A szilícium bizonyítottan képes enyhíteni a biotikus és abiotikus stresszfaktorok okozta káros hatásokat (KOVÁCS et al, 2022), például zab növényeken vizsgálták a szilíciumtrágyázás hatását sóstressz esetén, s az eredmények pozitívak voltak (STADNIK - TOBIASZ-SALACH, 2022), de ezeken felül jótékony hatását több stresszfaktor területén is alátámasztották, például szárazságstressz, (GONG et al. 2005; KUTASY et al, 2022; CSAJBÓK et al, 2022), vagy fagystressz (LIANG et al. 2008), és többek között nehézfém-toxicitás esetén (GUNES et al. 2007) búzában.

MALHOTRA ÉS KAPOOR (2019) kifejezetten cáfolja azt az állítást, hogy a Si nem esszenciális tápelem, ugyanis az ő kísérleteik során Si hiányos közegben nehézkes volt a termesztés.

Jótékony hatását tulajdonképpen kétféle képpen fejt ki: egyfelől beépül a sejtfalba, valamint a kutikula réteg alatt egy réteget képez, így nyújtva mechanikai védelmet, másfelől pedig stimulálja a növények védekező mechanizmusait (MA - YAMAJI, 2006).

Az 1980-as évek végétől a kénhiány egyre fokozódik hazánkban (MARS, 2004). A talajok kénhiánya egyre nagyobb problémát okoz országszerte. Ennek oka a megváltozott mezőgazdasági gyakorlat, valamint a csökkent légköri koncentráció, és a növények fokozottabb mértékű kénfelvétele (LUCHETA - LAMBAIS, 2012). A kén egy esszenciális mikroelem, hisz két aminosavnak is, a metioninnak és a ciszteinnek alkotóeleme, ezáltal a fehérjeszintézisben limitáló. Továbbá antioxidánsoknak, – mint például a glutation - szulfolipideknek és vitaminoknak (tiamin, biotin) is alkotórésze (SAMANTA et al, 2020). A gabonafélék, főleg a mai modern genotípusok érzékenyek a S hiányára. NYBORG (1968) kutatása során a kénes kezelés nagymértékben növelte az NPK műtrágyázott zabnövények terméshozamát. A cisztein a redukált ként tartalmazó összes molekula kiindulópontja (NAZAR et al, 2011), így a glutationnak is alkotóeleme, amely egyfajta védőmolekulaként funkcionál a növényekben. Zab esetén megfigyelték, hogy a növényt ért lisztharmat fertőzést követő 24 órában megnövekedett

a glutation koncentrációja a rezisztens vonalakban (KÜNSTLER et al, 2020). A tiamin (B$_1$ vitamin) esetén is bebizonyosodott, hogy szerepet játszik az olyan abiotikus stresszfaktorok negatív hatásainak mérséklésében, mint a hidegstressz, sóstressz és ozmotikus stressz (SAMANTA et al, 2020). Ezen eredmények alapján levonható a következtetés, hogy a kéntrágyázás csökkentheti a hőmérsékleti stressz negatív hatásait, miközben úgy tudjuk növelni a terméshozamot és az ezermagtömeget, hogy az ne menjen a minőség rovására (TAO et al, 2018).

A szilíciumot és a ként lombtrágya formájában juttattuk ki. A lombozaton keresztüli tápanyagpótlás a mikroelemeket hatékonyan pótolja a növény számára, célzott és emellett környezetbarát. Hatékonysága azonban nagyban függ a környezeti tényezőktől (pl. hőmérséklet, megvilágítás, stb.) (NIU et al., 2021).

II. Anyag és módszer

II. 1. Alapadatok

A kísérletet a Debreceni Egyetem Böszörményi úti Campusán található Bemutatókertben állítottuk be, kisparcellás körülmények között, csernozjom talajon. Egy parcella az első évi kísérlet során 10,5 m^2, míg a második évben 12 m^2 területű volt. A vetés 180 kg/ha-os vetőmagnormával (5,5 millió csíra/ha) történt, 2020-ban 10. 26-án, 2021-ben pedig 10. 21-én. Mindkét évben hazai nemesítésű, martonvásári és szegedi fajtákat vizsgáltunk. (Mv Hópehely, Mv Kincsem, Mv Imperiál, Mv Istráng, GK Arany és GK Impala). A 2022-es évben a GK Impala nevű fajta kísérletbe vételére nem nyílt lehetőségünk, így ezzel a fajtával kapcsolatban csak egy év eredményei állnak rendelkezéseinkre.

4 kezelést alkalmaztunk a kísérlet során. A kontroll csoport semmilyen kezelést sem kapott, a szilíciumos (Si) kezelést kapott parcellákat az első év során a Prosilicon nevű készítménnyel kezeltük 3 l/ha dózisban, a második évben az Optysil nevet viselő készítményt alkalmaztuk 0,5 l/ha-os dózisban. A kénes (S) kezelés során az érintett parcellákat a Jello Fluid nevű szerrel kezeltük 5 l/ha-os adaggal. A kombinált (Si+S) kezelés során mindkét készítményt kijuttattuk az előbb felsorolt dózisokban.

A Prosilicon hatóanyaga kálium-szilikát (K$_2$O:10,5 Si: 1,4 m/m %). Az Optysil szilícium-dioxidot (SiO$_2$) tartalmaz, literenként 200g-ot. A Jello Fluid fő hatóanyaga a kén-trioxid (SO$_3$), 1000g/liter mennyiségben, ezen felül van még nitrogén, magnézium és bór tartalma is.

A készítményeket lombtrágyaként juttattuk ki.

2021-ben a betakarítás időpontja 07. 09-re esett, 2022-ben pedig 07. 08-ra.

II. 2. Az időjárási viszonyok értékelése.

Az 1. ábrán a 2020-2021-es évi csapadék- és hőmérséklet viszonyokat láthatjuk. A szeptemberi és októberi csapadékbőségnek köszönhetően a zab vetését kissé megkésve tudtuk csak kivitelezni, viszont a fejlődése nem volt akadályozott. A leghidegebb hónapként számontartott januári hőmérséklet szokatlanul enyhe volt, 4,3 ºC-al volt magasabb a havi átlaghőmérséklet a 30 évi átlagéhoz képest. A téli időszakot egy lassú kitavaszodás követte enyhe hőmérséklettel és elegendő mennyiségű csapadékkal. Ezután a nyár egy rendkívül aszályos júniussal robbant be, melyet mi sem bizonyít jobban, minthogy a havi csapadékösszeg 73,5 mm-el volt alacsonyabb a 30 éves átlagétól, a hőmérséklet pedig 3,9 ºC-kal volt magasabb a sokéves átlaghoz képest. Ennek köszönhetően habár a termékenyülés zavartalanul zajlott le, szemtelítődési problémákat tapasztaltunk.
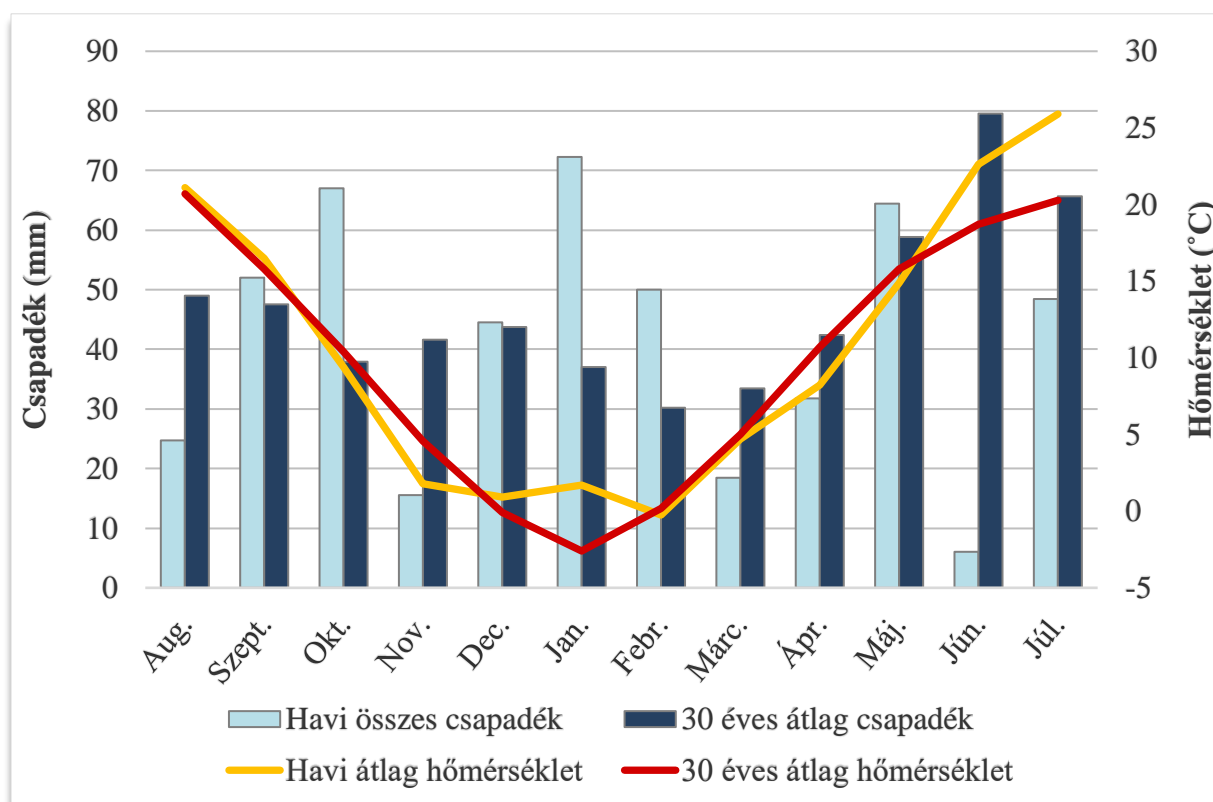
1. ábra: A 2020-2021-es év időjárási viszonyai a kísérleti területen. Forrás: DE MÉK Precíziós Növénytermesztési Kutatás-fejlesztési Szolgáltató Központ [2021]
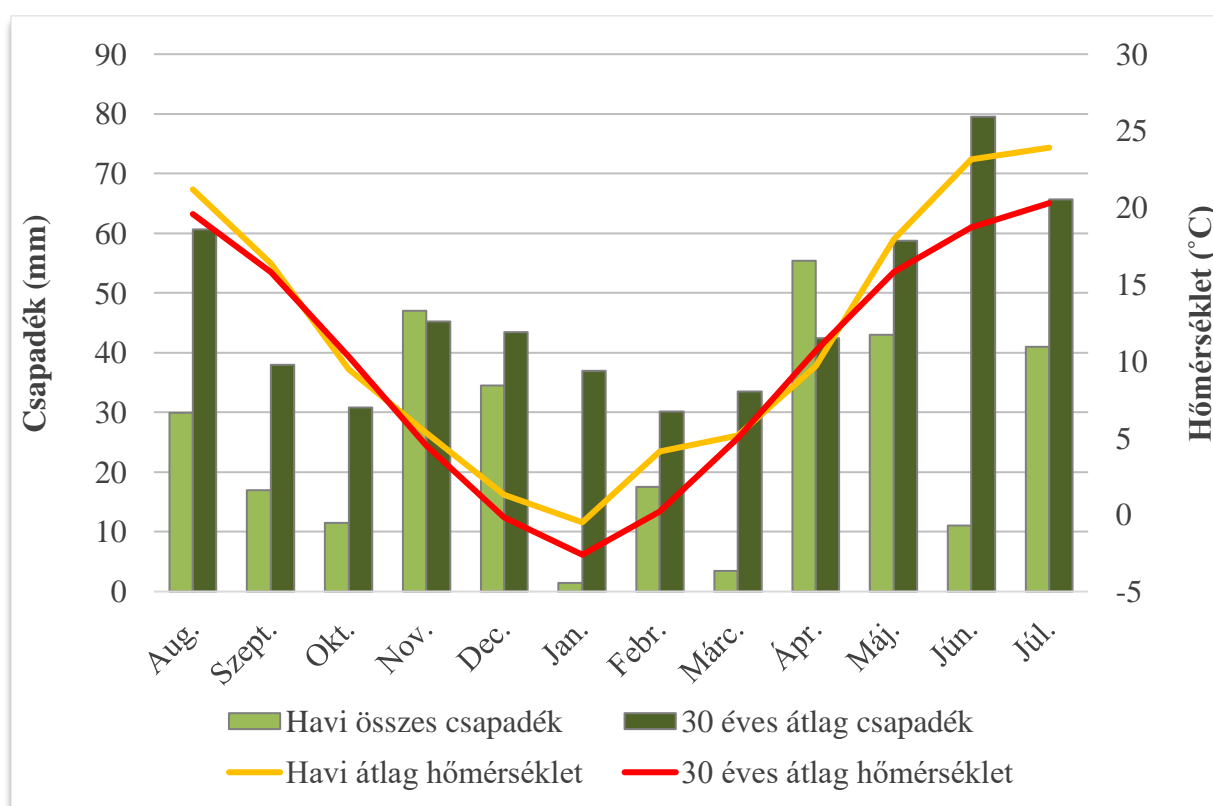
2. ábra: A 2021-2022-es év időjárási viszonyai a kísérleti területen. Forrás: DE MÉK Precíziós Növénytermesztési Kutatás-fejlesztési Szolgáltató Központ [2022]

A 2021-2022-es évjárat (2. ábra) az őszi zab számára kedvezőtlenül indult. Az aszályos nyár az augusztusi hónapban is tovább folytatódott. Az alacsony csapadékszint a szeptemberi és októberi hónapokra is jellemző volt, ami nagyban megnehezítette az elvetett állomány kelését. Ebből adódóan a zabnövények fejletlen állapotban indultak a télnek, ami meg is mutatkozott a vegetáción. A viszonylag enyhe télnek köszönhetően télállósági problémát egyik fajta esetében sem tapasztaltunk, az állomány sikeresen áttelt, azonban a csapadékhiánnyal egészen áprilisig küzdeniük kellett. Az áprilisi csapadék segítette az állomány fejlődését, azonban olyan vegetációs tömeget, mint az előző évben, egyik fajta esetében sem értünk el. Májustól kezdve a lehullott csapadék mennyisége ismét elmaradt a 30 éves átlagtól. Összességében elmondható, hogy a 2022-es év időjárási szempontból rendkívül kedvezőtlenül alakult szinte minden termesztett kultúra, így az őszi zab számára is. A csapadékhiány mellé magas légköri hőmérséklet is párosult már a májusi hónaptól kezdve. Ebből adódóan nemcsak szemtelítődési, de termékenyülési problémákkal is szembe kellett néznünk.

II. 3. Levélterület-Index mérése

A levélterület-Index mérésére a LICOR cég LI-2000 Plant Canopy Analyzer nevű készülékét használtuk. A levélterület-Index, röviden LAI (leaf area index) egy olyan mutató, amely alkalmas a levéltömeg/biomassza mérésére.

II. 4. Termés

A betakarítás minden fajta és kezelés esetén azonos időpontban, egy Wintersteiger 125 parcella kombájnnal történt. A learatott termésből mintát vettünk, amiből meghatároztuk a betakarításkori szemnedvességtartalmat. Ezt követően számítottuk ki az egyes parcellák 14% szemnedvességre korrigált termését, majd az így kapott adatokból kiszámítottuk az 1 hektárra jutó termés mennyiségét.

II. 5. Statisztikai értékelés

Az adatok statisztikai kiértékelését az IBM-SPSS 22.0 programcsomaggal végeztük. Az adatok együttes értékelésére varianciaanalízist (General Linear Model), a páronkénti összehasonlításhoz LSD post hoc tesztet használtunk. Mindkét esetben 5%-os elsőfajú hibával (α) végeztük az elemzéseket.

III. Eredmények

III. 1. Genotípus hatása az őszi zab Levélterület-Index (LAI) értékére (2021-2022)

A 2021-es évben mért LAI értékeket a 3. ábrán szemléltetjük.

3. ábra: Az őszi zab fajták 2021 évi LAI értékei a kezelések átlagában [Debrecen, 2021] ± sztenderd hiba; a különböző betűk szignifikáns eltérést jelölnek a fajták között p= 5% szinten

Az első évi kísérlet során a három mérési időpont közül a június 10-i mérés során mértük a legmagasabb értékeket, csak a GK Arany és az Mv Istráng esetén volt különbség, ugyanis ezeknél a fajták már a május 27-i mérés idejére elérték a levélterületük maximumát. Szignifikánsan magasabb értékeket az Mv Imperiál és a GK Impala fajták esetében mértünk a június 10-i méréskor. A június 24-i mérés eredményei voltak a legalacsonyabbak, ami részben az aszályos időjárásnak, részben pedig az érés természetes folyamatainak tudható be. Az átlagos levélterületi értékek május 27-én 6,90, június 10-én 7,18, június 24-én pedig 6,16 m^2/m^2 voltak.
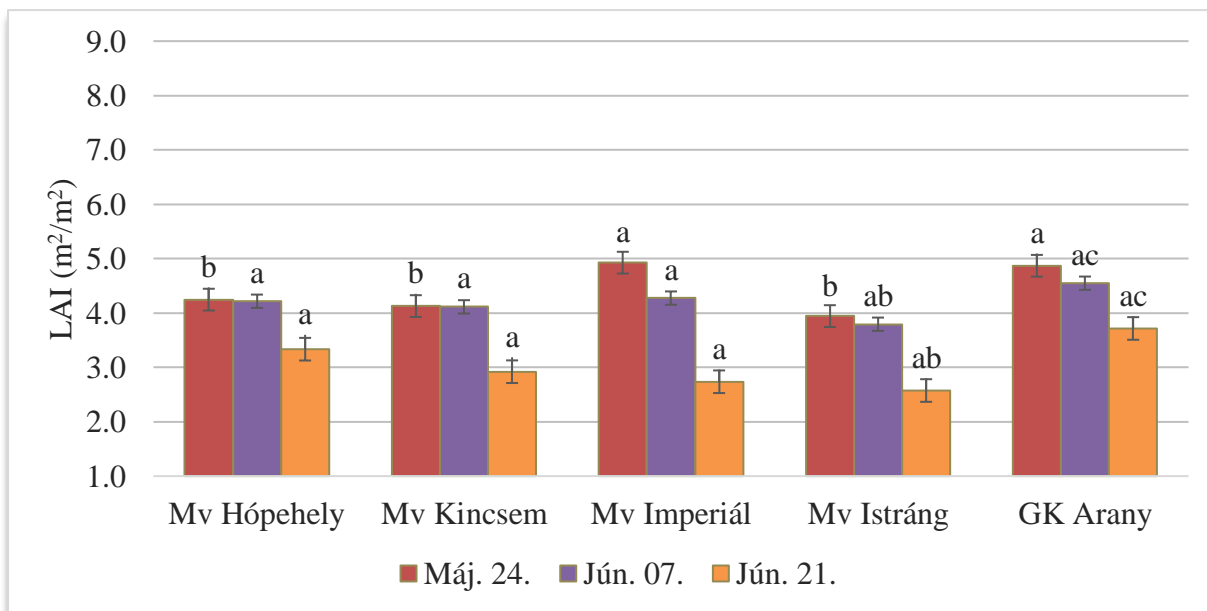
4. ábra: Az őszi zab fajták 2022 évi LAI értékei a kezelések átlagában [Debrecen, 2022] ± sztenderd hiba; a különböző betűk szignifikáns eltérést jelölnek a fajták között p= 5% szinten

A második évben a legmagasabb értékeket május 24-én mértük a 3 időpont közül, ezért valószínűleg a szokatlanul aszályos időjárás okolható. Az Mv Imperiál és a GK Arany fajták esetében az első mérés során eredményeink statisztikailag igazolhatóan magasabbak voltak (4. ábra).

Az előző év május végi méréséhez képest átlagosan 35,9%-kal alacsonyabb LAI értékeket mértünk, majd ez az érték a mérések során folyamatosan nőtt, június elején 41,7%, június végén pedig már 50,4%-kal kisebb értékeket felvételeztünk, mint az előző évben. Az extrém időjárás erősen befolyásolta a kapott eredményeket. Átlagosan 42,4%-kal volt alacsonyabb a LAI értéke 2022-ben, 2021-hez képest.

III. 2. Kezelés hatása az őszi zab Levélterület-Index (LAI) értékére (2021-2022)

5. ábra: A levéltrágya kezelések hatása az őszi zab 2021 évi LAI értékeire a genotípusok átlagában. [Debrecen, 2021] ± sztenderd hiba; a különböző betűk szignifikáns eltérést jelölnek a kezelések között p= 5% szinten

2021-ben a kontroll parcellákon valamennyi mérési időpontban szignifikánsan magasabb levélterületet mértünk (5. ábra). A 3 kezelés átlagértéke 13,3%-kal volt alacsonyabb a kontroll parcellák átlagához képest, az eltérés az első időpontban volt a legnagyobb (16,8%), s folyamatosan csökkent (12,5%, majd 10%). A kezelések eredményei között, - főleg a szilíciumos és a kombinált kezelések esetén - minimális volt az eltérés.
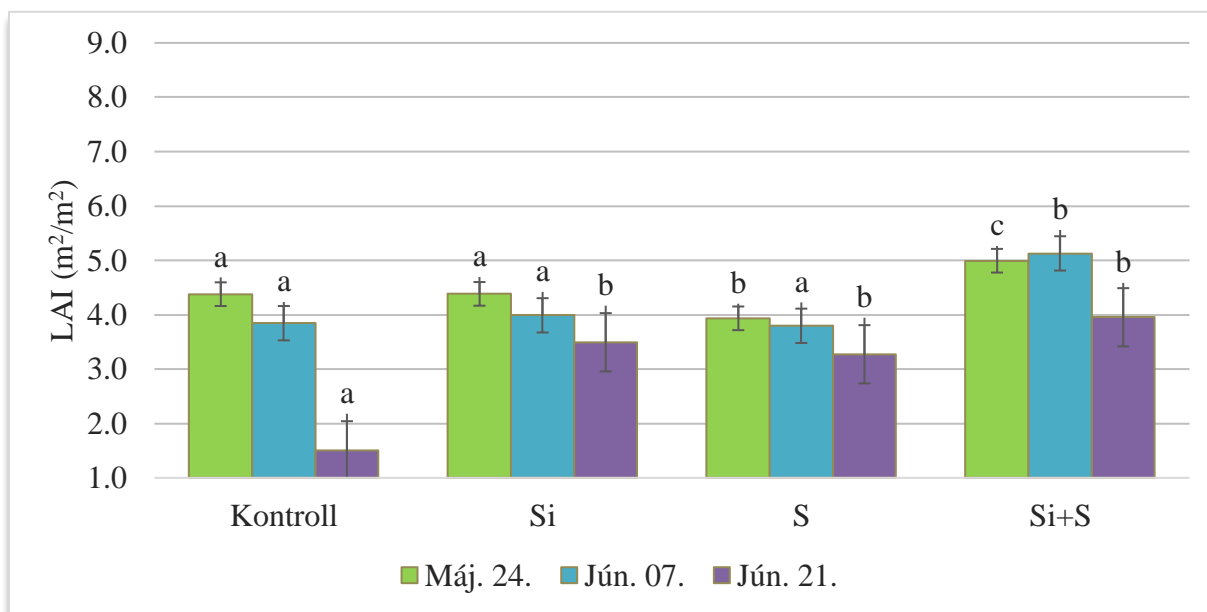
6. ábra: 2022. évi LAI eredmények a genotípusok átlagában. [Debrecen, 2022] ± sztenderd hiba; a különböző betűk szignifikáns eltérést jelölnek a kezelések között p= 5% szinten

A második évben szignifikánsan a legmagasabb levélterületi értékekkel a kombinált kezelésben részesült parcellák rendelkeztek, átlagosan 22,9%-kal volt magasabb LAI értékek a többi kezelt terület átlagértékeihez képest, és 70%-kal a kontroll területekhez képest. A kontroll parcellákon mért június végi eredmények is bizonyítékául szolgálnak annak, hogy mindhárom kezelés összességében enyhítette a rendkívüli aszály negatív hatásait, hiszen az idő előrehaladtával a kezelt területek növényei tovább megőrizték az asszimilációs felületüket, ami a fotoszintézis folyamatának további működését jelenti.

Érdekes jelenség, hogy az első évben mindhárom alkalommal a kontroll parcellákon mértük a legmagasabb értékeket, ellenben a második kísérlet során a kombinált szilícium és kén kezelésben részesült parcellák esetén mértük a legkimagaslóbb eredményeket, azonban 2021-ben a termésmennyiségeken nem mutatkozott meg a vegetatív tömegben elért előny, sőt. Feltételezhetően a szilícium részt vett a növény vízháztartásának szabályozásában is, elsősorban a párologtatás mérséklésével. Egyéb vizsgálatok eredményei alapján arra következtethetünk, hogy a kén és a szilícium kezelésnek egyfajta szárrövidítő hatása is volt a téli és kora tavaszi kedvező vízellátottság miatt erősen fejlett állományban, aminek hatására a kezelt parcellákban alacsonyabb LAI értékeket mértünk. A következő évben a tenyészidőszakot érintő őszi és tavaszi időszak is csapadékhiányos volt, amihez a nyári periódusban még egy magas hőmérsékleti aszály is párosult. Azt figyelhetjük meg, hogy a gyengébben fejlett állományban a kezelést kapott növények tovább meg tudták őrizni a vegetációs felületüket, mint a kontroll parcellák növényei, hisz a 2022 évi eredmények alapján az utolsó mérés alatt 42,1%-kal mértünk alacsonyabb LAI-t a kontroll esetén a kezelések átlagához képest.

III. 3. Genotípus hatása az őszi zab termésére (2021-2022)

Az első kísérleti évben összességében szép eredményeket értek el a vizsgált fajták (7. ábra), átlagosan 6374 kg/ha terméshozamot produkáltak. A szignifikánsan legkimagaslóbb eredménnyel a GK Arany nevű fajta rendelkezett, majd az Mv Istráng és az Mv Hópehely követték a sorban. Az Mv Kincsem statisztikailag alátámaszthatóan kevesebbet termett a többi fajtához képest.

A második évben szintén ugyanaz a három fajta produkálta a legmagasabb termésátlagot, mint az első évben: a terméseredmények alapján elsőként az Mv Hópehely, másodikként az Mv Istráng, harmadikként pedig a GK Arany végzett. A post-hoc teszt alapján minden a fajták közötti eltérés minden esetben szignifikáns volt. 2022-ben is az Mv Kincsem fajta esetében mértük a legalacsonyabb termésátlagot. Az Mv Hópehely fajta kiváló alkalmazkodóképességét, abiotikus stressztűrő képességét mutatja, hogy a kedvezőtlen időjárás ellenére az előző évhez képest a legkisebb termésdepressziót ennél a genotípusnál tapasztaltuk.
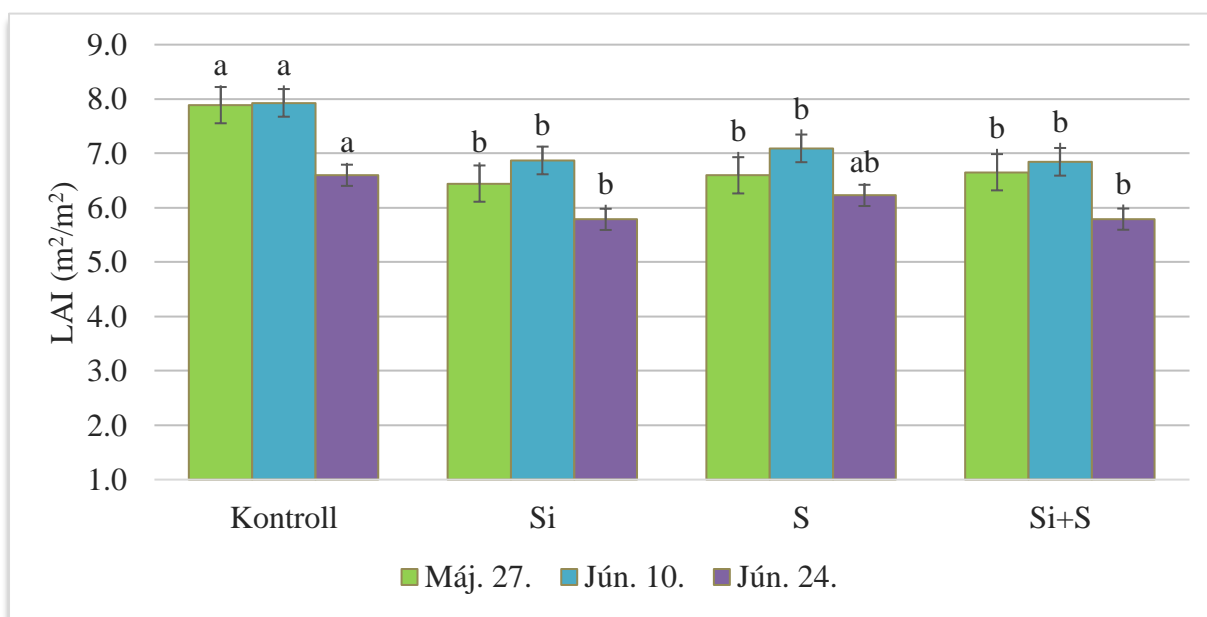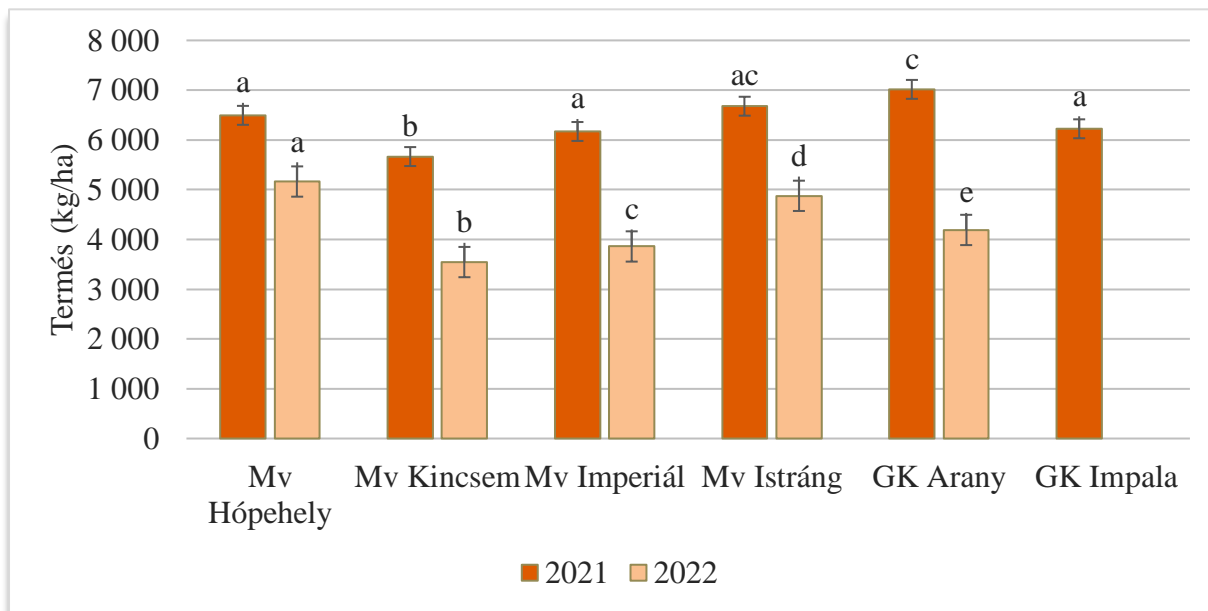

7. ábra: Az őszi zab fajták 2021-2022 évi terméseredményei a kezelések átlagában.
[Debrecen, 2021-22] ± sztenderd hiba; a különböző betűk szignifikáns eltérést jelölnek a
fajták között p= 5% szinten

Ha összehasonlítjuk a két évet, látható hogy az aktuális évjárat nagyban befolyásolta az eredményeinket. A második évben tapasztalt extrém szárazság hatására 20-40%-os terméscsökkenést figyeltünk meg az előző évhez képest, az átlagos terméskiesés 32,5% volt.

III. 4. A szilícium és kén kezelések hatása az őszi zab termésére (2021-2022)

Az első kísérleti évben mindhárom kezelés bizonyíthatóan jótékony hatással volt a terméshozamra (8. ábra). A legmagasabb terméseredményt a szilíciumos kezelés esetén kaptuk, melyet a kombinált és a kénes kezelés szorosan követett. A kezelések között a termés vonatkozásában statisztikailag igazolható eltérést nem tapasztaltunk. A kezelt területek átlaga és a kontroll területek között közel 0,5 t/ha a terméskülönbség.
A második évben a kombinált kezelésben részesült területen termett szignifikánsan magasabb szemtermés. A kontroll, kénes, valamint szilíciumos parcellák eredményei esetében nem tudtunk szignifikáns differenciát kimutatni. A kombinált és a kontroll parcellák értékei közötti különbség több mint 1 t/ha, ez bizonyítékul szolgál arra, hogy a kén és a szilícium együttes alkalmazása pozitív hatással volt stresszes környezetben az őszi zab produktivitására.
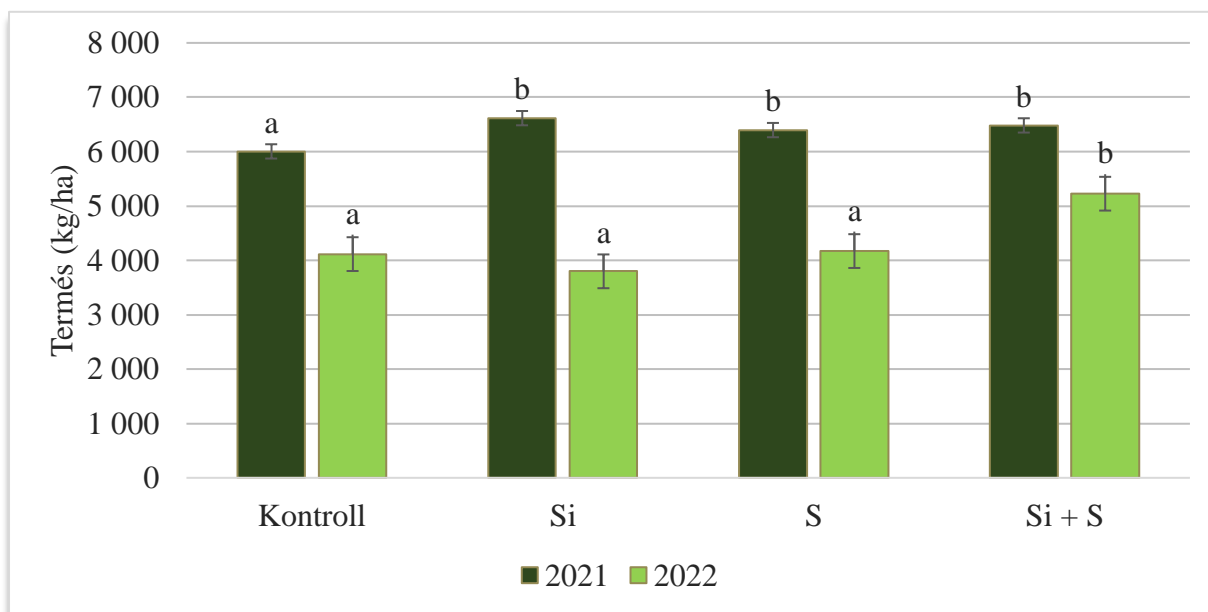
8. ábra: A lombtrágya kezelések hatása az őszi zab termésére a fajták átlagában. [Debrecen, 2021-22] ± sztenderd hiba; a különböző betűk szignifikáns eltérést jelölnek a kezelések között p= 5% szinten

A 2022-es évben kapott terméseredmények átlagosan 32,1%-kal voltak alacsonyabbak a 2021-es eredményekhez képest. A szórás azonban magasabb volt, mint a fajták esetében: a kombinált kezelés esetén 19,4%-os volt a csökkenés, a szilíciumos kezelés esetében azonban 42,6%-ot kalkuláltunk.

IV. Összefoglalás

Jelen tanulmányban két évjáratban vizsgáltuk a szilícium és kén kezelés hatását az őszi zab fajták levélterület-index (LAI) értékére és produktivitására.

Az időjárás nagyban befolyásolta az eredményeinket, a két vizsgált év időjárása erősen eltérő volt a zab kezdeti fejlődési lehetőségeinek szempontjából, ami mindkét mért tulajdonság esetében megmutatkozott.

Az Mv Hópehely, Mv Istráng és a GK Arany fajták mindkét évben kiemelkedő terméshozamot produkáltak, az Mv Kincsem azonban mind a két esetben a legkisebb termést érte el. Télállóság szempontjából mind a 6 fajta megfelelőnek bizonyult, ki kell emelnünk azonban, hogy mindkét évben enyhébb volt a tél a sokéves átlaghoz képest.

A kutatás során megfigyeltük, hogy nem volt pozitív korreláció a LAI értéke, és a terméshozam között. Az első évben habár a kontroll parcellák növényei mutatták a legmagasabb LAI-t, a termés a kontroll esetén volt a legalacsonyabb. A második évben azonban – a szakirodalmaknak megfelelően - a kombinált kezelés hatására kaptuk a legmagasabb LAI értékeket és hozamokat is. Egy lehetséges magyarázat lehet, hogy optimális fejlődési körülmények között mind a szilícium, mind a kén csökkentette a növények levélzetét, míg kevésbé kedvező körülmények között épphogy elősegítette a kombinált kezelés a lombozat kibontakozását.

A továbbiakban is szeretnénk folytatni a kísérletet, hogy hosszabb távon is elemezni tudjuk a szilícium, valamint a kén hatását a növényi folyamatokra több évjáraton keresztül.

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A város mint emlékezet a kortárs lengyel női irodalomban

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Absztrakt

A kutatás abból a hipotézisből indul ki, hogy a földrajzi terek tükrözik a társadalmi, politikai, történelmi és kulturális élet lenyomatait. A települések térbeli megjelenései a társadalmi válság és a történelmi korszakok kivetülései. A városnak külön szótára és nyelvezete van, amit az épületek, a terek tükröznek. Ezek a „beszélő" városok nyitottak térben és időben, illetve az ön-élet-írás színtereivé válnak, mivel a város terei megpróbálnak kifejezési formákat találni az el nem mondott traumák láttatására, azaz a város-elméletek egyben szubjektum-elméletek is.

A vizsgálódás legfontosabb kérdésköre, milyen sajátos lehetőségei és kihívásai vannak a lengyel kortárs női irodalomnak a társadalmi emlékezet mobilizációjára, a traumatikus múlttal való szembenézés lehetőségeinek megteremtésére? Olga Tokarczuk *Dom dzienny, dom nocny (Nappali ház, éjjeli ház)* és Joanna Bator *Piaskowa Góra (Homokhegy)* című regényeiből vett példák segítségével mutatom be az emlékezet és a múltfeldolgozás viszonyát Lengyelország kelet-közép-európai történelmi kontextusában. Kiváltképp a második világháborút és az 1989-es rendszerváltozást érintő történelmi eseményekre való reflektálás mikéntjeire térek ki.

A kutatás további célkitűzése feltárni, hogy az 1989 utáni lengyel női irodalom hogyan próbálja feldolgozni a huszadik századi nagy társadalmi traumákat. A későbbiekben az 1989/90-es rendszerváltozás emlékezetkultúrájának szépirodalmi megjelenítését kívánom vizsgálni a kortárs magyar és lengyel női irodalom szövegtestén, hogy megtaláljam egy közös metszetet a közép-kelet-európai irodalmaknak.

Kulcsszó: városelmélet, térpolitika, lengyel irodalom, rendszerváltás

I.   Bevezetés

Jelen tanulmány Olga Tokarczuk *Nappali ház, éjjeli ház* és Joanna Bator *Homokhegy* című regényéből vett példák segítségével mutatja be az emlékezet és a múltfeldolgozás viszonyát, a különböző történelmi eseményekre való reflektálás mikéntjeit, illetve a különböző városértelmezéseket. Abból a hipotézisből indulok ki, hogy a városi és földrajzi terek politikai, kulturális és szociális reflexiók, ennek következtében a városkép minden esetben a történelem lenyomata is. A települések térbeli megjelenései, míg az épületek néma nyomai, kivetülései a társadalmi válságnak és a történelmi korszakoknak. A városnak külön szótára és nyelvezete van, amit az épületek, a terek tükröznek. Ezek a „beszélő" városok a szociális és kulturális változásoknak a kaleidoszkópját nyújtják, mivel egy interdiszciplináris kategóriát alkotnak, ami értelmezhető szociológiai, pszichológiai, földrajzi, politikai és történelmi szempontból is.[1] Azok a területek, amik bemutatásra kerülnek az írásomban nem állandóak, az időben utaznak az emlékekkel és a migráló lakosokkal együtt, egyfajta nem-helyekként funkcionálnak. A helyek Tokarczuknál és Batornál is főleg az emlékezetben, a jelentésben élnek és olyan városok történetszálai bontakoznak ki, amik eddig még nem kezdtek el beszélni, de most kezdenek formát ölteni az eddig elhallgatott tapasztalatok. A város egy bonyolult struktúrájú tér, aminek változásai kihatnak a szereplők életére, és a megváltozott tér befolyásolja az egyének identitását.

II.   Az emlékezés, azaz a múlthoz való viszony dimenziói

Az egyéni emlékezet minden esetben társadalmi meghatározottságú, mivel benne a kollektív emlékezetek összekapcsolódnak és az egyéni emlékezet ezeknek a kapcsolódásoknak a színterévé válik. Az emlékezés tehát különböző csoportok tapasztalataiból, forrásaiból, gondolataiból ered, amelyhez az egyén is kötődik.[2] Jan Assmann összegző munkássága alapján az emlékezet külső dimenziójának négy alterülete van: a mimetikus emlékezet, a földrajzi terület és a tárgyak emlékezete, kommunikatív emlékezet, illetve a kulturális emlékezet. Jelen vizsgálódás szempontjából a helyek és tárgyak által őrzött emlékezetet célszerű közelebbről is elemeznünk. Az ember évezredek óta tárgyakkal veszi körül magát, és ezek tükrözik a személyiségének, identitásának egy képét és önmagára, valamint a múltjára is emlékeztetik. De a város vagy maga a táj is idesorolható, azok is élő organizmusként funkcionálhatnak az egyén számára.[3] Ezért is kiemelten lényeges az emlékezés térbeli kereteinek, a lakott térben való vizsgálata. Hangsúlyos az Én-t övező, hozzá tartozó tárgyi világ, a fizikai környezet, hiszen identitásteremtő és -alkotó funkcióval rendelkeznek, melynek következtében szimbólumokká válhatnak, illetve az emlékezés támpontjaként is szolgálhatnak. Jan Assmann gondolatmenetét követve megállapítható, hogy az emlékezés tereket, helyeket használ jelekként, ezeket szemiotizálja és térbeli metaforákként használja fel.[4] A városi és földrajzi terek egyben politikai, kulturális és szociális reflexiók. Ahogy az emlékezetben úgy a városképben vagy a tájképben sem a múlt, mint olyan őrződik meg, hanem csak az látható, amit a társadalom is rekonstruálni hajlandó, vagy amivel szembe tud nézni. A jelen behatásaival folyamatosan zajlik a múlt újjászervezése és átalakítása.

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[1] Vö. SZEWCZYK, P.: Miasto w prozie kobiet początku XXI wieku: „Bambino" Ingi Iwasiów i „Piaskowa Góra" Joanny Bator. Czytanie Literatury. Łódzkie Studia Literaturoznawcze. Wydawnictwo Uniwersytetu Łódzkiego. 2015. 4. Vol. 12. http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.hdl_11089_17789 (letöltés ideje: 2023. 01. 05.)

[2] ASSMANN, J.: A kulturális emlékezet. Írás emlékezés és politikai identitás a korai magaskultúrákban. Ford.: Hidas Zoltán. Atlantisz Könyvkiadó. Budapest, 2004. 38.

[3] ASSMANN, i.m. 20.

[4] ASSMANN, i. m. 40.

A város és a tér határoz meg minket, hiszen szimbolikussá és személyes, illetve kollektív identitást teremtő képpé válhat, ezáltal képes írni a szubjektumot. Tokarczuknál a vidékre kerül a hangsúly,–mert a vidéknek mindig volt egyfajta alapvető melankóliája: az eltűnő tér és diszkurzus. A tér-elméletek egyszersmind szubjektum-elméletek is, például a város szociális tényezők hordozója és emberi viszonyok, emlékek tájképe is.[5] A tér is alkotóeleme a szubjektumnak, a szubjektum is magába fogadja a tériességet. A tér összekapcsolódik az ösztönökkel, vágyakkal, célokkal, hatalommal, érzelmekkel és cselekedetekkel, amik mind kihatnak az egyén életére. Például a város terei, épületei, struktúrája és textúrája az egyéni térérzet részévé válnak.[6] Tokarczuknál a ház szimbolizálja az elkülönülést, az elvonulást, a védettséget és az oltalmat. A stabilitás illúzióját adja az egyénnek, aki számára a ház a világ középpontjának a képmásaként értelmeződik. A ház térbeli megjelenése, kivetülése a társadalmi válságnak és a történelmi korszakoknak. Azaz, a városnak külön szótára és nyelvezete van, amit az épületek, a terek tükröznek.[7] Érdekes párhuzam, hogy Tokarczuk szerint az emberek úgy vannak felépítve belülről, mint a házak: a szobák, a pitvarok a test egyes kamráinak, járatainak feleltethetők meg. Továbbá a házak berendezései tükrözik az emberek személyiségét, s ha belépünk egy házba, olyan mintha a másik testébe és gondolataiba lépnénk be. Marta háza is olyan mint az idős parókakésztő asszony: nincs benne a jövő lehetősége és a múltat tárgyakká változtatja. Csak egy pillanat van benne, a „most", a végeérhetetlen és minden irányba elnyúló jelen.

Katarzyna Szalewska lengyel filológus professzor is rávilágított arra, hogy a város terei megpróbálnak kifejezési formákat találni az el nem mondott traumák láttatására, ezért egy települést úgyis lehet értelmezni, mint egy emberi testet.[8] Ennek következtében a korporeális narratológia által bevezetett és használt szempontok alapján is lehet interpretálni a várost, ami a történelmi események következtében már számtalanszor megsérült és a felszínén látható jelek különböző szimbolikus jelentésekkel bírnak. A *Nappali ház, éjjeli ház* című regényben Nowa Ruda korábban németek által lakott házai felszíni nyílt sebként tátonganak, amelyek örökké emlékeztetnek a német kisebbség múltjára, kulturális örökségére (például: építészeti szokásaik, munka moráljuk) és a lakosságcsere programra is.

Joanna Bator *Homokhegy* című regényében Wałbrzych és a homokhegyi panelszörny kerül központi szerepbe. Az egész várost meghatározza a szénpor illata, illetve a kommunista időszak, aminek a felemelkedését is köszönheti. Ez az alsó-sziléziai város is korábban németek lakta volt, majd 1945 után tele lett idegenekkel, akik az immár kitelepített németek házaiba költöztek és Lengyelország távoli helyeiről érkeztek a lakosságcsere program keretében. (Ugyanez a történeti szál kerül feldolgozásra Tokarczuknál is.) Rengeteg idegen érkezik, akiket a második világháború megfosztott a gyökereiktől, de egy másik élet reményében hajlandóak felépíteni az új Lengyelországot. Ugyanakkor Wałbrzych lakosainak régi emlékei homályosak, illetve nem mernek szembenézni a múlttal és gyökerüket vesztettek, akik az új térhez sem képesek kapcsolódni és csak a kilátástalanság fogadja őket. Lényegében egy történelmi áttekintést kapunk a világháborútól a kommunizmuson át a rendszerváltás fordulatáig. Wałbrzych városának két arca van, egyrészt a felszínen egy ipari központot láthatunk, másrészt a föld alatt egy igazi bányászváros húzódik, végtelen folyosókkal, amiket a fekete víz lep el és teljesen nem bizonyos, hogy mit rejt a város alatti terület. Batornál is megjelenik az ásás motívuma, ahogy Tokarczuknál is, mivel mindenki folyamatosan ás, vagy a szén miatt vagy az

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[5] BÓKAY, A.: A város. Egy fantázia színeváltozásai. Műhely. 2006. 29. évf. 6. sz. 9.

[6] FARAGÓ, K.: Történő terek és egzisztenciális térérzetek. A várostér dinamikus koncepciója a regényben. Műhely. 2006. 29. évf.. 6. sz. 30. o.

[7] SZALEWSKA, K.: The experience of Urbanity in Contemporary Polish Literature. in: Huang Tiechni, Nie Zhenzhao, Charless Ross (editors): Forum for World Literature Studies. Vol 6. No 3. Shanghai-Wuhan-West Lafayatte. 2014. 393.

[8] SZALEWSKA, i.m. 396.

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egykori német lakosság által elrejtett tárgyak megtalálásáért, amiket kincsnek vélnek. Batornál központi jelentőségű a panel motívuma a városon belül, mivel a homokhegyi szörny mind a három női alaknak mást jelent: Zofiának elérhetetlen, Jadziának a földi paradicsom, Dominikának fojtogató, visszahúzó környezetet. Mindegyik nő más életet akar élni, mint amit az anyja megmutatott vagy átadott. Jadzia számára a kommunizmusban az volt az álom, amikor kiutalták számukra egy lakást az új lakótelepen, ami még távfűtéssel is rendelkezett. Dominika számára pedig ez a környezet fojtogató.

A város tereinek az értelmezésének a szemléltetéséhez érdemes Bator regényénél maradnunk, ahol a park Jadzia és Stefan számára még a központi találkozások, beszélgetések és séta helyszíne volt, ahol biztonságban lehettek, de egyre veszélyesebbé vált a támadások és rablások miatt. Dominika már nem szeret ott sétálni és fél, mert részeg férfiak (köztük az apja, Stefan is) elpusztítják a hely harmóniáját. Ez is mutatja, hogy a város terei nem használhatók egyenlőként a lakosok számára. Például amikor Jadzia először megérkezett a város vasútállomására megszégyenülve érezte magát az állomásnál lévő kocsmánál, mert még soha nem volt egyedül ilyen helyen, míg a férfiak magabiztosan méregették és uralták a teret. De ugyanúgy a parknál is, a gyerekek és nők számára veszélyes terület, míg az azt uraló részegeknek a kibontakozási lehetőség. Dominika már a városban született és természetesnek veszi azt, ahogy részt vesz a városi társadalmi életben, míg anyjának és nagyanyjának ezt meg kellett tanulnia. Wałbrzych Dominikának a szorongást jelképezi és többre vágyik, nem a bányák, gyárkémények látványára, illetve nem akar a szomszédok után kémkedni, ahogy a többi lakos teszi. Inkább nomád lesz, mintsem olyan helyen éljen, amit nem érez a sajátjának.

III. Sebzett városok

Mindegyik kiválasztott regényben határvárosok jelennek meg[9]. Jacques Derrida városértelmezésére hivatkozva Orbán Jolán kiemeli, hogy a város az emlékezés és az ígéret hordozója, de nem a jelen nézőpontjából, hanem a történeti perspektíva felől közelítve, éppen ezért válik nyitottá térben és időben. Beszélő városokról van szó, amelyek a „traumatikus építészetük", sebzettségük révén az emlékezet tárházává válnak.[10] Tokarczuk és Bator is a regényében az örökös mozgásban levés perspektíváját tartják fenn, mégpedig a határszubjektum kialakításával. Ezek a szereplők a határok közül való kitörés lehetségességét akarják megélni. De a regényekben lehetetlen önként kitörni a körülölelő térségéből, mert minden próbálkozás eredménye a kudarc és a csalódás, például Tokarczuknál Krysia szerelemkeresésében is jól látható. A térség megtartja az áldozatait és nem engedi őket el, Marek Marek sem tudta elhagyni a borzalmakkal teli házat vagy Ergo Sum is visszatér a háború viszontagságai után vagy az egykor kitelepített német lakosság is visszatért, immár idősödő turistaként. A turisták üres telkeket fotóztak, az egykori otthonaik hűlt helyeit. A behatároltság a hatalom ellenőrző eszközének a része, és a határokon való átjutás nem lehetséges, még halottként sem, mert akkor is a határok között ragad az egyén, mint ahogy Peter Dieter, a német turista esetében is láthattuk.

Érdemes megvizsgálnunk a regényekben is megjelenő posztindusztrializáció jelenségét az 1989 utáni posztkommunista térségben. A rendszerváltás elhozta ugyan az áhított szabadságot, de számos eddig elfojtott sérelmet, veszteséget és traumát is felszínre hozott, ami identitáshiányhoz, identitáskrízishez és új egyenlőtlenségek keletkezéséhez vezetett. A hiányok

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[9] Például Tokarczuknál Nowa Ruda oly annyira közel található a cseh határhoz, hogy a lakók még a cseh diszkókat is hallják, illetve a határőrök is figyelik a lakosságot. A határőrök viselkedése jól prezentálja a korszakban uralkodó mentalitást, amikor is a német turista férfi hulláját (aki mellesleg gyermekként még Nowa Rudában nőtt fel, de a családjukkal el kellett költözniük és most visszatért feleségével felidézni a régmúltat) áthelyezik a másik ország területére, és egyik határőr csapat sem akarja vállalni a felelősséget és a vele kapcsolatos elintézendő ügyeket.

[10] Vö. ORBÁN J.: A város mint emlékezet és ígéret (Jacques Derrida halálára). Lettre. 2004. 55. sz. http://epa.oszk.hu/00000/00012/00039/orban.htm (letöltés ideje: 2023. 01. 05.)

feltárásához célszerű a hantológia felől közelednünk[11]. Minden tér telített a hiányos jelenlétekkel, a funkciótlan épületekkel, s olyan részekkel, amik a deviáns társadalmi tényezők játszóterévé váltak. Figyelembe kell venni a romokat, amik a társadalmi, politikai és történelmi jelenségek lenyomatai. De ezek sem nem holtak, sem jelenlévők, sem élők, hanem köztes nem-helyek.[12] Az emlékezet helyhez rögzített, de a helyszín a hatalom számára átjárható és átlátható, irányítható, ám a romosodás működésképtelenné teszi a hatalmat, mert tért nyer a heterogenitás. Az elhagyatott területek szimbolikusan eltörlésre kerültek a társadalmi mezőből és rejtett jelentésekkel rendelkeznek. A rom csendje szembesít a történelmi traumák nem múló jelenlétére, illetve befolyást gyakorol a nyugtalanító maradványaival az egyénre, mert állandóvá teszi a szégyen lehetőségét, valamint a megtörtséget tudatosítja. A rom egyben megmentett történetek hordozója is, az emlékezet helye, ami kifejezi az élet pusztulásra hajló törékenységét. Olyan túlélő, akinek megvan a maga története, de sem ideje, sem közönsége nincs rá, hogy meghallgassák.[13] Ugyanakkor a rom egyben felügyeletlen hely, senkihez sem tartozik és üressége nem integrálható, nem lehet uralni.

A traumák által megsebzett tájakon a romok a némaságukkal beszélnek, mégpedig a kimondatlan emléknyomaikkal, a sugalmazott jelentéseikkel és a nyugtalanító atmoszférájukkal. Tokarczuk regényében Pietno és Nowa Ruda látványának a bemutatásán keresztül a romlás képei körvonalazódnak. Marta barátnője, Agnieszka Pietno feletti hegyen lakik és ő rálát az egész településre, az ő szemszögéből láthatjuk a jelen helyzetét: „Látta a részeg a férfiakat és a kószáló gyerekeket. Látta a nőket, akik fákat húztak ingatag lábukon a hegyről. Nyilván ők is részegek voltak. (…) nézte a kacsaürülékkel teli patakot, az egész falura vetülő árnyékot, a kihullott szőrű macskákat, az elromlott gépeket, elromlott régi nyomókutakat." (52.o.)[14] A téeszek megszűnésével több ezren lettek munkanélküliek, és a változás bekövetkeztével hirtelen nem találták a helyüket, így sokaknak az alkohol jelentette a megnyugvást. Az elromlott gépek képe is utalhat az egykor működő téeszre is. A leírásból kitűnik, hogy a falu borzalmas állapotban hever és teljes kilátástalanság határozza meg a lakói életét. Peter Dieter is hasonló helyzetet tapasztal, amikor visszatér falujába. Peter nem ismert rá a falujára, mert nem voltak házak, udvarok és utacskák, hidak, a falunak csak a váza maradt és néhány ház maradt meg, szinte elnéptelenedett a település. Az emberek a közeli nagyobb városokba költöztek a jobb lakhatási és megélhetési körülmények reményében és a modernizáció vívmányait élvezni. A regényben megjelenő szereplők céltalanok, csupán vegetálnak és képtelenek megvalósítani az álmaikat. A múlt és saját történeteik örvényében ragadtak vagy a végtelen jelen fogságában. Az elbeszélő sem különbözik tőlük, nem ismerjük a múltját és jelen helyzetéről vagy céljairól sem derülnek ki tényleges információk, olyan mint egy üres edény, amit mások történetei töltenek ki.

A romok, mint a fényképek, köldökzsinórként is funkcionálnak, mivel képesek összekötni az első és a második generáció emlékeit. Azt mutatják meg, ami már nincs, de reprezentálják azt is, ami volt, azt az életet, ami már nem létezik, ám mindezek ellenére még mindig tart.[15] Különböző történetek darabkáit hordozzák magukban, amelyek egy nagyobb narratíva felé mutatnak. De mégsem foglalható a történetük lineáris narratívába, mert a

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[11] Kulturális és művészeti mozgalom, amely a 2000-es évek elején jelent meg, és olyan művekből áll, amik a múlt nyomaiból épülnek fel. Olyan médiumokként működnek, amik lehetővé teszik a múlt átélését, illetve azt, hogy az emlékezők kifejezzék magukat.

[12] HORVÁTH M. – LOVÁSZ Á.: Romok és szellemek. Egy kísértetjárta fenomenológia felé. Sic Itur Ad Astra. 2017. 66. sz. 468. http://www.epa.hu/01000/01019/00014/pdf/EPA01019_sic_itur_ad_astra_2017_66_467-484.pdf (letöltés ideje: 2022. 12. 10.)

[13] Vö. HIRSCH, M.: Żałoba i postpamięć, tłum. K. Bojarska, [w:] Teoria wiedzy o przeszłości na tle współczesnej humanistyki, red. E. Domańska, Poznań 2011, 250.

[14] A szövegben szereplő oldalszámok a regényre utalnak: Olga Tokarczuk: Nappali ház, éjjeli ház. Ford: Körner Gábor. L'Harmattan. Budapest, 2014.

[15] HIRSCH, i. m., 255.

köztesség határozza meg, emiatt nyíltan elbeszélhetetlen, ahogy Tokarczuknál is, az elbeszélő sem lineárisan tárja fel a térség történetét.[16] Marta végig a peremen marad, figyeli és szerkeszti a történetszálakat, ahogy a parókákat is összeállítja, lélek-mérnökként többnyire hallgat és megfigyel, legfőbb aktivitása pedig az, hogy lát, érzékel és megőriz. Ezt a feladatot, kiválasztott pozíciót fogja jelképesen átruházni az elbeszélőre azzal, hogy számára is elkészíti a parókát, ami teljes mértékben őhozzá passzol. A parókakészítő megtestesíti a lengyel népi bölcsességet, és alakja rendkívül misztikus, illetve a regény végi eltűnése is. Úgy tűnik mintha Marta személyében az ősi párkák egyesülnének, mintha sorsistennő lenne, aki kiméri és elvágja az emberek életfonalát, ezt pedig a parókakészítés szimbolizálja. A hajszálak Marta elképzelése szerint a gondolatok őrzői és tárhelyei, ezért a parókakészítés során odafigyeléssel kell összefűzni a megfelelő gondolatokat, és a hozzájuk passzoló személynek kell átadni. Mintha az emlékek tárházát adná át.

IV.   Kriptaként feszülő nem-helyek

Az emléknyom esetében, ha felderíthetetlen hely marad, akár a rom formájában, akkor hasonló mechanizmusok figyelhetők meg, mint amelyekre Derrida hívja fel a figyelmet Török Mária és Ábrahám Miklós kripta-fogalmát elemezve. A kripta a hiány helye, de egyszersmind őriz, figyel, elrejt és örök mementóként emlékeztet. Egyfajta hamis, mesterséges tudattalant hoz létre a megosztott Énben, egy nem természetes helyet, amit válaszfalakkal elszigetelve alkot meg.[17] Egy befelé forduló, lezárt és titkos teret alakít ki, ami távol tart minden behatolást. Valahol az Énben biztonságban tartja magát, valamilyen titkos helyet foglal el. A kriptát erővel hozták létre, valamilyen trauma, veszteség hatására és arra ítéltetett, hogy néma maradjon, kitörölhetetlen jelként beágyazódjon az Én belsejébe. Az Én azonban megpróbál azonosulni azzal a tárggyal, amit beépített (inkorporált) és újjászerveződésre vár, de nem lesz sikeres a folyamat és valami idegen megmarad az Énben.[18] Az inkorporáció egyfajta mágikus bekebelezés, gyógyulás, ami során elképzeljük mintha lenyelnénk a veszteséget, tehát egyben elutasítják az elveszettnek a feldolgozását és sajáttá való tételét, mert félünk attól, hogy a feldolgozás által átalakítana bennünket. Az inkorporáció voltaképpen egy elfojtás, „a veszteség introjekciójának elutasítása"[19]. De mennél tovább tartja bent önmagában annál tovább történik a kizárási folyamat is, így a kripta a hallgatás helye is, és amiről megemlékezik nem maga a tárgy, hanem annak a kizárása az introjekcióból, mint egy emlékmű. Az Én magában hozta létre a kriptát, mint külső széfet, egyfajta nem-helyként, ami hasonló funkcióval bír, mint a tériesedett rom. Ebben a kívüliségben, nem-helyben fontos mechanizmusok a bent tartás és a mentés.[20] A kripta tartalmazza a traumákat, amik felelősek azért is, hogy az introjekció nem ment végbe. Az inkorporáció abból a szempontból is kriptikus jelenség, hogy elrejtőzik a normális mögött, a jellemvonások között.[21] Olyan mintha Tokarczuk regényében Marta lenne az, aki őrzi Nowa Ruda és Pietno térségének a kriptájának a kulcsát, és szép lassan, szálról-szálra, ahogy a többször idézett gombafonalak[22] is, kibontásra kerülnek az elfojtott, fel nem

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[16] HORVÁTH- LOVÁSZ, i. m. 479.o.

[17] DERRIDA, J.: Fors Nicolas Abraham és Maria Torok angol szavai (részlet). Ford. Egri Petra. Imago. 2021. 10(4). 53.

[18] DERRIDA, i. m. 56.

[19] ÁBRAHÁM M.-TÖRÖK M.: Rejtett gyász és titkos szerelem. Ford. Erős Ferenc és Miklós Barbara. Imago. 1998. 2–3. 17. http://imago.mtapi.hu/a_folyoirat/e_szovegek/pdf/(09)1998_2-3/123-156-Abraham-Torok-Rand_Burok_es_a_mag_reszletek.pdf (letöltés ideje: 2023. 01. 05.)

[20] DERRIDA, i. m. 61.

[21] ÁBRAHÁM -TÖRÖK, i. m. 21.o.

[22] A gomba motívuma többször felbukkan a történetekben és mindig veszélyforrásként jelenik meg, amely halált hozhat és percek alatt vethet véget az életnek. Az elbeszélő be is vallja, hogy olyan szeretne lenni mint egy gomba, mert a gombák érzéketlenek és az egész földet képesek belakni, bárhol megteremnek, ahol nedvességhez jutnak,

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dolgozott, kollektív identitás részéve nem tett tragédiák, veszteségek és emlékek. Akkor kerülnek kibontásra ezek a történetszálak, amikor a falak meginogtak, a történelmi és kulturális tér változáson esett át, a rendszerváltozás hatására. A kollektív emléktár eddig sírboltként megőrizte a közösség traumáit, kimondatlan nyomasztó súlyként nehezedtek a szereplők életére, sorsára és az Én titokhordozó temetőőr szerepbe kényszerült, aki nem tudott szembenézni a saját, illetve családjának a múltjával.[23] A szereplők sorsán is látszik, hogy nem képesek újjászületni, élni a lehetőségekkel és kitörni a térségből. A múlt úgy van jelen a személyiségükben, mint egy valóságdarab, amely tagadásra kárhoztatott, de a kimondatlan, élve eltemetett emlékek belülről semmisítik meg a szubjektumokat.

Érdekes történetszál Tokarczuk regényében az, amikor az elbeszélő legelőször találkozott Taki-a-Takival, mikor is a férfi inni kért a főszereplőtől, de közben észrevette a ház falán a kék szemű védősárkány rajzát. A kép láttán bontakozik ki a Szörny története. Korábban, a második világháborút követő időkben, miután a németeket deportálták egy szörny járta a környéket. A rém csirkéket, kacsákat és libákat vadászott le. A lakosok elhatározták, hogy megölik, de a különböző próbálkozásaik mit sem értek. A hatóság az új rendszer kiépítésével volt elfoglalva, a földosztással és a szövetkezetek alapításával. De egyszer egy nőt magával is ragadott a szörny a tó aljára, s ezt a hatóság sem nézhette tétlenül. Végül felrobbantották az egész tavat, és a rém meghalt. A szörny a lakosság bűntudatát testesíti meg, egyrészt a lengyel lakosság szerepét a holokausztban, másrészt a németek deportálásában való közreműködésüket. Ő az emlékek kriptájából fel-feltörő szörny, aki büntetésként rettegésben tartotta fogva a lakosságot, mivel arra emlékeztetett, hogy nem sikerült feldolgozni a múltat, ezért megölése szimbolikus, mert kiirtásával a lakosság a múlttól akar megszabadulni és a felejtés, illetve a szelektív emlékezés stratégiáit kívánja követni.

V.   Konklúzió

A dolgozat először a téma feldolgozásához elengedhetetlenül szükséges elméleti keretrendszert vázolta fel érintőlegesen, s a történelem, az irodalom és az emlékezet összefüggéseit vizsgálta. Ezt követően igyekeztem kiragadott irodalmi példákon keresztül néhány pragmatikusabb elemzési lehetőséget felvázolni, amelyek rávilágítottak a múltfeldolgozás mikéntjeire. A kiemelt regényekben továbbá hangsúlyos volt, hogy az emlékezés földrajzilag meghatározott és a tájnak, a településnek fontos szerepe van, mert a tér mindig beleilleszkedik a múlt eseményeinek emlékeibe és az identitás a földrajzi helyszínekhez is erőteljesen kötődik. A bemutatott felvillanó különböző történetek olyanok, mint a puzzle darabok, melyek kirakásával összeáll az egész értelme. A darabok egymáshoz illesztésével a 20. századi lengyel történelem körképét vehetjük szemügyre, és benne az egyének sorsának alakulását. Az irodalmi szövegválogatás nem szisztematikus, vagy reprezentatív, hanem egy kezdeményezés akar lenni, amely további kutatásokban is folytatható, illetve kibővíthető. A tágabb volumenű kutatás célját képezi egy közös metszéspont találása a téma ábrázolását illetően a kortárs lengyel és magyar női irodalomban, valamint a kapott eredmények összevetése azzal, hogy a történelemtudományi és a társadalomtudományi kutatások hogyan reflektálnak a vizsgált korszakra.

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valamint egyes gombafajták képesek hipnotizálni az illatuk által, bódulttá teszik az embert. A főszereplő egy óriási hideg micéliumként tudja elképzelni a létezését. A micélium a gombafonalak összessége, szövedéke, amely a gombák talajt átszövő részét alkotja, és a fonalak folyamatos növekedésre képesek, tehát terjeszkedni tudnak, így végtelen terük és „hatalmuk" van. A micélium szövedéke akar a történetek fonalainak is megfeleltethető, a spórák összességéből, amiből a különböző misztikus történetek táplálkoznak és lefedik az egész világot. Mindezek origójában pedig az elbeszélő áll, akinél összpontosul az összes történetfonál és rálátása van a világra, de önmaga fásult és érzéketlen marad, így szemléli a dolgok folyását.

[23] ÁBRAHÁM -TÖRÖK, i.m. 26.o.

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Issues of legal responsibility regarding offences against cultural heritage

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Abstract: My presentation focuses on the responsibility issues of offences related to cultural heritage within the framework of international law. Though numerous conventions pay attention to the importance of the protection and preservation of cultural heritage and cultural properties, there are significant differences between them. Which categories of cultural heritage are safeguarded regarding the convention? In which of these cases are conventions relevant, and what do we understand by cultural crimes? The sanctions and legal responsibility are very different in this field. Nowadays, the main question is whether current legal instruments and platforms are adequate, sufficient and efficient.

I. Introduction

The legal framework of the protection of cultural heritage in a broad sense is constituted among others, by numerous international conventions. A part of them regards the protection of cultural properties, while the rest is for safeguarding the cultural heritage.

This paper aims to present the results of my research regarding the responsibility issues of crimes committed against cultural heritage. My purpose was to determine, whether current instruments of the international law are sufficient and efficient to prove the personal responsibility in case of crimes against cultural heritage or cultural property. To get the appropriate result, I used two methods in my research. To present the legal framework of the protection of cultural heritage and cultural property, I had to examine the relation between these terms. The texts of the several international conventions beyond the definitions reflects the importance of protection, including obligations for the member states. This research focuses to the role of two international conventions, those regarding for the protection of cultural property in the event of armed conflict and for the world heritage. Finally, I think that the presentation of the judicial practice has an essential importance in this research, so I examined the cases of the International Criminal Tribunal for the former Yugoslavia and the International Criminal Court, too.

II. Cultural property or cultural heritage?

Although we cannot find concrete, universally accepted definition neither for cultural property nor to define the term cultural heritage, different international conventions have own wording as a definition. Moreover, in many cases, these conventions have an exhaustive-kind list of what may be considered cultural heritage or property.

In the following table, I would like to show how international conventions accepted within the United Nations Educational, Scientific and Cultural Organization's (UNESCO) framework can be divided into two groups according to their subject.

Table 1.

CONVENTION		Cultural Heritage or Cultural Property
Title	**Year of signature**	
Convention for the Protection of Cultural Property in the Event of Armed Conflict	1954	Cultural Property
Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property	1970	
UNIDROIT Convention establishes conditions for claims of restitution/return of stolen or illegally exported cultural objects respectively.	1995	
Convention Concerning the Protection of the World Cultural and Natural Heritage	1972	Cultural Heritage
Convention on the Protection of the Underwater Cultural Heritage	2001	
Convention for the safeguarding of the Intangible cultural heritage	2003	

Source: Own illustration [2022]

According to the terminology of these conventions, the term cultural property mainly embraces physical, mainly movable cultural elements like different collections, art objects, antiquities, ancient (or more than one hundred years old) coins, paintings, sculptures, manuscripts, stamps, etc. Cultural heritage, in the terminology of UNESCO conventions written above, can be tangible or intangible. Tangible heritages could be divided into cultural and natural (or mixed) heritage.

In practice, the expression of cultural property involves institutions that safeguard properties, too. Museums are an example of them.[1]

The Convention for the Protection of Cultural Property in the Event of Armed Conflict has a detailed definition of cultural property. According to the text of the convention, a wide range of cultural elements could be seen as cultural property, whether movable or immovable. Among others, the term cultural property involves monuments of architecture or history; groups of buildings; archaeological sites; works of art; or manuscripts.[2]

III. Historical development of the protection of cultural heritage

People have always been interested in the maintenance and preservation of buildings that have already been built. It has three reasons. Firstly, the materials that constitute the buildings were costly. The second reason is technical since ancient buildings needed stupendous labour (and cost) to demolish and to use them again. Finally, those monuments had a spiritual atmosphere or played an important role in the local communities.[3]

The first legal documents concerning the protection of buildings were related to popes. For example, the bull called "Cum almam nostram Urbem" of Pius II has been issued to safeguard antique monuments within the borders of the Papal State. Despite their effort, by the end of the 15th century, the demolition of ancient buildings had become more common.[4]

At the same time, as a result of demolition processes, numerous antiquities and works of art have been released. The 17th century was very special. It was the heyday of collecting these treasures and memories of art and the beginning of the interest in archaeological excavations. After this time, in more and more states, the systematization of historical or art heritages has been started.[5]

Hague Conventions, accepted in 1907, can be thought of as the first intersection of heritage protection and international law. Article 27 of the Hague Convention IV determines, that in cases of sieges and bombardments "all necessary steps must be taken to spare, as far as possible, buildings dedicated to religion, art, science, or charitable purposes, historic monuments, hospitals, and places where the sick and wounded are collected, provided they are not being used at the time for military purposes."[6] What is more, article 28 in assaulted places prohibits pillage, too.[7] Article 5 of the Hague Conventions IX regards the responsibility of commanders. "In bombardments by naval forces all the necessary measures must be taken by the commander to spare as far as possible sacred edifices, buildings used for artistic, scientific, or charitable purposes, historic monuments, hospitals, and places where the sick or wounded

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[1] Casini, Lorenzo: "Italian Hours": The globalization of cultural property law. In: International Journal of Constitutional Law. 2011. Vol. 9. no. 2. p. 371.
[2] Convention for the Protection of Cultural Property in the Event of Armed Conflict. Article 1(a).
[3] Szabó, Annamária Eszter: A kulturális örökség joga. Bíbor Kiadó. Miskolc. 2013. p. 27.
[4] Blake, Janet: International Cultural Heritage Law. Oxford University Press. Oxford. 2015. p. 2.
[5] Szabó, Annamária Eszter: A kulturális örökség joga. Bíbor Kiadó, Miskolc, 2013. pp 29-36.
[6] Hague Convention (IV) respecting the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land. Article 27.
[7] Hague Convention (IV) respecting the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land. Article 28.

are collected, on the understanding that they are not used at the same time for military purposes."[8]

Although these conventions were pioneers in the development process of international law regarding the protection of cultural heritage, they had the power not enough to provide protection effectively. The destructions of the world wars have pointed out that comprehensive and sufficiently efficacious protection is needed. In the decades that followed, many international conventions were born concerning cultural properties and cultural heritage.

IV. Conventions related the protection of cultural properties and cultural heritage

IV. 1. Hague Convention (1954)

Convention for the Protection of Cultural Property in the Event of Armed Conflict, accepted in 1954, emphasizes the commitments made by the member states to protect cultural properties. Article 3 obliges member states to make rules already in peacetime to avoid the negative impacts of an armed conflict on cultural properties.[9] Article 4(1) expresses the prohibition of using cultural properties and their environment for purposes that might lead to their destruction or damage during armed conflicts. [10] Article 4(2) introduces an exception. Imperative military necessity means that obligation, written in Article 4(1), "may be waived only in cases where military necessity imperatively requires such a waiver."[11]

IV. 2. World Heritage Convention (1972)

Regarding cultural heritage, the Convention Concerning the Protection of the World Cultural and Natural Heritage (also known as the World Heritage Convention, WHC) was accepted in 1972. It was born to protect and preserve the natural and cultural heritage, the so-called world heritage sites (WHS), defined in the first two articles of the convention.

World Heritage Sites are the most precious collection of heritage. To be declared world heritage is need to meet at least one of the ten criteria[12] determined by the World Heritage Committee. Since having an outstanding universal value has crucial importance regarding World Heritage Sites, World Heritage Convention obliges member states not to take any deliberate measures which might cause any damage to them.[13]

Protection within the framework of the WHC means a supportive and cooperative system which promotes state parties in the identification and preservation of cultural and natural heritage. World Heritage List (WHL) consists of the World Heritage Sites.[14] Currently, the LIST consists of 1154 properties, natural, cultural and mixed ones, as well. 52 of the 1154 properties are inscribed on the List of World Heritage in Danger, which incorporates World Heritage Sites in special needs.[15] These Sites need urgent and efficient support due to being threatened by danger, which may cause the loss of their outstanding universal value or the destruction of these sites.

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[8] Hague Convention (IX) concerning Bombardment by Naval Forces in Time of War. Article 5.
[9] Convention for the Protection of Cultural Property in the Event of Armed Conflict. Article 3.
[10] Convention for the Protection of Cultural Property in the Event of Armed Conflict. Article 4(1)
[11] Convention for the Protection of Cultural Property in the Event of Armed Conflict. Article 4(2)
[12] UNESCO: The Criteria of Selection. https://whc.unesco.org/en/criteria/ [accessed: 2022.11.15]
[13] Convention Concerning the Protection of the World Cultural and Natural Heritage. Article 6(3)
[14] Convention Concerning the Protection of the World Cultural and Natural Heritage. Article 11.
[15] World Heritage List: https://whc.unesco.org/en/list/ [accessed: 2022.11.20]

Danger, among others, can derive from an armed conflict, fast urbanistic or tourism development, flood, volcanic eruption, or extinction of the local fauna or flora.[16]

So, as we can see, cultural heritage can be seen from numerous point of view. World Heritage Sites have global importance, in some cases with transboundary existence, too.[17] WHS represents the cultural or natural heritage of nations they are the proudest of to have.

The selection criteria guarantees that properties of the World Heritage List are one-by-one have something unique, outstanding and universal as a feature.[18]

IV. 3. Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict (1999)

The Second Protocol serves as a supplementation of the Convention of 1954.[19] Concerning offences against cultural heritage, the protocol achieved steps forward in three fields.

A more detailed definition of the imperative military necessity has been determined.[20] Regarding sanctions, the acts meant to be offences committed against cultural property have been listed in detail.[21] The third significant result was the detailing of the use of the protocol and the convention in case of armed conflicts not of an international character. Regarding sanctions, the acts meant to be offences committed against cultural property were listed in detail.[22]

IV. 4. UNESCO Declaration Concerning the Intentional Destruction of Cultural Heritage (2003)

Although the declaration of 2003 is not a convention, it can be considered proof or an element of customary international law.[23] Involves the intentional destruction of cultural heritage and natural heritage sites, too. In the sense of the declaration, intentional destruction is an act of destruction, which of whole or in part cultural heritage in a way that violates international law or is considered to be an offence against humanity. The statement emphasizes the importance of protection both in times of peace and in armed conflict. The seventh point of the declaration regards the individual responsibility, urging states "to establish jurisdiction over, and provide effective criminal sanctions against, those persons who commit, or order to be committed, acts of intentional destruction of cultural heritage of great importance for humanity, whether or not it is inscribed on a list maintained by UNESCO or another international organization."[24]

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[16] Convention Concerning the Protection of the World Cultural and Natural Heritage. Article 11(4).

[17] 43 WHS of 1154 are transboundary properties.

[18] These features might regard the following: human creativity, the interchange of human values, cultural tradition, human-built heritage, examples of a traditional human settlement, events or living traditions – in conjunction with other criteria, exceptional natural beauty, stages of the history of the Earth, evolution process of ecosystems or natural habitats with scientific or conservational importance.
UNESCO: The Criteria of Selection. https://whc.unesco.org/en/criteria/ [accessed: 2022.11.15]

[19] Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict. Article 2.

[20] Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict. Article 6.

[21] Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict. Article 15.

[22] Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict. Article 22.

[23] Gerstenblith, Patty: The Destruction of Cultural Heritage: A Crime against Property or a Crime against People. John Marshall Review of Intellectual Property Law. 2016. Vol. 15. p. 383.

[24] UNESCO Declaration Concerning the Intentional Destruction of Cultural Heritage. VII. https://international-review.icrc.org/sites/default/files/irrc_854_unesco_eng.pdf [accessed: 2022.11.15]

V. ICTY and ICC – forums of the jurisdictions in cases of war crimes related to cultural heritage sites

V. 1. International Criminal Tribunal for the former Yugoslavia (ICTY)

The ad-hoc tribunal of the United Nations was established to investigate whether international crimes had been committed within the territory of the Socialist Federal Republic of Yugoslavia, after 1st of January in 1991.[25] Article 3 of the Statute points out the power of the ICTY to prosecute persons for violations of the laws or customs of war. Article 3 (d) regards crimes against cultural heritage: "seizure of, destruction or wilful damage done to institutions dedicated to religion, charity and education, the arts and sciences, historic monuments and works of art and science".

As a result of the proceedings of the ICTY, two commanders were found guilty of offences against cultural heritage. Pavle Strugar and Miodrag Jokić were both commanders in several military operations attacking the Dubrovnik region, including the Old City of Dubrovnik,[26] which has already been on the World Heritage List since 1979.[27]

V. 2. International Criminal Court – ICC

International Criminal Court has the power to investigation among others in war crimes committed after 1st of July 2002.[28] Concerning crimes against cultural heritage, the following definition of violations of the laws and customs is applicable both in international armed conflict (Article 8.(2)(b)(ix.)) and in armed conflicts not of an international character (Article 8.(2)(e)(iv.)). "Intentionally directing attacks against buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals and places where the sick and wounded are collected, provided they are not military objectives;"[29]
The connection between personal responsibility in offence against cultural heritage and the Statute is linked by the two limiting factors, also determined in the text. It means that the attack is based on an intention. Furthermore, military objectives are allowed to be target during armed conflicts. [30]

V. 3. Al Mahdi case

Until nowadays, the ICC in only one case has found a person guilty of war crimes regarding crime against cultural heritage. Details of the Al Mahdi case are presented in the subsection below.
Timbuktu has inscribed on the World Heritage List in 1988.[31]

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[25] Hoffmann, Tamás: Nemzetközi büntetőjog. In: Kardos, Gábor – Lattmann, Tamás (eds.): Nemzetközi jog. Budapest, 2014. p. 374.

[26] Pavle Strugar case: "DUBROVNIK" (IT-01-42). https://www.icty.org/x/cases/strugar/cis/en/cis_strugar_en.pdf [accessed: 2022.11.23]
Miodrag Jokić case: "DUBROVNIK" (IT-01-42/1) https://www.icty.org/x/cases/miodrag_jokic/cis/en/cis_jokic_en.pdf [accessed: 2022.11.23]

[27] Old City of Dubrovnik. https://whc.unesco.org/en/list/95 [accessed: 2022.11.20]

[28] Hoffmann, Tamás: Nemzetközi büntetőjog. In: Kardos, Gábor – Lattmann, Tamás (eds.): Nemzetközi jog. Budapest, 2014. p. 377.

[29] Rome Statute of the International Criminal Court. Article 8.(2)(b)(ix.) and Article 8.(2)(e)(iv.).

[30] Gerstenblith, Patty: The Destruction of Cultural Heritage: A Crime against Property or a Crime against People. John Marshall Review of Intellectual Property Law. 2016. Vol. 15. p. 346.

[31] UNESCO: https://whc.unesco.org/en/list/119 [2022. 11. 24]

In 2012 the site was inscribed on the List of World Heritage in Danger, for the second time. The northern regions contain 2 of the 4 World Heritage Sites. In 2012 armed conflicts and uprising-related difficulties threatened the heritage sites. Ansar Dine, an armed Islamic group, damaged several parts of the Timbuktu World Heritage Site, tombs, and cultural institutes, among others, the biggest centre for manuscripts of West Africa, too. Mali asked for help from UNESCO.[32] 15 of the 16 mausoleums belonging to the World Heritage Sites have been destroyed, and 3 mosques have been damaged by the year 2015.[33]

Ahmad Al Faqi Al Mahdi was an alleged member of the Ansar Dine. He joined the group in April 2012. The International Criminal Court (ICC) charged him with intentionally directing attacks against 10 religious and historical feature buildings. The only confirmed charge was war crime.

Al Mahdi attacked protected objects under Article 8(2)(e)(iv) of the Statute of the ICC.

To prove the crime charged, ICC had to prove five facts. These can be read in figure 1.

> 1. The perpetrator directed an attack.
>
> 2. The object of the attack was one or more buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals or places where the sick and wounded are collected, which were not military objectives.
>
> 3. The perpetrator intended such building or buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals or places where the sick and wounded are collected, which were not military objectives, to be the object of the attack.
>
> 4. The conduct took place in the context of and was associated with an armed conflict not of an international character.
>
> 5. The perpetrator was aware of factual circumstances that established the existence of an armed conflict.[21]

Figure 1. Source: ICC [2022][34]

Al Mahdi admitted his guilt.[35] He was convicted of the war crime, under the following articles of the Statue:

- Article 8(2)(e)(iv): he attacked protected objects
- Articles 25(3)(a): he was a co-perpetrator.[36](Individual criminal responsibility)[37]

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[32] UNESCO: Timbuktu. https://whc.unesco.org/en/soc/261 [accessed: 2022. 11. 24]
[33] UNESCO: https://whc.unesco.org/en/soc/3218 [2022. 11. 24]
[34] The Prosecutor v. Ahmad Al Faqi Al Mahdi: ICC-01/12-01/15. 13. p. 8.
https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2016_07244.PDF [accessed: 2022. 11. 24]
[35] The Prosecutor v. Ahmad Al Faqi Al Mahdi: ICC-01/12-01/15. 11. p. 7.
https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2016_07244.PDF [accessed: 2022. 11. 24]
[36] The Prosecutor v. Ahmad Al Faqi Al Mahdi: ICC-01/12-01/15. p. 49.
https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2016_07244.PDF [accessed: 2022. 11. 24] p. 49.
[37] Rome Statute 25 3. (a): In accordance with this Statute, a person shall be criminally responsible and liable for punishment for a crime within the jurisdiction of the Court if that person: (a) Commits such a crime, whether as an individual, jointly with another or through another person, regardless of whether that other person is criminally responsible.

He was sentenced 9 years of imprisonment.[38]

V. 4. Responsibility

The role of the principle of individual criminal responsibility for crimes against cultural heritage in armed conflicts increased after the bombardment of the heritage site of Dubrovnik. An attack against and the destruction of cultural heritage may be considered a war crime, which may lead to the determination of the individual criminal responsibility of the perpetrator or perpetrators.[39]
The Second Protocol to the Hague Convention not only provides the most detailed system for safeguarding cultural heritage but lists those violations and crimes, as well, that make the perpetrators countable for their crimes during prosecution.[40]
The Article 15 of the Second Protocol determines the next five serious violations:
„(a) making cultural property under enhanced protection the object of attack;
(b) using cultural property under enhanced protection or its immediate surroundings in support of military action;
(c) extensive destruction or appropriation of cultural property protected under the Convention and this Protocol;
(d) making cultural property protected under the Convention and this Protocol the object of attack;
(e) theft, pillage or misappropriation of, or acts of vandalism directed against cultural property protected under the Convention."[41]
Responsibility, as can be read above, is a very complex task to prove. Summarizing the factors needed, individual responsibility in crime against cultural heritage is based on the following ones:

- the attack and the violation happened in an armed conflict of an or not of an international character.
- personal participation in the crime against cultural heritage;
- intention to destroy cultural heritage;
- making highly protected cultural property to be object of an attack;
- the attack aims to the destruction objectives protected in the Statute of the ICC, or in the Hague Convention (1954) and the Protocol;
- the use of cultural property protected or its nearby territory to support a military action;
- the acts of theft, pillage or misappropriation of cultural property protected by the Hague Convention (1954), or any vandalism against them.

Currently, these kinds of violations with the conditions above belong to the category of war crimes.
The consequences of the case of Al-Mahdi show that the system of the international criminal jurisdiction is ready and owes adequate instruments for the protection of cultural heritage and support it.[42]

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[38] The Prosecutor v. Ahmad Al Faqi Al Mahdi: ICC-01/12-01/15. [accessed: 2022. 11. 24] p. 49.
[39] Wierczynska, Karolina - Jakubowski, Andrzej: Individual Responsibility for Deliberate Destruction of Cultural Heritage: Contextualizing the ICC Judgment in the Al-Mahdi Case. Chinese Journal of International Law. 2017. Vol. 16. p. 701.
[40] Wierczynska, Karolina - Jakubowski, Andrzej: Individual Responsibility for Deliberate Destruction of Cultural Heritage: Contextualizing the ICC Judgment in the Al-Mahdi Case. Chinese Journal of International Law. 2017. Vol. 16. p. 700.
[41] Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict. Article 15.
[42] Wierczynska, Karolina - Jakubowski, Andrzej: Individual Responsibility for Deliberate Destruction of Cultural Heritage: Contextualizing the ICC Judgment in the Al-Mahdi Case. Chinese Journal of International Law. 2017. Vol. 16. p. 712.

The detailed determination of crimes against cultural heritage contributes to the better understanding of the importance of protection, therefore increasing "cultural awareness" it may lead and promote a more effective defense of cultural heritage and cultural property. During an armed conflict, the recognition of the fact of the crime of violence may cause discourage to destroy these kinds of (protected) objectives.

VI. Conclusions

The research pointed out that the purpose to protect and safeguard the cultural property and cultural heritage of humanity dates to ancient times. Nations and people had their own but common reasons to defence buildings and different kinds of cultural elements. From the middle of the twentieth century, after the World War II, significant developments have been made in the international law. International conventions play a dual role in this process. They determine new or different kinds of cultural heritage (or cultural property) and express different levels of protection for them and obligations for the state parties. However not all of the conventions regarding cultural heritage and properties have power enough to be a reference for personal responsibility of crimes against them, but all of them is important to determine the fact, that the attacked element whether cultural heritage or property.

The results pointed out, that current legal instruments of international law are adequate to establish the criminal responsibility. At the same time, the jurisdiction of the ICC is not universal. This is an aggravating circumstance, because it might be avoided.

Cases of the ICTY and ICTY were both related to world heritage sites.When the conception of world heritage was still an idea, WHL should have been the collection of about 100 properties.[43] Nowadays, we have more than 1100 and 52 of them are in danger due to several reasons. This is a huge responsibility for member states, because the World Heritage Committee can withdraw the world heritage status of the property if the outstanding universal value no longer exists in the case of the given site. Until today, it happened three times but not due to armed conflict. But apart from this fact, any attack or act of violence can cause irreversible and definitive destruction in these sites and properties.

In my opinion, the prevention of destruction and the commitment to avoiding armed conflicts are the most urgent task for humanity. Adequate development of international law can contribute to more effective protection by the proper system of rules and can play a significant role in the mitigation of offences against cultural heritage and property.

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[43] Batisse, Michel - Bolla, Gerard: The Invention of „World Heritage". Association of Former Unesco Staff Members. History Club. Párizs. 2005. p. 78.

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Creative concept for maintaining workplace health

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Introduction: The primary objective of the EU's 2020 strategy is to make the economy sustainable, with a particular focus on increasing the number of people in active employment, so that the employment rate of working-age people aged 20-64 reaches 75%. It is important to underline that Europe is characterized by an aging society, so the key to increasing employment now lies in keeping workers active for as long as possible, primarily through their health status (Braun et al., 2015). The health of workers depends on several factors, from the physical environment to the design of the workplace (comfort factors: lighting, ventilation, temperature, noise) (Borsos et al., 2021). Furthermore, the physical factors of the workstation, i.e. whether the workstation is ergonomically designed (possibility to adjust desks, chairs, monitors, possibility to stand up, accessibility), and psychosocial factors such as stress, burnout, mental disorders, etc (Lima - Coelho, 2011).

Objective: In addition to health promotion, it is also important to avoid accidents and illnesses at work, which can be addressed, among other things, by the design of office spaces. The additional costs resulting from absenteeism, illnesses, and accidents at work can be reduced by a well-thought-out concept (Borsos et al., 2022.; Helander et al., 1988.; Robertson et al., 2012.; Straker et al., 2009).

Method: Our research team developed a complex solution proposal that was examined from architectural, health, economic and technical perspectives. A mixed methodology was used: a literature review, a questionnaire survey, a field study, and case and control groups were set up.

Results:The program can be used to formulate simple interior design recommendations that can contribute to improving the health of workers with low investment. Once validated, our Creative Concept can be used as a multi-component workplace health promotion method to help a wide variety of offices to develop a health-promoting work environment.

Conclusion: Currently, due to the effects of the pandemic and the Russian-Ukrainian war, office space is a priority area of research. However, there is a need for employers to rethink office space by creating a safe, more productive working environment where employees can work individually or in groups, and by creating appropriate social spaces where employees can recharge and thus achieve an overall work-life balance that contributes to the success of the company.

Keywords: workplace health, health promotion, computer workstation ergonomics, office spaces, well-being

I. Introduction

People spend around 90,000 hours at work throughout their lives. This alone explains why we should strive to spend a significant part of our lives in the most suitable environment, with minimal exposure of the individual organism to stress sources within our capabilities (Norhidayah et al., 2013). Physical, cultural and technological factors are those that can most affect an individual's well-being. These are the factors that employers should pay attention to and design the most appropriate environment for the type of work they do, in order to make their workplace attractive to new employees and to retain their best colleagues. In the workplace, there are a number of work processes that require functional spaces that need to be used by employees in specific situations (e.g. meeting rooms, conference rooms; private zones for telephoning, etc.). These spaces need to be designed with the right precision, e.g. soundproofing, ventilation, acoustics, lighting, etc. (Artazcoz et al., 2018).

Nowadays, there is also a growing demand for communal spaces in the workplace, which many companies used to think of as a distraction from work. Although social spaces can provide only minimal relaxation, they can make a big contribution to maintaining health, for example: workers can break up sedentary work by standing up and walking; they can relax their focused gaze by looking into the distance; they can free up our brains a little, etc. (Barna, 2019). Every workplace has different habits, different needs for space, equipment and furniture, and it is also necessary to understand the work processes of the organisation and the communication paths within the organisation (Borgulya - Balogh, 2018). It can be concluded that one of the basic principles of ergonomics is to design the environment to meet the needs of the user. Design can be a risk factor, as it can lead to the marginalisation of functions (Vaszkó, 1984). A well-designed working environment contributes to increased employee satisfaction, commitment to the workplace and reduced stress. Thus, where appropriate, turnover can be minimised.

Furthermore, loyalty enables employees to perform their tasks more effectively. In turn, individual performance gains can lead to an increase in overall organisational performance (Del Pozo-Antúnez et al., 2018). As a member of the research group Parameterized Comfort in Physical Spaces - Biomedical Engineering of the Faculty of Engineering and Informatics of the University of Pécs, in collaboration with my colleagues, we intended to develop a design method based on data collection, measurement and processing for a sustainable and healthier built environment (Cakó et al., 2021). This paper aims to present a summary of the work of the research team, with a particular emphasis on a systematic literature review.

II. Objective

A person spends around 70 000 hours of their life in a sedentary position if they have to work in an office job (Ausubel - Gruebler, 2020). Sitting too often or inappropriately puts people under strain and can have serious consequences, including poor posture and various health problems associated with lack of exercise (Elek, 2013), such as headaches, neck pain, shoulder pain, back pain, circulatory disorders, anxiety, or even discomfort caused by stomach pain (Davis et al., 2011). Of course, it is not only the responsibility of the employer to create the right working environment for employees, but also the responsibility of the employee to perform his or her duties with maximum efficiency.

The pandemic of the new coronavirus has shaken up many parts of the world: economy, society, education, health, etc. The pandemic has thus brought about the need for mandatory changes in almost every aspect of our lives (Adams et al., 2020). Organizations were forced to take mandatory steps to obtain government intervention to contain the virus (Bartik et al., 2020a). Those organizations that were able to do so provided telecommuting (Home Office) for their employees. Others closed down for an indefinite interval, and there were organisations that could continue to operate (grocery stores, public transport, waste collection, etc.) without

teleworking (Adrjan - Lydon, 2020). The virus changed our lives overnight, as the majority of people suddenly became isolated and uncertain about the unknown future (Caligiuri et al., 2020). Working from home requires the right technical background and digitalisation. At the same time, its implementation is completely changing employees' attitudes (Pinzone et al., 2017), communication, interaction with work and colleagues (Kovaitė et al., 2020, Pató et al., 2021). Changing expectations and the role of space have also contributed to these transformations. The sectors most affected were education, administration, IT and finance (Jarjabka et al., 2020). In this country, both companies and employees successfully overcame the obstacles in the resulting constraints (Bartik et al., 2020b). As a result, digital education and working from home quickly took off, leading to an increase in the share of teleworkers in the country as well as abroad (Arntz et al., 2020.; Venczel-Szakó et al., 2020). Work from home (WFH) provided a way for workers to carry out their tasks from home during the epidemic (Adams et al., 2020). This required the use of specific technologies and tools, which also accelerated the spread of Industry 4.0. To enable teleworking, organisations could act in different ways (Akkirman - Harris, 2005). On the one hand, they had to provide employees with the necessary conditions and technology to work from home. On the other hand, employees had to be introduced to new communication platforms in order to be able to negotiate and have meetings with colleagues and customers (Shou et al., 2019). Accelerating technology change was also important in the implementation of online education (Bagó, 2020; Thékes, 2020) or in the development of eHealth services already underway (Balogh et al., 2020). Where deemed necessary, employers provided training to acquire new skills.

The epidemic demonstrated that the hybrid working models thus developed did not necessarily hinder efficient working. For the future, as organisations have different characteristics, different telework models may be developed (Mlitz, 2021). The main objective of this study was to explore the changes in home office/teleworking practices associated with the global spread of the COVID-19 virus. The relevance of the study is demonstrated by the fact that there is a large and diverse body of research on the topic at present. The identified research niche is explored in this work through a specific methodology, a systematic literature analysis of the area under study. Since the fourth wave of COVID-19 was underway at the time of writing, it is still difficult to draw conclusions and conclusions for the future. The research will thus explore the work that has been done so far (Adams et al., 2020), focusing on the research question: - Has the perception of the home office changed as a result of the COVID-19 pandemic?

III.Methods

The results of the questionnaire survey and the instrumental measurements are not part of this study. An anonymous, voluntary questionnaire survey on subjective perceptions of comfort was conducted within the research team. Data collection on the subjective workplace comfort perceptions of the respondents working in the office building under study was conducted during the months of November and December 2019 using an online questionnaire published on the company's internal information system. A total of 2,163 employees work in the office building, and 216 employees completed the questionnaire during the available period, 210 in Hungarian and 6 in English. Respondents participated in the survey voluntarily and anonymously, with the option "do not wish to answer" for each question. The data analysed are presented in aggregated form, excluding the possibility of individual data being identified. The questionnaire contained mainly closed questions on satisfaction with the workplace, perceptions of factors influencing well-being and health, and characteristics of workload. Statistical analyses, after data cleaning, were performed using IBM SPSS Statistics v24 software. We also clarified questions that allowed me to see how the workers felt about the design of their current workplace. There were also open-ended questions to which the workers could respond in their own words. These

helped me to formulate suggestions on how the company could increase employee satisfaction and thus organisational effectiveness. The aim of the study was to identify the stochastic and deterministic relationships between the impact of stress, the determinants of office space comfort and individual comfort preferences. The long term goal of this research is to promote the design of living spaces and office spaces that can have a positive impact on human health and prevent disease (Komalanathan - Thangavelu, 2014). To ensure the representativeness of our research, we conducted objective, instrumental surveys in the 3rd floor office space. In noise measurement, the resonance frequency value is the value at which the instrument result peaks. Optimally, it would show an exponentially decreasing value, in which case it would be ideal acoustics. Analysis method: surfaces are acoustically very different, with many absorption areas. Saturation and droning tests had similar results in terms of correlation, in this case droning tests were used in different areas of the office space.

During the study, there was an extremely high level of absorption, which is a huge overload for the workers, the speech is intelligible but requires constant high concentration to understand. This form of verbal communication is acoustically unsuitable for speech intelligibility, and the space is not designed appropriately. In many cases, we measured resonance, standing waves, which means that there is nothing between two hard objects to absorb the sound, i.e. it bounces back and forth in space. It can be concluded that noise pollution is one of the areas that most needs to be addressed in the design of office space. The office building under study uses mostly open-plan, open-plan offices.

The employees' questionnaire survey showed that they were most dissatisfied with noise pollution. I would recommend that the organisation review whether it has ergonomically designed each workstation appropriately. CO2 measurements were in line with the standard values (mostly between 600-800ppm), with one or two measurements showing higher values, which were observed when measuring small meeting rooms directly after use. Ideal results were obtained for large open-plan offices. The concentration of air used can slow down brain function and cause drowsiness, which can lead to tension in the individual during work. It can cause workers to become de-concentrated, which can lead to distress, leading to a loss of efficiency. In the office space under study, the windows are partially openable, and constant ventilation was designed into the design of the automation, which, according to the measured results, works well. In terms of temperature, the average temperature was 26 degrees Celsius, which in my opinion can be classified as hot, causing a feeling of drowsiness in the workers. Employees have the possibility to regulate the temperature with a thermostat, thus providing partial autonomy to the employees, which may increase their satisfaction, thus increasing their eustress level. When measuring light, lux values were measured, which gave a wide range of results. Some work groups worked with only natural light, while other work groups did their work with all possible light sources switched on. The lighting in the lounges also varied, with some lounges with darker designs and some private spaces with windows. From the questionnaire responses, respondents clearly preferred lounges with natural light (Borsos et al., 2020). From my literature research, light and illumination was the most subjective area. It is important to provide other sources of light and shading for employees in addition to intermittent lighting.

This paper focuses on the systematic literature review (SLR) method. The basic characteristics of this method include the ability to identify and select literature relevant to a given topic. The method provides the possibility to collect empirical studies related to a given research question in a transparent system (Booth et al., 2016). The SLR method provides the possibility to define the problem domain of the discipline related to the research question by specifying information sources, search keywords and exclusion criteria (Nicolas - Toval, 2009). A systematic literature search thus provides reliable information, is methodologically transparent and allows for future replication (Tranfield et al., 2003). By applying SLR in the

research process, it provides the possibility for a focused search, which allows for reliable, high quality studies. In order to identify the most relevant literature for the study, several electronic databases were searched, namely Web of Science, Science Direct and Researchgate.

The keywords and search terms were modified when using Google Scolar. The criteria applied have thus led to the production of this study, which has been carried out by means of a systematic literature search, narrowing down the literature over several rounds, and selecting the most relevant, high-quality literature. The search terms were formulated after the research question was identified. In a first step, the possible keywords and terms were maximised and used to start the search. The number of hits was thus extremely high (9 178), which led to the modification of the search terms. Terms that seemed relevant at the beginning of the study were also filtered out. As a next step, the keywords virtual office, alternative office, new ways of working, telework were added to the keywords, as the study focused on the changes in the workplace and in the way people work caused by the pandemic. The next step in the research was the use of boolean operators to set the relationship between the result sets. Boolean operator working principle. The search is performed by specifying the TS tag, i.e. by subject (Alliant Library, 2001).

[1] (TS = ("home office" AND "work at home" AND TS = "new normal").

[2] (TS = "indoor environment quality" AND "ergonomics" AND "parameterized indoor environment" AND reverse "computer workstation ergonomics" AND reverse workplace health and wellbeing AND reverse health promotion)

[3] (TS = "workplace health and wellbeing" AND "job attitudes" AND cost and benefits of home office AND stress about home office AND work hours at home *)

[4] (TS = "virtual office, AND alternative office, AND new ways of working, AND telework")

[5] (TS = "home office OR telework, OR "new normal" OR back to the office, AND pandemic OR COVID*,").

It can be seen that the final search - in line [5] - was TS = "Home Office OR Telework, OR "New normal" OR back to the office, AND pandemic OR COVID*,". After refining the search terms, a total of 423 studies were found in the electronic databases. The next step was to filter out duplicates using Zotero's link management. Using the application to filter out duplicates, the number of articles obtained was reduced to 294, followed in a specific step by the selection of the 129 most cited articles using Google Scholar. On expert recommendation, 43 additional articles were selected from the studies frequently cited in the selected articles. This is the so-called snowball method, which is an additional procedure in the systematic literature processing. Based on the searches, the final number of literature selected for processing was 172. Of these, 118 were screened out using the content of the abstracts, the keywords of the articles and the previously defined acceptance and rejection criteria, resulting in 54 relevant literature items being included for processing (Fig. 1.).
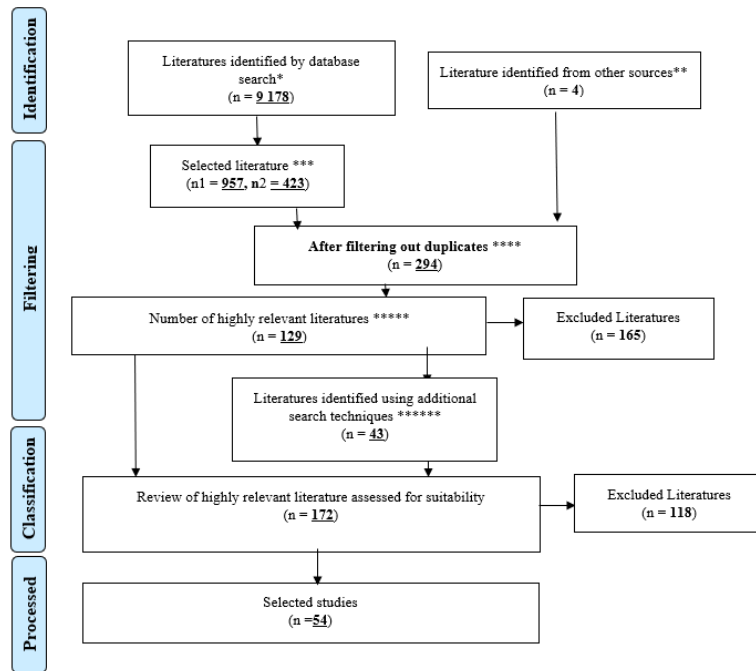
Comments:
* The number indicates all literature from the various databases (Web of Science, Science Direct and ResearchGate).
** The number of literatures recommended by experts.
*** Filter application: for journal articles and reviews.
**** using Zotero reference management software.
***** Evaluation of each literature by title, abstract, and then selection of the top 100 literature by Google Scholar reference number.
****** Using the snowball method.

Fig.1.: Flowchart of systematic literature review
Source: own editing based on the Scoping worksheet

All selected articles included Covid-19 as a keyword, with the term Home-office being found in most of the articles. Industry 4.0 and health were the next most frequently used keywords, followed by stress and telecommuting, and finally, the most frequently used keywords were satisfaction, loyalty, work-life balance and 'return to the office' after a viral incident. The data were extracted supplemented by citing the articles, reading through the abstracts, and sorting the identified literature by topic. By modifying the time limit of the SLR method, literature published between 2000 and 2021 was selected (Fig.2.).
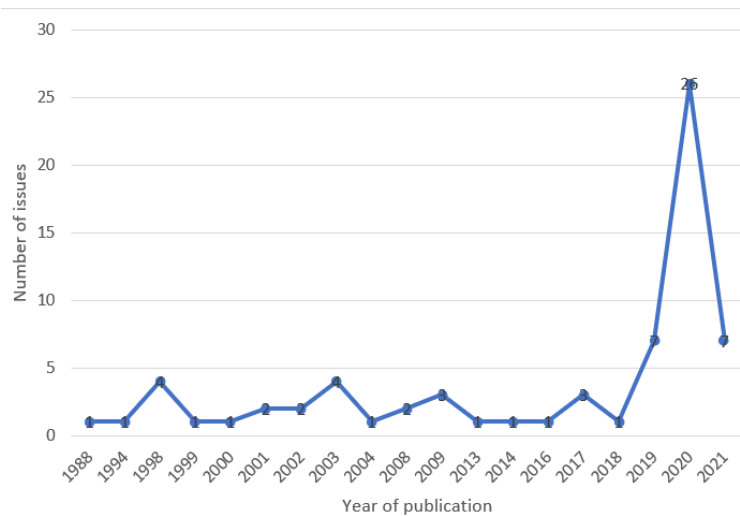
Fig.2.: Flowchart of systematic literature review

Source: own editing

Thus, 35 papers written during the pandemic period were included among the 54 papers. Next, the scientific value of the selected studies was assessed. Based on an international ranking system, the literature is classified into four main categories: Q1, Q2, Q3 and Q4. In Hungary, the literature classified as A, B, C and D is at the top of the ranking. Based on the rating of the selected journals, it can be concluded that the majority of the journals were published in Q1 journals and the majority of the Hungarian-language journals were published in C journals. The articles were identified using the Scimago Journal Rank and the MTMT database. It can be concluded that the journals were selected based on their rating and relevance to their field of specialisation, which publish valuable scientific results (MTMT, 2016, Sasvári, 2016). In addition to the systematic literature review, the study also included several statistical data illustrating the sectoral distribution of work-from-home activities (EUROSTAT, KSH, WHO).

IV. Results

The evaluation of the questionnaire and the interview survey is ongoing. In the first round, the following survey was carried out based on the results obtained. The questionnaire was retrieved and 216 evaluable questionnaires were available for data analysis. The aim of the study was to identify the stochastic and deterministic relationships between the impact of stress, the determinants of office space comfort and individual comfort preferences. The long term goal of this research is to promote the design of living spaces and office spaces that can have a positive impact on human health and prevent diseases (Komalanathan - Thangavelu, 2014). In order to provide a representative analysis of my research, I used a questionnaire survey to investigate the subjective perception of comfort of employees and to examine objective values of the impact of stress based on instrumental data, which preliminary results, deeper analysis stage will be carried out in the future, the current data will be used as an overview. I compared the results obtained and analysed whether the subjective results of the workers and the objective results "given" by the field are the same or different. Based on the time spent in the office building, I concluded that, overall, the workstations were adequately equipped. In order to reduce stress levels, the organisation needs to focus on noise attenuation due to the large office space. The total number of employees in the office building under study was 2 163, of which 216 completed questionnaires, 210 in Hungarian and 6 in English, which I interpreted as a database in the following.

The demographic data cover gender, age groups, highest level of education, type of job held and number of years in the company. The age distribution of respondents was as follows, with 19 respondents aged over 50 and 45 respondents aged 40-50, with the majority of respondents, 119 respondents, aged 30-40 and 32 respondents aged under 30. Two thirds of the respondents are men and one third are women. The propensity of men to complete was significantly higher (66%) than that of women (34%), which may be due to the fact that the total number of employees is 2 163, of which 1 458 are men and 705 are women. The majority of respondents have a tertiary education, 181 in total; 45% have a college degree and 39% have a university degree, while 17% have attended adult education or have a secondary education. One third of the employees have been with the organisation for less than 3 years, one third for 4-6 years and one third for more than 7 years. 93% of the respondents are involved in the company's operations in a subordinate status, with only 13 of the respondents holding a managerial position.

With a score of almost 90%, the majority of people surveyed consider the workplace, where they spend most of their time, to be the most important factor in their well-being and well-being. The results of my literature research fully support the findings, since ergonomic spaces, properly designed and equipped with the necessary equipment (furniture, IT tools, etc.) make work more efficient. Of course, this also requires the formulation of well-designed job

descriptions and the well-structured design of the communication channels and spaces mentioned above.
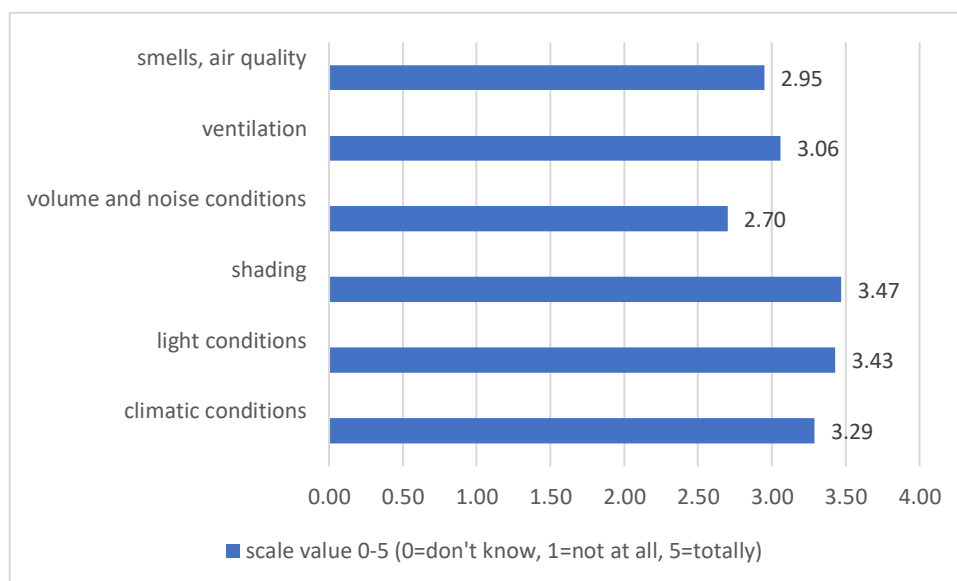
Fig.3.: How do you think the following aspects of your workplace affect your well-being and well-being
Source: own editing, Results from the evaluation of the questionnaire, n=216

The respondents' data show that they believe that their well-being and well-being are most negatively affected by noise and volume conditions (2.7), while shading (3.47) and lighting (3.43) have the least influence on these trends. Odours and air quality (2.95), ventilation (3.06) and climatic conditions (3.29) were rated as moderately influential by respondents. Noise and sound conditions are a function of the use of the office building, and it is necessary to rethink the work tasks and work processes in relation to the available space. From the results of the questionnaire survey, we can conclude that respondents think that the work space in which they spend their working time is important, so we need to conduct further surveys on their work at home, which we can compare with our results so far.

The next section looks at how teleworking has gained popularity in certain countries and geographical areas, and how the viral situation has affected the use of this type of work. United States: while at the turn of the millennium around one fifth of employees reported working regularly from home (Bartik et al., 2020b), a study by Dingel and Neiman (2020) published in 2020 found that more than half (55%) of US companies allowed employees to telework occasionally. And a third of organisations allowed employees to regularly work from home or remotely. A survey by Mlitz (2021) found that almost half (47%) of workers surveyed had never worked from home during the epidemic. However, after Covid came into effect, just over a third (34%) did so. The proportion of those who worked from home occasionally (less than 1 day, 1-2 days) halved to 28%, while the proportion who worked from home for the majority of working days per week (3 or more days) increased sharply, with almost half of respondents (44%) working from home at least 5 days per week. According to MacEachen et al., (2008), at the turn of the millennium, there were 19 million workers in the United States who worked from home at least one day a week. According to research by Dingel and Neiman (2020), two decades later, 37% of jobs are now performed from home, with significant variation across regions by industry.

While the social distancing and isolation (Barrot et al., 2020) of working from home has proven highly effective in reducing the epidemic, it has also had significant economic costs. US industrial production suffered a 12.75 percent loss and service sector employment fell by nearly 17 percent, resulting in nearly 24 million unemployed in ten months (Ludvigson et al., 2020).

When the epidemic broke out, many people were surprised by how effectively and quickly employers and workers were able to adapt to the change. According to research by Brodie et al. (2020), 80% of people surveyed would like to continue working from home in the future. 64% of the workers they surveyed felt motivated to work remotely, and 68% said they were able to complete their tasks without interruption. 77% had ergonomic workspaces, 80% were able to complete their tasks on time, also because 87% had the technology and equipment they needed, which is partly supported by research by Kermit et al. (2020).

However, their research outlines in detail the ergonomically inadequate home workstations in relation to rapid changeover, for which they have developed a comprehensive yet low-budget comfort proposal to make future home working more comfortable, so that employees can perform their tasks more efficiently from home. Overall, the employees surveyed were efficient and happy to work from home. Research by Nicholas et al. (2015) on the perceptions of employees who teleworked before Covid showed positive results, with many employees who teleworked being relieved of commuting and travel time, which they could use more efficiently, while at the same time increasing their loyalty to the organisation and improving their work-life balance, and therefore felt that they would be happy to continue working from home. Studies by Barrot et al. (2020), Blaine (2020), and Brodie et al. (2020) also showed that fear of a virus or other health threatening situation can amplify the need for social distance between workers. About a quarter of the workers surveyed would not prefer to work from home even in such a health threatening situation, while about 1 in 5 could not decide. Almost 60% of respondents would prefer to work mostly or entirely from home in such situations. Providing adequate facilities is key, as Bloom (2020) reports that 42% of full-time employees worked from home in May 2020. As each epidemic wave passes, there are also companies that expect, and some require, employees to return to the office and wear masks and maintain physical distance at all times, in line with health regulations. These companies, in turn, are mostly restricting movement in congested spaces and redesigning their offices (Martens, 2008; Brodie et al., 2020).

European Union Member States: according to a report by the European Commission (2020), only 5.4% of workers in the European Union worked from home in 2019, the year before the pandemic. Those who occasionally worked from home accounted for less than 10% of the employed population. Their share has only shown a slowly increasing trend over ten years, with significant differences between countries. In 2019, the Netherlands and Finland had the highest share of teleworkers, with nearly 14% of employees working mostly from home. They were followed by Luxembourg with 11.6% and Austria with 9.9% of employees working from home. Hungary reported 1.2%, Romania 0.8% and Bulgaria 0.5% with the lowest number of home workers. In Germany, 12% of workers worked from home in the pre-pandemic period, rising to 35% during the pandemic (Arntz et al., 2020, EUROSTAT, 2020, EUROSTAT, 2021). According to a survey conducted by the IAB before the crisis ("High-frequent person panel"), 56% of home workers did not take up this option, while in May 2020 only 18% worked exclusively at work. It is estimated that in Germany, 42% of all work could be done from home (Fadinger - Schymik, 2020). In the Madrid region, Alonso et al. (2017) predict a 10% reduction in work trips by 2031, and predict that atypical forms of work could reduce peak-hour traffic.

However, O'Brien - Aliabadi (2020) model that off-peak travel by telecommuters will increase. In Hungary, telecommuting was a rare phenomenon before the pandemic (Csoba, 2018, Zádori et al., 2020). According to Jarjabka et al. (2020), 5% of workers worked from home before the pandemic, which increased to 27% in the March 2020 Ipsos survey. At the onset of the pandemic, in the second quarter of 2020, the share of teleworkers in our country increased eightfold. The most affected home office industries are information and communication, where 4 out of 10 people worked from home (Jarjabka et al., 2020).

According to the Hungarian Central Statistical Office (2021), the number of home office workers in Hungary reached nearly 760,000 during the pandemic period so far, accounting for 17% of the workforce. In the previous 10 years, only 2.9% of workers worked remotely or in a home office, which triples by 2020, with 8.6% of people working from home. In the period following the release of COVID, the monthly share of people working from home in Hungary evolved as follows: the priority period, from April to June 2020, when the share of people working from home office increased fourfold compared to the previous period. And by region, two thirds of home workers live in the central regions. The lowest proportions were found in the regions of Northern Hungary, Southern Great Plain and Central Transdanubia. According to the survey, the majority of home workers (77%) have a degree and 21% have a school leaving certificate. Surveys by the Central Statistical Office (2021) also show that the types of work performed in the home office varied by economic sector. The sectors most affected were information and communication (39.1%), scientific and technical activities (e.g. education, administration, etc.) (33.5%) and financial services (29.8%). The lowest ranked sectors were agriculture (1.3%), health and social work (3.0%) and manufacturing (3.6%), where there were still almost no teleworkers (Bagó, 2020, Buzási-Pásztor, 2020, Jarjabka et al., 2020, Venczel-Szakó et al., 2020.; Fadinger and Schhymik (2020), confirming the domestic experience, found 'Financial and insurance activities', 'Information and communication services' and 'Education' among the three sectors most affected internationally. And the sectors least affected by working from home were, in their experience, 'Agriculture, forestry and fishing', 'Accommodation, food service and beauty activities' and 'Construction'.

The first effects of the pandemic are beginning to emerge from the articles reviewed, with the role of personal services (B2B) and retail, hospitality and tourism (Fadinger - Schhymik, 2020) declining significantly. It was the players in these sectors who felt the negative impact of the virus the most (Adrjan - Lydon, 2020, Bartik et al., 2020b). Agriculture, healthcare and services are among the sectors most at risk (Bagó, 2020, Buzási-Pásztor, 2020). The spread of Industry 4.0 in the 21st century (Longo et al., 2017) has clearly been accelerated by the digital transformation due to COVID-19 (Adams et al., 2020). Several digital learning management systems have emerged or are under development (e.g. Zoom, Microsoft Teams, Skype, etc.) to cope with the sudden increase in the number of users (Shou et al., 2019).

The pandemic period has necessitated the use of these systems, which has greatly transformed employee habits, although their effectiveness is not yet representative (Bartik et al., 2020b, Bloom, 2020, Nicholas et al., 2015). Numerous articles in several databases show that organisations that had already implemented teleworking, i.e. had experience, have both adapted more easily to the sudden changeover and invested in innovation of existing technological resources (EB, 2020, Jessica, 2020, Longo et al., 2017, ONS, 2021, Pinzone et al., 2017, Longo et al., 2017, and others), Although not enough information is yet available, it is likely that working practices will change in the post-COVID world (Kermit et al., 2020, Longo et al., 2017). In terms of how, it is important to highlight that as every organisation, organisational culture and employee circumstances are different (Brodie et al., 2020), diversity in change solutions can be expected.

As humans are fundamentally social beings, it is not certain that working from home is a good solution for all employees. Nor is it certain that all workers can be provided, either through their own efforts or by their workplace, with a suitable home office (Aslan - Güngör, 2019). While some workers enjoyed this new experience, for others it was more of a burden. Virtual working worked successfully in some cases, but there were situations where it failed. Moreover, they have experienced a fluctuating emergence in many places. In many places, the productivity of employees doing varied work increased, while that of those doing monotonous tasks decreased in many cases (Brodie et al., 2020).

The articles reviewed suggest that the way work is done will continue to change in the future, based on what we have seen in the Covid period. It is likely that the digital form will be favoured by society and the economy (Longo et al., 2017). From the Covid-19 epidemic onwards, teleworking, working from home, is likely to affect a larger share of the population. In the short term, organisations are likely to continue to support home working to reduce the spread of the virus. And in the longer term, building on the positive experience of teleworking workflows, they are likely to regularly telework employees (Kermit et al., 2020). The analysis showed that the home office environment has positive effects for both organisations and individuals. Teleworking can increase productivity while increasing employee satisfaction (Bloom, 2020, Krajcsák, 2018, MacEachen et al., 2008, Nicolas - Toval, 2009).

Surprisingly, the studies reviewed did not show a direct effect between job insecurity and teleworking (Ancarani et al., 2019, Tortorella et al., 2019). Diamantidis and Chatzoglou (2019) argue that this may be explained by the fact that individual workers' performance variation is not as vulnerable to job conditions. Li et al., (2019) observe that the impact of the epidemic may be mitigated on workers' performance if other factors are appropriate in the workplace. This view is very much in line with the findings of Gopalakrishnan and Guilherme (2021), who suggested that organizational factors such as leadership and culture are key determinants of employee performance. An analysis of the selected literature suggests that employees can be as committed to their workplace and their job as they were before the virus event (Buzási - Pásztor, 2020, Gopalakrishnan - Guilherme, 2021). Several articles have found that working from home saves employees time, energy and money (meals, travel, clothing) (Kossek, 2001, Hill et al., 2003, Sullivan - Lewis, 2001). In addition, however, the workload increased in many places because workers had to deal with several things at the same time: taking care of work processes, home tasks, possible family care during the pandemic. This often overburdened workers and caused stress, but the articles showed that they were able to manage such situations over time (e.g. studying with children in the afternoon and then resuming work) (Bondarouk - Ruël, 2009, Fodor et al., 2011, Krajcsák, 2018).

It is generally assumed that flexible working hours through teleworking benefit the family (Hill et al., 2003). Research confirms that working from home gives workers more autonomy, allowing them to organise their time for work - housework and childcare (Ancarani et al., 2019, Rapoport et al., 2002). Working from home can improve communication within the family (Akkirman - Harris, 2005), increase savings for families e.g.: shopping, eating out, clothing, commuting costs can be reduced (Hill et al., 2003, Kossek, 2001, Sullivan - Lewis, 2001). The use of teleworking can thus make jobs more attractive, as employees have to commute less and the work-life balance can be improved for those working from home (Harrington - Walker, 2004, Kermit et al., 2020). When home office working is well managed, organisations can increase individual efficiency by building trust (Bauer et al., 2019), balancing control and autonomy, and examining negative stress situations to turn them into positive ones (Nicholas et al., 2015). The effectiveness of working from home also requires the development of an appropriate control system (Arntz et al., 2020). Control can be facilitated by clear task assignment, but it is important to consider that workers can be more loyal to their workplace by providing them with the autonomy they need (Krajcsák, 2018). Furthermore, if firms have the opportunity, they can further improve the efficiency of their employees through online training in task and time management practices (Buzási - Pásztor, 2020, Gopalakrishnan - Guilherme, 2021, Varga et al., 2018).

V. Conclusion

The literature review analysed highly cited studies on the changes in the use of teleworking and home office, which were included in three major academic databases. The research covers a wide range of high quality literature and international contexts, with the aim of processing the

characteristics of the home office and its changes in practice before and during the first waves of the pandemic. The literature reviewed is complemented by the use of statistical data reports. In addition to the negative effects, the experience of the pandemic also shows learning and adaptation (Abonyi - Miszlivetz, 2019, Frank et al., 2019, Jean-Noel et al., 2020, Kermit et al., 2020, Shou et al., 2019,). It is the task of science and researchers to explore the data already available and to analyse them to help decision makers with predictions and recommendations. Recent empirical evidence shows that bringing workers back to the office is becoming increasingly important for many public and private organisations (Kermit et al., 2020, Maria, 2020). This makes it particularly important to present further research on the merits and challenges of working from home and teleworking. The first experiences of COVID-19 have shown the world that society is capable of radical global change when needed (Abonyi - Miszlivetz, 2019, Kovaitė et al., 2020, Kronblad, 2020). The literature review has outlined that by adapting and rethinking the experiences during the pandemic, many organisations can organise their work processes more effectively in the future, in line with health standards (Brodie et al., 2020, Jean-Noel et al., 2020, Jessica, 2020, John, 2020, Kermit et al., 2020). COVID-19 has forced the adoption of new ways of working in many places. Organisations need to rethink their work and the role of the office. It can be argued that after the pandemic, nothing is likely to be the same as it used to be, everything will be slightly transformed (Koren - Pető, 2020, Lise, 2020a, Lise, 2020b, Maria, 2020, Zach, 2020). The shift towards a knowledge economy and the rise of Industry 4. 0, teleworking could be a key tool for mitigating climate change (Abonyi - Miszlivetz, 2019, O'Brien - Aliabadi, 2020).

The study highlighted that more comprehensive research is needed to show the different interrelationships (climate, culture, industries, ecological footprint). For the future, the fashion for large, single-occupancy offices is likely to be overridden by new building regulations that will take into account capacity utilisation in addition to health standards (Blaine, 2020, Harrington - Walker, 2004, Lise, 2020b). The initial assumption of the study is that the pandemic has changed the role of home office organisations in the functioning of the organisation. This change is not expected to stop in the future. Research has shown that some organisations have already changed the way they operate and work, i.e. they are not reverting to the 'old ways' (Useem-Harrington, 2000). Instead, the 'new normal' will be adopted, whereby employees whose activities can be outsourced will at least occasionally telework or work from a home office (Kermit et al., 2020). Of course, they will also have the option of working from the office, but this will require organisation.

Competition for talent has intensified over the last few years. At the same time, some talent pools are less willing to relocate and commute to their employers' sites than before (Brodie et al., 2020). In my view, employers can now gain a head start on them by reconstructing their operations and determining what can be done remotely. Home offices used by organisations may also give a competitive advantage to more backward regions, as they may have fewer geographical constraints to sourcing available talent (Gopalakrishnan - Guilherme, 2021). After all, employees do not need to move close to the workplace if they can work from home and only need to visit the office occasionally (Arntz et al., 2020). Thus, "talent" can work remotely from their own region, where the cost of living is assumed to be lower. This could also mean that, as they would prefer to spend their salary in the region, they could contribute to the development of the region (Brodie et al., 2020, Gopalakrishnan - Guilherme, 2021). The research has highlighted the need for complex research into teleworking, as it has an impact on many factors. Positive experiences of employees have been reported in terms of job satisfaction (Bloom, 2020, Krajcsák, 2018, MacEachen et al., 2008, Nicolas - Toval, 2009), work-life balance (Nicholas et al. (2015) and can also lead to increased productivity for employers (Hill et al., 2003, Krajcsák, 2018). However, potentially positive outcomes can only be realised if a

number of preconditions are met, which also need to be addressed by researchers and policy makers in organisations.

Furthermore, it is necessary to take into account employees working in atypical forms of work in future workplace planning (Bailey-Kurland, 2002, Sullivan-Lewis, 2001). The rise in the number of telecommuting, full-time employees may also eliminate the need to commute to work and the size/necessity of a central office tenancy (Hill et al., 2003, Kossek, 2001, Sullivan - Lewis, 2001). The pre-planetary perception is that offices are central to the way people work. They play a critical role in productivity, culture and competition for talent. Companies thus competed intensively to acquire the best offices (Brodie et al., 2020, Hill et al., 2003, Kossek, 2001, Sullivan - Lewis, 2001). Employers have to act with new eyes on the ball as a result of the epidemic. By reassigning employees to the office, employers need to ensure that their employees can perform their duties in a safe working environment in accordance with health standards (Brodie et al., 2020). Retaining/recruiting a well-trained, talented workforce is costly (e.g. exit interviews, accrued vacation and ongoing benefits, vacancy costs, temporary workers, overtime, recruitment, selection and hiring costs, training, etc.). According to research by Hill et al. (2003), depending on the type of job, these direct and indirect costs total between 41% and 241% of annual salary. A holistic approach is needed to support the digital transition when building HR management systems (Bondarouk - Ruël, 2009). HR management concerns all functions of the process and should be strategically and conceptually linked: recruitment, training/education, qualification, personal development, health promotion and other support services (Buzási - Pásztor, 2020, Caligiuri et al., 2020, Gopalakrishnan - Guilherme, 2021). Public and private organisations do not need to make these changes alone, but can rely on change management and organisational development colleagues to help them intervene in a number of areas (appropriate IT, innovation, ergonomics, interior design, hygiene standards, etc.) (Farkas et al., 2013). Workplace managers should clearly expect clear compliance from teleworkers in order to ensure that they not only work safely but also effectively, which can increase organisational efficiency (Nicholas et al., 2015).

Research into teleworking is still in its infancy, but with the emergence of the virus it has taken on a prominent role, and the economic crisis caused by the Russian-Ukrainian war and the issue of energy efficiency are also a shock effect in this area. There is a lot of research going on, but it is extremely difficult to grasp this research area, as the concept itself is very diverse. It is not well defined in research, with some using teleworking - home office - as a synonym, and others distinguishing between these atypical forms of work. Furthermore, the way in which home working is recorded in the employment contract depends to a large extent on the workplace, some where it is only agreed verbally; others where it appears in the employment contract at the place of work. This anomaly can also cause biased data to be obtained for a single survey.

As a result of the COVID-19 epidemic, it can be concluded that in the long term changes will take place in the world of work. In planning for these, employers have the opportunity to alleviate pressures in the workplace by introducing new workplace habits, norms and practices. Due to the positive effects of digitalisation and viralisation, those sectors that can afford to mandate working from home will certainly count on 1-2 days per week, so that workers are expected to spend only 3-4 days in the office. It follows that they can rethink the organisation of work, optimise their rental properties and possibly even use a smaller office building in the future, which will allow them to increase their efficiency. Now is the time to do all this, with the right safety standards in place, by implementing a more productive working environment, which can help to make it easier for employees to return to the office. They can do so by breaking away from the familiar ways of the past and switching to, for example, shared-desk working. This concept implies that there will be no personal workstations, but rather the possibility for employees to reserve a desk for themselves for a day of their choice by viewing

the available capacity via some computer system. Of course, this is just one potential solution among many, ultimately a well-planned return to the 'new normal' that employers can now take advantage of and change the work environment to create a better experience for employees. This can improve collaboration and productivity while reducing costs. Employers can also increase the social spaces created to deepen social interaction, where employees have the opportunity to socialise and build peer relationships. Overall, the changes brought about by the virus are long overdue, and because of this, companies can create a new, secure, more productive environment where employees can work and collaborate with colleagues offline or online to achieve their organisation's goals.

VI. Limitations of the study

COVID-19 and Industry 4.0 are popular areas of research, therefore the conclusions do not cover the entire literature, only the part of the literature relevant to the objectives and methods chosen in writing the study. There is a lot of ongoing research on this topic, the results of which may still contain exciting/interesting information.

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Aviation safety aspects of covid-19 infection, Possible utilization of biosensors in fatigue-measurement

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Abstract: Covid-19 pandemic had a significant effect on every aspects of our lives, well known impact on air traffic as well, however not many considerations of its effect on aviation safety yet. The aim of this research is to identify the effects of covid-19 infection- and post covid syndrome in particular- on aviation personnel and mitigate the risk that it may cause in aviation safety. Since the breakout of this pandemic more and more information was published on long term side effects of the infection. Many of the most common complications, such as chronic fatigue, brain fog, memory failures, decreased concentration and increased reaction times had been reported for long periods after the sickness. These complains are strongly effecting the human performance in the demanding environment of aviation- posing an increased risk of human error occurrence not just in pilots, but as well among the air traffic controllers, flight attendants and ground engineering services. Mistakes due to post covid symptoms in any of this population may lead to catastrophic accidents in flying- risking hundreds of lives. One of the highlighted performance- deteorating aviation risk in post-covid symptom is chronic fatigue- a well-known human error factor for which all aviation safety agencies are recommending a fatigue management system, but yet not much practical tools to objectively measure fatigue. The author can utilize the opportunity of accessing data of regular medical screenings of aviation personnel, study the objective performance before and after covid infection in this population and use questionnaires to collect subjective data on post covid symptoms among them. Furthermore can conduct research both in hypobaric chamber flight simulations and during real time flights in the future to develop a biosensor technology to objectively monitor human performance in terms of alertness and fatigue.

Analysing the data of physical performance of 47 divers and parachutes with an average of 66,91 days after the covid-19 infection had shown a significantly higher pulse reaction in patients who reported fatigue as symptom- suggesting a worse physical condition and correlation between subjective and objective effects of fatigue on performance even 2 months after covid-19. From these preliminary results we can suggest, that further research and study in this topic may lead to solutions for mitigating the risks of covid-19 infection in aviation.

Keywords: covid-19, post-covid syndrome, aviation safety, human factor error, fatigue management

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I. Introduction

Aviation safety concerns are almost as old as flying itself. When scientists started to study that hot air is flying upwards, soon they developed the idea of using this uplifting force to carry a basket for transportation, which formed the first balloon flights. As the technology developed, these balloon flights carried human on board and achieved higher altitudes as well, beyond the fully compensated level of hypoxia caused by barometric pressure drop in higher altitude (hypobaric hypoxia) (approximately 2500 meters above sea level). The first aviation safety concerns might have been those experiments in which the aviation scientists put animals in the balloon basket to see the possible health effects, hazards of flying. The results of these experiments (the animals died when the balloon flew above a certain altitude, later on some unfortunate death of pioneer balloon pilots as well until one survivor could explain the signs and symptoms developing in high altitude) made the aviators concern some safety issues, such as the lack of oxygen that might be harmful to the human body in higher altitudes- and developed rudimentary "air bags" filled with ambient air to provide the necessary oxygen for the aviators in higher altitude and prevent sudden incapacitation or death of the aviators in the balloon flight. Up till today, these steps as identifying hazards, analyse and mitigate the risk by understanding the cause and possible prevention steps are the baseline of aviation safety management. My research is based on the knowledge about covid-19 infection published in international studies since the outbreak of this pandemic, from which I have identified covid-19 infection, and post covid symptoms- chronic fatigue in particular, as a dangerous hazard in aviation safety- in this study I analyse the risks that it might pose on aviation safety and search for the possible ways of prevention.

II. Correlation of covid-19 infection with aviation safety

2.1 From aviation technologies to the Human Factor

The Wright Brothers submitted their patent application for „wing-wrapping technique" to direct an aircraft in the air with changing the aerodynamic properties of the aircraft in 1904, after they have performed the first successful flight of a human-directed, controllable, motorised, heavier-than-air aircraft in 1903 [1] (Figure 1.), which was also the basis of modern aerospace engineering (Figure 2.). Besides the Wright Brothers, many other nation and people were involved and interested in flying as well, one prominent person among them was the French aviator called Louis Bleriot, who was also an engineer and developed an aircraft on his own as well, he has designed the first single-winged mono-plane, which was controlled and directed in the air by a combination of a joystick operated by hand and pedal operated by feet [2][3]. The French parachuter Pegoud had jumped out from a Bleriot mono-plane like this during a parachute test in 1913, when he observed the bizarre movements of the abandoned aircraft during his descent, and it came to his mind that an aircraft could be able to perform the same spectacular manoeuvres with the control of a pilot as well. Later on he made it happen, dazzling his spectators with vertical S-manoeuvres, inside loops and inverted half-loops with rolls [4. Pg.1. paragraph 1]. This was the birth of the modern aerobatic flights. These aerobatic manoeuvres were widely used during the first

World War in air combat situations and turned to be an essential part of aerial combat and skill demonstration flights during civilian and military air shows just like nowadays. Seeing these aerobatic manoeuvres, the aircraft engineer and aviator Bleriot himself said in 1922 that **"It is not the resistance of material which limits the aerobatic performance of the artificial bird, but the physiologic resistance of man, who is the brain of the artificial bird."** [4. Pg.1. paragraph 2]. This statement is even more true in concerning the modern complex aviation environment and technologies, the 4th, 5th generation combat- and aerobatic aircrafts, with an addition to it, that the resistance of the man- may it be the pilot, or any other essential coordinating or ground engineer or aviation mechanic personnel to support the pilot in successfully performing the task. This „weakest point"- the Human Factor is still the biggest error source in aviation safety up till today, 80% of aviation accidents are caused by human factor error [5. Pg.6.].
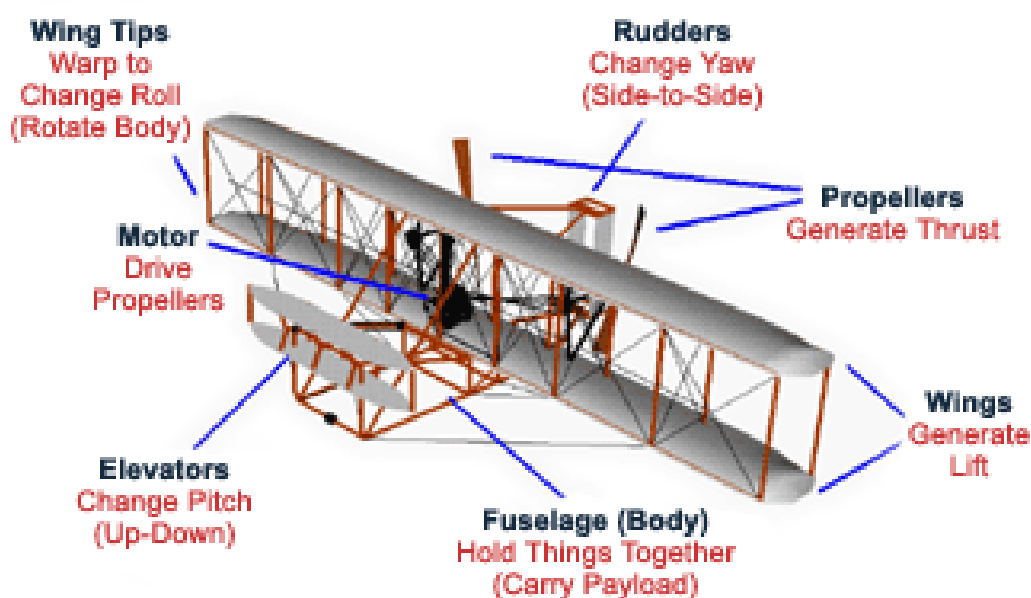
Figure 1.: the drawing of the 1903 Wright Flyer aircraft with engineering solutions of directing the aircraft in 3D in the air [6]
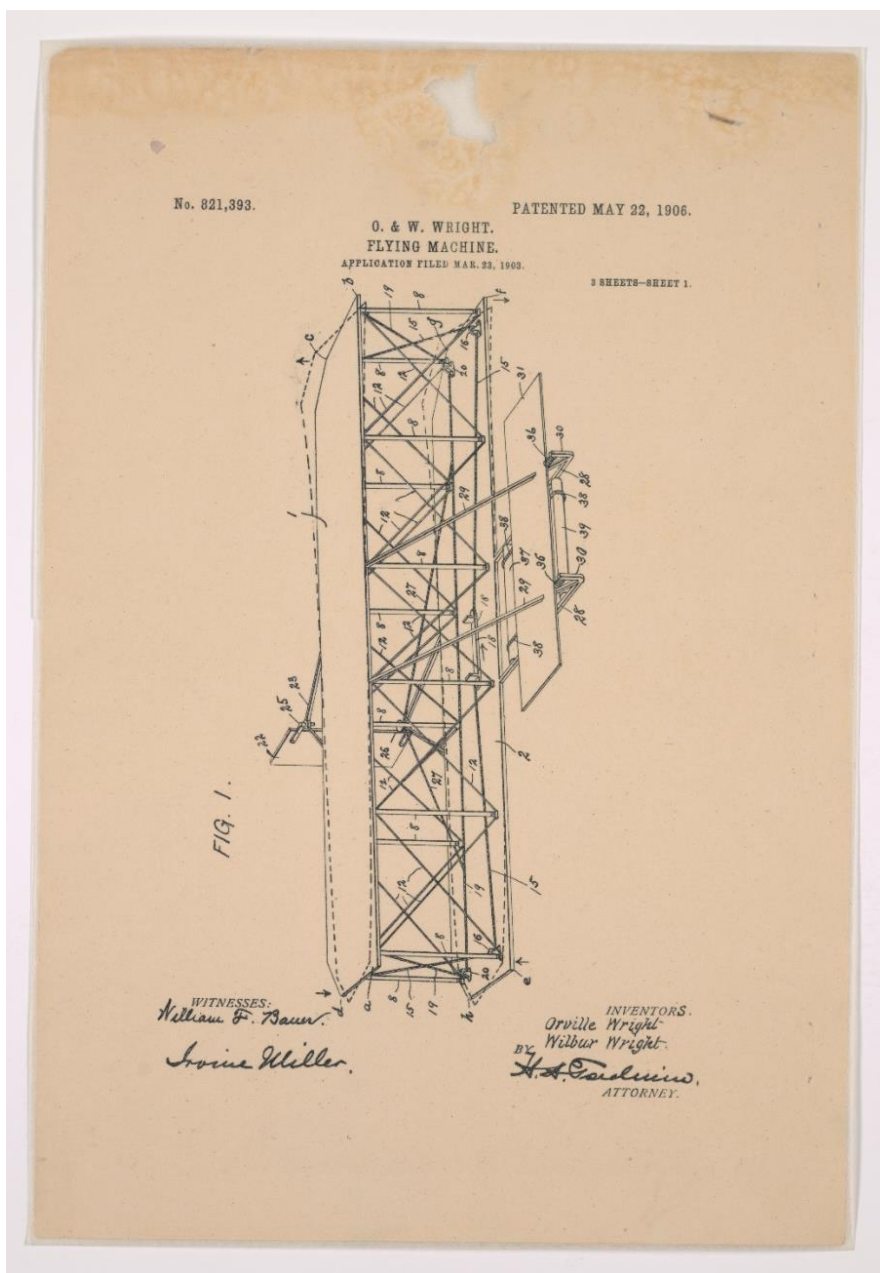
Figure 2.: The Patent Right of the Wright Brothers from 1906, US Patent 821393 [7]

2.2 The role of Human Factor in aviation safety

The Human Factor (HF) includes error-sources originating from human activities in a wide range. The intentionally committed rule breaking or violating the rules in effect are relatively rare, unintentional human errors occur in a much higher proportion of cases. Such unintentional human error could be the wrong execution of well-written regulations (due to not-knowing the regulation, or incorrectly performed actions in the well-known regulation, the lack of skills)- a skill based

error, or it could be the correct performance of a wrongly created regulation- a rule based error, or possibly forgetting about the regulations- knowledge based error. Besides these, many environmental factors may belong to Human Factor errors as well, for example communication mistakes (not clearly explained procedures or tasks), organisational errors (such as not providing the safe and necessary working environment and working conditions, incorrectly planned workload, or effects of economic decisions on safety). Several aviation safety model exists to explain these Human Factors, the most well know models are James Reason's Swiss cheese model (Figure 3.), which investigates the root causes of the human errors identified in the event chain development, another famous human factor model is the SHEL(L) model (Figure 4.) focusing on the dynamic equilibrium and continuous changes between the human- the environment and the machine, and Rasmussen's SRK (Skills, Rules, Knowledge) model- which is the behavioural approach of the human error [8]. One common feature of these aviation safety models is that 1 single individual mistake of the human- may it be intentional or unintentional-, does not definitely lead to catastrophe- if the other defence lines are well working within the organisation (for example using of check lists for control of actions, overview of actions by the co-pilot, air traffic controller or supervisor, correct communication -for example expressing uncertainty, asking for help or reporting an observed/noticed mistake-, internal and external audits of the organisation or financial resources spent on aviation safety training programs).
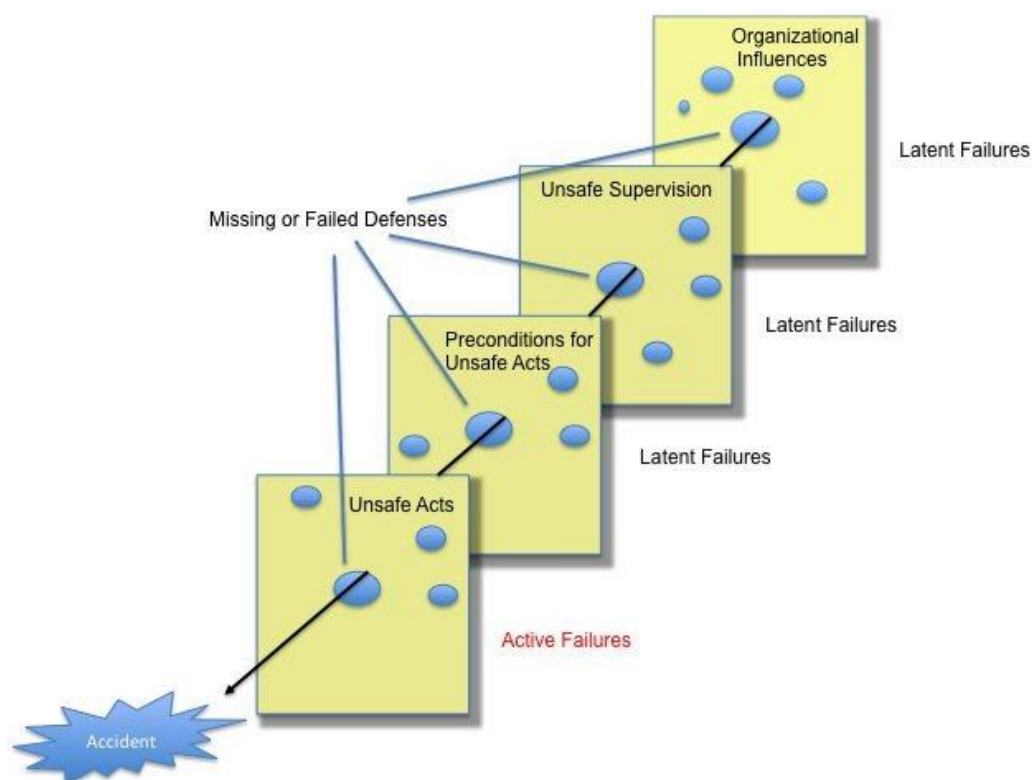
Figure 3: James Reason's Swiss Cheese Model of Human Factors in accident causation [9]
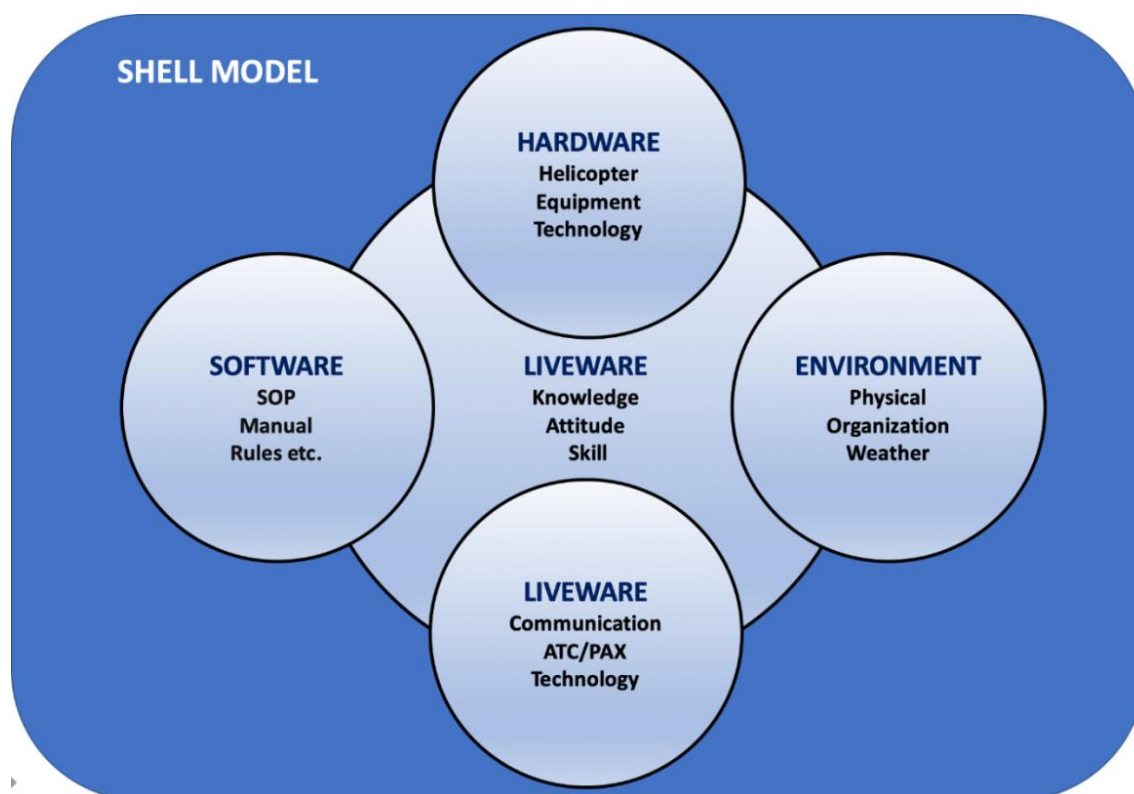
Figure 4.: SHEL(L) model of Human Factors in aviation safety [10]

2.3 Connection of covid-19 infection and post-covid syndrome with Human Factor Errors

Fatigue, lack of awareness (concentration problems), psychic pressure, stress, memory failures, lack of orientation are **among the most common human factor errors** [5. Pg.7]. The **most common symptoms and possibly long-lasting side effects and complications of covid-19** infection described in the international publications since the outbreak of the pandemic **belong to these human factor error preconditions**. The most common complaints from covid-19 infection are **fatigue, brain fog- concentration problems, memory problems, decreased cognitive functions, sleep disorders, psychic problems**. **Working ability** among patients after covid-19 infection is **significantly decreased** both in terms of longer reaction times and higher mistake-ratio[11]. Based on the international studies, a significant part of the covid-19 patients, approximately **60-70% reports long lasting fatigue,** 40-60% reports persisting respiratory problems (shortness of breath) and **25-45%** of patients reports **persisting psychological problems** in proportion to the severity of the covid-19 sickness [12]. Many of these complains increase the risk of human factor error in aviation safety and many of them remains even longer period after the infection. **Even 3, or 6 months after the infection**- when no more signs of covid-19 complications are detectable with the usual diagnostic procedures- a significant amount of patients still report **chronic fatigue** (about **70%** of patients **after 3 months,** and still **34%** of patients **after 6 months**), decreased quality of life and decreased functional capabilities (for example worse results on 6

minutes walking test, on lung function test or mental- cognitive and quality of life questionnaires) [13] (Figure 5.).

Symptoms persisting longer than 4 weeks after the onset of infection are called **post covid syndrome** [14]. Among pilots who suffered from covid-19 infection, the physiological problems and decrease in working ability developed from post covid complications might lead to emergency situations during flight- or may even cause sudden incapacitation of the pilot. This may **significantly increase the risk of human factor error** and therefore may **pose an aviation safety risk**. Severity of post covid symptoms and prevalence of post covid complications are positively correlating with the number of existing risk factors of the patient (age, chronic diseases etc.) [15] [16] [17]. Considering the fact, that extension of the age-limit in aviation is one of the biggest challenges in aviation medicine these days in declaring the maximum age for fitness for flight [18], according to the covid-19 literature, among the older pilots and aviation personnel we can expect and predict more severe symptoms during infection with more number and more severe post-covid complications after the infection as well- because of this, the older pilots and aviation personnel might need more medical care and longer rehabilitation period before returning to flight. **Among the civilian pilots and aviators**, who are less strictly medically screened and certified due to the less rigorous and less strict civilian aviation medical regulations referring to them, **post covid syndrome may pose even more aviation safety risk.**

POST-COVID SYMPTOMS THAT MAY POSE AVIATION RISK	FATIGUE	CONCENTR. PROBLEMS	PSYCHIC PROBLEMS
Comprehensive health assessment three months after recovery from acute COVID-19 Bram van den Borst et al. Clin Infect Dis. 2021 Sep 7;73(5):e1089-e1098. DOI: 10.1093/cid/ciaa1750 post-covid symptoms 3 months after inf, 124 patients	69%	36%	30%
Postdischarge symptoms and rehabilitation needs in survivors of Covid-19 infection, a cross-sectional evaluation S J Halpin,et al: Wiley Journal of Medical Virology, 27 July 2020 DOI: 10.1002/jmv.26368) **100 hospitalised patients 4-8 weeks after covid-19**	60-70%	n/a	25-45%
Long COVID and Post-infective Fatigue Syndrome: A Review, Carolina X. Sandler et al, Open Forum Infect Dis. 2021 Oct; 8(10): ofab440.Published online 2021 Sep 9. doi: 10.1093/ofid/ofab440 **115 Literature's meta-analysis until January 2021.**	average: **46 %** 50 % 4- 7 week **53 % 8 -11 wk.** 40% 12-15 wk. 28% 16-20 wk. **34% 28. week**	Similar, slighty lower %	n/a
Assessment and characterisation of post-COVID-19 manifestations, Marwa Kama et al., Wiley The international Journal of Clinical Practice, IJCP 2021;75 doi.org/10.1111/ijcp.13746 **278 young, relatively healthy patients**	**72,8%**	28,6%	28,6%
Post-acute sequelae of covid-19 **six to 12 months after infection**: population based study (Raphael S Peter et al,	**37,2%**	31,3%	21,1 %

BMJ 2022; 379 doi: https://doi.org/10.1136/bmj-2022-071050 (Published 13 October 2022) 6-12 months after covid infection, about 12.000 patients, cross sectional study, mean of 44,1 years old, **average of 8,5 months after** covid infection			

Figure 5.: Prevalence of some post covid symptom that may cause aviation safety risk based on the international literature (the author's own work based on [13], [12], [16], [15] and [19])

2.4 Effect of covid-19 infection of physical performance

In the first part of my research, I have studied the effect of covid-19 infection on physical performance. Due to the demanding aviation environment and physiology, every person working in aviation must have a special occupational licence- a flight licence. Just like with driving licence, every individual wishing to use a device (vehicle) that is strictly demanding on the human's active inputs to be controlled- and might be dangerous to other human beings if this control is lost- must prove the ability to control that device (vehicle) with the proper skills and knowledge to operate it safely, and also have to be medically certified as fit to drive- and due to the natural progression of medical problems in human- such medical certifications have to be repeated regularly in a timely manner. People working in aviation and aviation environment- exposed to high work load, possible hypoxia, hypobaria, gravitational forces, accelerations, noise, vibration, increased information processing workload and stress- are also obliged for a very specific medical aptitude test- the flight medical certification on a regular basis. Pilots, on board flight technicians, flight medics, stewards and stewardesses, parachuters, divers, air traffic controllers and ground mechanic service personnel are all obliged to undergo aviation medical examinations regularly, as all of these groups are either exposed to aviation environment or are essential part of performing flights in a safe manner. These aviation medicine examinations are executed in our Institute, and aims to screen out all and any medical problem that might be an aviation safety risk- to avoid sudden incapacitation during flight (work). Since the outbreak of covid-19 epidemic- considering the health problems it may cause- those personnel who are obliged to undergo our regular aeromedical examination board certifications- were called in to our institute for an extraordinary aeromedical examination if they have been infected with covid-19, to evaluate their fitness to fly after the covid-19 sickness and screen out the possible medical and/or psychological problems that could cause aviation safety risk. One of the performed examinations is aiming to test the physical performance- the aviator's physical stress tolerance and measure the physiological reserve capacities of the body. One well known complication of covid-19 infection might be the inflammation of the cardiac muscle (myocarditis) caused by the virus toxins disseminated in the body system during and after the covid-19 infection- which might cause severe or even life-threatening cardiac problems for a longer period when exposed to physical load even among young and otherwise healthy sportsmen. To avoid this risk, returning to sports and/or training is advised only gradually after covid-19 infection (the period and intensity of returning to sports is determined by the severity of the covid-19 infection) [20] [21].

2.5. Methods

Regarding this recommendation, we have performed this physical test with an exercise ECG treadmill ergometry with a modified Bruce protocol, which aimed to set a moderately increasing, more gradual physical stress on the patients' body system under a well monitored and controlled environment. The stages of the physical load levels were longer, and the load (speed and angle of ascent) was more gradually increased than the standard Bruce protocol (Figure 6.) Blood pressure, ECG, pulse rate, peripheral oxygen saturation was continuously monitored to closely observe the reaction of the patients' cardiovascular responses for the physical load and be able to detect early and terminate the examination if any complain (chest pain, shortness of breath, cardiac arrythmia) or any other pathological sign develops. With this method we can expose our patients to physical load in a safe way after covid-19 infection to determine the **physical performance objectively**. **Physical performance was measured** in maximal load (in Watt) and in Metabolic Equivalent (representing the maximum oxygen uptake-multiplication as a response to physical load). Besides these values, **physical performance can also be measured by the pulse reaction** to physical load. **The increase in pulse to physical load is negatively correlating to the physical performance, the physical condition** [22], the higher the pulse increases to physical load, the worse the patients' physical condition is.

Bruce protocol	stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Speed km/h	2,7	4,0	5,4	6,7	8,0
Inclination	10%	10%	14%	16%	18%

modified Bruce protocol	Stage 0	Stage ½	Stage 1	Stage 2	Stage 3	Stage 4
Speed km/h	2,7	2,7	2,7	4,0	5,4	6,7
Inclination	0%	5%	10%	12%	14%	16%

Figure 6.: classic Bruce protocol load stages and the modified Bruce protocol load stages that were used in the post-covid stress ECG examination (figure created by the author)

We have analysed 47 aeromedical examinations obligated parachuters and divers stress ECG results, with the mean of 66,91 days after the covid-19 diagnosis (mean age was $36,43 \pm 9,52$ years, mean weight: BMI=$26,59 \pm 2,44$ kg/m²) performed with the above described modified Bruce protocol treadmill ergometry. All patients were male, which is understandable in terms of typical gender distribution in aviation and the professions of parachuters and divers specifically in our study (mainly males- especially in state aviation which is our Institute's profile). 26 patients (55,32%) did not have any existing chronic diseases, 18 patients (38,29%) had 1 diagnosed chronic disease, 4 patients (8,51%) had more than 1 diagnosed chronic disease. The main diagnoses were hyperlipidaemia (HLP, 9 patients- 19,15%), high blood pressure (3 patients plus 1 patient diagnosed and treated with post-covid hypertension, total of 4 patients 8,51%), 3 patients with

obesity (6, 38 %, obesity-I with BMI between 30 and 35 kg/m²) and 2 patients with hypothyreosis (4,25%). The distribution of existing chronic diseases is described in Figure 7. The typical comorbidities were addition to HLP, these comorbidities were steatosis, Gilbert syndrome, obesity and high blood pressure- which are describing the natural progression of dietary mistakes- wrong diet cause HLP, that overloads the liver and produce steatosis and obesity, which progresses into high blood pressure if intervention and life style changes are unsuccessful. As our patients were state aviation members- also military professionals- they are more often and more strictly screened in aviation medicine terms than civilian aviation personnel, therefore in total, the age distribution (Figure 8.), the number of existing chronic diseases and relative few numbers of comorbidities represent a relatively young and considerably healthy population after covid-19 infection.

Diagnosed chronic disease	Number of patients in study group	BMI (in case of obesity)
High blood pressure	1	
Hyperlipidaemia (HLP)	5	
left Tawara bundle block	1	
Obesity (as single diagnosis)	1	BMI 30,7
hypothyreosis	2	
hyperuricaemia	2	
ventricular extrasystole	1	
Gilbert syndrome (hyperbilirubinaemia)	2	
cardiac mitral or tricuspidal valve insufficiency (minimal)	1	
Addison disease (primer hypadrenia)	1	
psoriasis	1	
obesity+ HLP+ steatosis+ Gilbert syndrome	1	BMI 32,2
HLP+ steatosis	1	
High blood pressure+ HLP+ steatosis	1	
obesity+ High blood pressure+ HLP+ steatosis	1	BMI 32,7
post covid high blood pressure	1	
NO chronic disesaes	26	

Figure 7.: distribution of existing chronic diseases in study group (the author's own work)

The pulse data measured during the examination were also calculated in percentage of the age-related vita max pulse (220-age) for us to be able to compare the pulse reaction (proportion of increase of pulse rate compared to starting pulse rate) to the standard physical load stages regardless of the age of the patient among the studied population. We have collected data from the patients about the individual symptoms, duration of covid-19 infection, medical treatment needs, possible complications, possible existing chronic diseases- and we have been searching for correlation between subjective complaints, covid-19 symptoms, existing chronic diseases and the objectively measured physical performance.
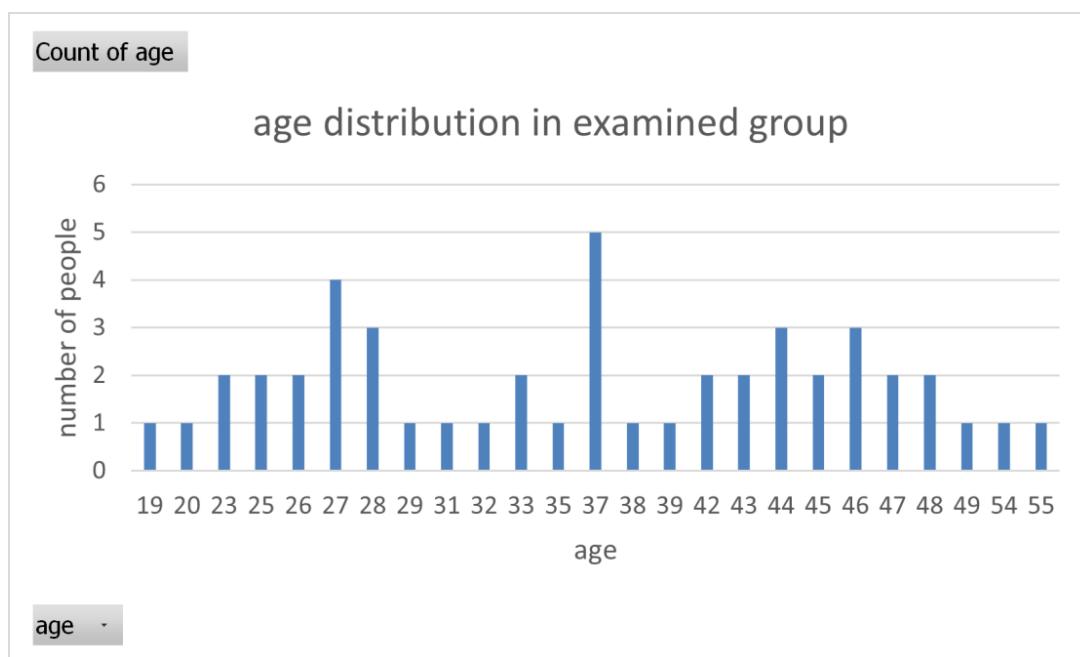
Figure 8.: age distribution in the examined group (the author's own work)

III. Results

3.1 effects of covid-19 infection on physical performance

Our results showed that the physical performance measured in **maximum MET** (metabolic equivalent) was **negatively correlating to the pulse reaction in every stage** of physical load (r= -0,374 - -0,706; p<0,01), which confirms the above-mentioned literature statement, that physical condition negatively correlates to pulse reaction. Among the subjective symptoms of covid-19 infection, **fatigue was significantly correlated (p<0,05) to pulse reaction** both in pulse rate and in age-related vita max pulse percentage in every load stage. **Those patients who reported fatigue**, as subjective symptom due to covid-19 infection, reacted to physical load with higher increase in pulse, therefore **were objectively in worse physical condition at the time of the examination (about 2 months after the infection)** (Figure 9.). Our results showed that the existing chronic diseases were correlated with higher pulse reaction, therefore worse physical condition even after this 2 months following the infection and the existing chronic disease was positively correlated to the development of fever during the infection- therefore existing chronic disease (for example among civilian pilots and aviation personnel) cause more severe symptoms and more post-covid complications. These results are in accordance with other international literature results describing correlation between the existing chronic diseases and more severe effects and complications of covid-19 infection. Neither the measured blood pressure- nor the peripheral oxygen saturation showed significant correlation to any subjectively reported symptom, nor to any value measuring physical performance (MET, Watts or pulse reaction). Apart from fatigue none of the other reported subjective covid-19 symptom showed significant correlation to

physical performance values during the examination. It seems so, that the other typical symptoms of covid-19 infection (such as agnosia -loss of taste- and anosmia -loss of smell, or fever) or the duration of the sickness does not effect the objectively measured physical performance, also not effecting the response of circulatory or respiratory systems to physical load (such as blood pressure and peripheral oxygen saturation) 2 months after the covid-19 infection. These systems might have been regenerated after the infection in this 2 month period.

These **results confirm a hypothesis of my research that the fatigue**, which according to the literature develops very often during covid-19 infection and persist for a longer period in post-covid syndrome as well, **significantly effects the physical performance**- therefore the human working ability, **and so it may pose a significant aviation safety risk even 2 months after** the covid-19 infection.

Figure 9.: effect of fatigue on age-related vita max pulse percentage (the author's own work)

3.2 Aviation safety aspects of fatigue

The above discussed fatigue is one of the most known human factor errors leading to aviation safety risk, because in physiological effect- the fatigue cause very similar workability and performance decrease in human like alcohol consumption [23]. The importance of fatigue in aviation is also emphasized by the International Civil Aviation Organisation (ICAO), that requires the aviation organisations to run Aviation Safety Management Systems (ASMS) [24], and an important separated part of it is regulation for ensuring proper Fatigue Management [25] to reduce the risk of human factor error caused by it. Fatigue management therefore is an essential part of aviation safety management systems.

The aviation safety risk of fatigue was well demonstrated in the NASA's Nap Study in 1994 [26], in which they observed the alertness of pilots on transcontinental long-haul flights with various methods- including EEG (electro encephalogram, to observe the brain activity with monitoring brain waves). Human brain shows a well differentiated wave form during sleep-different from the wave forms characterising alert state, awareness (Figure 10.). The more active the brain is, the faster the brain activity is with higher frequencies detectable. When the alertness falls, when we get tired, the brain waves slow down, most times a slow eyelid closure occurs, and slow alpha waves (8-12 Hz) appear on EEG characterising the border between awakeness and sleep, maybe theta waves (4,5-7Hz) typical for superficial sleeping also appear on EEG. **In case of fatigue** or exhaustion- if resting is not possible, the brain can produce short periods of ***unconscious sleep- from 5 to 15 seconds long***- these are called ***microsleeps***, and these microsleep episodes are ***unnoticed*** by the person. During such microsleeps the EEG waves do not show the typical deep sleep delta wave forms, but hence the brain is turning to a rest-mode, the alpha waves-characterising the boarder of awake and sleep stages and maybe the theta wave -sign of superficial sleeping appear on EEG. Such microsleep episodes occur in our everyday life as well without any major consequences, for example during reading, studying or even during monotonous work, however if microsleep happens during driving for instance due to fatigue and monotonous activity to protect the brain from too much workload, that could have dangerous or even life-threatening consequences. **In flying, where even a small thoughtlessness might lead to a catastrophe, such unconscious microsleep events may cause major aviation safety issues**. The aim of the earlier mentioned NASA Nap study was to prove, that it is safer in aviation to allow the long-haul flight pilots to have short terms of tactically planned and timed naps, to avoid the human factor error possibilities driven from overload and fatigue of pilots. Pilots were divided into 2 groups; one group were allowed to have short naps during flight whilst the other group was not allowed to have naps during the flight. They observed awakeness, alertness with EOG (electro ophtalmogram-detecting the movements of the eyes, psychomotor vigilance test (examining the reaction times and information processing ability) and also with EEG waves monitoring to detect the number of microsleep episodes during the last 90 minutes of flight, which includes the most dangerous part-the descent and landing phases of flights. Those pilots, who were not allowed to rest with naps, therefore the pilots who were more fatigued, produced much more microsleep episodes (in average 120 microsleep episodes in total of the last 90 minutes of flights, from which 22 microsleeps happened *during the landing* procedures), than those pilots who were allowed to rest with naps (having strategic 40 minutes naps during flight in pre-planned timings, these pilots produced in

average only 34 microsleep episodes in the last 90 minutes of flight and no microsleep episode occurred during the landing phase).

As we could see from the international literature, covid-19 infection and post-covid syndrome cause chronic fatigue in 60% of cases still after 3 months, and in 34% of cases even after 6 months, additional to this sleep disorders also develop and persist in 30,8% after 3 months [27] and still in 21,1% after 6 months [28] in covid patients which can even aggravate the severity of fatigue in post covid syndrome- therefore it can greatly challenge the fatigue management system of aviation safety.

Fatigue is a well-known and feared human factor error origin in aviation safety, and covid-19 infection might significantly increase the prevalence and severity of fatigue in aviation personnel- however even the fatigue management documentation does not mention much objective measurement methods- **fatigue is mostly measured by self-reporting subjective scales or questionnaires**. This **subjective measuring way has several pitfalls**, one of them is that it could only function well in a really well working and not punishing „just culture" where the pilots, air traffic controllers or ground mechanic service personnel would be brave enough to admit and report that he or she is too tired for safe working and therefore unfit for duty. Other pitfall is the fact that the individuals most times overestimate their own working abilities, not noticing the shortfalls in their accomplishments, not recognising the decrease in their performance due to fatigue. Microsleeps for example are *unconscious* signs of fatigue, the person most times does not even notice that it happened, does not realise the shortfall in his or her performance. However, these microsleeps last short time (5-15 seconds), in the very dangerous environment of aviation such short time periods of unawareness can lead to catastrophe without the person even noticing and reporting their error.
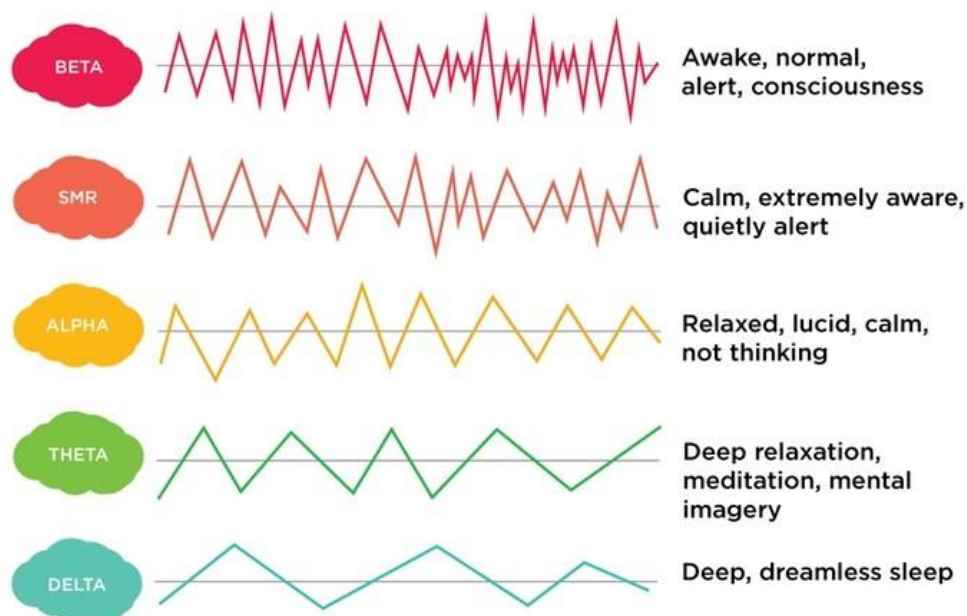
Figure 10.: picture of brain wave types [29]

In aviation safety aspect, it would be much safer to measure fatigue as sign of human performance of awareness/alertness objectively, therefore it is worth to research the possible methods of objectively detecting and measuring the level of fatigue to reduce the aviation safety risk of covid-19 infection.

3.3 The role of biosensors in fatigue measurement possibilities

The most accurate way of measuring the brain's awakeness, to detect the microsleep episodes is the EEG (electro encephalogram) monitoring as the authors did in the NASA Nap Study. The brain cells' activity produce electrical voltage fluctuation. The EEG is a non-invasive examination, based on detecting this fluctuation in electrical voltage between the millions of brain cells, monitoring the brain cell activities. This requires electrodes which can be fixed well even on the hairy scalp (skin of the skull) and can detect the electrical activities between brain cells. The changes between the electrical activity between 2 electrodes forms the shape and picture of the brain wave in EEG recording. These voltage fluctuations can be characterised by frequency, registration and timely representation, visualisation of these fluctuations produces the picture of the so-called brain waves. The more electrode leads we use, the more exact the mapping of activity of specific brain areas will be. The faster the brain waves are, the more active that brain area is. When we are awake and alert the EEG shows fast Beta waves (13-30 Hz), the most intense brain activity- the strong mental workload is characterised by the fastest wave form, the Gamma waves (30-50 Hz), and brain waves get slower and slower with reducing frequencies during rest, sleep and deep sleep. **On the edge of awakeness and falling asleep**, in a relaxed state of mind **Alpha brain waves appear (8-12 Hz),** then we fall asleep into the superficial sleep of REM (rapid eye movement) stage, which is characterised by the occurrence of Theta waves (4,5-7 Hz), while during deep sleep the brain produces the slowest frequency Delta waves (0,1-3 Hz) [30] (Figure 10.).

In the initiating phase of sleeping, when we loose awareness and right before falling asleep, **Alpha waves (8-12 Hz) appear on EEG**, we could say that these Alpha waves are signalling the edge between awakeness and falling asleep, therefore **detection of these Alpha waves are suitable to observe the point of awakeness decline, the most vulnerable point of human performance**. The Alpha wave activity symbolises the calm, relaxed, quiet mind-state, just before the individual falls asleep, so Alpha wave activity can be expected when the human mind is about to "turn off" because its fatigued and needs to rest. In sleep deprivation, work overload, fatigue, or exhaustion, especially in monotonous work environment like low traffic periods for air traffic controllers or long-haul flight pilots flying in cruise altitude, the above explained unconscious microsleep episodes may occur. Guilleminault et al. in 1975 originally defined *microsleep* as a "short-lasting burst of typical stage 1 sleep as described by Rechtschaffen and Kales and/or a short burst of synchronous Alpha/Theta activity recorded." [31]. This short, 5 to 15 seconds period with slowing brain waves, appearance of Alpha and/or Theta waves is totally unconscious, generally-but not always- comes together with the feeling of drowsiness, the slow closure of eye lids, waste majority of individuals does not even notice these short episodes of decrease in awareness and temporary reduced working ability and decline in performance- and the aviation safety importance is originating right there, that the individuals do not realise their reduced performance, therefore do not even notice the very high probability of human factor error during

these short time-slots. Many studies discussed the role of microsleeps in car accidents during longer, monotonous routes or after sleep deprivation. Because microsleeps do not always come with the closure of the eyelids, it may occur even with open eyes, the in-built security systems of the newer cars or trucks (like the eye-movement detector incorporated into the central rear-view mirrors) might not be able to detect all these microsleep episodes as first signs of falling awakeness due to fatigue. It would be much safer and objective to monitor the brain waves- the Alpha waves in particular- to detect the reduction of useful awakefullness with EEG sensors.

The previously described NASA NAP study was executed in 1994, when EEG devices were robust in size with long and many wires to connect the electrodes to the recording machine. Due to the relatively big space-needs of these signal processing EEG units, during the nap study they have only recorded the electrode signals on board and processed the recorded data later on in the ground laboratory. Nowadays there are much more modern and advanced sensor technologies, signal detection, forwarding and processing is also faster and smaller in size with even bigger data capacity than their ancestors. Present days the biosensor technologies capable of detecting, recording, storing, forwarding and processing multiple biological parameters of the human body are in their heyday and these technologies are getting smaller and smaller in size while they are fast and rapidly developing. Many „wearables" biosensor technology are available mainly targeting the consumer market (everyday users) for assisting sport activities, supporting relaxation techniques, or monitoring sleep quality.

There are examples for **the military/tactical utilization of these wearable biosensor technologies** as well [32], both in forms of classic wearable devices such as earplugs, smart watches and also in the form of the **most advanced biosensor technologies- the smart textile.** This last mentioned technology developed the **smart clothes**, as biosensors reduced in size and advanced to wireless data transmitting technologies too enabling the biomedical engineers to integrate the biosensors into flexible, wearable textile. To grant the necessary tight contact to body surface its usually used for designing smart cloths underwear and they are capable for example estimating the soldier's health status and physiological stability by measuring the life signs and stress level of the individual. Some in-built biosensors may even detect environmental dangers such as chemical, biological, radiological or nuclear (CBRN) threat, viruses, extreme environmental temperature or barometric pressure. In case the soldier is injured, monitoring the heart rate, blood pressure, breath rate can provide more exact data about the health status of the injured person- these biological parameters correlate very well with the severity of the injury, and the biosensors may also forward GPS coordinates for exact location above the usual information of the reports sent by the units. The useful information about the injured personnel might be transmitted even to a further rescue centre, which could be a great help in determining the needs and capabilities prepared within the emergency response teams, making the response to such emergency faster and much more accurate and effective. The wearable biosensor devices, depending on the type, are usually capable of measuring the sport performance (step count, distance achieved, calories burnt etc) and to detect basic life signs (pulse, blood pressure, peripheral oxygen saturation, breath rate, body temperature and even ECG signs in particular models), however all manufacturer clearly states, that these devices are not suitable for medical diagnostic aims, the data

analysis results performed by the biosensor is not equal with a medical diagnose only for informational data.

There are **available biosensor technologies for detecting EEG signals** as well, also mainly targeting the consumer markets, aiming to help better life quality with assisting relaxation techniques, stress management, and in connection to this- to monitor sleep quality. These EEG sensors are designed for everyday use so they should be comfortable, far not working with such big and robust apparatus like the old times EEG devices used in medical examinations, however the price for these size reductions is the limited information and reduced value of the recorded data. Typically, they have fewer electrode leads and due to the limitations of wearable design, the number of monitored brain areas are limited too. The challenges for EEG electrodes- especially in comfortable wearable design, is to stay in place even on the hairy scalp, even during motion (movements), detect good quality of signals thru the hairy skin- for this the electrodes required transmitting medium such as gel or water between the electrode and the skin making the use of them pretty difficult and uncomfortable. Nowadays dry EEG electrodes are also available and widely used, however with dry electrodes we have to watch for the quality of the signal detection which can be weaker without the transmitting medium. Due to designed for everyday active use also in motion, these wearable EEG devices have a challenge in signal noise reduction as well when detecting signals from the hairy scalp during motion and also challenging to make a design that is comfortable to wear for longer times like during sleep. To store recorded EEG data in-built memory cards are available now, offering post-recording data process, and wireless data transmission is also available in newer models with a separated (much smaller sized) signal processing and recording unit. The most modern EEG sensors are not just using dry electrodes (no need for uncomfortable transmitting medium) but also capable to transmit recorded signals wirelessly thru Bluetooth technology, and the signal processing and recording unit and software can be as easily solved as a mobile phone application. This design is used for EEG sensor devices used for example monitoring sleep quality or improving the effectiveness of stress management or relaxation technique, providing an easily understandable, user friendly and simple platform to evaluate and understand the EEG signals detected by the biosensor device. The wearable EEG device is detecting the brain waves, observe the changes in brain waves, some of them can as well detect the occurrence of Alpha and/or Theta waves and with this, the device software is able to give feedback to the user whether the executed relaxation technique could provide real rest to the brain or not. The wearable EEG devices targeting to monitor the sleep quality are detecting the changes in brain waves the same way, differentiate the Alpha waves characterising the initial stage of sleep (falling asleep) and superficial sleep, they can identify the Theta waves that occur during REM phase of sleep and the slowest Delta waves which appear during deep sleep phase. The number, the duration and cyclic change of these brain waves, the *sleep cycles*, describe the quality of sleep so the software of the EEG sensor device can give a feed back to the user about the individual's last night and even last days or weeks of sleep quality (depending on data storage capacity).

3.4. Possibility of using EEG biosensor technologies in aviation safety

As I have explained in previous chapters, fatigue is a well-known risk factor in aviation safety, majority of covid-19 patients develop long lasting fatigue in the post-covid period, and this chronic fatigue seems to persist even 3- (in 60% of cases) or 6 months (in 34% of cases) after the infection [16], and this significantly increase the risk of human factor error in the complex environment of aviation. The most objective way to measure the human performance decrease as a result of fatigue is the detection of EEG waves (brain activity) to differentiate awakeness from initial stages of falling asleep and determine the moment when the human awakeness and performance is falling. **Detecting the Alpha and/or Theta waves on EEG can identify the moment when the human brain starts to fall asleep due to fatigue** (detecting the microsleep episodes), which is the most sensitive moment in the decrease of human performance and working ability hence these microsleeps are *unconscious, unnoticed* deterioration of wakefulness, therefore **detecting occurrence of these Alpha and/or Theta brain waves may alert the critical fall of human performance and reduce the aviation safety risk** with preventing human error developing from fatigue.

Currently there is no adequate EEG biosensor technology available on the market which would be acceptable to be used in aviation environment, as the available EEG biosensor devices are targeting the consumer market mainly, and in their current design are not suitable for utilization in aviation. The most suitable design for (also military) aviation would be the smart cloth technology, but there is no EEG sensor yet in smart textile design. The wearable EEG biosensor devices studied in this research are not compatible with the ergonomical, information technological (IT), and information security requirements of (military) aviation (Figure11.)

Some among the available EEG biosensor devices (for example the Emotiv Epoc X (Figure12.) or Emotiv Insight 2 (Figure 13.) or the BitBrain Diadem (Figure 14.) might be suitable for scientific research as well considering their EEG detection quality and ability, in some groups of aviation personnel for sure- considering the working environment, most likely research among air traffic controllers or ground mechanic crew (8-12 hours shift, prominent periods of monotonous work load and vulnerability for fatigue caused performance deterioration with increased risk of human factor error in aviation safety issues). However these devices could only be used for testing some of the hypothesis of this research (that the prevalence of fatigue and microsleep episodes are higher in covid-19 patients and that this increased risk in aviation safety remains for a longer period after the infection than what we can detect or diagnose with our current examination methods, and the hypothesis that there is a difference between the prevalence of such post-covid complications like chronic fatigue between the military and civilian pilots), not suitable for regular use especially not suitable for being used during flights because none of these devices are small enough, not ergonomically fitting into the aviation equipment and environment of an aircraft or pilot helmet, nor compatible with the data transferring systems of the aircrafts.

The basic requirements for an EEG biosensor device which is usable in aviation environment are:

- minimum 3 leads (frontal, parietal, occipital regions), but preferably 4 leads, including temporal region leads too

- use of dry electrodes
- high quality of EEG signal detection (especially important the quality of noise reduction in the signal due to the characteristically high noise and vibration plus dynamic movements in aviation environment)
- EEG electrodes should stay in place on hairy skin (must consider the high gravitational forces, accelerations as well that effect the electrodes physically during flights)
- Should fit ergonomically into the currently used equipment without causing extra load on the user (helmet and radio communication devices, should be comfortably wearable besides these and also optical devices even for a longer period inside the helmet without causing uncomfortable pressure or pain)
- Appropriate and optimal, flight-approved power source (air worthiness certified, resisting to rapid changes of temperature and barometric pressure, not prone to self-ignition, not flammable)
- Wireless data transfer ability which is compatible with the information technology systems of the aircrafts, or in the absence of this: appropriate data storage capacity providing later post-record data processing)
- Proper and expected protection of the transmitted medical data (medical confidentiality)
- appropriate software to analyse the EEG signals, identify the Alpha and/or Theta brain waves (identifying microsleep episodes), monitor the prevalence of these microsleep episodes, therefore detect the decrease in awakefulness and ideally notify the user(s) about this (alert the critical decrease in awakefulness therefore avoid the aviation safety risk of decrement in human performance and prevent the sudden incapacitation of aviation personnel)

Figure 12: Emotiv EPOC X EEG device [33]   *Figure 13: Emotiv Insight 2 EEG device* [34]

name	EEG leads	Ergonomy	Software	battery	
MINDWAVE headset 2 NeuroSky EEG	1 + ref and grounding	++	+	6-8 hours	1 lead not enough
iMotion EEG	More leads, but only frontal	Head band+ long wires	+	n/a	uncomfortab
Emotiv EPOC X	14 watery electrodes	Headset style+ flexible electrode arms	+ W.less BT	9 hrs	cc. 900 USD
Emotiv Insight 2	5 semi-dry electr.	headset from 5 main regions	+ W.less BT	20 hrs	cc. 500 USD
Emotive earbuds MN8	2	Miniature earplug size, stress and attention-decline monitoring	+ W.less BT	6 hrs	Not suitable for Alpha wave analysis
MUSE 2 headband MUSE S elastic headband	? No avail. info Frontal and parietal?	headband, but rather for sleep-, relaxation monitoring (neuro feedback)	+ W.less BT	5 hrs	cc 270 USD 380 USD For EEG analysis?
DIADEM EEG BitBrain	12, dry electrodes 4 region	headband+ cross bands 10 m range of BT device	+ W.less BT Micro SD	8 hrs	Small box for data process
AIR Bitbrain	8 frontal+occipital	Only headband	+ W.less BT	8 hrs	
HERO BitBrain	9 but no occipital	headband+ cross bands	+ W.less BT	3 hrs	

Figure 11.: comparism of currently available EEG biosensor devices (the author's own work)

Figure 14.: BitBrain Diadem EEG device [35]

IV. Summary

International publications about the covid-19 infection revealed many acute symptoms and long term complications of the covid-19, that are significantly deteorating the human performance which means a high aviation safety risk in the demanding aviation environment, therefore it is reasonable to research the field and focus on how to reduce the risk and prevent possible human factor errors developing from the post-covid syndrome among the people working in aviation industries. Chronic fatigue is one among the most common and long lasting post-covid complaints and the best way to measure human wakefulness would be an objective measure method- a wearable EEG biosensor device monitoring the brain activity, which has air worthiness as well.

For the special requirements in aviation (see chapter 3.4.), a wireless smart cloth EEG biosensor technology would fit the most, which could be inbuilt into the inlay of the helmet- or inbuilt into a smart textile of the cap the pilots may wear under the helmet, supported by a proper data analysing software and data transmitting and processing system and an air worthiness certified

power source, unfortunately there is no available EEG biosensor in smart cloth technology. In terms of objective measurement of aviation safety risk imposing post covid symptoms- chronic fatigue in particular, I think developing such EEG biosensor technology is possible, considering the tendency of miniaturisation and improvement of quality in biosensors with wearable design, in non-flying aviation personnel like air traffic controllers, ground mechanic support personnel, and focusing on smart cloth technologies, in helmet in-built form for pilots as well, with involving the necessary research and develop founds and industrial partners. The next challenge will be to get the developed EEG biosensor device air worthiness certified, and design it in a way that is suitable for mass production and available purchase price as well, because such EEG biosensor technology -as an innovative *objective* measure method for human awakefulness- could be considered as an important (if not essential) part and tool of fatigue management systems not just in post covid patients and not just in aviation, but in every working place with increased or monotonous work load that is sensitive for human factor error due to fatigue caused deterioration of performance and working ability (for example emergency service members, shift workers, long distance drivers, train engineers, tram or bus drivers etc, data analysts, accountants and many other high work load occupation).

Continue of analysing the regular and extraordinary post-covid aviation medicine examination results may help to understand the exact conditions that might reduce the human performance of the aviation personnel and may help to develop new methodology and possibly new objective measure devices to mitigate the risk that these post covid symptoms pose on aviation safety, however such results and biosensor devices would be very useful in the future for any human performance evaluation under any circumstances not just in terms of post covid syndrome and could be useful for all fields of the human performance based employment market.

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[31] Christian Guilleminault, Michel Billiard, Jacques Montplaisir, William C. Dement: Altered states of consciousness in disorders of daytime sleepiness, Journal of the Neurological Sciences, Volume 26, Issue 3, (1975) 377-393, ISSN 0022-510X, https://docksci.com/altered-states-of-consciousness-in-disorders-of-daytime-sleepiness_5e5ce5eb097c4765508b45a2.html (downloaded: 2022.11.17.)

[32] Irad: The future of smart tactical clothing source: https://xmetix.com/the-future-of-smart-tactical-clothing/ (downloaded: 2022.11.16.)

[33] Figure 12.: Emotiv EPOX X EEG sensor, source: https://www.emotiv.com/

[34] Figure 13.: Emotiv Insight 2 EEG sensor, source: https://www.emotiv.com/insight/

[35] Figure 14.: BitBrain Diadem EEG sensor, source: with permission of the company https://www.bitbrain.com/neurotechnology-products/dry-eeg

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Doctor Fautsus of Marlowe:
The Evil at the frontier of hermeneutic and therapeutic reading

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Unlike person-centered bibliotherapy (Béres) the text-focused hermeneutic bibliotherapy or literature therapy (Jeney) connects the therapeutic dimension with interpretation (Gilbert, p. 242.) As a doctoral student of Edit Gilbert I approach bibliotherapy from hermeneutic views.

My first premise is that hermeneutic bibliotherapy can be practised disregarding psychiatric goals, with the aim of relieving individual anxiety as a universal experience (Heidegger, Yalom). My second premise is that the classical literary works have a direct communicative power making it possible to cross temporal distances (Gadamer, p. 325.) and to reach the imagery world of individual Psyche (Szabó, p. 46.). The so-called classics have the ability to start up the cognitive linguistic process from universal to individual, from archetype to symbol, from symbol to conceptual metaphor and finally to linguistic expression (Szabó, p. 201.). The concept of Satan is a special existential concern in our culture. So my third premise is that in terms of Yalom it has to do with the loss of freedom or individuality in an interpersonal relationship. Self-reflecting Self appears during the Renaissance in European literature (Bókay) and it can be surely interpreted as the manifestation of the collective shadow personality of Christian culture. Nevertheless symbols can be understood only individually in a dialogue (Jung, 1993., p. 55.) by metaphoric language (Szabó, p. 18–19.). These metaphors are called identity themes by Norman Holland, following Freud (Holland, 2016.), and are suitable for mapping the imagery world of individual Self, as conceptual metaphors are based on images that turn into symbols (Szabó, p. 196.).

Hence the goals of my research is to develop a hermeneutic model of bibliotherapeutical reading, which connects interpretation with the therapeutic method of symbolization (Kapitány–Kapitány). The hermeneutic model of translation (Steiner) can serve as a model of this process. The group leader in this process is similar to translater in the sense of Gadamer. (Gadamer, p. 344.). At the University of Pécs, in the fall semester of 2021, based on the method of close reading, the reader response theory of Norman Holland (Holland, 2008.), the four ultimate existential concerns of Irvin Yalom and the archetypes of Carl Gustav Jung (Jung, 2017., p. 10–43.) with a group of four students we read Doctor Faustus of Marlowe with the aim of shaping our individual Satan. In advance, everybody collected their nightmares, and we also used expressive writing (Pennebaker-Evans) and the Renaissance Visconti-Sforza tarot-cards, based on Jungian archetypes, to help forming random unconscious associations.

Thereby the members of the group were able to verbalize their anxieties, personalize their individual Satan, finding him among their close family members or former lovers. Meanwhile a lively dialogue with a more than four-hundred-year-old classical literary work could be conducted.

Keywords: Bibliotherapy, hermeneutic, symbol therapy, Self, identity

I. Introduction[1]

Bibliotherapy is just over a hundred years old.[2] It literally means healing through books. We mean the purposeful application of various creative writing-reading methods to treat physical and mental problems. It is essentially a practice, not a theory, as Éva Jeney emphasizes. But she also adds that every definition of bibliotherapy "starts from some theoretical premise, which does not mean that the author has a comprehensive theoretical concept of healing with literature."[3]

The aim of my doctoral work is to develop an ideal model of bibliotherapy group reading, which uses the results of structuralist, analytical and hermeneutic reception theories that approach the relationship between the text and the receiver from different views, aiming to create the integrity of the personality. During the crisis of values experienced in our time, there is a general need to get answers to our existential questions, to reinterpret the relationship between the self and the world, and to recreate our identity. It is therefore not about the comprehensive theory that Éva Jeney lacked here either, but about the modeling of an idealized group reading process on the systematic application of theoretical keys and my experience as a group leader.

The theoretical framework of this model is provided by hermeneutics, insofar as it sees the human world as understandable in conversation, in the dialogue of questions and answers. And also because hermeneutics somehow perceives this world as symbolic, as Georg Friedrich Meier once imagined it following Leibniz.[4] Perceiving existing things as a chain of signifiers, looking for meaning, and a message in them, results in returning to the interpreter, who asks the world, the other person, and the text in front of him: "Where am I here and now in the world?" Hermeneutic bibliotherapy designates the self-interpreting position of therapeutic reading from the point of view of this pan-semiotics. It interprets the recipient not only as a created being, but also as a perfect sign that represents itself and interprets itself. In fact, he looks for himself in every text, but he sees the completeness encoded in himself. He experiences the completeness of the Jungian *Selbst.*[5]

The evolutionarily developed instinct in humans, which prompts us to transform phenomena into images, enables us to perceive reality in symbols.[6] In such images, behind universal human experiences, typical responses to typical situations, actions, roles, images attached to the living and inanimate world, i.e. archetypes, are hidden. For a bibliotherapy model that seeks to question the existential situation of a person, to resolve their anxieties arising from their identity crisis, to lead the receiver back to his cultural roots and the sources of his traditions, and interprets reading as an initiation, a rite, myth criticism working with archetypes offers conceptual and methodological concepts.

Bibliotherapy primarily means the use of established psychotherapy techniques, and its success can be measured by whether the group members achieve the set goal. For example, can they clarify their relationship with their mother, can they process their grief, can they get rid of their addictions with the help of reading texts and excerpts of different genres and standards. In agreement with Éva Jeney, the theory, which bibliotherapy partly borrows from various trends

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[1] Thanks to Andrea Imrei for reading the first version of this study. I have incorporated her comments into my work.

[2] Jeney É.: Biblioterápia, irodalomterápia. Helikon. 2016. vol. 62. no. 2. p. 151.

[3] Ibid. p. 153.

[4] Szondi P.: Bevezetés az irodalmi hermeneutikába. T-Twins. Budapest, 1996. p. 98.

[5] Jung C. G.: Aión. Tanulmányok a Selbst szimbolikájához. Ford. Viola József. Scolar. Budapest, 2017. A *Selbst*-ről szóló fejezet: pp. 30–43.

[6] Jung C. G.: A tudattalan megközelítése. In: Az ember és szimbólumai. Ford. Dr. Matolcsi Ágnes. Göncöl. Budapest, 1993. p. 68.

in literary criticism and psychology, is necessary for determining starting points and selecting methods. So, again, this is important background knowledge from a practical point of view.

The activity of the ideal reading group I imagine can actually only be called bibliotherapy in a narrower sense. Therapy, because the group leader trusts in the aesthetic effect of texts, in their power to transform a personality. The prerequisite for this is, of course, that he believes in people. In the fact that man is inherently capable of change. But he also believes that there is permanence in the world and that the world can be understood within a horizon. This understanding, as I have already indicated, is revealed in the hermeneutic conversation with the world, the essence of which was formulated by Hans-Georg Gadamer as the positive intention of what the other person wants to say.[7] The existence, position, feelings, and inner world of the other are signs to be deciphered just like our own.[8] In this discussion, the archetypal model of any kind of "other world" is the literary text. But only the good text. I dare to risk that the masterpiece, which captivates us, tells us something new and keeps us excited even after decades, is somehow able to reflect the milkiness of the world, the psychic imprint of which is the Jungian *Selbst.* By aesthetic quality I therefore mean something similar to complexity as Harold Bloom: "masterful use of figurative language, originality, depth of thought, wide knowledge and richness of diction".[9]

The message of a good text must be deciphered, its code must be broken, it must be penetrated aggressively, the mythical structure encoded in it, i.e. idealized human content and human experience, must be forcefully brought to the surface. Once that is done, and the code breaker appreciates that he has brought a useful treasure with him, he can adapt his own world. He can restore the hierarchy of the world that is tilted in himself. Now he can create new narratives, create a new identity, find new friends, acquaintances, enemies and allies in literature, but can also see the characters of his personal world as different people. As archetypes who play out their destiny in the roles assigned to them, obeying the laws of the world.

This world is made intelligible by language and covered by language. It must be translated, decoded according to the code system of our own life experiences. Gadamer says that we are in a continuous conversation with the world while trying to understand ourselves in it. George Steiner goes so far as to say that we are always translating. We transform the world in our own image, while we search for words in the "no man's land" of language and psyche to find a new language for the foreign text lying before us.[10] We are silent inside. To find words, to create a language and to make the foreign other our own in a healing way. This is the art of hermeneutic bibliotherapy. To recreate the world and ourselves with words. My research aims at the theoretical-methodological foundation of such a reading process.

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[7] Gadamer H-G.: A nyelvek sokfélesége és a világ megértése. In: In: Bókay A., Vilcsek B. (szerk.): A modern irodalomtudomány kialakulása. Osiris, Budapest, 2001. pp. 191–197.

[8] Gilbert E., V.: Biblioterápia mint alkalmazott irodalomtudomány és lehetséges oktatási modell. Helikon. 2016. vol. 62. no. 2. pp. 242–243.

[9] Bloom H.: Elégikus töprengés a kánonról. In: Rohonyi Z. (szerk.): Irodalmi kánon és kanonizáció. Osiris. Budapest, 2001. p. 185.

[10] Steiner G.: Bábel után. Nyelv és fordítás. 2. Ford. Bart István. Corvina. Budapest, 2009. p. 19. George Steiner's four step model of translation serves as a model for my interpretation concept. It is a philosophic approach to interpretation, not like Norman N. Holland's psychoanalytic DEFT model, which presupposes the imprint of early relationship experiences in artistic reception. Papp-Zipernovszky O.: A pszichoanalitikus befogadás-elméletek empirikus vizsgálata az irodalom és a film területén. Imágó Budapest. 2011. vol. 1. no. 1. pp. 41–50. Holland N. N.: Tranzaktív beszámoló a tranzaktív irodalomtudományról. Helikon. 1990. vol. 36. no. 2–3. pp. 246–258. Using DEFT in bibliotherapy: Béres J.: A tranzaktív irodalomelmélet biblioterápiás alkalmazhatóságáról, https://www.reciti.hu/wp-content/uploads/BeresJudit.pdf [Download time: 04.01.2023.]

This was connected to the group work that began in the spring of 2021 and ended in the fall of 2022 and was conducted over four semesters, in which correspondence university students from Pécs and an online lay control group participated. Below, I describe the two one-and-a-half-hour university seminars held in the fall semester of 2021 and our work with the control group conducted in parallel with it. Our reading is Marlowe's *Doctor Fautus,* and our theme is the fall of the individual pushing human boundaries, damnation, self-destruction, fear of unknown forces, anxiety and the search for a way out, ascension and redemption. It is a current topic in our upset, nervous, changing age, but it is also sufficiently universal to be effective at all times.

II. Hypotheses

I. 1. Hypothesis

The great canonical works contain archetypal symbols, which is why they can have a significant aesthetic and, in some cases, therapeutic effect. For this reason, they are also suitable for us to understand the source of our universally experienced existential anxieties.

My very first assumption is that timeless classics discovered again and again from generation to generation, the great works capable of evoking a cathartic experience, have an archetypal deep structure, for example regarding the character and fate of the protagonist, but also through the original use of such universal symbols as *island* or the *sea.* In this way, they offer an inexhaustible source for an experiential reception that has both aesthetic and therapeutic effects.

As Northrop Frye puts it, a significant symbol like the *sea* is an archetypal symbol of literature. Categories that precede literature, such as *rite, myth,* and *folktale,* appear again and again in the greatest classics, and the great classics return to them. This is why, Frye claims, masterpieces with profound meaning stick with them, and many of the motifs of what they have to say converge at one point. In this way, literature can be seen as expanding from an invisible center into a conceptual space. Frye's interesting idea is that the central myth of literature is the *search myth,* and if we want to see the meaning layers of this myth, we have to start from the workings of the subconscious, where enlightenment originates, that is, from the dream.[11]

According to Frye, different spheres of existence are expressed in specific symbols corresponding to different genre approaches. Thus, Jung's "monster mother" appears in the tragic view of the human world, the tragic image of the amorphous world is the sea, while neutral archetypes include, for example, the island.[12]

I took these facts into account when planning the four semesters. I included parts of several literary works in the readings in which the protagonist is constantly on the move in space or time, such as Odysseus, Orlando or Garren Péter, who are looking for home and country. Perhaps they are hindered from moving forward, staying on an island, like Odysseus in the island of Ogygia, where Calypso plays the role of the underworld or *chthonic mother.*[13] Such is the exiled Julia in novel Augustus of John Williams or Shakespeare's Prospero, the latter in many ways acting as a chthonic father. But we also dealt with Ulickaja's Medea, who follows her adopted children, and we read Ákos Győrffy's *A hegyi füzet,* in which the island is a mountain cottage, a symbolic place of solitude, faith and spiritual self-discovery. Marlowe's *Doctor Fautsus* is looking for knowledge, although at first he just wants the most beautiful

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[11] Frye N.: Az irodalom archetípusai. In: Bókay A., Vilcsek B. (szerk.): A modern irodalomtudomány kialakulása. Osiris, Budapest, 2001. pp. 441–448.

[12] Idem. p. 448.

[13] Jung C. G.: Aión... pp. 18–29.

virgin in Germany, and the question is what he will get in return. In order to penetrate the archetypal hellish recesses of his world, we called on our dreams for help.

The tragic view of existence mentioned by Frye is obviously related to a person's self-awareness. The awareness of death and passing away, the abandonment and anxiety felt at the moment of falling into sin. As Heidegger says: existence (Dasein) can be experienced as „care" (Sorge).[14] According to existentialist psychotherapist Irvin D. Yalom, there are four existential concerns in our lives that can serve as a guiding thread for any group work. These are death, meaninglessness, isolation and freedom, which are basic conflicts that always lead to anxiety.[15]

However, when we talk about the characters or motifs of literary works as *symbols,* we must distinguish between the concepts of literary and psychological symbols. Looking at the written text, it is obvious that there is meaning coded in a structuralist way. What can be considered a literary symbol is not solely up to the reader. From the receiver's point of view, however, it is at least as important to distinguish between archetype, symbol and symbol creation. What appears to the outside world from an archetype is, in the psychological sense, a symbolic image.[16] But whether we see something as a symbol depends on the attitude of the observer's consciousness. From a bibliotherapy point of view, the process of symbol formation is particularly noteworthy, during which a concept, object, phrase, event, person, image acquires a symbolic meaning, since this is an ability of the psyche that serves to protect and maintain mental health.[17]

That is why universal symbols such as the sea or the island, the chthonic mother or Satan can be suitable for penetrating into the deepest recesses of our existential anxieties by working together, unraveling a good text thread by thread.

I. 2. Hypothesis

The works that we label with the classic name are timeless. They always appeal to the reader, which is why they are particularly suitable for the purpose of close-up bibliotherapy, since their archetypal motifs offer the group leader the creation of a thematic network along which he can arrange the texts.

Based on the above, and this is my second assumption, Hans-Georg Gadamer's thesis that the word "classic" means "timelessness" seems to be justified. In other words, "the communicative power of a work is in principle unlimited", since it "represents itself and interprets itself", so it is in constant mediation between past and present.[18] This is why a bibliotherapy that takes into account good books, the aesthetic effect of great works that occupy an unquestionable place in the European cultural canon due to their self-worth, and the healing power that emerges from the aesthetic experience has a raison d'être.

This starting point connects my research to the direction of bibliotherapy that places greater emphasis on the hermeneutic dialogue with the text. Éva Jeney directly separates *bibliotherapy* from *literature therapy.* Literary therapy mobilizes the therapeutic power of creation, including both the artwork itself and the creative interpretation.[19] Following my supervisor, Edit V. Gilbert, I assume that a therapeutic dimension emerges both from professional reading that

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[14] Heidegger M.: Lét és idő. 2. jav. kiad. Osiris. Budapest, 2004. p. 215.

[15] Yalom I. D.: Egzisztenciális pszichoterápia. 2. kiad. Ford. Adorján Zsolt. Park. Budapest, 2019. p. 83.

[16] Szabó R.: Metaforák és szimbólumok. C. G. Jung szimbólumértelmezésének és a fogalmi metaforák elméletének összevetése. Oriold és Társai. Budapest, 2015. p. 51.

[17] Idem. 45. Kapitány Á., Kapitány G.: Szimbolizáció és pszichológia. ELTE PPK, L'Harmattan. Budapest, 2020. pp. 127–135.

[18] Gadamer H-G.: Igazság és módszer. 2. jav. kiad. Ford. Bonyhai Gábor. Osiris, 2003. pp. 324–325.

[19] Jeney É.: Biblioterápia, irodalomterápia... p. 155.

unites multiple horizons and from lay acceptance based on aesthetic pleasure.[20] In the long term, professional and lay reading can equally have a personality-shaping effect, but I believe that this effect can only be unique and contingent if it does not develop in a guided group process based on coherent theoretical foundations. *Myth, symbol, rite, archetype, fate, identity* can be key concepts in this process.

It may seem contradictory that while hermeneutics is first and foremost the art of interpreting texts, and in a broader sense the art of understanding the human world existing in linguistic dialogue, bibliotherapy is by its very essence a person-centered expertise. The literary text is mostly just a springboard during bibliotherapy group work. As Judit Béres emphasizes following Irvin D. Yalom, there is no direct connection between catharsis and the therapeutic effect of the text.[21] The experimental researches of Orsolya Papp-Zipernovszky also confirmed that the work of art does not have an integrative effect on the personality simply through personal interpretation. That is, no matter how in-depth the reading is, it does not lead to a transformation in the personality by itself. The *interpretation of the interpretation* will lead the receiver to become aware of how his or her individual responses to the work are related to his or her personal life history and early relationship experiences, and this is embedded in the art therapy group process.[22]

That is why the selection and ordering of the works, the arrangement of the archetypal patterns hidden in their deep structure into a narrative whole, i.e. a *myth* that can also be interpreted as a life path model – which, in Frye's expression, means that, in contrast to naturalism, the human content is "conventionalized in accordance with an idealized direction"[23] – plays a key role in my model.[24] The group leader's personal life and reading experiences, as well as knowledge of the "generative grammar" of archetypal symbols, are crucial. You must create a group canon in advance from the network of selected text fragments, which will offer common reference points for the group memory and establish the cohesion of the group, which can then become a reference model for everyone's own life story. In this process, the group leader is similar to an interpreter in the Gadamerian sense. He adapts the meaning of the text to the specific situation in which the text is interpreted. His role is akin to that of the mediator of the divine will, who is able to interpret the language of the oracle.[25]

I. 3. Hypothesis

Satan is an archetypal symbol and one of his motifs is the loss of freedom. People mostly experience this in interpersonal relationships, so Satan appears as a projection in everyday life, and anxiety clings to the person identified with him. The bibliotherapy treatment with the literary figure of Satan can therefore be suitable for achieving the therapeutic goal of anxiety relief and humanization.

The central archetype of the group work presented here was Satan. Although it is a very complex figure, I highlighted an aspect of it during our interpretation that can make it suitable for achieving therapeutic goals, taken more closely. One of its features is related to the loss of

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[20] Gilbert E., V.: Biblioterápia mint alkalmazott irodalomtudomány... p. 242.

[21] Béres J.: Egy személyközpontú biblioterápia felé. Helikon. 2016. vol. 62. no. 2. p. 264.

[22] Papp-Zipernovszky O.: A pszichoanalitikus befogadás-elméletek... p. 49. Interpreting interpretations was the basic method of Delphi-seminars of Holland and Schwartz. Holland N. N., Schwartz, Murray: Know Thyself. Delphi Seminars. The PsyArt Foundation. Gainswille FL, New York, 2008. Thanks to Professor Antal Bókay for bringing it to my attention and for sending me this book.

[23] Frye N.: A kritika anatómiája. Ford. Szili József. Helikon. Budapest, 1998. p. 118.

[24] My concept is similar to fairytale therapy.

[25] Gadamer H-G.: Igazság és módszer... p. 344.

freedom, and therefore my third hypothesis is that the concern of anxiety due to the loss of freedom described by Yalom makes this archetype suitable for therapeutic processing.

As it is widely known, the concept of *archetype* was created by Carl Gustav Jung. It is not an abstract hypothesis, but his psychiatric experiences led Jung to the connections he noticed between the recurring dream images of some of his patients and mythical figures, religious symbols, and ancient images. According to Jung's definition of the self, "the self rests, on the one hand, on the *entire field of consciousness,* and on the other, on the *totality of unconscious contents."*[26] The latter was again divided by Jung into two separate spheres. "The content of the personal unconscious is the product of individual life, while the collective unconscious is made up of permanent and a priori existing archetypes."[27]

In several of Jung's writings, Jung tried to dispel the misunderstandings that arose around archetypes. These "archaic remains" or "ancient images" are not mythological images or motifs, they are not "inherited references", but the archetype is a kind of orientation. It is an instinctive tendency like the urge of a bird to fly, and in man a physiological urge which manifests itself in fantasy and reveals its presence in the form of symbolic images.[28]

The archetype takes different forms in different cultures, but it can be recognized by the function it fulfills in myths or dreams. For example, a *trickster* is a rebel who flouts order, public morality, and the law, who is also a cunning prankster. He is the one who destroys our self-confidence, who knocks us out of our confidence, pulls the ground from under our feet. He is the Germanic Loki, the Javanese god Semar, and he is the biblical Satan, whom Christ calls the father of lies. He is undoubtedly an evil figure, but he also makes us reevaluate things and start over.[29] He is part of the force, we could say with Goethe, who "forever strives for evil and forever does good". The figure of Satan, as it appears in European literature, is characteristic of Jewish and Christian culture, but it is related to the collective unconscious, that is, an archetype.

Jung describes Satan as a spiritual image that reflects the psychological reality of an aspect of the total *Selbst* (self). For example, the crucifixion, according to Jung, is a symbol of the differentiation of consciousness: the *ego* is an observer, who suffers when making the ultimate decisions, when he does not decide for himself, but is forced to submit to a decision.[30]

The self-reflexive *self*[31] appears in European literature during the Renaissance, its most prominent representative is Hamlet,[32] but it is around this time that the figure in league with the devil also appears, be it a man, like Faust, or a woman, like Beatrijs and Mariken or Mary of Nijmegen. Satan, with whom an alliance can be made against God, probably comes to us from the shadow personality of the Christian person, as a collective manifestation of a potential symbol encoded in our culture, as the Antichrist is the extreme and necessary opposite of Christ.[33]

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[26] Jung C. G.: Aión... p. 11.
[27] Uo. p. 15.
[28] Jung C. G.: A tudattalan megközelítése... p. 68.
[29] Szabó R.: Metaforák és szimbólumok… pp. 51–55.
[30] Jung C. G.: Aión... pp. 52–53.
[31] For the demarcation between the Jungian and the Freudian *Selbst (self)* and the diversity of Jung's definitions of archetypes, see: Horváth L., Szabó A.: A fekete nap melankóliája és a Selbst dekonstrukciója. Posztstrukturalizmus és posztjungiánus pszichológia. Magyar Filozófiai Szemle. 2015. vol. 59. no. 3. pp. 103–120.
[32] Bókay A.: Önéletrajz és szelf-fogalom dekonstrukció és pszichoanalízis határán. In: Mekis D. J., Z. Varga Z. (szerk.): Írott és olvasott identitás – Az önéletrajzi műfajok kontextusai. L'Harmattan. Budapest, 2008. pp. 33–65.
[33] Jung C. G.: Aión… pp. 50–51.

For the civilized man, the archetypes are accessible during the low functioning of consciousness. Such are dreams, when unconscious contents flow into the conscious space.[34] Archetypes, as mentioned above, appear in symbolic form, such as the dream equivalents of mythical beings, however, they can only be interpreted individually in the process of therapeutic dialogue. In Jung's words, during a "dialectical exchange of ideas between two people".[35] Jung emphasizes that the archetypal content first always appears in a linguistic analogy, or, as confirmed by cognitive linguistics research, it is expressed in a metaphorical language behind which lies a conceptual framework suitable for creating symbols.[36] These metaphors can be paralleled with the "identity themes" of Norman N. Holland, who followed Freud, which take on linguistic expression in the form of projections in response to a symbolically interpreted motif.[37]

Since during Holland's transactive reception, what ultimately gains symbolic meaning is mainly determined by the emotional relationship, identity themes can also be suitable for resolving fears and anxieties attached to or associated with the figure of Satan. We feel that the joke played against us, the humiliating revelation, the seductive lie robs us of our essence, but there is an even crueler face of Satan. As it is often depicted, e.g. on tarot cards, it enslaves, and holds power. In our group work, I highlighted this demonic feature in search of the source of the primal anxiety of nightmares, since this feeling of existence in a literal sense means the loss of freedom, and in my opinion, in extreme cases, it is connected to the destruction of individuality in interpersonal relationships.

However, group work in literary therapy approaching the texts from the perspective of Frye's myth criticism cannot end there, since the trickster is also a shadow archetype of another figure. And this is nothing but the immature *child* living in the man, who plays with others creating serious illusions, always looking for a "loser" to charm.[38] This dazzling, false magician is very similar to the main character of our next seminar reading. He is Prospero, who displays a veritable array of archetypes around him, as there is a sea and an island, a chthonic father who keeps his daughter in ignorance, a ruler and a wizard, and the opposite of everything. During the logical arrangement of the archetypes, the exceptional position of the group leader in the hermeneutic model of reading in literary therapy can be seen.

II. Goals

During the four semesters at the university, we worked in a small group with the same four young middle-aged female correspondence students. A few new female students joined them every semester. At the suggestion of my supervisor, I also organized a control group of educated intellectuals in parallel with them, with whom we read the same texts and were given the same tasks. They formed a medium group of mostly older middle-aged men. Based on a pre-compiled text corpus containing classical and contemporary works, we read selected excerpts together, which we interpreted with the help of creative tasks.

In both groups, we read Marlowe's *Doctor Faustus* with the goal of personifying our personal Satan and releasing our anxieties about him.

The long-term goal of the four semesters is for everyone to create their own life path map by the end of the readings. Such a diagram draws an undulating curve from the flow states of

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[34] Jung C. G.: Az archetípusok és a kollektív tudattalan. Ford. Turóczi Attila. Scolar. Budapest, 2011. pp. 154–155.
[35] Jung C. G.: A tudattalan megközelítése... p. 55.
[36] Szabó R.: Metaforák és szimbólumok… p. 18–19.
[37] Holland N. N.: Az irodalmi folyamat és az egyéni elme. Helikon. 2016. vol. 62. no. 2. pp. 192–211.
[38] Szabó R.: Metaforák és szimbólumok… p. 54.

freedom and the emotional lows of addiction. Without exception, each of our diagrams resembled an ECG curve. They modeled the heartbeat, the natural rhythm of life. Creating a life path map is a well-established therapeutic method, the purpose of which is to make people aware of recurring repetitions and patterns in order to change, create an identity, and formulate new goals.[39] I asked the group members to reflect on our common readings at each turning point.

The Faust theme can be inserted at one of the extreme points of a life path map. The superhuman thirst for knowledge of the flamboyant researcher who pushes human boundaries, rebels against God, can lead people down dangerous paths, but that is precisely why it is not an everyday experience. Those who are devoted to reading, thinking, and fantasy can feel the depth and drama of this intellectual gap during their lives.

Among the Faust adaptations, I chose Marlowe's masterpiece because the mesmerizing power of Renaissance magic shines through it. For example, when Doctor Faustus writes the anagram of Jehovah's name backwards, he treats language in an almost deconstructive way, and this will be one of the paths leading to damnation. I didn't choose this detail, but the signing of the contract and the scenes that follow, because that is where Satan's juggle and the falsity of the contract are revealed. And this is also where the human weakness of the main character is revealed, who after his daring rebellion is actually ridiculously longing for human things and physical pleasures. When he finally overcomes his intellectual superiority and defiance and wants to know the secret of creation, he forces even Mephisto to turn to a higher power, Lucifer. Faustus is threatened in the style of a mobster and forced to obedience. I also chose another detail to close the lesson, the last act, where the total loneliness of the person standing in the throat of death is revealed. Until now, Fautsus had been playing, mocking, even throwing a fit at the devil. This makes him sympathetic and attractive, he takes on a bit of a demonic form himself, thus making Mephistopheles himself. However, in his final monologue, the terror of a person facing the unstoppability of the passage of time is expressed in an astonishing way, the touching wail of a scientist who despairingly observes the meaninglessness of his life.

The big question of this semester was where is the way out of the apparent hell and damnation, which seems to be necessary for more authentic self-knowledge. The main character of the first class, Doctor Faustus, is an unbelieving and compromised figure, but looking at his courage, thirst for knowledge, his self-awareness that defies Satan and his fallibility shown in his final monologue, he is a lovable and human figure. We cannot accept his fall. As readers, we instinctively look for the solution, the way out, to which we hoped to find the key in ourselves – in our dreams – and in another literary work, the work to be covered in the next class, Shakespeare's *The Tempest.*

Collecting dreams served this purpose. According to Jung's idea, in a dream, our consciousness conveys messages that the waking consciousness wants to sink for some reason. At the same time, in a dream, perception covers a wide range. According to Jung, dreams also carry the seeds of future psychic events and thoughts. In a dream, the brain pays attention and makes a prognosis.[40] That is why the ancients believed that dreams could be predicted.

The unconscious meaning-making function of dreams was shown with astonishing openness in this class. When I asked the group members for demonic dreams, even I could not have known that the dream motifs brought in – the transition from a familiar environment to a foreign one, the fall, the loss of the voice, i.e. the ability to speak, the resurrection of the dead – would all appear in those satanic-themed literary pieces, which I brought to class. It has been proven that

[39] Limpár I.: A siker tervezhető. A praktikus tudás lélektani könyve. Kossuth. Budapest, 2018. pp. 235–238.
[40] Jung C. G.: A tudattalan megközelítése… p. 36.

dreams are suitable for finding a mediator between fiction and reality with the help of collective consciousness contents.

III. Methods

During the entire four semesters, I took into account similar aspects regarding text selection and processing group work as Imre Andrea with her group called *Ugróiskola* (hopscotch). After the questions about liking or disliking, we dealt with the actions of the characters, progressing from understanding the text to formulating personal problems and parallels that can be drawn with the text. Like Andrea Imrei, I took advantage of the awareness effects inherent in visual associations.[41]

Since the "interpretation exercises" of the previous semester continued under the title "comparative studies", I asked the group members to bring Satan-themed poems, songs, and movie clips, which we listened to and watched at the beginning of the lesson. Next to Marlowe's *Doctor Faustus,* I brought the "female Faust", the story of Mariken or Mary of Nijmegen. I chosed the part in which Mariken, who makes a contract with Satan, has to throw away her protective name, Mary (her essence, her personality), in order to make a contract with Satan in exchange for the science of necromancy. The same motif appears in Michael Ende's magical tale, *The Neverending Story.* I also read a part of it. Basthian is looking for his last remaining memory in the mine of dreams. In order to return to reality from the realm of Fantasy by succumbing to total darkness and self-surrender (initiation), he must renounce his name.

This last moment already belongs to the continuation, to the topic of the next lesson, to finding a way out, to getting out of the darkness. However in the framework of the Faustus lesson, I only wanted to deal with the role of *dreams* and the *name,* and their symbolic significance in self-creating.

We were able to do a wide range of text processing with the university students. After reading and interpreting the passage, we also interpreted our dreams together, in addition to the literary parallels mentioned above, we watched film excerpts from *State buoni se potete* in Hungarian, and finally, in order to convey the cultural-historical context, everyone drew a card from the Renaissance Visconti-Sforza tarot deck, which clearly depicts archetypal figures. According to some assumptions, it represents the spheres of the Neoplatonic path of the soul. The pack also included the Devil (luckily no one drew it!), so group members could reflect on the current personal meaning of the randomly drawn cards. As a homework assignment, they were given to formulate what strengths the card warns them about. I also asked the group members to write a letter to their "own Satan" according to the genre expectations of expressive and transactive writing,[42] in which they try to understand him or her. This served as preparation for the next class, when we read Shakespeare's *The Tempest,* in which Prospero forgives his enemies.

The work with the control group was not so complex. Few people participated in this session, but they were really active and, shedding the distancing, rational reading attitude previously shown by most of the control group members, they surprisingly opened up to emotional reception.[43]

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[41] Imrei A.: Az Ugróiskola csoport. Helikon. 2016. vol. 62. no. 2. pp. 283–284.

[42] Pennebaker J. W., Evans J. F.: Gyógyító írás. Ha fáj a történeted. Kulcslyuk. Budapest, 2018. pp. 170–171.

[43] Among the four types of reading attitudes and receptive levels described by István Kamarás, the members of the control group were mostly characterized by the removing, rational category, while the correspondence university students used the empathetic and analytical-summarizing strategy. Kamarás I.: Az irodalmi mű befogadása. Gondolat. Budapest, 2007. 135.

IV. Results

The interpretation of the text was based on two questions: What kind of person or man is Doctor Faustus? And what is the demonic in the part read?

The conversation turned to the contract. God does not ask man for a contract, someone remarked. He can form an alliance with him universally, but he does not contract with anyone individually. This suggests trust. However, it is questionable, someone raised, whether this contract is valid at all. After all, Mephistopheles does not observe it on an important point, does not consider it valid for him. Someone has argued that Faustus wants it, and that this moment is important because it not only validates the contract, but it is also a very human thing. A person can be tempted through his will. The same group member also found it interesting that Mephistopheles himself suffers, he is also addicted to a situation. When Faustus asks where hell is, Mephistopheles claims that he is hell itself. Where he is, there is hell. And someone brought up that Fautsus is constantly receiving signals, but refuses to pay attention to them with his will.

Although the imported dream images can be classified into template motifs,[44] their interpretation is suitable for creating individual meaning. Different group members, for example, interpreted the shape of the dead in dreams in different ways. One group member has a recurring nightmare of always finding her dead grandmother, whom she loved very much, in the shed of their vacation home. This motif appears in literature in the form of necromancy. The word originally meant divination with the help of the souls of the dead, and later referred to black magic practiced with the help of Satan.

Someone suggested that such a dream was nice to her. Meeting the resurrected grandparents is a good feeling. The group member who brought the holiday dream feels anger in the dream because it is a lie. Because she knows with her dreamlike consciousness that the grandmother is dead, she shouldn't come back, and yet she is here. Maybe someone else appears in her picture and someone plays a bad joke on her. Just like Mephistopheles with Faustus.

Somebody mentioned that the apotheosis of landlessness was mentioned by Shestov, in which it is stated that "you can be reborn when you have lost everything". In Chinese, the same character represents *crisis* and *rebirth.* She then brought up Hannah Arendt, who in *The Banality of Evil* discusses how we become part of a satanic machine. According to one of the group members, however, works such as Marlowe's *Doctor Faustus* are not so effective today because we no longer see the world in such black and white terms.

In connection with this, the question arose in me: are we not vigilant enough in the direction of evil today, or has our world become too tame? I brought this question to the control group as well, where one of the group members said that after Dante, modern man "poured sugar water over Satan", trivializing his figure. According to another group member, Doctor Faustus is not a tragic enough figure in his eyes, because his curiosity is like someone searching for a Christmas present. According to him, the average person does not know the decision when someone consciously decides to be on the wrong side. The famous words of the Duke of Gloucester are more appropriate here: "I am determined to prove a villain." This group member put it this way about Marlowe: "When you sell your soul, it is much darker than that."

From the homework assignments read aloud by the university students in the next class, as well as from the transactive letters they wrote to Satan, it became clear that Satan is more of a

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[44] Described by Jung: flying, falling, dangerous animals, chasing, weapon not working, growing to infinite small or big size. Jung C. G.: A tudattalan megközelítése... p. 49.

colloquial name in everyday life, and the group members project this image onto their close relatives and ex-lovers, whom most they blame for bad, in whom they see someone who had to be defeated in order to move on. This, of course, corresponds to the archetype who, such as Job's tempter or Madách's Lucifer, is a necessary evil in terms of the development of things. At the same time, from a therapeutic point of view, this projection carries the danger of demonization. The reason that the opposite happened is that the task was to write a sympathetic letter in which the understanding of the human background played a role.

Last but not least, in the meantime we managed to have a live dialogue with a literary work that is more than four hundred years old, inspiring us to productive and very intense intellectual and emotional work in the atmosphere of group reading. In a word, we have dusted off a classic of the European canon that is now probably rarely read.

Summarizing what has been said so far, it can be said that among my hypotheses, the first assumption was confirmed in connection with Marlowe's *Doctor Faustus,* that a work based around an archetypal symbol can give the group a significant aesthetic experience, ignite a creative process of acceptance, and bring to the surface a significant experience of the group members, which is associated with anxiety.

My second hypothesis was verified with the help of the brought dreams and literary parallels, since we found countless points of connection between the motifs emerging from unconscious contents, which also show the dynamics and network of typical life situations.

Finally, my third hypothesis was only partially or barely confirmed. The archetype of Satan symbolizes such a borderline situation of life, it represents such a dark numinosity of the soul, which is actually only experienced by a few and rarely, or they hide such feelings very much, and are therefore only metaphorically connected to the figure of a real person, to whom addiction, the experience of limiting freedom is tied.

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Feminist Insights from Middle-Eastern Literature: What is Being Inherited? A Feminist Reading of the Palestinian Novelist Sahar Khalifeh's *The Inheritance*

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The Palestinian literature is being described as a marginalized arena of study since little attention has been devoted to explore the Palestinian literary works in relation to world literature. More specifically, little attention has been devoted to explore the writings of Palestinian female writers. Thus, the Palestinian female remains a veiled subject and little research is being dedicated to de-veil this Oriental subject to the global scene. Accordingly, this research attempts to broaden the scene through analysing the literary works of the Palestinian feminist writer Sahar Khalifeh, in particular, her novel *The Inheritance* (1997).

The research elaborates on the way Khalifeh's characters are victimized within the Palestinian society that suffers from both occupation and the patriarchal traditions. Thus, the research traces the way Khalifeh portrays her female characters in the novel as victims living under a double colonization within the Palestinian society. The research draws on post-colonial feminist theories since the Palestinian female appears as an oppressed (colonized) subject who has her own unique challenges. In other words, the research questions the Western feminist approaches regarding the Oriental woman's representation since the West approach the Oriental female according to their own values. Thus, the research argues that non-Western women should not be treated as a homogenous category with coherent identity and universal characteristics; instead, social, religious, political and cultural factors should be taken into consideration when addressing the woman question in Third World countries.

The research concludes that all the practices against the Palestinian female are of patriarchal nature while the male figures are not responsible to observe their morality. Such patriarchal patterns continue to veil, circumscribe women's lives and prevent them from being full citizens within the Palestinian society. Thus, in Khalifeh's work, women still appear as victims of the inherited patriarchal traditions.

Keywords: Palestinian literature, Patriarchal system, Post-colonial feminism, Sahar Khalifeh, The Inheritance (1997)

I. Introduction

The journey of the Oriental female to liberate herself and shift her position from the private sphere at home to the public arena within her society is of double burden compared with her Occidental sister. On the one hand, the Oriental female has to resist the colonization imposed on her as a colonized subject living in Third World countries, and on the other hand she has to refute the domestic oppression imposed on her as a prey for the patriarchal traditions. Accordingly, any attempt from Western feminists to de-veil the situation of the Oriental woman would not reflect the real scene in details. For example, the Indian feminist critic Chandra Talpade Mohanty argues:

> What is problematical, then, about this kind of use of 'women' as a group, as a stable category of analysis, is that it assumes an ahistorical, universal unity between women based on a generalized notion of their subordination. Instead of analytically demonstrating the production of women as socio-economic political groups within particular local contexts, this move limits the definition of the female subject to gender identity, completely bypassing social class and ethnic identities (1984, p.344).

> In other words, regarding the woman question in the Orient, there are three factors which are: "Colonial occupation, the occupation of Palestinian land, and more recently the Gulf War, have shaped the views of both men and women in the area" (Sabbagh, 1998, p.43). In addition, the Palestinian feminist activist Hanan Mikhail Ashrawi criticizes the Occident feminist frameworks regarding the Oriental female; in particular, the treatment of the Oriental woman as the 'Other' veiled subject using a Western mentality stating:

> To me the major drawback was the political lack of responsibility and foresight in understanding women's position among all the oppressed of the world … if you are fighting against the oppression of women or discrimination against women, you must fight against all sorts and oppression or discrimination … Western feminists will have to put their own house in order and see that there is not just sisterhood but also an affinity among all the oppressed, regardless of the nature of the oppression, before they address other forms of oppression (An interview 1998).

> Accordingly, this research aims to broaden the Oriental feminist scene by providing insights from Palestinian literature as an example on women status in Third World countries. However, it is important to mention that the research is not trying to create a unified image of the Oriental female or the Palestinian female as opposed to that of the Western representation of her, yet it aims to feed the scene with some feminist insights which could help in revealing some information about the unique experience of some Palestinian females since "The literature on Palestinian women is still far from being complete" (Sabbagh, 1998, p.62). Thus, voicing what the Palestinian critic Suha Sabbagh called "Palestinian women's 'herstory' (that) is a story of empowerment, of gaining greater rights from patriarchal structures, of a double resistance" (1998, p.76) becomes a must. Accordingly, the present research puts the Palestinian literature on the table for examination by analysing the production of the pioneering feminist writer Sahar Khalifeh in her novel *The Inheritance* (1997).

I.1.The Female Image within the Palestinian Family

It is important to highlight the way women are being represented in Palestinian literature. In other words, women are always confined within the threshold of their domestic roles; thus, they perform their roles as protectors of their home, family, chastity, virginity and honor.

Accordingly, any violation of these domestic roles would lead to punishment by the male figure within the Palestinian society. Hamam1ra asserts that "Palestinian women who transgress the borders of the domestic sphere are subject to verbal and physical violence and sometimes, so-called, honour killing" (2019, p.4). This is represented clearly in the position that women occupy within the social fabric of the Palestinian family since:

> The structure of the family remained hierarchical, with variables such as age and gender shaping the pattern of relations among its members. The father represented the top of the hierarchy, with central decision-making authority, especially in cases of marriage, divorce, and inheritance ... Females ranked at the bottom of the hierarchy, with little or no share in decision making (Jad, 1998, p.114-115).

> This shows the subordinate position that women occupy within the Palestinian social fabric. In addition, the Palestinian female image in literature is not different from her image in real life since her literary image is also dyed with a patriarchal ink. For example, the well-known Palestinian poet Mahmoud Darwish portrays the Palestinian female within only domestic roles such as the mother, the wife, the lover, etc. who needs to be protected and saved. Darwish "has created a connection between the nation and women with various characters, especially the love and mother, …, and lots of evidence reveals that women occupied the highest position in the poetry, making it a sacred symbol - the homeland" (Yu & Alhartani, 2018, p.3). Thus, women representation is controlled by the patriarchal pen.

> However, the female reaction to this patriarchal system could be traced in Sahar Khalifeh's work. In other words, Khalifeh becomes aware of these phallocentric patriarchal traditions and representations of the Palestinian female; thus, she tries to refute them in her writing. Khalifeh comes to understands this subaltern position of the Palestinian female since her biographical records reveal that she suffers from this marginalized position early in her life, she is treated as a "miserable, useless, worthless sex … Growing up female meant that there would be many rules surrounding her life. As an escape, she resorted to reading, writing, and painting" (Koy, Gustafson, Obitz-Cooney, 2006, p.1). Accordingly, in her work, Khalifeh tries to subvert this stereotypical image of the Palestinian woman since:

> Her main characters, a woman head of a household, a journalist, a prostitute, and a housewife, are trapped between poverty, occupation, traditional norms, and unchanging male perceptions. Yet, they grow and become stronger through their adversity and are able to make a contribution to society in many ways (Sabbagh, 1998, p.35).

Khalifeh's characters "fight occupation they also fight against restrictive traditional values inculcated into their innermost self" (Sabbagh, 1998, p.35). Thus, *The Inheritance* (1997) stages the floor for Khalifeh to reveal the obstacles that the Palestinian female suffers from which, in turn, prevent her from moving forward. The reasons for choosing *The Inheritance* (1997) for the analysis is that the novel revolves around the concept of the female honor that is a daring yet rarely discussed topic in her work. This echoes Alhawamdeh's words who states "little attention has been given to Khalifeh's *The Inheritance* because I think it does not concentrate on the narrative of resistance to the Israeli occupation to the West Bank" (2015, p.105) compared with her early novels where the focus is more political than feminist. In addition, *The Inheritance* (1997) devotes a sufficient space for the female characters to manoeuvre within and it reveals their agonies to the readers "Khalifeh's real success in this novel is giving voice to different Palestinian characters of various circumstances; most important of who are female characters who are rarely heard in literature before" (Elnamoury, 2016, p.3). Thus, the investigation of those characters could feed the research with the patriarchal images Khalifeh tries to subvert in her work.

I.2. Honor and Inheritance within the Palestinian Context

World Health Organization defines honor crimes as a "girl or woman being killed by a male or female family member for an actual or assumed sexual or behavioural transgression, including adultery, sexual intercourse or pregnancy outside marriage or even for being raped" (2012, p.2). This definition entails two important aspects within the Palestinian society: on the one hand, it shows that death is the destiny that awaits the female figure who fails to preserve her honor. On the other hand, it shows that the concept of honor is linked only with the behaviour of females whereas the male figures are not responsible to observe their morality and behaviour "since the male's immorality does not affect the honor of the family. Such gender imbalance brings victimization to women, who are transformed into a symbol of the family's honor to be protected and avenged by their male relatives" (Alhawamdeh, 2015, p.105). Thus, when it comes to Palestinian traditions, the cleaning of the male honor by sucking the female blood to death, is a must since the social context within the Palestinian society places much emphasis on the reputation of the male figure and what people say about him. In this regard, Kanaana, the Palestinian anthropologist and folklorist, notes "the fact that Palestinian culture is an oral and aural culture that privileges the spoken over the written" (2005). In other words, if a woman violates the codes of morality regarding her honor, the man should react to this violation. Abu-Odeh asserts that "to be a man is to engage in daily practices, an important part of which is to assure the virginity of the women in your family. In Arab culture, a man is that person whose sister's virginity is a social question for him" (1996, p.13). Thus, it is considered shameful for a man not to revenge over the loss of his honor. "If a man doesn't intervene by killing his sister/wife once she has shamed him, he suffers a loss of his gender: he is no longer a man" (ibid.). However, it is important to mention that there is no correlation between honor killing and religion since some male figures resort to employ Islam as a veil for their violence against women:

> There is no mention of honour killing in the Quran or Hadiths. Honour killing, in Islamic definitions, refers specifically to extra-legal punishment by the family against a woman, and is forbidden by the Sharia (Islamic law). Religious authorities disagree with extra punishments such as honour killing and prohibit it, so the practice of it is a cultural and not a religious issue (Muhammad, 2013, pp. 20-21).

Moreover, honor crime practice is universal and it is not peculiar to the Palestinian society per se since World Health Organization declares that "there are an estimated 5,000 murders in the name of 'honor' each year worldwide.... These killings occur mainly in parts of the Middle East and South Asia, but also among some migrant communities" (2012, p.2). In addition, the concept of honor is linked to the inheritance process within the Palestinian family. In other words, the preference of a baby boy over a girl is the norm since the male hire would keep the family lineage whereas the female is viewed as a burden. This echoes Canaan's words who observes that "The preference for male children who are taken to signify honour and the perception of female children as tokens of burden and shame are common features in Palestinian proverbs" (1931, p.175). Accordingly, within this system of symbols regarding honor and inheritance, the present research will trace the scenes Sahar Khalifeh presents in her novel *The Inheritance* (1997) and analyse the way the female characters are being victimized by the patriarchal traditions within the Palestinian society under the veil of honor and inheritance. In light of these concepts, the research will trace the behavioural aspects of the three main characters Zayna, Nahleh and Futna and highlight the masculine oppression imposed on them under the veil of honor and inheritance as will be discussed in the upcoming sections.

II. Discussion: The Burden of the Female Honor in *The Inheritance*

II.1.The Female Quest within the Third Space

Zayna is the main narrator of the novel and she is the one who tries to make connections and reconciliations with other female characters during the course of the events taking place in *The Inheritance*. Zayna is half Palestinian, half American since she was born to a Palestinian father and an American mother. From Zayna's perspective, this is a problematic hybrid space. This recalls Homi Bhabha's concept of 'the third space' in his book *The Location of Culture* (1994) where the offspring of the migrant find themselves inhabited in a neutral space. Thus, Zayna is confused about which side she should choose for herself. This is manifested in *The Inheritance* when Zayna's grandmother, named Deborah, comments on the situation of America during 1990s, the era of the war between Iraq and Saudi Arabia, stating "Oh God! What happened to America and the Americans? What happened to us?"(27). Zayna contemplates:

> It was 'We' that hurts me. What is the meaning of us? Who are we? We are the Americans? I am not American. 'Who are you then?'… I didn't say I was Arab because I wasn't. Who am I then? Despite my mother's citizenship, my birth certificate, my school certificate, my books, my accent, my clothes, and everything about my life, I was not truly American. The depths of my mind were inhabited by visions and pictures, love songs, those Arabic mawals moving like the passage of a breeze, the scent of violets, the fragrance of memories, all leaving behind a honey-sweet solution in the heart (27,28).

> This proves that Zayna is stuck between the standards of the two spaces which are totally the opposite of each other: the Occident that is represented by her maternal American roots and the Orient that is represented by her paternal Palestinian roots. This gap between both sides affects Zayna's behaviour both as a teenager and as a mature person. Thus, to understand Zayna's behaviour as a teenager, it is important to reflect on her familial surroundings. For example, *The Inheritance* shows that Zayna's father could be described as a traditional Palestinian male figure. That is, he wants his daughters to follow his steps and inherit the Palestinian traditions that put much emphasis on the virginity of woman. Zayna's father states "I want my daughters to be brought up as Arabs, clear and transparent as a candle" (17). However, during her teenager, Zayna gets pregnant and her father wants to end her life "he was chasing me in the street, holding the longest knife. I was fifteen years old" (17). In this situation, Zayna's father appears as a typical Palestinian male who wants to wash the shame caused to him by his daughter's pregnancy outside marriage. The father is acting according to the Palestinian traditions that treat female honor and virginity as concepts that are constituents for the male reputation. Thus, according to Zayna's father patriarchal perspective, his daughter makes the light of his candle blurred and this, in turn, affects his reputation as an Arab male. Zayna decides to escape to her American grandmother to help her survive this situation. Her father shouts angrily "Daughter of a dog, by God I will suck your blood!" (23) Her grandmother tries to help her yet the father insists that he ends her life "It's over; consider her dead. She must pay for her mistake. I must wash away my shame and hers"(23). While chasing her, *The Inheritance* portrays Zayna's father as a "smashing monster, without mind or sense. He wasn't the father I knew but a total stranger"(23).

> At this moment, Zayna's grandmother grabs a hunting rifle and starts threatening Zayna's father that she would shoot him. Finally, her father puts the knife aside and they help him by treating his bleeding hand. Zayna's grandmother addresses him "calm down … Zayna is staying here. You can go to your people and tell them that you acted like a man and killed her" (25). *The Inheritance* employs the verb 'tell' to convey the idea that the Palestine culture

is an oral one; thus, Zayna's father image as a man would be preserved if he spreads the news orally that he already punishes his daughter. However, when Zayna's father leaves the house for the last time, Zayna shouts "Dad Forgive me!" (25). At this point, *The Inheritance* communicates two important things: on the one hand, the male figure within the Palestinian society acts as an authority who has the right to confiscate his female's life if she violates the moral codes of behaviour and morality, by doing so, the male figure believes that he could correct his image in front of his male peers and preserves his manhood qualities. On the other hand, the novel proves that the burden of the inherited traditions within the Palestinian society could drive the male figure to become an extremist to the extent that he could kill his kin of the same blood just to satisfy the masculine codes of behaviour.

Accordingly, *The Inheritance* shows that the father is also a victim of the social traditions, which means that he tries to find an escape from these patriarchal traditions by inflicting harm on the weaker sex; that is the Palestinian female. *The Inheritance* is not putting all the pressure on Zayna's father alone; instead, it tries to make the door open for change within the Palestinian society since the novel does not allow the father to slaughter his daughter. Instead, he stops the chasing and leaves the grandmother's house going back to his roots, the West Bank in Palestine. In addition, Zayna's grandmother even though she is an American, she knows enough about the cultural expectations when it comes to men's reputation and honor within the Palestinian society. Deborah tells Zayna's father to go and tell his people that he ends the life of his daughter and that he becomes a man now. These incident takes place in autumn where the yellow leaves are falling down and a new life is about to emerge and bloom. Hopefully, the decaying patriarchal societal traditions would disappear and be replaced by non-biased gender equality norms "autumn was in its last days and the leaves are falling down" (25).

The second stage in Zayna's life where this neutral space becomes problematic for her is manifested in her adulthood. Thus, firstly, it is important to highlight the way *The Inheritance* represents Zayna as a mature female then discuss the impact of this hybrid space on her behaviour. Zayna, as an adult female, is portrayed as a successful female figure at the professional level. She becomes an anthropologist who is interested in studying the nature of human beings and their social affairs. Zayna now is in her thirties and she is an economically independent woman. Zayna reveals "my mother died so I inherited her, I have two apartments, one in Washington and the other in San Diego. I have two cars, yacht…" (30). However, after all these achievements, Zayna feels that she still misses something. Thus, upon receiving a letter from her uncle telling her that her father is about to die and she has to go back to Palestine if she is to claim her share of the inheritance, Zayna decides to accept her uncle's letter and make her first lifetime visit to Palestine to meet her roots "Come quickly before the thread breaks and you lose your claim to the inheritance"(43). Upon her acceptance of the letter, Zayna will shift from the position of the West to that of the East.

Zayna is threatened not to get her share of the inheritance since Palestinian females are being denied the right to get their shares of the inheritance just because they are females. In other words, the female figure is not entitled to have any access to financial independence within her society. This is clear in the way Zayna describes the way one of the villagers welcomes her "and he starred at me for some time trying to discover if I as a 'female', deserve all this inheritance" (52). The paradox within the Palestinian society is that in some cases, women are being killed because the family does not want to give the woman her share of the inheritance; thus, the concept of honor killing is used as a veil to justify and cover up their violence and ill-treatment of women. From the patriarchal perspective, women's honor is having a slippery definition, sometimes it is a symbol for the male figure's reputation and his manhood qualities; however, in other circumstances, the same concept is used as a veil to hide the patriarchal desire and drive for money and power. Thus, *The Inheritance* tries to de-veil

the way the Palestinian society treats its females through Zayna as a victim who comes to act within this neutral 'in-between' space since she grows up as a female without being exposed to all these discriminating cultural practices. By doing this, *The Inheritance* doubts the concept of 'Third World woman' as a coherent group that Mohanty criticizes and it provides a clear demonstration for the necessity of taking into consideration the peculiar socio-economic conditions for each group of women in different parts of the world. Thus, Zayna, the anthropologist, will be more familiar with the patriarchal system within the Palestinian society that oppresses women through her interaction with other female characters within the Palestinian society that will be discussed below.

II.2.The Female Honor

Nahleh is represented in the novel as a scarifying female figure who spends her whole life working in Kuwait as a teacher to support her family financially, a family that consists mainly of males, that is her five brothers: Jaber, Jamal, Mazen, Said and Kamal. However, during the Iraq-Kuwait war in 1990s, Nahleh loses her job and is forced to go back to the West Bank again. Nahleh is not satisfied with this shift in her life since she realizes that she is left alone: "I woke up to find myself old, without a husband, without a house, and no one to call me mama" (71). Nahleh feels that her family does not appreciate her efforts in helping them to survive: "I worked in Kuwait, being milked like a cow, teaching and bringing them up, but they paid no attention to me and did what they wanted" (70). *The Inheritance* hints to the fact that the family allows the female to change her place and cross the threshold of domesticity if that place brings them profit. In other words, it treats women as toys who are deprived of feelings and they only do what serves the patriarchal agenda. Thus, *The Inheritance* assures that this is one of the fundamental themes Sahar Khalifeh's feminist approach tries to criticize; that is the necessity to treat women as individuals not as machines or emotionless subjects that are under the control of the patriarchal system all the time.

Thus, Nahleh is not satisfied with her current situation as an unemployed woman "I am not used to staying at home. I spent my whole life working. Now I find myself doing nothing but housework, sweeping and cleaning, washing and making pickles! I'm about to explode, this kind of life is killing me. Am I going to stay home after having spent a lifetime working?" (117). Nahleh does not want to end her life at home without a job since she is used to have her own room and her own income as Virginia Woolf insists on in her book *A Room of One's Own* that "a woman must have money and a room of her own if she is to write fiction" (1929, p.4). Accordingly, after losing these weapons, Nahleh starts to look for alternatives to fill this gap. She starts to beautify and use make ups, her father once wonders: "Where is Nahleh? Where did she disappear?' and Nahleh continues to stay in her room in front of her mirror trying new outfits and playing sports to lose weight … then she starts to write, writing her memoir … she starts writing one page then she writes other pages, after that she stops and does not know how to continue or what to say"(95). Most of the time, "Nahleh sits in front of her mirror and starts to apply crèmes and oils, which she brought from Nablus, on her skin" (96). By doing this, Nahleh tries to look for a partner with whom to continue her life.

The situation Nahleh finds herself within, the pressure of her family and the traditions that view the unmarried woman as a spinster makes the situation worse. *The Inheritance* inserts "Spinster? Spinster! A shallow sick word for the single unmarried woman and an unmarried woman is a fruitless land, it is not attractive. It does not arouse the thought and feeling. And this is the situation of the woman without rain" (66). In other words, the husband/male is like the rain that will make the woman become fruitful. In addition, within the Palestinian society, mothers themselves are concerned about their daughters being married

since having unmarried daughters who are still even in their thirties means that the mother's daughters are like "the sluggish goods" (147). However, Nahleh is in her fifties now and she insists that getting married could be the solution for her problems. This belief is rooted in the cultural practices within the Palestinian society and the oral traditions. A popular Palestinian proverb shows that the movement of the Palestinian female and her exchange of place is too restricted within only two places 'A woman leaves her house twice: when she gets married and moves to the house of her husband, and when she dies and is carried to her grave'. Although marriage is assumed to be an escape from being treated as unwanted low demanding goods. Nahleh is still trapped in this trading process since marriage is performed by an exchanged of money, that is the dowry between the male figures. Nahleh is forced to adhere to the societal norms that view marriage as the only destiny for women if they are to be considered worthy creatures. Thus, she loses her status as a free independent woman and finds herself in a situation where she has to confront to the out-dated Palestinian patriarchal traditions. *The Inheritance* describes the scene where Nahleh is sitting in front of her mirror to recognize who she is and her reflection in the mirror would tell her more about who she is. It is the mirror that serves as a crossing point between Nahleh the independent woman and Nahleh the victim of the inherited patriarchal traditions.

Accordingly, this victimization of females within the Palestinian society derives Nahleh to insist on searching for a male partner that would uplift her from this situation. Nahleh believes that the male figure would empower her. Thus, she starts a relationship with an old man named Abu Salem who is already married and has children. Nahleh is caught having a love affair with him in a party that takes place in her town; thus, she has to marry him, "she does not find a place for love except in the toilet area!" (200). When her family discovers this, Nahleh has to suffer the consequences. Thus, she escapes to Zayna's place; however, Nahleh's brother Said insists that he kills her. When he finds her with Zayna, he shouts "Open the door! You daughter of a dog?" (136). He takes a knife from the kitchen and threatens Nahleh "With this, you see! With this. Does she think there are no males in her family" (163). *The Inheritance* shows that the shame caused by the female to her male relatives is only washable by her blood, which means ending her life. In addition, ending the life of the female by using a 'feminine tool' that is the knife, which is a 'domestic tool' usually used in the kitchen, could indicate that no one will blame the male since females are being killed by a domestic tool not a patriarchal one like e.g. the sword, the pen, the gun, etc. Moreover, *The Inheritance* employs the phrase 'the biggest knife' many times, a kind of knives that is usually used in the butchers' shop; thus, this could be a sign to exaggerate the amount of oppression and the huge punishment imposed on women.

However, Nahleh tries to defend herself by threatening her brother of calling the police "Get out! I will call the police"(163). *The Inheritance* tries to criticize the Palestinian society that does not provide the security for women inserting "but she knows well and he knows too that there is no police and that the country is a mess since there is neither government nor supervision" (163). Finally, Nahleh holds a rifle to stop Said from attacking her and she succeeds in stopping him. This recalls the same scene that happens with Zayna and her father while she is being chased by her father when she gets pregnant. Again, allowing a woman to hold a gun which is a 'masculine tool', even it is a hunting rifle, could be a sign/call from *The Inheritance* for women to take the first step and start defending themselves. *The Inheritance* repeats the same incident to communicate the message that these practices are the norms that the males resort to when it comes to their honor; that is their females' reputation within the Palestinian society.

The Inheritance views Nahleh as a woman who is totally indulged in the domestic traditional role of the wife towards her husband. For example, after Nahleh's husband runs away when his first wife and his children discover his second marriage, Nahleh insists that

she would not divorce him "Oh! Isn't he my husband? Even if her runs away and escapes, he is still my husband. I am his wife and the wife should be patient and bear the hardships with her husband"(201). However, things get worse when Abu Salem's family kidnap Nahleh since they want her to sign a paper giving up her right of inheriting him. Nahleh insists not to sign the paper stating "Will I be divorced at the end of my life? What would people say about me? You want them to say that I am without honor? You want them to say that I get married with him because of the inheritance? Or you want them to say that I married him just to taste him?" (201). *The Inheritance* describes Nahleh's behaviour as a victim when her father says "she is lost twice: once in her body and the other in her mind" (159). When his daughter disappears and is being kidnapped, the main concern of the father is only that what people would say about him: "He was shaken up and more afraid of scandal than for Nahleh's safety" (159). Nahleh ends up refusing to be divorced or giving up her share of the inheritance.

Nahleh is being treated as a criminal who deserves a big punishment. Her brother Kamal who works as an engineer in Germany contemplates while talking to his brothers about Nahleh's fate after the scandal, "if she were in Frankfurt, then her situation would be different since she could talk about her 'real self'" (155). Kamal is aware that women there express and verbalize themselves in conferences, magazines and newspapers and there are universities and institutions that give advice to divorced women and spinsters alike. In addition, Mazen believes that if Nahleh had the chance to go outside the West Bank, then her perspective about life and her behaviour would change a lot. Even at this point, while Nahleh's brothers are discussing the possibility of taking her to Frankfurt, they continue to treat her as a child who cannot decide and reason what is suitable for her. *The Inheritance* tries to communicate the message that the problem is not about the place but about the mentality of the people who occupy that space/place. This shows the patriarchal practices that position the males as guardians who are responsible to preserve the morality of women within the Palestinian society. This also reveals the nature of the relationships between Palestinian people; their relationships are subject to traditions and rules rather than emotions. Zayna, the narrator summarizes the scene concluding "I realized that the feeling of the individuals towards each other is not as strong as I thought or the way they assume it should be. The members of my family were merely detached pieces in a rusty chain …. Their relationship was part of the traditions and was only symbolic" (160). This system of symbolization is the main subject that Khalifeh tries to subvert in all her works.

II.3. Double Oppression

Futna is Zayna's father's wife. She is nearly of the same age with Zayna. Her skin is fair and she takes care of her appearance a lot. Zayna's first meeting with Futna takes place at the hospital where her father is taking his last breath. At the first sight, both females do not like each other, Zayna comments "I looked at her and she did the same but she did not attract my attention. For an unknown reason which I didn't understand, I felt sympathy with her" (59). However, Zayna and Futna get engage in a conversation about who will inherit her father after his death since *The Inheritance* tries to present the way the society oppress women and forbid them from taking their share of the inheritance just because they are females. Futna tells Zayna that "you are a female" (61), then she adds "if destiny had another say, I would compensate you and give birth to a male hire" (61). Zayna, the outsider, does not get the point in Futna's speech; thus, Futna explains: "The male blocks the others to inherit and without a male brother, your uncle would inherit. Do you understand what I mean?" (61).

This situation derives Futna to look for a solution to win the inheritance. She goes to an Israeli hospital to get a male hire; Futna undergoes an artificial insemination process in an

Israeli hospital. Thus, after Zayna's father passes away, she announces that she is pregnant. At this point, Futna has two challenges: on the one hand, she is afraid of her mother's reaction since she is an old fashion woman who is too strict when the issue is related to honor and God. On the other hand, her insemination process is done in an Israeli hospital that is in the colonizer's space. This stands against Futna's mother national views. Zayna asserts "from Futna's mother perspective, her daughter is smart since she got married of my father and this secures her daughter's life until death" (87). However, she doubts the method her daughter employs to get this child, Futna assures her mother stating "I didn't do anything that would make God angry. It's only a surgery that the doctor did at the hospital wearing gloves and a mask and there was a nurse assisting him" (90). Futna's mother shock is of double reasons: on the one hand, her daughter's body/honor is exposed to a male figure, and on the other hand, this male figure is an Israeli colonized figure. This affects the Palestinian traditional standards that consider the doctor as an oppressor and colonizer. In other words, Futna violates to codes of behaviour regarding her honor since her body is being exposed to a male who is a colonizer. After the negotiations with Futna's mother, she finally accepts her daughter's pregnancy. Thus, Futna starts the preparation to welcome her son; everything she prepares is blue since she is sure that she will have a baby boy.

Futna's labour approaches when there is a festival to inaugurate a project for water recycling in the town. People are gathering to join the festival; however, this creates a mess which requires the Israeli soldiers standing at the check points surrounding the area to interfere and prevent people from going to the festival fearing that they may smuggle guns and other weapons which would threaten their security. During this mess, Futna is lying down on the ground and shouting, she is in the process of giving birth to her long waited baby boy. People are shouting at the Israeli soldiers to let the ambulance reach Futna; however, their request is rejected and Futna is left waiting and suffering until she gives birth to her baby boy then she leaves the world. At the end, her mother holds the baby towards the soldiers saying "Thank you very much, this is your share" (316). At this moment, *The Inheritance* shows that women are not only victims of the patriarchal traditions, since Futna loses her life to get a baby boy to win the inheritance, but they are also victims of the occupation within the Palestinian society which also plays a major role in impeding women from being alive. This is part of Sahar Khalifeh's feminist approach that Palestinian women are victims of the occupation and not only males who suffer from this oppression. Palestinian women get their share of victimization from both traditions and occupation. *The Inheritance* shows that the current situation within the Palestinian society is not comfortable and this is clear in the final scene in the novel where it ends at the airport with Zayna who has interacted and exposed the life details of the Palestinian females within her father's society. Zayna realizes that she could not live within this atmosphere. It does not suit her ambitions as a young modern woman. However, *The Inheritance* does not shut the door in front of the society to change, there is still a room to fix this system, Zayna's uncle while saying goodbye to her affirms her that "It's true that the male inherits the double compared with the female, yet, your share is still reserved for you"(317). Zayna nods her heads and walks towards the plane after a journey full of knowledge about traditions and females' stories within the Palestinian society.

III. Results

The Inheritance tries to depict the life of the Palestinian females who are caught between patriarchal traditions and occupation. The majority of the events in the novel are devoted to discuss the way women are being treated as symbols that stand for men's reputation and honor. Thus, any breach of the morality codes that decide the way the female should behave, her blood will be the cost. This means according to the Palestinian male codes of behaviour

that ending the life of the woman proves that the male figure is a man and he is able to preserve his reputation by confiscating the life of the female figure and sucking her blood. By doing this, he preserves the qualities of his manhood. In addition, the novel focuses on the injustice practices that prevent women from having their share of the inheritance just because they are females; thus, they are not entitled to inherit or have their own property. Accordingly, the female figure resorts to artificial means which leads to expose her body/honor to the male figure; in particular, the colonizer to have a male hire to guarantee that she will be worthy of the inheritance.

IV. Conclusion

The female figure is a victim of traditions and occupation, in both cases, her honor is being threatened. Thus, *The Inheritance* succeeds in revealing the social context of the Palestinian female and the layers of this culture as important keys that Mohanty insists on taking them into account if to approach the Oriental woman and release her from being victimized and confined within a symbolic system of inherited traditions that treat her simply as a coherent worthless sex.

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Interrelationships between cultural capital and private language teaching: results of a quantitative pilot study

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During the globalization of the 21st century, the significance of language knowledge has become more essential than ever. In order to enhance their children's learning opportunities, more and more families take advantage of the different forms of private language lessons. Private tuition offers students with a higher socio-economic status the opportunity to expand their knowledge, while at the same time, students with a lower status participate in other non-formal courses for remedial purposes (Imre 2020). The aim of our pilot study is to reveal what value students attributed to language knowledge, as well as to explore correlations between students' socio-economic status (SES), school performance and motivation to participate in private tuition (Hegedűs 2021). In the present quantitative study (N=70) research questions are analyzed regarding the nature of private tuition students took part in and correlations between SES and language learning goals in private language tuition are examined. Our results show that there is an interrelationship between the rate of attendance in private language tutoring and cultural capital as the mother's academic qualification determined the value families attributed to language learning. In addition, students participating in private tuition intended to enhance their career aspirations in a larger proportion than students who did not attend private tuition. Our results emphasize the role of cultural capital in language learning as a value and confirm the literary findings (Diaz 2019). Albeit the limitations of the present study, our research can form the basis for further research in exploring the characteristics of private language tuition.

Keywords: Cultural capital; educational values; private language tuition; shadow education; socio-economic status

I. Theoretical background

The phenomenon of private education is not new, as it was considered a form of education known and existing even in ancient times. Private education can take different forms. Bray and Silova (2006) draw attention to the fact that although private education can take the form of individual private tuition and preparatory courses offered by institutions, private lessons usually mean individual and small group education, while preparatory courses refer to the education of larger groups. Private language teaching appears as a frequent form of education to supplement language lessons in the formal school system, but there is little available data on the socioeconomic characteristics of participants and their families. In her research on extracurricular activities, Imre (2020) points out that private tutoring offers students with a higher socioeconomic status the opportunity to expand their knowledge, while at the same time, students with a lower status participate in other non-formal courses. Szilágyi (2009) summarizes the goal of students using private language education, which can be remediation or education that supplements the school curriculum. In the course of supplementary education, students are prepared for graduation and/or language examinations, or they may learn a subject (another foreign language) that they do not have the opportunity to do at school. Szemerszki (2020) draws conclusions from the data of the National Competence Measurement, based on which younger students participate in extracurricular activities rather than private tutoring in a higher proportion, while the rate of participation in extracurricular lessons increases with age. This is especially true in the case of foreign language education, which is primarily used by students with a better academic average.

Józsa and Fejes (2005) point out that albeit a rich and vast source of literature is available on the interrelationship between student's socioeconomic background and performance at school, but little empirical data can be found regarding the context of participation in private language tuition. Using data from the 2015 PISA survey, Liao and Huang (2018) look for reasons for students' participation in private education through examining their grades in Science. Their results show that, on the one hand, individual factors and, on the other hand, school-level factors probably increase the chances of students' rate of participation in shadow education. Such factors are individual interest in the subject, as well as students' expectations regarding studies. In addition, the autonomy of the school, its equipment with the resources necessary for learning and the size of the school are also of decisive importance in the participation in private education. However, the question arises as to what effect/results private education can have on student achievement. The authors' important conclusion is that, overall, private education did not have a significant impact on school performance, but at the same time, the gap between students' performance increased, as students with a higher socioeconomic background benefited more from private education than their peers with a lower socioeconomic background. In her study, Bíró (2020) describes the characteristics perceived by private language teachers as their strengths, while Hegedűs (2021) examines the participation rates in private language tuition, the expectations and motivations of students. The primary reason for participating in private tuition is that language education at school was considered inadequate and inefficient by the families: the curriculum was not adapted to the language level of the students, and the students did not receive enough attention in their formal language class. In their longitudinal study in China, Zhang et al. (2021) conduct a survey on the effectiveness of private tuition but they did not find any significant correlations among secondary school students. Their conclusion was that for some students, private education had a different effect, which can presumably be explained by the students' different learning styles. They draw attention to the fact that when choosing private tuition, it is important for parents to carefully consider the available options. Zhang and Xie (2016) examine the social background variables of participation and the effectiveness of private education in China. In their research, they come to the conclusion that

there is a positive correlation between private education and the socioeconomic status of the family, since the student's gender, age, place of residence, high qualifications of parents, family income and lower number of siblings all increase the probability of participation in private tutoring. However, difference in the academic performance of children who received and did not receive private education was insignificant when the characteristics of the family background was examined.

II. Research method

In the present quantitative research, when interpreting the concept of shadow education, Bray's (1999) definition is taken as a basis, according to which the lessons offered in private education are paid and supplementary to formal school lessons. The purpose of the present pilot study is to find answers to the questions that arose as gaps in the literature review regarding the motives and reasons for participation in foreign language shadow education. In addition, the value of learning languages for learners taking part in private tuition was also examined. What kind of correlation can be demonstrated between social background factors such as the education of the mother, the type of school and the student's place of living? If language learning is of great value, what reasons motivate students to participate in private education? Is the existence of the language certificate decisive, the importance of which is drawn by Fekete and Csépes (2018) as an essential document in Hungary towards a more successful career choice and thus towards mobilit?

Our research questions are grouped around two main areas: social background factors and motivation in private language teaching; accordingly, results are highlighted and summarized in the following way:

• what characterizes the socio-economic background of students participating in shadow education (private language tuition)
• what forms of private tuition the students use
• what characterizes the motivations and objectives of students participating in private education
• what correlations are found between the students' socio-economic background participating in private language education and the rate of participation in language education

I.1.Research questions and hypotheses

In order to compile the questionnaire, the measuring instrument of our quantitative research, in a reliable and valid way, the dimensions of the items based on Dörnyei's process-oriented theory and Kuhl's self-regulation theory were created. With the help of the explored literature (Bíró 2020, Hegedűs 2021, Imre 2020), the following research questions and hypotheses were formulated as the basis of the study:

KK1: What socio-economic characteristics characterize the students and their families participating in shadow education?
H1: Most of the students participating in shadow education live in cities and have a better socioeconomic status than students who do not take part in private tuition. The mother's education is of vital importance: the mothers of students participating in shadow education have a high school diploma, college or university degree.
KK2: 2. Which forms of foreign language shadow education do language learners use, and for what purpose do they participate in paid language tutoring outside of school?

H2: Among the forms of shadow education, in most cases, student study with private tutors rather than at language schools. Most participants decide on private tuition in order to pass the language examination. A smaller proportion of students participate in language education outside of school for remedial purposes (Szilágyi 2009). Students with higher cultural capital participate in private language education in order to increase their chances of further education and career choice (Hegedűs 2021).

II. Research results

II.1. Data collection and analysis

In order to answer the research questions, quantitative research was conducted, and data was collected in the 2021/22 academic year. The data collection took place anonymously in the North-East part of Hungary (Szabolcs-Szatmár-Bereg, Hajdú-Bihar and Borsod-Abaúj-Zemplén counties). In North-Eeast Hungary, there is a particular emphasis on learning English, as the largest number of students obtain language examinations and advanced-level school-leaving examinations in English, which corresponds to the intermediate level language examination certificate. The reason for this is that in Hungary, language skills are currently certified on the basis of two standardized external exams: the foreign language graduation exam and the accredited language exam. It can be assumed that the students' primary motivation is to obtain a language examination certificate, which creates an opportunity for them to continue their studies in higher education.

Eleventh- and twelfth-grade secondary school students and first-year university students (N=70) took part in the survey in the form of an online convenience questionnaire. The average age of the students was 18 (M=18,271), so they had relatively large experience in the field of foreign language learning. Based on their distribution by place of living, the majority were students from small towns (29 people) or villages (21 people), and the number of students living in large cities was 20. Regarding the type of secondary school, 27 people were students attending vocational schools and vocational secondary schools, while 43 people attended grammar schools. The data was collected in May 2022, and data processing took place in July 2022, through descriptive statistical analysis, Anova analysis and simple linear regression analysis using IBM SPSS software. A five-point Likert scale was used to measure the answers in the questionnaire, in which the participants indicated their agreement/disagreement with various statements (1= not at all true/no such thing, 5= very true).

II. 2. Results

The results of the research are presented along the following steps: 1) correlations between students' socio-economic background and private learning, 2) reasons for learning with a private teacher, and 3) exploring the value of language learning along the dimensions of the language exam goal and international goal.

II.2.1. Socio-economic background

In our research, the socio-economic background of the student is of great importance, correlations in private language education need to be examined to justify our first hypothesis. The correlations between the use of private lessons and student characteristics were examined through a descriptive statistical analysis based on the student's place of living and the type of school the students attended. In addition, the highest qualification of the student's mother was

used to measure cultural capital. Apart from this, the existence of material possessions and the frequency of annual holidays were used to measure financial capital.

Since the three examined counties are among the most disadvantaged regions of Hungary (Garami (2020), the type of place of living is of decisive importance in terms of the academic success of the individual student.
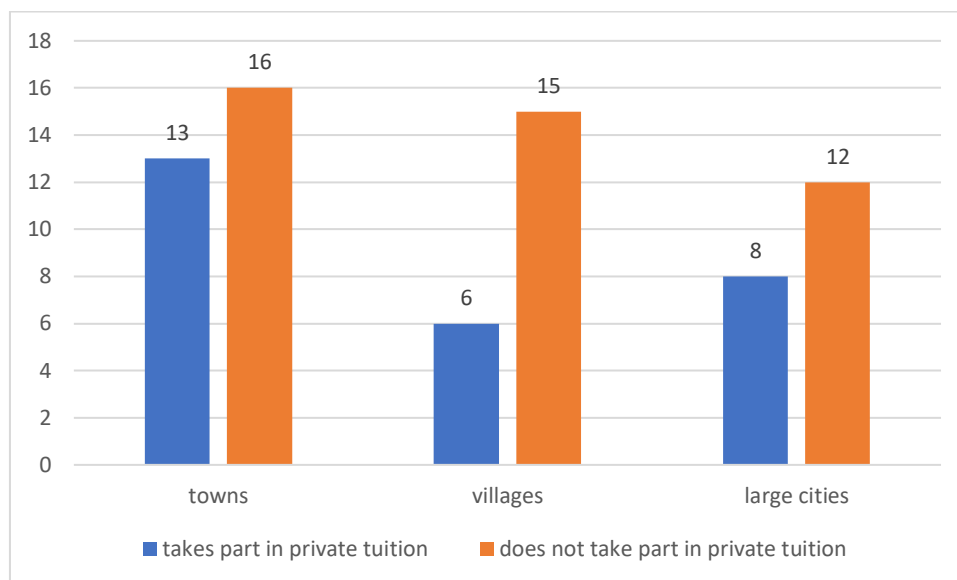
Figure 1: Correlations between place of living and private tuition

Figure 1 shows that the distribution of respondents based on the type of place of living is almost proportional, since 21 people live in villages, 20 people live in larger cities, and 29 people live in smaller towns. The results of our study show that the place of living was not significant (p=0.501), because the smallest proportion of people living in villages participated in private language lessons (six people), while those living in larger cities and smaller towns did so approximately in the same proportion (29 students from larger cities and 13 students from smaller towns).
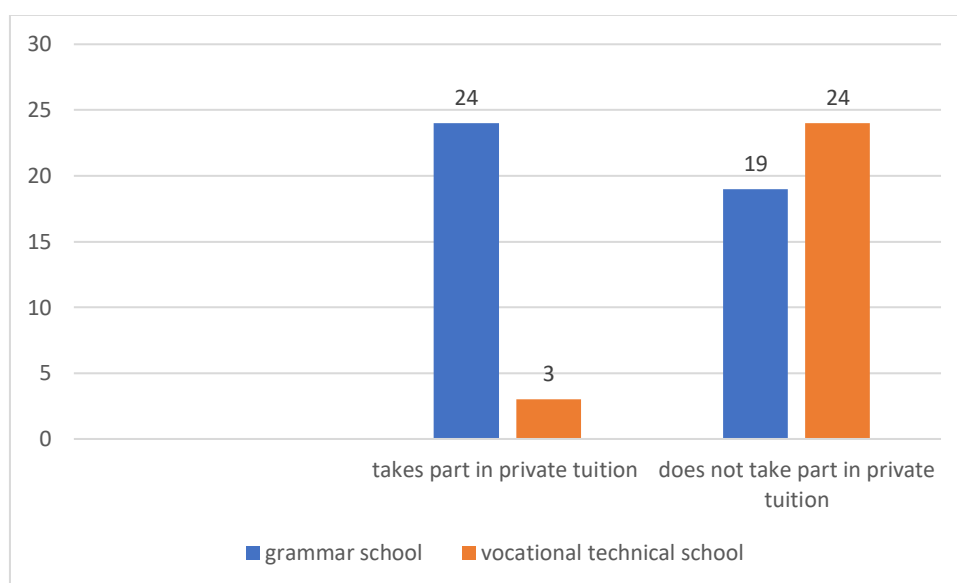
Figure 2: Correlations between secondary school and private lesson participation

The analysis regarding the correlations between school types is of vital importance, as it is assumed that students attending different school types had different language learning goals and values. Figure 2 shows that less than half of those who completed the questionnaire used some form of private tuition (27 people), 43 people did not go to a private tutor. Regarding the type of school, a significant difference (0.001) was found, as almost half of the students attending grammar school (24 people) took part in private tuition, while only three of the students attending a vocational school or vocational secondary school took advantage of private tuition. From this result, it can be concluded that secondary students attending grammar school probably had different goals from their peers and used this type of education to enhance their opportunities in higher education.

In the following, the relationship between the mother's highest qualification, as an indicator of cultural capital, and the participation rate in private language tuition was examined and a significant correlation was found between the mother's highest qualification and the rate of participation in private education (0.001), as the children of mothers with higher qualification took part in private tuition in a higher proportion.
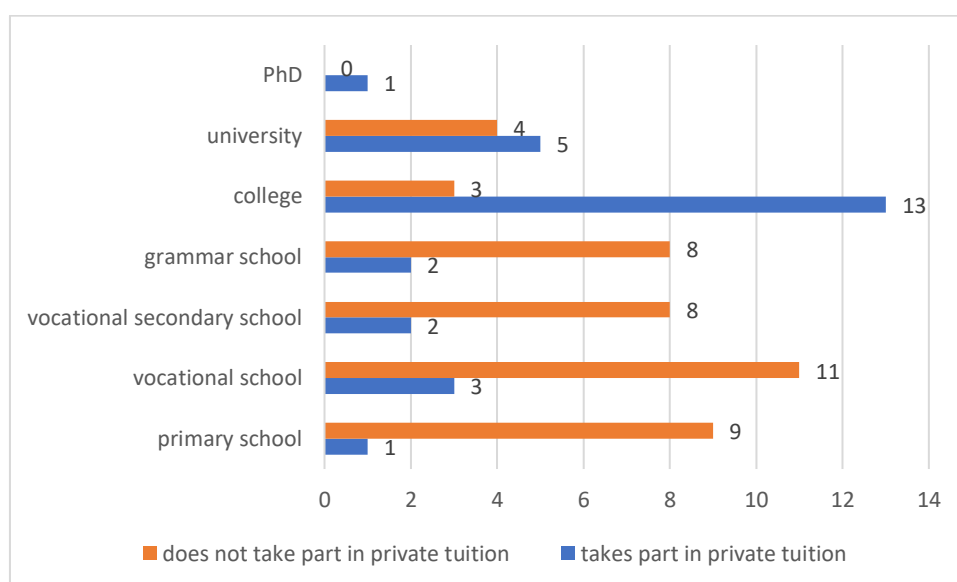
Figure 3: Correlations between mother's highest qualification and participation rate in private language tuition

As Figure 3 shows, children of mothers with college degrees participated in private tuition in the highest proportion (13 out of 16), while almost half of the children whose mothers had a university degree (five out of nine) went to private tutors. There was only one student taking part in private tuition, whose mother did not have any secondary level school certificate.

In the examination of the socioeconomic status, our last variable was the financial capital, to measure whether correlations could be detected between the existence of material possessions and the frequency of family holidays. No significant difference was found, yet surprisingly, students who did not take part in private education had the opportunity to go on holiday more often than students who attended private tuition. While most of the participants in private tuition rarely (once a year) or never went on holiday, among the non-participants there was a higher number of students who went on holiday several times a year. It can be concluded that the interrelationship of financial capital and private tuition did not necessarily mean that the families whose children took part in private tuition had more financial resources. Presumably, the parents with higher qualification and higher cultural capital conveyed different values to their children and utilized their financial capital resources to a greater extent as cultural capital.

Based on these results, our first hypothesis was partially confirmed. Students participating in private language tuition were mostly students living in cities, however, in the case of their socioeconomic background, the impact of cultural and financial capital was different. Taking into account the cultural capital of the families, it can be concluded that students participating in private tuition had a higher cultural capital than their peers, so it is assumed that language learning as a cultural value was also more important for the families.

II.2.2. Reasons for participating in shadow education

As a first step in assessing the value of language learning, the aspects of participation in shadow education were examined to gain data on the motivation families had to participate in shadow education and the form of shadow education they took advantage of.
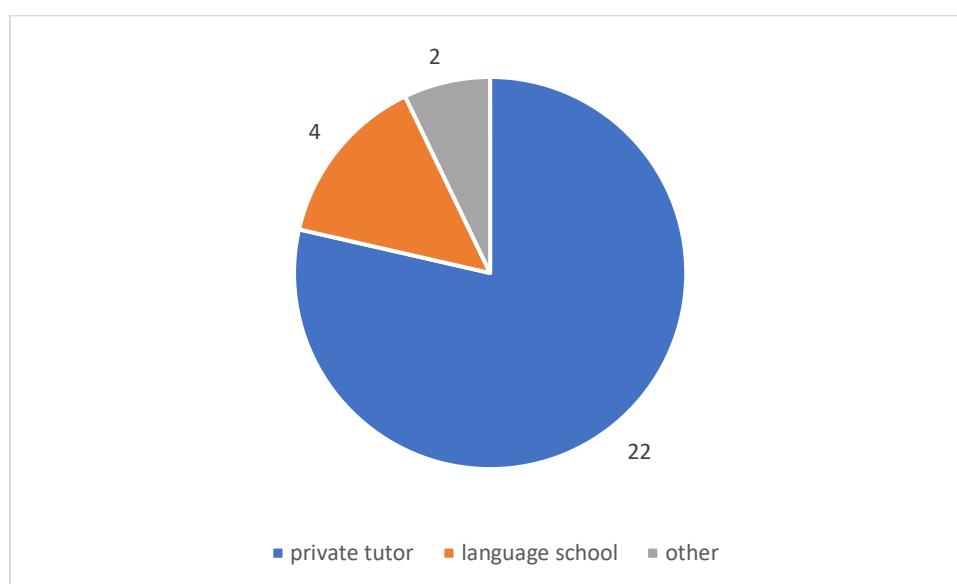
Figure 4: Forms of private tuition

Figure 4 shows that most respondents (N=22) chose the form of learning English with a private tutor, and only four students studied at a language school. The reason for the difference might have been that students needed individual attention and would have preferred to make progress at their own pace. To justify our hypothesis, the reasons and motivations for students to take part in private tuition was examined and the following results were gained:
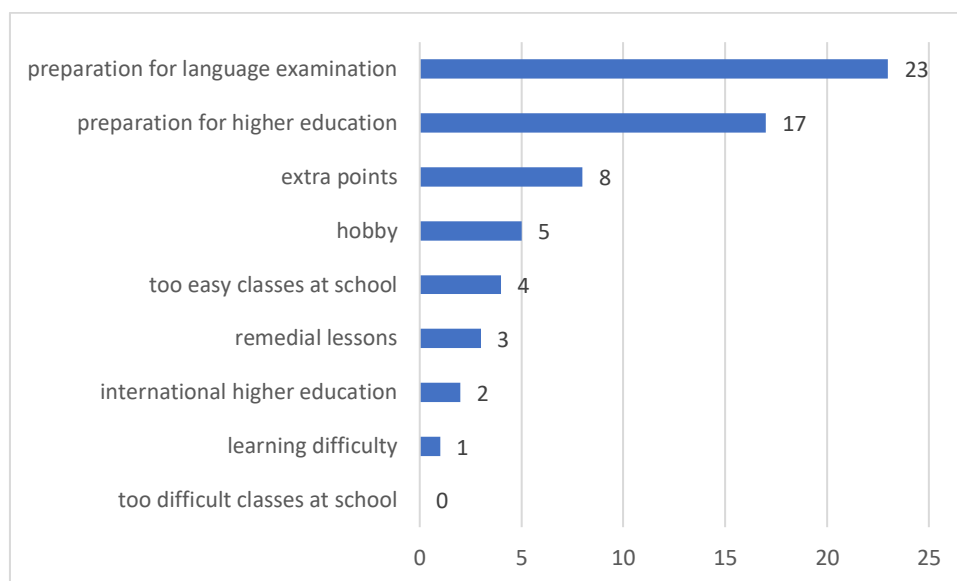
Figure 5: Reasons for participating in private language tuition

As it can be seen in Figure 5, the most common reason for studying with a private tutor (23 people) was the purpose of preparation for a language examination, which confirms the results of the literature (Réti 2009). At the same time, the second most important reason was the preparation for higher education (17 people), as well as the extra points students could gain when entering university once in possession of a language examination (8 people). Two students were motivated by international higher education, while four students expressed their criticism of language teaching at school, as they had found the school language lessons were too easy, while one student used the help of a private tutor because she/he had a learning difficulty.

In order to examine the value of language learning, an analysis was carried out along the dimensions of the language examination goal and international objectives through the following measurements:

• descriptive analysis to calculate the average of the dimension's items

• through a cross-tabulation analysis, exploring the relationships between cultural capital (mother's highest education), material capital and values related to language learning goals.

Table 1: Language learning objectives

Language learning value	Mean	Standard deviation
I am learning English to be able to pass a language exam of the highest possible level	3.086	1.2128
You can really speak a language if you have a language examination	2.886	1.3356
Often, I only study English to prepare for a language examination.	3.343	1.2597
In language learning, it is very important for me to pass an intermediate language examination	3.486	1.2597

I think passing an intermediate language examination will help me achieve my goals to get into higher education	3.086	1.1260
Learning a language is important for me to be able to realize my career-related goals	4.086	1.0320
I think a language examination is important for me to get extra points to get into higher education	3.586	1.1977
I think a language examination is important for me to be able to study at an international university	2.971	1.1914
I am learning the language because I want to work abroad	2.843	1.3037
I am learning the language to have the opportunity to continue my studies at an international university	2.271	1.4338

As shown in Table 1, the motivation of language learning goals can be divided into two main groups: the language examination goal, which can contribute to the expansion of career options, and the other group relating to studying and working abroad. Through a descriptive analysis, above-average results were obtained in the case of four items: preparing for the language exam as the goal of language learning (3.343), obtaining the secondary language examination (3.486), learning the language as a means of achieving goals related to career choice (4.086), and for higher education obtaining additional points (3.586).

Table 2: Mother's highest qualification and language learning value (p=0.05)

Constant	Beta	Significance
Correlations of learning with a private tutor	-0.131	0.000
Language examination aim	0.351	0.255
Intercultural aim	**0.643**	**0.05**

In order to justify our second hypothesis, by running a simple linear regression, the interrelationship was examined between the effect of the family's financial capital and cultural capital on the student's values and objectives related to language learning. The results show that in the case of international goals, a strong positive correlation (0.643) can be shown between the mother's highest qualification and the value of language learning. While there is no

significant correlation between the language examination goal and learning with a private tutor, a positive correlation can be seen in both cases.

Table 3: Financial capital

Constant	Beta	Significance
Correlations of learning with a private tutor	0.129	0.182
Language examination aim	0.048	0.883
Intercultural aim	-0.640	0.06

On the other hand, in the interrelationship of financial capital and international objectives, a negative correlation was gained, although, no significant difference was found.

III. Conclusion

In our quantitative research, we shed light on the characteristics of private language teaching. Connections between the student's socio-economic background, her/his goals for language learning, and the interpretation of the value of language learning were analyzed. The characteristics of the motivations that guide students to participate in private language tuition were unveiled and data was gained on to what extent cultural and financial capital influence participation in shadow education.

In the course of our research, conclusions were drawn regarding the importance of having a language examination certificate, higher education on both a national and international level, as well as career aspirations in the dimension of the language learning goal. The largest proportion of students considered language learning as a means to achieve their goal related to higher education. Obtaining the language examination certificate was the main motivational factor for most students, as they gained extra points for it to get into higher education. At the same time, a smaller proportion of students hoped to increase their chances of choosing a career by language learning. Based on our results, the student's place of living, or the type of school they attended did not significantly influence the rate of participation in private language tuition. While the mother's highest qualification, as an indicator of cultural capital, had a positive effect on participation in private language tuition, financial capital had a small effect on students' participation rate. In summary, it can be said that our pilot research partially supports the literature background, as it confirms the importance of cultural capital, yet it has limitations due to its small number of elements. At the same time, it creates the opportunity to form the basis for conducting future large-scale studies.

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Locating Literary Identity in J. M. Coetzee's *Life and Times of Michael K* (1983) and *Foe* (1986) : A Critical Study

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Abstract: J. M. Coetzee, a widely acclaimed South African novelist, has often used his country's apartheid system as well as silence to mirror the bleakness of the human condition. The very process of writing anti-apartheid literature during that period brought world recognition to the African situation as well as his works. However, this writing resulted in danger, disdain, and persecution to these authors whose government struggled to conceal the truth and prevent these voices from telling their stories. Although Coetzee's oeuvre is widely considered as a milestone in postcolonial anti-apartheid literature, his works were perceived as 'too oblique with insufficient political charge'. In this paper, I will try to refute early criticisms of Coetzee's fiction that his works failed to take a definitive stance on the politics of apartheid. The central focus is the way in which Coetzee chooses his diction to arouse powerful imagery and symbolism correlating the conflicts , both internal and external, of his characters with the real ideological and physical conflicts that enveloped the apartheid.

Keywords: Apartheid; conflict; identity; postcolonialism; resistance

I. Introduction

The ideological oppression of the liberal white South Africans is extensively projected in the works of the South African Noble Prize winner, J.M. Coetzee as the majority of his novels explicitly symbolize or allegorize the different types of apartheidic oppression. Born in 1940 in Cape Town, the boyhood of John Maxwell Coetzee was dominated by cultural conflicts, consequent to his color and language use, as an English-speaking white South African, or more precisely, Afrikaner. The question whether Coetzee would consider himself an Afrikaner or not, has been evident in establishing his literary identity. As John Gamgee observes, "Coetzee has always been suspicious or skeptical of belonging to a certain group that would limit his individual freedom" (69). Further, in an interview with David Atwell, Coetzee describes the complex situation of his literary identity, suggesting that:

> No Afrikaner would consider me an Afrikaner. That, it seems to me, is the acid test for group membership, and I don't pass it. Why not? In the first place, because English is my first language, and has been since childhood. […] In the second place, because I am not embedded in the culture of the Afrikaner […] and have been shaped by that culture only in a perverse way. (Coetzee, *Doubling the Point* 341)

What is remarkable in Coetzee's words here is the double sense of rejection and complicity, the state of being 'within' and 'without'. His desire to be completely detached from the Afrikaner community is evident in his denial of being "embedded" in the Afrikaner culture. However, his sense of complicity, the sense that he always attempts, or wishes to, dismiss, is evident in the "perverse way" that Afrikaner culture has shaped his life.

In his work, *The Cambridge Introduction to J. M. Coetzee,* Dominic Head suggests that "Coetzee's ethnicity- in the South African context- has had a crucial bearing on his literary identity" (22). What Head suggests here is the difficulties and challenges that faced Coetzee in his oeuvre, as his reliance on English language placed him in an ambivalent or transitional position between two poles; the white South Africans and the black South Africans. Coetzee was criticized by both parties for not addressing the contexts they desired to be addressed or, more precisely, to be historicized. Moreover, his use of English language and "his reliance on European theoretical and literary models put him at the far end of the spectrum from those writers seeking to develop a 'pan-Africanist' model for South African writing" (Head 24). However, Coetzee was aware of his 'ambivalent' or 'marginal' position since his background distances him from English, as well as Afrikaner affiliations. His use of English language was very intentional rather than being accidental, and the adherence to the European literary genealogy is considered to by his major weapon in opposing the ideological force of history and the hegemony of realism in the South African fiction.

To further understand Coetzee's position and literary identity, it is essential to mention Simon During's distinction between "the 'post-colonized', those who identify with the culture overlaid by imperialism, and by the language of the colonizer, and the 'post-colonizers', those who are embroiled in the culture and language of colonialism, even while they reject imperialism" (127). Coetzee's ambivalent position as an English-speaking South African was the reason for this dispute. However, in recent history, Afrikaans has been viewed as the imperialist language not English and as Head suggests: "With this qualification, it seems appropriate to consider Coetzee

as a 'post-colonizer' in During's sense, occupying that margin of postcolonial writing in which complicity is the necessary focus" (28).

II. Discussion and Results

II.1. *Foe*

Coetzee's *Foe* is a highly 'literary' work, a postcolonial reworking of Daniel Defoe's *Robinson Crusoe*, containing important allusions to other works by Defoe. The novel is written from the perspective of Susan Barton, a castaway who landed on the same island inhabited by "Cruso" and Friday as their adventures were already underway. Like Robinson Crusoe, it is a frame story, unfolded as Barton's narrative while in England attempting to convince the writer Daniel Foe to help transform her tale into popular fiction. Focused primarily on themes of language and power, the novel was the subject of criticism in South Africa, where it was regarded as politically irrelevant on its release. While Coetzee's *Foe* was criticized for not directly addressing the apartheid and allegorizing the conflict in a fictional setting, reading the work of J.M Coetzee as essentially uninvolved, disconnected, and too abstract to represent the South African politics would undervalue the significance of intellectual thought and literary symbolism, and would in turn depreciate the cultural role that literature plays in politics. Although Derik Attridge believes that Coetzee's abstract involvement in the South African politics excludes him from joining the canon of eminent authors(219), Coetzee underscores his political message evidently in *Foe*. Coetzee projects the idea of oppression in nontraditional terms through interactions between Susan, Cruso, Foe, and the most vehemently debated character, Friday. Although critics have different sayings in determining who oppresses Friday, the omnipresent theme remains stable: Friday, as a "colored" man, intensely represents the oppressed, without taking into consideration the various factors that oppress the other characters, most notably, Susan Barton. However, a closer reading of the novel reveals an entirely different story. Rather than contributing to his oppression, Friday employs his silence as a manner of resistance and insubordination. The power of Friday's silence oppresses Susan by not allowing her story of the island to obtain "the substance it has lost" (Coetzee, *Foe* 51). Throughout the novel, Susan speaks of losing her "substance" regularly, "substance" in this situation is something which can exist independently, the basis that underlies the existence of other things. As a result of Friday's silence, Susan Barton loses her substance because without Friday's story, her story cannot exist independently. The oppression that Susan experiences is representative of the perceived oppression of liberal white South Africans during the apartheid. Coetzee's exquisiteness in presenting these ideas enables the reader to recognize the huge responsibility liberal white South Africans shouldered for assisting black South Africans.

Returning back to During's distinction of 'post-colonizers', those who are embroiled in the culture and language of colonialism, even while they reject imperialism" (127), there is one passage in *Foe,* in which Susan Barton entreats Foe to give her back the substance she has lost, she describes herself as a "ghost" beside the "body" of Cruso. Interestingly, a ghost finds itself bound to the same location, haunting in the same place forever, much like Susan's soul is bound to the island. Susan depends on imprisonment to achieve her freedom; she must depend on her captivity on the island to free herself from her past and her oppressor, Friday. Implicitly, this passage symbolizes the liberal white South Africans' desire to dissociate themselves from the oppressors with whom they share the same color of skin by designating their pasts as altruistic and sympathetic to the black South Africans. However, being a part of a group defined simply by

skin color, liberal white's struggle against the apartheid remains diaphanous , making them insubstantial entities in that struggle.

Following Cruso's death, Friday unwillingly leaves the island with Susan Barton. Susan sends a group of men from the rescue ship back on the island to retrieve Friday, because, according to her, " Friday is a slave and a child, it is our duty to care for him in all things, and not abandon him to a solitude worse than death" (Coetzee, *Foe* 39). Susan believes that Friday stands a better chance in a country he has never stepped foot in rather than staying on the island surrounded by solitude and thus, in utter freedom. Through her actions, Susan presents two important notions. First, she views Friday as an inferior barbaric being who cannot care for himself and second, she proclaims the duty of those in power to take care for "lower" people in their authority. Although these notions appear contradictory, they both seem interrelated when viewed in the scope of political arena of apartheid in South Africa. Since Susan Barton is representative of liberal white South Africans, Coetzee demonstrates that the liberal whites are the ones being oppressed as they are entrapped between two opposing sides: the black South Africans whom they sympathize with yet fear, and the reactionary ruling whites whom they share the color of their skin but not the color of social or political beliefs. However, although liberal white South Africans want to free and protect blacks from the apartheid, the type of freedom they wish to give the blacks is a freedom of their own design, not necessarily the extent or type of freedom desired by black South Africans.

Coetzee's achievement in *Foe* represents the mind of an author well accustomed to the political struggle in South Africa. Although his abstractness and the subtlety in presenting ideas may have caused some critics to disregard the relevance of his metaphors, Coetzee has certainly made a harsh political statement that transcends the field of literature into the realm of real life politics. At the time of this novel's publication, the apartheidc era neared its worst stages of oppression and violence against the black South Africans.. Through the dilemma of Susan Barton, Coetzee passes on the senses of helplessness, anger, and oppression felt by liberal whites. However, through Friday, Coetzee successfully reverses the roles of the colonizer and the colonized, creating a spotlight of hope to a very real oppressed community.

II. 2. *Life and Times of Michael K*

Coetzee's 1983 novel, *Life and Times of Michael K*, a story of a man named Michael K, who makes an arduous journey from Cape Town to his mother's rural birthplace, amid a fictitious civil war during the apartheid era in the 1970-80s, delves into the politics of South Africa by immersing the reader in the fictionalized events of a very real human tragedy. Coetzee depicts the South African apartheid through the lens of a man completely uninvolved in the war. However, as the title character's experiences prove, it is impossible to escape the apartheid. Through this novel, Coetzee erases the doubt and ambiguity about his firm place as a voice of the apartheid by placing the narrative in the heart of South Africa. Coetzee's political scope in the novel offers two confounding and disturbing choices for reacting to the apartheid. Either to remain completely uninvolved with the result of living in homelessness, lethargy, and starvation, or to become involved in the war and risking self-freedom. Needless to say, neither option looks appetizing, but that is the point. Coetzee understands the bitter truth of the apartheid: no one can escape it and its effects are devastating. As evidenced throughout the novel, while potentially more difficult and harmful during the journey, silent resistance allows the achievement of an

ideological freedom so sorely sought after by liberal white South Africans instead of failing in attempts to grasp an empathetic understanding of victims of the apartheid.

As the narrative shifts between first and third person narrators throughout the novel's three sections, questions of narrative point of view arise. As in *Foe,* Coetzee interest in Michael K centers around a character whose "story… had never been an interesting one," (Coetzee, *Life and Times of Michael K* 68), and also similar to *Foe*, the story told depends on the work of an outside narrator. In both novels, Coetzee's discussion of storytelling and authorship suggests that the process of narration requires "interesting" stories, without which publication is impossible. But, if Coetzee's main characters in both novels have very little to offer in the way of persuasive stories, why does Coetzee dedicate two entire novels to these "uninteresting" stories? As in *Foe*, Coetzee assigns the narration duties to certain characters who can, and willingly do, communicate in *Life and Times of Michael K*. Since Michael K and Friday refrain from telling their own stories for lack of interest or otherwise, their would-be oppressors, Susan Barton and the medical officer, serve the role of creating these stories for the reader. Both imperial narrators sense some importance lies in the stories of the "other" or the "native" characters they encounter in the course of the narrative. However, both recognize that only through these "natives" this importance could be discovered. In their constant attempts to acquire these stories, both Susan Barton in *Foe* and the medical officer in *Life and Times of Michael K* become so dependent on obtaining these accounts for their own personal benefit that the silence they receive instead serves to oppress them. In both novels, each narrator describes the silence they encounter in similar terms. The medical officer describes Michael K's silence in expressions that elicit images of suffocation, "a silence so dense that I heard it as a ringing in my ears, a silence of the kind one experiences in mine shafts, cellars, bomb shelters, airless places" (Coetzee, *Life and Times of Michael K* 140). The density of Michael K's silence creates images of the "black smoke" of Friday in *Foe*, but in this passage the medical officer uses terms and expressions that apply more directly to South Africa and to the apartheid.

Through his novels, *Foe* and *Life and Times of Michal K*, Coetzee presents a perception of silence that differs greatly from the perception which emerges from the work of most postcolonial writers. In general, the postcolonial discourse recognizes the relation of language to power and oppression and the crucial role that language plays in hindering the ability of the "other" to express self. However, this is not the case in Coetzee's fiction, where the "other", uses silence as a weapon to oppress the oppressor and to grasp a sense of self-freedom. In this representation of the silent "other", Coetzee invests silence with a power that undermines the hegemony of speech. The very idea of using silence as a weapon to defy one's own oppression and to cause the oppression of another is revolutionary and almost wholly neglected by critics of Coetzee. Most focus on the oppression of Friday and Michael K in their close readings of the texts, however, Coetzee's minute attention to diction allows for different interpretations. Thus, the importance Coetzee places on silence as a double-edged weapon and the results of this action on characters (particularly white characters) is too great to be ignored. This importance lies in the literature's way of spreading ideas, emotions and stories across continents and cultures.

III. Conclusion

To conclude, J.M. Coetzee is not the first South African to win the Nobel Prize in Literature for work concerning the apartheid. However, like Nadine Gordimer's but more explicitly, Coetzee's fiction addresses both black oppression and white guilt as its own form of oppression. Coetzee's

achievement lies in his ability to create an association between silence and resistance. Silence in fact becomes the means through which the "other", represented by Friday and Michael K, resist the languages of imperialism. Since the imperialists, Barton and the medical officer, position of dominance hinges on a recognition of them as masters, the silence of Friday and Michael K denies them this position. The South African apartheid was one of the greatest human tragedies in history; however, it existed as back-page news outside the African context. Through his fiction, Coetzee enlightens the western world to the horrors of the apartheid and the idea that the conflict was not so simple as merely black versus white. It also allows for different reflections and considerations on history's most evil oppressions.

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Comparing the endovascular treatment of tandem occlusions and isolated intracranial occlusions in acute ischemic stroke

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Abstract

Introduction: Intracranial mechanical thrombectomy (MT) is considered as a standard treatment approach in acute ischemic strokes (AIS) due to isolated large vessel occlusion (LVO) of the anterior circulation. Although patients with tandem occlusion (TO) (intracranial LVO and a concomitant, ipsilateral extracranial internal carotid artery high-grade stenosis or occlusion) have been excluded from the recent randomized thrombectomy studies due to the greater stroke severity and the technical complexity of the endovascular treatment (EVT). Therefore the exact treatment strategy of TO is still unclear. We sought to compare stroke patients with TO and patients with isolated intracranial occlusion (IsO). Comparisons included the demographic and clinical parameters, interventional parameters, time metrics, and clinical outcomes.

Methods: Consecutive patients with anterior LVO who underwent EVT in the participating institutions (Debrecen, Pécs, Szeged) were enrolled in our study. Patients' data were collected from our prospective stroke registry (STAY ALIVE Stroke Registry). Patients were divided into two groups depending on whether TO or IsO was detected. Investigated outcomes included the 90-day functional outcome and mortality.

Results: A total of 166 patients (69 ± 12 years, 54.8 % female) were enrolled in our study, including 32 (19.6%) TO cases, and 133 (80.1%) patients with IsO. Patients in the IsO group were slightly older (70 ± 12 years vs. 66 ± 9 years, p = 0.075), and had a higher prevalence of comorbidities such as atrial fibrillation (46.5% vs. 16.1%, p <0.002). There was no significant difference in the investigated outcomes, although we observed a trend towards higher rates of 90-day mortality (29.1% vs. 16.7%, p=0.053) in the IsO patient group. However, the distal embolization was higher (29.0% vs. 12.8%, p=0.026) in the TO group. After the regression analysis, the age (p=0.016) and baseline NIHSS (p=0.002) were associated with the 90-day good functional outcome, and the age (p=0.009), glucose (p=0.047) and sICH (p=0.025) were correlated with the 90-day mortality.

Conclusion: Our results suggest that the functional outcome of the patients with large vessel occlusion does not primarily depend on the occlusion type, since patients with tandem occlusion showed a comparable functional outcome with a moderately less mortality rate 90 days after the stroke. Furthermore, our results confirmed the safety and efficacy of EVT in tandem lesions.

Keywords: Ischemic stroke; mechanical thrombectomy; tandem occlusion

I. Introduction

Acute stroke is the third leading cause of death and the first leading cause of severe disability worldwide (1). Approximately 43 000 new acute stroke cases occur annually in Hungary (2). Acute ischemic stroke (AIS) accounts for 85% of all acute stroke cases (3). Large vessel occlusion (LVO) causes 20-40% of ischemic strokes and occurs when a major brain artery is blocked (4). The primary aim of LVO treatment is to recanalize the occluded vessel as soon as possible. There are two main therapeutic approaches: the formed clot thrombolytic dissolution (intravenous thrombolysis [IVT]) or the direct clot removal with endovascular catheter devices (mechanical thrombectomy [MT]). Previous randomized controlled trials (RCT) have proven the efficacy and safety of MT in patients with AIS over IVT (5-7).

Another severe form of AIS is tandem occlusion (TO), which is defined as an intracranial LVO of anterior circulation with a concomitant, ipsilateral high-grade stenosis or occlusion of the extracranial internal carotid artery (EICA). Former studies estimated that more than half of TO patients (40-69%) die or survive with severe disability without effective treatment (8). Furthermore, patients with TO were poorly presented (18.3% in REVASCAT, 17% in ESCAPE) or excluded (SWIFT PRIME, EXTEND-IA) from previous RCTs due to the complex endovascular technique and greater stroke severity (5,7,9-11). Therefore the endovascular therapy of TO was investigated in only retrospective studies. Recent guidelines recommend (with only II B evidence) performing mechanical thrombectomy in tandem lesions if it is reasonable (12). Although, the exact treatment strategy in TO is still a matter of debate, as currently there is a lack of strong evidence for the optimal endovascular approach.

The purpose of the present study was to compare stroke patients with TO and patients with isolated intracranial occlusion (IsO). Comparisons included the demographic and clinical parameters, interventional parameters, time metrics, and clinical outcomes.

II. Methods

II.1. Study population

Data of patients with anterior circulation ischemic stroke who underwent MT due to LVO between 2017 November and 2021 January were retrospectively collected from our multicentric registry (STAY Alive Acute Stroke Registry). Three university clinics from Hungary participated in the present study. All involved patients gave written consent to participate in our study, following the Good Clinical Practice (GCP) guidelines. Patients meeting the following criteria were included: (1) acute stroke symptoms with baseline National Institutes of Health Stroke Scale (NIHSS) >4 points, (2) age over 18 years, (3) IsO or TO confirmed by CT angiography or peri-interventional angiograms, (4) symptom onset was no longer than 24 hours, (5) underwent MT. Tandem occlusion was defined as an occlusion or high-grade stenosis (>70%) of the extracranial internal carotid artery (EICA) with an ipsilateral intracranial LVO (ICA-T, MCA M1, or M2 segment). Tandem lesions due to dissection of EICA were excluded. We recorded and investigated the following parameters: (a) demographic data; (b) vascular risk factors; (c) stroke severity status based on NIHSS score; (d) admission and control imaging data (occlusion site, Alberta Stroke Program Early CT Score [ASPECTS]; multiphase CT-angiography [mCTA] collateral score); (e) time metrics, details of the endovascular treatment and complications.

II.2. Recanalization therapy

All eligible patients received intravenous thrombolysis (0.9 mg/kg, 10% of the dose as a bolus, and the remainder over 60 min) before the endovascular treatment. The exact endovascular strategy was left to the decision of the neurointerventional specialist. Biplane angiography was used for the intervention. Anterograde approach was applied for the EVT of TO, i.e. first, recanalization of the EICA lesion with or without stent application in the acute phase, second, intracranial MT performed primarily with aspiration catheter. In IsO cases, intracranial MT was applied in the same way. The final mTICI scoring of 2b, 2c, or 3 (modified thrombolysis in cerebral infarction) was defined as successful recanalization (13).

II.3. Follow-Up and clinical outcomes

To evaluate the hemorrhagic status and infarction volume, all of the patients underwent a control cranial CT scan 24 hours after the acute treatment. The hemorrhagic transformations were classified according to the European Cooperative Acute Stroke Study (ECASS II) classification (14). Symptomatic intracranial hemorrhage (sICH) was defined as parenchymal hematoma (PH1 and PH2) with an increase of 4 points on the NIHSS. Investigated outcomes included the good (independent) functional outcome (modified Rankin Scale (mRS) score 0–2) at 90 days and all-cause 90-day mortality.

II.4. Statistical analysis

Data analysis was performed using SPSS (version 26.0, IBM, New York). Normality was assessed with the Kolmogorov–Smirnov test. Quantitative data were expressed as the median and interquartile range (IQR) or the mean ± standard deviation (SD). Categorical variables were analyzed using chi-square or Fisher's exact test. For the comparison of the continuous variables, Student t-tests or Mann–Whitney U tests were used. Binary logistic regression analysis was used to assess the association between baseline data and outcomes. The adjustment was made for the potential confounders, and the variables with $p < 0.1$ in the univariate analysis were entered into the multivariable logistic regression model. A p-value of < 0.05 was considered statistically significant.

III. Results

A total of 166 patients (54.8% female) with acute stroke due to isolated large vessel occlusion or tandem occlusion and who underwent endovascular therapy in the participating institutions were enrolled. Thirty-two (19.3%) patients had TO and IsO was detected in 134 (80.7%) cases. The characteristics of the overall population are summarized in Table 1. Patients in the IsO group were predominantly female (60.4% vs. 31.3%, p=0.003), slightly older (70 ± 12 years vs. 66 ± 9 years, p = 0.075) and had a higher prevalence of comorbidities such as atrial fibrillation (46.5% vs. 16.1%, p <0.002).
Patients in the TO group were more likely to have ACM M1 occlusion (75.0% vs. 59.0%, p=0.093). Although in the IsO group, the ICA-T (14.9% vs. 12.5%, p=0.726) and ACM M2 occlusions (26.1% vs. 12.5%, p=0.103) were more frequent. There was no significant difference between the groups in the admission NIHSS point (13, IQR 8-18 vs. 13, IQR 10-17, p=0.853), the ASPECT (9, IQR 8-9 vs. 9, IQR 8-10, p=0.831) and collateral score (4, IQR 3-4 vs. 4, IQR 3-4, p=0.374).
Regarding the details of the endovascular treatment, the symptom onset to groin puncture time (310 vs 255 minutes [min.], p=0.034) and the total revascularization time (369 vs. 310 min,

p=0.028) were significantly longer in the TO group. In addition, the procedure time was also longer in the TO group, the difference was not significant (49 vs 36 min, p=0.121). The rate of eligible patients for prior IVT before MT did not differ significantly between the groups (25.0% vs. 32.8%, p=0.391). Ninety days after the stroke, 65 patients (39.2%) achieved the favorable functional outcome and 44 patients (26.5%) died. Although there was no significant difference in the 90-day outcomes, we observed a trend towards higher rates of 90-day mortality (35.1% vs. 16.7%, p=0.053) in the IsO patient group. The distal embolization rate was significantly higher (29.0% vs. 12.8%, p=0.026) in patients with a tandem lesion. Symptomatic hemorrhagic transformation was recorded in 9 patients (5.4%), however, there was no significant difference between the groups (6.3% vs. 5.2%, p=0.818).

Regression analysis found that younger age (p=0.016), lack of atrial fibrillation (p=0.039), lower baseline NIHSS point (p=0.002) and blood glucose (p=0.006) were correlated with 90-day favorable functional outcome, while older age (p=0.002), higher baseline NIHSS point (p=0.050) and presence of sICH (p=0.017) were associated with 90-day mortality. The relationship between the occlusion type and the investigated outcomes has not been confirmed. In addition, distal embolization did not prove to be a significant predictor of outcomes. The results of the regression analysis are summarized in Table 2.

Table 1. Evaluated parameters in group of tandem occlusion (TO) and isolated intracranial occusion (IsO)

	TO (n=32)	IsO (n=134)	P-value
Total patient number, n (%)	166 (100)		
Age, years, mean (SD)	66 (9)	70 (12)	0.075
Gender, female, % (n)	31.3 (10)	60.4 (81)	**0.003**
Hypertension, % (n)	78.1 (25)	82.0 (109)	0.619
Diabetes Mellitus, % (n)	18.8 (6)	28.2 (37)	0.275
Atrial Fibrillation, % (n)	16.1 (5)	46.5 (59)	**0.002**
Previous stroke/TIA, % (n)	13.3 (4)	21.5 (28)	0.311
Admission NIHSS, % (n), IQR	13 (8-18)	13 (10-17)	0.853
Intracranial occlusion site:			
- ICA terminus	12.5 (4)	14.9 (20)	0.726
- ACM M1	75.0 (24)	59.0 (79)	0.093
- ACM M2	12.5 (4)	26.1 (35)	0.103
ASPECT score median (IQR)	9 (8-9)	9 (8-10)	0.831
mCTA score, median (IQR)	4 (3-4)	4 (3-4)	0.374
Intravenous thrombolysis, % (n)	25.0 (8)	32.8 (44)	0.391
Stroke onset to groin puncture time, % (IQR)	310 (275-590)	255 (190-410)	**0.034**
Groin puncture to reperfusion time, % (IQR)	49 (30-60)	36 (20-56)	0.121
Stroke onset to revascularization time, % (IQR)	369 (295-675)	310 (224-465)	**0.028**
Distal embolization, % (n)	29.0 (9)	12.8 (17)	**0.026**
Successful recanalization (TICI ≥ 2b), % (n)	96.9 (31)	96.3 (129)	0.869
sICH, % (n)	6.3 (2)	5.2 (7)	0.818
90-day mRS, median (IQR)	3 (1-6)	3 (1-6)	0.344
90-day mRS ≤ 2, % (n)	50.0 (16)	44.1 (49)	0.568
90-day mortality (mRS 6), % (n)	16.7 (5)	35.1 (39)	0.053

Table 2. Investigated predictors of outcomes

90 day mRS 0-2	OR (95% CI)	P-value
Age	1.054 (1.010–1.101)	**0.016**
Gender	1.396 (0.515–3.784)	0.512
Diabetes mellitus	3.062 (0.931-10.072)	0.066
Atrial fibrillation	0.521 (0.281–0.966)	**0.039**
NIHSS baseline	1.172 (1.059–1.297)	**0.002**
Blood glucose	1.574 (1.141–2.170)	**0.006**

90-day mortality	OR (95% CI)	P-value
Age	1.082 (1.029–1.139)	**0.002**
Gender	1.039 (0.395–2.735)	0.939
Diabetes mellitus	1.744 (0.641–4.750)	0.276
Atrial fibrillation	2.252 (0.870–5.831)	0.094
NIHSS baseline	1.096 (1.001–1.202)	**0.050**
sICH	19.878 (1.715–230.385)	**0.017**

IV. Discussion

In patients with AIS the primary aim of the treatment is the occluded vessel recanalization as soon as possible. Recent RCTs have shown the superiority of MT in the LVO of anterior circulation over IVT alone (5-7). Though, approximately 15-20% of ischemic stroke patients have stenosis or occlusion of the EICA in addition to the intracranial occlusion (15). In addition, this type of occlusion can lead to poor functional outcome or death. However, tandem lesions were poorly presented or excluded from the previous randomized trials.

Altogether 65 patients (39.2%) achieved the favorable outcome and 44 patients died 90 days after the stroke onset. There was no significant difference in the rates of favorable clinical outcome and mortality between the groups, in fact, the favorable outcome was more frequent and the 90-day mortality rate was lower in the TO group. Patients with IsO were older and the rates of comorbidities (such as AF) were higher. These variables correlated significantly with the functional outcomes. Nevertheless, the low patient number in the TO group may influence the results of the outcomes. Our results are consistent with the findings of the previous studies and emphasize that patients with TO have the chance of a similar clinical outcome and the endovascular treatment should be considered the standard of care (16,17).

Furthermore, the frequency of distal embolization was significantly higher in the TO group possibly due to the atherothrombotic origin and the more complex technical approach including the carotid lesion angioplasty. Distal embolization detected in total of 29% of patients with TO. This result can be influenced by the opening sequence of the occlusions (anterograde vs. retrograde) and the opening management of the EICA. A previous study reported a significantly lower rate of distal embolization in cases where the EICA was opened by only balloon-angioplasty with balloon-assisted tracking technique instead of the standard acute carotid stent (ACS) treatment (17.9% vs. 39.1%), especially carotid artery stenting (CAS) (18). Although, neither the aforementioned study nor the present study proved the negative effect of distal embolization on the functional outcomes based on the result of the regression analysis.

Altogether sICH was detected in 9 times and there was no significant difference between the groups. The rate of successful recanalization also did not differ significantly in the two patient populations. Therefore our results suggest that the efficacy and the safety of the endovascular treatment are comparable between the groups, regardless of the type of lesion.

V. Conclusion

Our results suggest that the endovascular treatment of tandem lesions has similar safety and efficacy as the mechanical thrombectomy of the isolated intracranial occlusions. Furthermore, patients with tandem occlusion showed a comparable functional outcome with a moderately less mortality rate 90 days after the stroke. Although to clarify this issue more precisely, a prospective randomized trial would be suggested.

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Attitudes of Hungarian Consumers Towards Sustainable Consumption

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Numerous of researches supports that our current poor dietary habits are a major contributor to the growing problem of climate change in the 21st century.

The objective was to determine the knowledge of Hungarian society about sustainability and climate change, and the main factors influencing purchasing habits and product choice.

We made a quantitative cross-sectional study between 01/06/2021 – 01/02/2022, using a self-administered, online, anonymous questionnaire. Exclusion criteria were dietary on doctor's orders and being under 18 years of age. Total of 158 people (n=158) participated in the study.

Women are more presumably to write a shopping list (p=0.001) and carry a shopping bag (p=0.007) than men, shopping on average 2.66 times a week. Who knew the OKOSTÁNYÉR® recommendation were significantly rarer to consider the taste as the most important feature of a product (p=0.031) more likely to choose from a selection of domestic products (p=0.039), more often to read product labels (p=0.038) and more open to trying new products (p=0.028). Looking at the age groups, we found that the younger age group had a significantly higher proportion of people who knew the OKOSTÁNYÉR® recommendation (p=0.03), and when we examined the relationship between BMI and age, we found a significant relationship, BMI values higher at older ages (p=0.001). Those who selectively collected rubbish also threw out significantly less food (p=0.01). No significant association was found between food waste and climate change action (p>0.05), it is not clear that those who care more about climate change throw out less food.

This research has confirmed that education and appropriate professional information - OKOSTÁNYÉR® - have a positive impact on the sustainable and health-conscious nutrition and purchasing habits, which is an important segment of the fight against climate change.

Keywords: Climate change, product choice, food consumption, OKOSTÁNYÉR®, sustainability

I. Introduction

The rapid pace of human development has greatly eased the difficulties of everyday life and provided solutions to many obstacles, but it has also brought with it problems that were previously unknown. It has allowed for a significant increase in population worldwide and has also greatly extended life expectancy. [1] The world's population has doubled in the last half century and the UN estimates that by 2050 there will be 9 billion people on earth, a 50% increase compared to the millennium. [2] [3] [4] This projected future will place a significant burden on the environment, as increased population will mean increased food demand. [5] This process could contribute to a further increase in industrial production, which is already on a massive scale, and to the growing pollution of the environment. The use of non-biodegradable packaging materials by industry also plays a significant role in environmental pollution, as increasing production means increasing use of packaging materials. [6] [7] [8]The largest user of packaging materials is the food industry, where polyethylene terephthalate polycondensation plastic (PET) is the most widely used packaging material, and as PET does not degrade over time, its use places a heavy burden on the environment. [9] [10]

Climate change and the increasing pollution of the environment are a global problem, and the role of different social strata in solving them is not negligible. [11] In terms of final consumption, households are the most powerful consumption group. Previous studies have shown that the three most environmentally significant consumption areas are food consumption, housing and energy use. [6] [2] [12] Several domestic and foreign studies have attempted to investigate consumer behaviour, since by mapping consumer and lifestyle characteristics we can consciously correct their shortcomings to ensure a sustainable future for future generations. [13] [14] [15] Previous national research has shown that consumer attitudes are influenced by age, gender, income and education, among other factors. [16] Evidence shows that education from an early age can be an effective tool for environmental protection and sustainable, eco-conscious lifestyles. [2] However, this may need to be complemented by a more accurate mapping of consumer behaviour, as sustainable consumption starts with purchasing decisions at the point of purchase. A more accurate assessment of consumer attitudes could help to better target further research and educational materials and programmes and to better design and implement possible pollution and climate change mitigation measures for households. [17] [18]

The aim of our research is to assess the knowledge of Hungarian society about sustainability, sustainable food consumption and climate change. To assess the main factors influencing food purchasing habits and product choice.

II. Materials and methods

A quantitative cross-sectional study was conducted using convenience sampling between 01/06/2021 and 01/02/2022. An online questionnaire of 60 questions was used for the study, which was self-administered, voluntary and anonymous. Inclusion criteria were adult age and literacy skills. Exclusion criteria included being under 18 years of age and having any diet on doctor's orders, resulting in a final sample size of 158 (n=158). MS Excel 2016 and SPSS 26.0 software package were used to summarize the statistics and analyse the sample. Descriptive statistics, independent samples T-test, Chi-square test were used to evaluate the data. The level of statistical significance was set at $p < 0.05$ with a 95% confidence interval (CI: 95%).

III. Results

The distribution of the total sample by gender, age group and place of residence is shown in *Figure 1*. The responses received were weighed according to the inclusion and exclusion criteria, resulting in a final sample size of 158. The questionnaire was answered by 72.8% (n=115) women and 27.2% (n=43) men. The average age of the respondents was 40.38 years (± 15.78) with the youngest respondent being 18 years old and the oldest 82 years old. For age group comparison, the first group is young adults (n=57) i.e. aged 18-28 years. The second group is made up of adults and middle-aged (n=50) i.e. aged 29-50, and the third group is made up of the ageing and retired, aged 51+ (n=51). Respondents are grouped by their place of residence as follows, 24.7% (n=39) live in the capital, 27.2% (n=43) live in the city, while 48.1% (n=76) live in villages and towns.
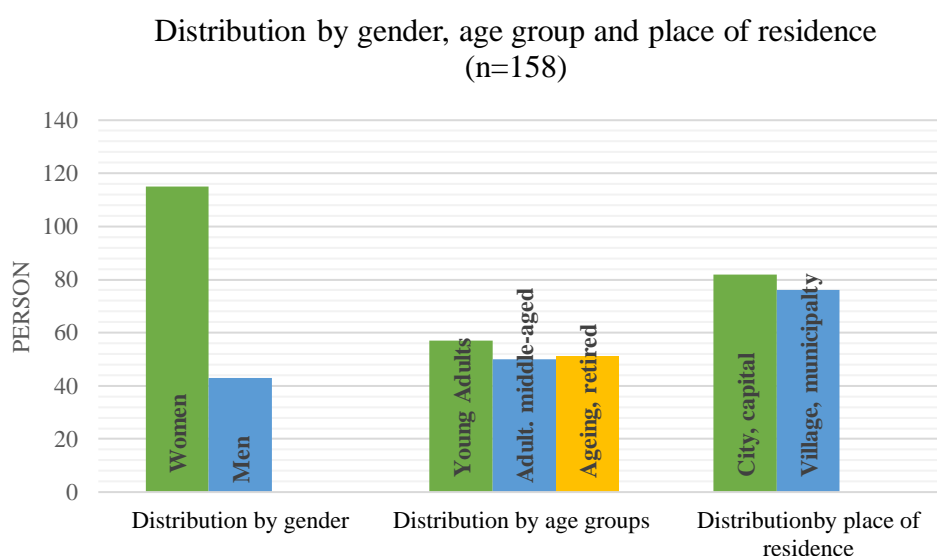
Figure 1.

The distribution of respondents by education level is as follows: 66.5% (n=105) have a tertiary education, 31% (n=49) have a secondary education and 2.5% (n=4) have a primary education. Height and weight values were asked to calculate BMI (Body Mass Index) values, which was done for all respondents and then divided into groups according to professional principles. According to the values obtained, the highest proportion of those who completed the questionnaire fell into the normal category (18.5-24.9 kg/m^2), representing 61.4% of our sample (n=97). Only 3.2% of respondents (n=5) fell into the lean category (18.5 kg/m^2). A quarter of the respondents (n=40, 25.3%) were overweight (25-29.9 kg/m^2). 7.6% (n=12) were in the first obesity category (30-34.9 kg/m^2), and only 0.6% (n=1) were in the second obesity category. The proportion is slightly higher when we look at the third obesity category, with 1.9% of completers (n=3) having a BMI of 40 kg/m^2. When examining the relationship between BMI and age, we found a significant relationship, with older age having a significantly higher BMI (p=0.001).

III.1 Climate change as an increasingly pressing problem of the 21st century

100% of respondents (n=158) had heard about climate change. Most of the information was obtained from the internet, 90.5% (n=143), with a lower percentage of 57.6% from books and newspapers (n=91), 53.2% (n=84) from television and a lower percentage of 44.3% (n=70)

from friends and family. The severity of the problem was rated individually on a scale of 1-10, with respondents giving an average score of 8.83 (±1.735) to our question. More than three quarters (n=135) of the respondents in our survey are trying to act, and only less than 10% (n=14) indicated that they are not doing anything about climate change. Neither educational attainment, nor place of residence, nor even age, encourages participants to act on climate change. Quantifying the responses, we find that nearly 80% (n=120) are acting to reduce the impacts of climate change in terms of eating, 66.5% (n=105) in terms of energy and water use, 41.8% (n=66) in terms of transport, and an even smaller proportion (38.6% (n=61) in terms of waste reduction. Social sensitivity to climate change was found to be unrelated to age, place of residence, gender and education level of the respondent (p>0.05)).

III.2 Buying habits and key factors influencing product choice

On average, participants shop 2.66 times a week (1,639). The lowest shopping frequency was 1 shopping trip per week, with 28.5% of respondents (n=45), while the highest shopping frequency was an average of 7 shopping trips per week, with 4.4% (n=7) of respondents in this group. When shopping, the vast majority of respondents shop in large chain stores (n=146, 92.4%), with a total of 30.4% (n=48) shopping in convenience stores and 41.8% (n=66) shopping regularly at markets and local producers (only a few respondents (n=7, 4.4%) shopping in the newer packaging-free shop in the country). Slightly less than a quarter of our sample (n=34, 21.5%) always write a shopping list, 41.1% (n=65) mostly write a shopping list, 25.3% (n=40) mostly do not write a shopping list, while 12% of the sample (n=19) never write a shopping list. Comparing gender, we find that women write a shopping list at a significantly higher rate than men (p=0.001), but no association with age, income and education. For shopping, 89.2% of respondents (n=141) take their own basket, bag or shopping bag. 38% (n=60) take a separate container for vegetables, fruit and bakery products, while only 7.6% (n=12) indicated that they do not take any container with them when shopping. Comparing gender, a significant difference was found for women (p=0.007), meaning that more women provide alternative shopping bags.

The wholesomeness of the product was the most important criterion for almost half of the sample (48.1%, n=76), while the taste of the product was only a decisive criterion for a quarter of the shoppers (25.3% n=40), while the price of the product was the most important criterion for an even lower proportion, only 19.6% (n=31), and 7% (n=11) considered the place of origin as the most important criterion when choosing a product. Domestic products are preferred by 79.1% of the sample (n=125) over export products. Preference for seasonal fruit and vegetables is a pillar of sustainable living. 77.2% of respondents (n=122) are more aware of the importance of choosing seasonal products, and women are more aware of this than men (p=0.02). The consumption of seasonal fruit and vegetables is also influenced by place of residence, with women living in cities being more aware (n=0.006) than those living in rural areas. A good 3/4 of respondents (74.1% (n=117)) also like to try new products, but neither age nor income, nor gender nor place of residence, have a significant influence on whether someone is willing to try a new product. One of the pillars of conscious shopping is reading food labels and how often. In our sample, the propensity to do so is high, with 71.5% (n=113) of people (n=113) reading the label on the product regularly. Our analysis shows that women are more likely to make conscious purchases, such as reading food labels, but that this is not associated with, for example, place of residence or age, or even income. No significant relationship was found with preference for Hungarian products, when adjusted for gender, age, education, residence and BMI. A significant association was also found between those who are more open to trying new products (p=0.02) and those who are more open to trying new products (p=0.02), i.e. they are not closed to new food choices.

III.3 Knowledge of exercise habits and healthy eating recommendations

70.9% of respondents (n=112) play sport regularly, while 29.1% (n=46) indicated that sport is not part of their life. Among respondents who indicated that they exercise regularly (at least 3 times a week), weight training, yoga, running, cycling, swimming and hiking and walking were the most common sports. When comparing the propensity to exercise regularly with BMI values, a significant relationship was found, with BMI values for regular exercisers being significantly lower (p=0.001) than for non-exercisers. In addition to sport, healthy nutrition is one of the pillars of a healthy lifestyle, and its domestic recommendation is best summarised by the OKOSTÁNYÉR® model, a short, colourful, easy-to-understand recommendation for everyday life developed by the National Association of Hungarian Dietitians. Overall, 29.7% (n=47) of those who completed the questionnaire had heard of the OKOSTÁNYÉR® recommendation. In order to more accurately assess the knowledge of the respondents about healthy eating, we asked them to indicate the correct proportions of the 4 food groups to be consumed per day from several possible options, which correspond to the OKOSTÁNYÉR® recommendation, or, if they were not familiar with the recommendation, to indicate the one they thought would show the correct proportions according to the recommendation. Based on the responses, 51.9% of respondents (n=82) indicated the correct figure according to the OKOSTÁNYÉR®. It should be noted that 24.6% (n=39) of the participants had otherwise learned about health promotion and healthy lifestyles during their studies in the past. Comparing the data, a significant correlation was found between those who had previously known the OKOSTÁNYÉR® recommendation and those who wrote a shopping list (p=0.009), i.e. those who had more knowledge towards healthy eating were also more conscious of their shopping by writing a shopping list regularly. This is confirmed by the fact that a further significant association was found among those who were familiar with OKOSTÁNYÉR®, they were significantly more likely to read product labels when shopping (p=0.038) and were also more open to trying new products (p=0.028). However, when compared with BMI data, no significant association was found with those who may have had a presentation on a similar topic during their studies (p>0.05). Looking at the age groups, we found that the younger age group had a significantly higher proportion of those who were familiar with the OKOSTÁNYÉR® recommendation (p=0.03). We found a significant association between those who prefer Hungarian products and those who are familiar with the OKOSTÁNYÉR® recommendation (p=0.039).

III.4 Survey on food waste and waste disposal habits

Only 2.5% (n=4) of respondents throw out food on a daily basis, and 3.2% (n=5) throw out food 3-4 times a week, which is almost as low. Almost half of our sample throws out food 1-2 times a week (44.3% n=70), and 32.9% (n=52) throw out food at a lower rate than this on a monthly basis. 17.1% (n=27) of respondents, on the other hand, reported that they never throw out food *(Figure 2)*.
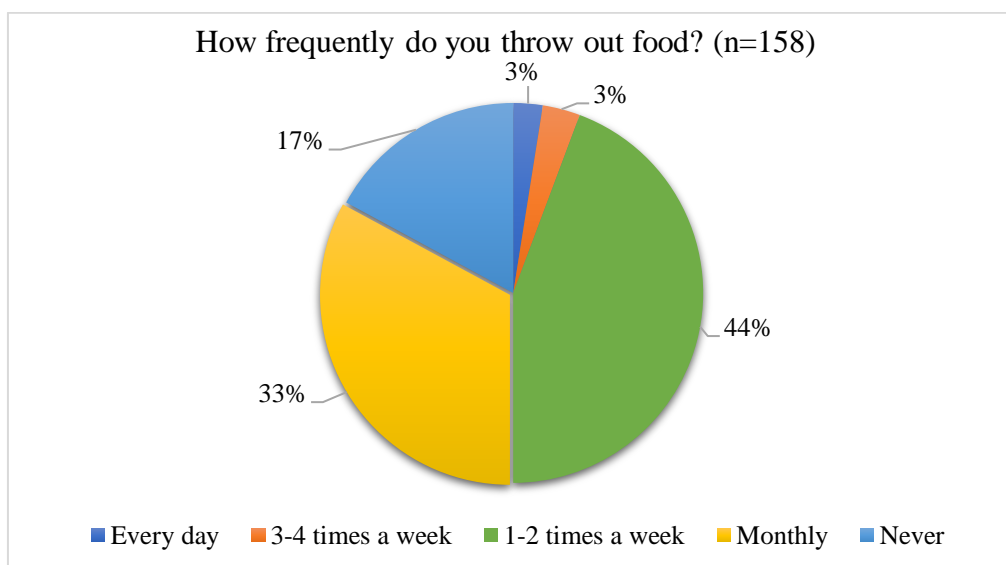
Figure 2: Frequency of food waste in households

A very high proportion of participants (89.2%, n=141) reported collecting selective waste (Figure 3). The most commonly separately collected waste is plastic, collected separately by 87.3% of respondents (n=138), paper is collected separately at almost the same rate of 84.8% (n=134), glass at a lower rate of 69% (n=109), metal at 55.7% (n=88), and hazardous waste such as electronics, batteries, used oil, etc. is collected separately by a total of 7% (n=11). No significant differences were found in the collection of separate waste by gender, age groups and income ($p>0.05$).
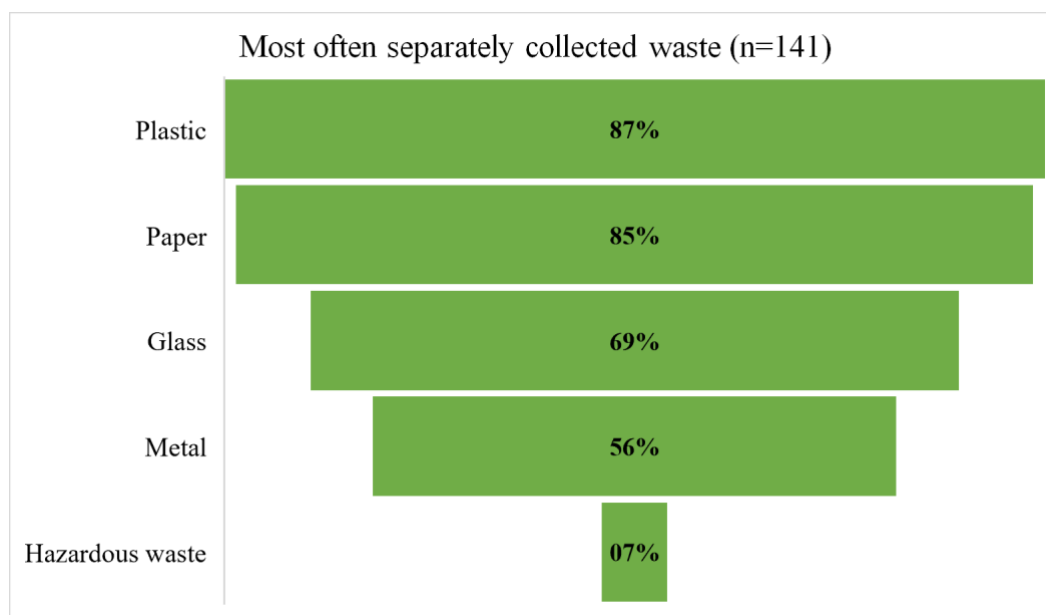
Figure 3.

No significant correlation was found between food waste and individual measures of climate change ($p>0.05$), so it is not clear that those who care more about climate change throw away less food, but those who collect their rubbish selectively throw away significantly less food ($p=0.01$). Those who think that reducing waste is the most important way to fight climate change do not throw significantly less food in the trash than those who think that reducing waste is not an important pillar of the fight against climate change. The theory that reducing waste is

an important pillar of the climate change fight does not translate into practice: although they agree in theory, in practice they do not throw away less food (p>0,05).

The benefits of integrating environmental and health education into school education are unquestionable in the fight against climate change, in the hope of raising more aware generations. In the present study, we assessed this, but at a low level, only 24.7% (n=39) of participants had at least 1 subject dealing with environment and health awareness, sustainable lifestyles and climate change in their school studies. 91% (n=155) of the respondents consider it important to include environment and health awareness topics as compulsory subjects in the curricula, such as knowing how to reduce waste and residues (88%; n=139) and learning how to eat a good diet (88%; n=139). More than half of the respondents would also like to raise awareness of environmental awareness in the field of transport (63.1%; n=100) as part of the curricula from an early age. Environmental awareness education in schools was considered more important by the older age group (51+) (p=0.04), with a significant gender difference towards women (p=0.004), but not related to highest educational attainment. In terms of age groups, the proportion of young people (18-28 years) who had attended such thematic classes during their time in public education was significantly higher (p=0.001).

IV. Discussion

The focus of the study was on sustainability and related actions against climate change. We assessed Hungarian consumers' attitudes towards sustainable consumption, their product choices and purchasing habits. Our results suggest that the expected gender differences in health-conscious and environmentally conscious behaviour were not clearly demonstrated. For women, the results of several national and foreign studies suggesting more health-conscious behaviour and seasonal fruit and vegetable purchases were confirmed, but in many aspects their habits did not differ significantly from the male respondents, so no clear difference could be established. [19] [20] [21] It is interesting to note that the only significant difference (p=0.001) in the frequency of shopping at the market was the frequency of shopping at the market, 49.6% for women and 20.9% for men. Looking at the literature abroad in general in terms of gender in the context of our research, several previous studies have suggested that women are more likely to buy sustainable food. [22] [23] The reason for this, Lea concludes, may be that women are more health conscious and perceive sustainable food (e.g. organic food) as healthier than what is considered conventional food. [24] This Australian study finding is supported by our research, which shows that women are significantly (p=0.002) more likely to pay attention to the seasonality of vegetables and fruits when shopping and significantly (p=0.001) more likely to write shopping lists and read food labels more often.

The other main segment of our research was waste management. A significant majority of the respondents, 89.2% (n=141), collect waste separately. In a survey in Romania in January this year, lower rates were found, with only 60.3% of respondents collecting plastic waste separately.[25] The Timisoara survey had similar objectives, to assess and learn about waste management habits, in order to better target education and promotion programmes to increase the proportion of people who want to live more consciously, which includes optimising waste management. Another important issue in waste management is the level of food waste. According to Eurostat's latest report, almost 57 million tonnes of food from the farm to the consumer's table ends up as waste in a year, or 127 kg of food per capita. The average EU citizen throws away 70 kg of food a year. With 66 kg of food waste per capita per year for Hungarian households, Hungary is one of the less wasteful countries compared to the average. [26] In China, action to reduce this rate has already been taken at government level in 2021, with legislation and heavy fines for restaurants that put excessive amounts of food on customers' plates or mislead consumers about portion sizes. [27] Our sample also has a high rate of food waste, with

the majority throwing out food 1-2 times a week (n=70; 44.3%). In China, before the measures and promotion programmes, the rate was higher, with 1.67% of daily household food ending up in the bin. [28] In contrast, 17.1% (n=27) of our survey participants never throw food away. It promotes more conscious food purchasing and consumption through special awareness and information programmes for both the adult population and children.

Our survey clearly shows that the knowledge and attitudes of the population under study towards climate change and healthy lifestyles are increasing, but still not enough. Healthy and conscious lifestyle and nutrition can contribute to curbing climate change, one of the pillars of which is to educate conscious consumers who can think critically and adjust to the sea of massproduced foods of our century, as climate change and its consequences are among the most important problems of the 21st century, the negative effects of which we are increasingly experiencing in our daily lives. Our sample does not clearly show which social group would be at the forefront of sustainable shopping and climate protection, making it difficult to address the relevant target group. The only solution is to inform the different sections of society in the appropriate language, such as climate education from an early age in a personalised form for the relevant age group. In order to achieve a climate-aware, sustainable society in our country, too, we still have a lot of work ahead of us. The transformation of traditional Hungarian eating habits and the consumer attitudes and lifestyles typical of people in the 21st century will be essential if we are to live safely on the planet for a long time to come and preserve it in its present form for future generations.

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What do the greatests say? The influence of public figures on the stock market via social media

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Economists are frequently asked to study the impact of certain economic events on a particular company. The task may seem complex initially, but it can be easily constructed using event study analysis. An event's impact can be measured over time on the value of a company's shares using financial market data.

In this research, the impact of news generated by influential people was investigated using the event study analysis methodology. The usefulness of this kind of study, in addition to market rationality, is that an event's effect is immediately reflected in the share prices. Thus, the economic impact of an event can be measured using the prices of securities observed over a relatively short period. In contrast, studies of direct productivity may require a long period or even several years of observation.

The hypothesis is that the social media interaction of influential and highly reputable individuals associated with a company affects the company's stock prices. More specifically, these individuals can influence the people who observe them so that they make their decisions accordingly by listening to them. Another hypothesis, namely that businesspeople are already reacting to trends, i.e., they have access to certain crumbs of information earlier, so that their manifestations are not accidental. On the contrary, they are consciously causing change, unlike famous people in other fields.

The results suggest that the hypothesis had been confirmed, as all the news analyzed influenced the evolution of share prices, as cumulative abnormal returns were significant in all the cases. The hypothesis that businesspeople react to trends and may have certain information before they do was also confirmed. Among public figures, Elon Musk and Kylie Jenner made the highest cumulative abnormal returns in the pre-window, suggesting that their manifestations are not accidental in time but deliberate.

Keywords: event study; market efficiency; social media

I. Introduction

In this paper, the discussion aims on how highly influential individuals can influence the stock prices of the companies through their social media appearances. The research was conducted using the event study analysis method, as it is used to measure the impact of a specific event over time on the value of a company's stock.

The key figure of the research was Elon Musk, however comparing the news he generated with other posts shared by equally well-known people around the world was crucial. It was essential that the companies issuing the shares were in different sectors and that the individuals were in different professions, to assess whether the profession and title of the person posting the news and the industry of the company issuing the shares could make a difference. In this way, the social media interactions of Elon Musk, Kylie Jenner, Hillary Clinton, Donald Trump, Cristiano Ronaldo were examined. Data was selected from sectors such as pharmaceuticals (BMRN), aerospace (BA, LMT), social media (SNAP), video games (CDProject, GameStop), e-commerce (Shopify), food (Coca-Cola), and automotive, energy (Tesla).

The preliminary hypothesis is that the social media interaction of influential and highly reputable individuals associated with a company affects the company's stock prices. More specifically, these individuals can influence the people who observe them so that they make their decisions accordingly by listening to them. Another hypothesis, namely that businesspeople are already reacting to trends, i.e., they have access to certain crumbs of information earlier, so that their manifestations are not accidental. On the contrary, they are consciously causing change, unlike famous people in other fields.

II. Literature review

Event study analysis has numerous applications. In financial research, it has been applied to a wide range of firm-specific and economy-wide events. Examples include fusions and acquisitions, earnings announcements, debt problems or new share issues, and macroeconomic factors.

The first published study on the subject was probably the research of James Dolley (1933). In this work, he examines the price effects of stock splits by studying nominal price changes at the time of the split. The sophistication of event studies increased from the early 1930s to the late 1960s. The works of John H. Myers and Archie Bakay (1948), C. Austin Barker (1956) and John W. Ashley (1962) are examples of studies conducted during this period. Improvements included the elimination of general stock market price movements and the isolation of confounding events.

In the late 1960s, Ray Ball and Philip Brown (1968) and Eugene F. Fama et al. (1969) introduced a method that is essentially the same as the one used today. Ball and Brown looked at the information content of earnings, concluding that at least half of all information about a company that becomes available in a year is contained in the earnings amount for that year (Ball & Brown, 1968). The breakthrough in this area was achieved by Eugene F. Fama and his colleagues. The key to the success of their study was the separation of event-generated and nominal interest rate changes. The primary aim of their analysis was to examine how common stock prices adjust to the information implicit in the stock split. The results of the study provide dedicated support for the conclusion that the stock market is "efficient" in the sense that stock prices adjust very quickly to new information. (Fama et al., 1969).

Applications in other areas are also abundant. For example, event analysis has been used in law and economics (G. William Schwert, 1981), to measure the impact of mergers and acquisitions (Eckbo, 1983) and legal liability cases to assess damages (Mark Mitchell & Jeffry

Netter 1994), to measure the influence of war news (Shapiro 1999). Most applications focus on the impact of an event on the price of a particular class of a firm's securities.

MacKinlay's paper, which is perhaps one of the most important of its kind, reviews and summarises the methods of event analysis to date. In his work, he examines the possible procedures, provides a sample to illustrate the event analysis methodology and breaks down the analysis into steps. He describes how, in general, event studies have shown that, as would be expected in a rational market, prices react to latest information. He also argues that event analysis will continue to be a valuable and widely used tool in economics and finance (MacKinlay, 1997).

A review of the literature over several decades has shown that event study analysis method is widely used. The analyses described above, and their results have also shown that the method is suitable for the analysis of daily data, unexpected events included. Through my research the calculations were conducted using daily exchange rates., however the subject is slightly different from the research presented. This paper examines the impact of social media interactions of today's celebrities on certain stocks that they (presumably) "disrupt".

Focusing on a discussion forum in the early 2000s, Tumarkin and Whitelaw investigated the relationship between forum activity and abnormal stock returns and trading volume. For stocks in the Internet services sector, they found that on days when message activity was unusually high, changes in investor opinions were correlated with abnormal returns (Tumarkin & Whitelaw, 2001). Chen et al. investigated the extent to which investor opinions, as mediated through social media, predict future stock returns and earnings surprises. They found that views expressed in articles and commentaries predict future stock returns and earnings surprises (Chen et al., 2014). Market manipulation via social media and "suspicious" stock recommendations were studied by Renault. He found that an unusually high number of messages on social media is associated with a large stock price increase on the day of the event, followed by a sharp price drop in the following trading week (Renault, 2017).

The topic I have chosen has already attracted the interest of many people, as evidenced by several studies on related topics in recent years. The proliferation of these studies is not surprising, as social media has become an exceedingly popular venue for individuals to share the results of their own analyses of securities, or simply their thoughts and opinions on a particular stock.

III. Theoretical framework

III.1. The use of event study analysis in financial markets

Financial theory suggests that capital markets reflect all the information available about firms in their share prices. Given this basic assumption, it is possible to study how a given event changes a firm's prospects by quantifying the effect of the event on the firm's stock price. Researchers in the field of finance have developed event analysis method to perform this type of analysis.

A particularly important aspect of the research is the identification of pre- and post-window, which can be used to determine the extent of information leakage, but also to examine the impact of the news separately. If the pre-window shows a rise in returns (or a fall in the case of negative news), it can be assumed that there has been an information leakage in relation to the news about the stock, but it is also possible that other events have occurred in the days preceding the news that may have affected the share price. If the return continues to rise (in the case of positive news) or fall (in the case of negative news) in the post-window period, it can be assumed that the actors were not able to accurately assess the extent to which the news affected the price movement and that this was reflected in the price later (Bedő & Rappai, 2004).

Event studies quantify the impact of a news item on the economy in terms of so-called abnormal returns. Abnormal returns are calculated by subtracting from actual stock returns the returns that would have been realised if the event under analysis had not occurred (normal returns). While actual returns are empirically observable, normal returns need to be estimated. To do this, the event analysis method uses expected return models, which are common in other areas of finance research (Neuhierl et al., 2013).

III.2. Determining the length of the event window

Determining the length of the event window is a quite difficult task that affects the whole analysis. The timeline of the event study analysis is shown in Figure 1:
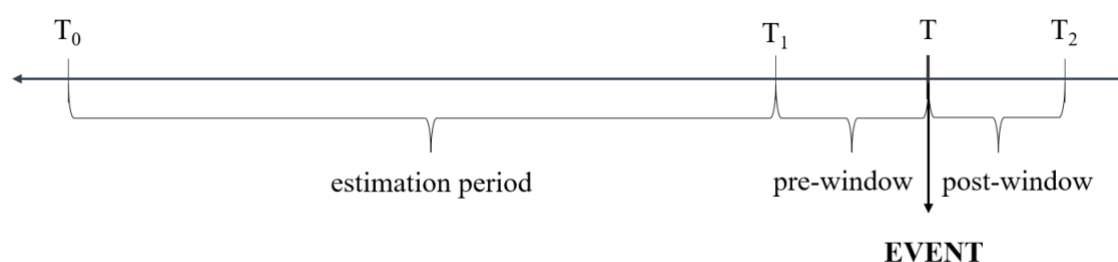
Figure 1. Timeline of the event study analysis. Source: Fűrész & Rappai, page 8, Figure 2 [2020]

Traditional studies favour symmetric pre- and post-window lengths and suggest choosing the event window length in a way that allows for comprehensive observation of the event. There is a large body of literature on event study analysis methods, but truly little information on event window length determination. Lev has shown that the event window length ranges from two days to one year, and all but one study used a fixed-length window (Lev, 1989 in Fűrész & Rappai, 2020). Krivin et al. discovered that window length correlates with the extent of earnings surprise and advised that each stock and event have a different window length (Krivin et al., 2003 in Fűrész & Rappai, 2020). Chang and Chen indicated that event window lengths should last for several days since the market is constantly reacting to news (Chang & Chen, 1989 in Fűrész & Rappai, 2020).

III.3. Calculation of abnormal returns

After defining the event and the sampling procedure, the next step is to choose the measure that will be used to determine the response of investors to the event. This measure is typically based on abnormal stock returns, calculated as the difference between realized returns and expected returns over the measurement period (Sorescu et al., 2017), written up as:

$$AR_{it} = \frac{P_{it} - E(P_{it})}{P_{it-1}} = R_{it} - E(R_{it}) \tag{3.1}$$

where P_{it} and P_{it-1} are the dividend-adjusted stock price of firm i at time t and $t - 1$, respectively, R_{it} is the realized return on firm i 's stock in period $[t - 1, t]$, and $E(R_{it})$ is the expected return on firm i's stock in period $[t - 1, t]$ that would be obtained in the absence of the event (Sorescu et al., 2017).

The total impact of the event over a given period can be measured by summing the individual abnormal returns. This shows how much the event investigated affects the evolution of the returns and then how quickly they go back to their original state. The following equation formally illustrates this exercise, covering an interval of K days to L days (Bedő & Rappai, 2004).

$$CAR_i^{K,L} = \sum_{t=K}^{L} AR_{it} \qquad (3.2)$$

In an event study with multiple observations of each type of event (e.g., acquisitions), cumulative average abnormal returns (CAARs) can be further calculated to represent the average effect of the same events.

The abnormal returns can be measured using daily or even monthly stock data, depending on the measurement horizon chosen for the event under investigation. Daily data are commonly used to study short-term events; in this case, abnormal returns are measured over the few days surrounding the event, which is the case in this study.

Behind the event study analysis lies the theory of efficient markets, in other words, the price of a security may change only when latest information is received. The event study method, as mentioned above requires that abnormal returns and cumulative abnormal returns be calculated. On condition that the mean of the abnormal returns is not zero, the event had information content. (Binder, 1998).

IV. Empirical analysis

The most crucial point of this research is the chapter on empirical analysis, as that is the practical translation of the theory discussed in the previous section. This chapter starts with the collection and selection of data, followed by the definition of the event windows' length. After this, the results of the calculations are presented. This is followed by a summary table.

IV.1 Introducing people and companies

My research includes Elon Musk as a key figure, but it was also important to compare the impact of the news he generated with other posts shared by equally well-known people around the world. It was essential that the companies issuing the shares were in different sectors and that the individuals were in different professions, to evaluate whether the profession and title of the person who posted the news and the industry of the company issuing the shares could make a difference. In this way, the social media interactions of Elon Musk, Kylie Jenner, Hillary Clinton, Donald Trump, and Cristiano Ronaldo were examined.

Table 1 summarises the events analysed, the people who are believed to have caused the change, their social media presence (news), the date of the event, and a breakdown by industry.

Table 1. Summary of individuals and companies

Person	Social media interaction	Date	Stock
Hillary Clinton	"Price gouging like this in the specialty drug market is outrageous. Tomorrow I'll lay out a plan to take it on. -H"	2015.09.21	BioMarin Pharmaceutical Inc. (BMRN)

(Table continues on the next page)

(continuation of the table)

Donald Trump	"The F-35 program and cost is out of control. Billions of dollars can and will be saved on military (and other) purchases after January 20th,"	2016.12.12	Lockheed Martin (LMT)
Kylie Jenner	"sooo does anyone else not open Snapchat anymore? Or is it just me... ugh this is so sad."	2018.02.21	Snap Inc. (SNAP)
Elon Musk	"Tesla stock price is too high imo"	2020.05.01	Tesla (TSLA)
Elon Musk	"Gamestonk!!"	2021.01.26	GameStop (GME)
Elon Musk	"The esthetics of Cyberpunk are incredible btw."	2021.01.28	CD Projekt (OTGLF)
Elon Musk	"Shopify is great too. SpaceX used them"	2021.01.28	Shopify (SHOP)
Cristiano Ronaldo	Pushes away two bottles of Coca-Cola during a press conference in Budapest.	2021.06.14	Coca-Cola (KO)
Elon Musk	"Strange that moved valuation, as Tesla is very much a production ramp problem, not a demand problem"	2021.10.25	Tesla (TSLA)
Elon Musk	Much is made lately of unrealized gains being a means of tax avoidance, so I propose selling 10% of my Tesla stock.	2021.11.06	Tesla (TSLA)

Source: own edited

IV.2 Determining the length of event windows

After the introduction of the previous literatures and the method, it is evident that the determination of the length of event windows is an essential point in the event study analysis process. Once assigning the exact date of the event, the pre- and post-window lengths of +/- 15 days were defined. During this research symmetric event windows were applied.

For each event, the daily adjusted closing price was used as the basis for analysis, considering that while the closing price represents only the end-of-day share price, the adjusted closing price also takes into account other factors such as dividends, stock splits and new share issues. As the adjusted closing price starts where the closing price ends, it can also be used as a more precise measure of the value regarding shares.

To filter out the effect of information leakage, a number of examinations were conducted using only post-window. As with the previous parameters calculations were conducted with post-windows of 15 days, where the results warranted it, the information leakage and the impact of the news have also been examined over longer (or shorter) intervals.

IV.3 Source of data

The source of the time series data was the site of YahooFinance[1], and for OTC stocks, OTCMarkets[2]. For each stock, the proper stock exchange on which the share was listed on, and

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[1] https://finance.yahoo.com/
[2] https://www.otcmarkets.com/

the appropriate market index were selected during the analysis. For ease of reference, this is illustrated in Table 2.

Table 2. Stock exchange affiliation of shares

NASDAQ
- BioMarin Pharmaceutical Inc. (BMRN)
- Tesla Inc. (TSLA)

NYSE Composite
- Boeing (BA)
- Lockheed Martin (LMT)
- Snap Inc. (SNAP)
- GameStop Corp. (GME)
- Shopify Inc. (SHOP)
- Coca-Cola Company (KO)

OTCQX
- CD Projekt SA (OTGLF)

Source: own edited

IV.4. Results

1. <u>TSLA – Tesla – Event: 2020.05.01.</u>

Musk considered Tesla's share price too high (Figure 2). The company's value surged in April on strong production and delivery numbers, favourable analyst coverage and an unexpected first-quarter profit (forbes.com, 2020).

Elon Musk ✔
@elonmusk

Tesla stock price is too high imo

5:11 PM · May 1, 2020 · Twitter for iPhone

20.1K Retweets **15.1K** Quote Tweets **183.1K** Likes

Figure 2. Elon Musk's 20/05/01 Twitter post. Source: Twitter.com

The information leakage shown in Figure 3[3] (left side) reveals that there is no negative value, however, it is clear that it drops from remarkably high CAR values to lower ones before the event. It is still 23.37% on the 4th day of the pre-window and 15.78% on the last day before, falling back to 7.32% on the day of the social media interaction, on the following day it is almost the same as on the -1st day, when it takes a value of 14.19%.

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[3] The y-axis shows the cumulative abnormal return, while the x-axis shows the time (days) of the event in each figure regarding the information leakage and the impact of the news.

The positive values suggest that expectations in the pre-window lead to positive abnormal returns, and the exchange rate thus corrects for this after the announcement. In this case, it was relevant to examine the impact of the event by considering only the post-window.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Tesla	CAR: 2,79% - 24,35%	CAR: -1,44% - (-13.13%)
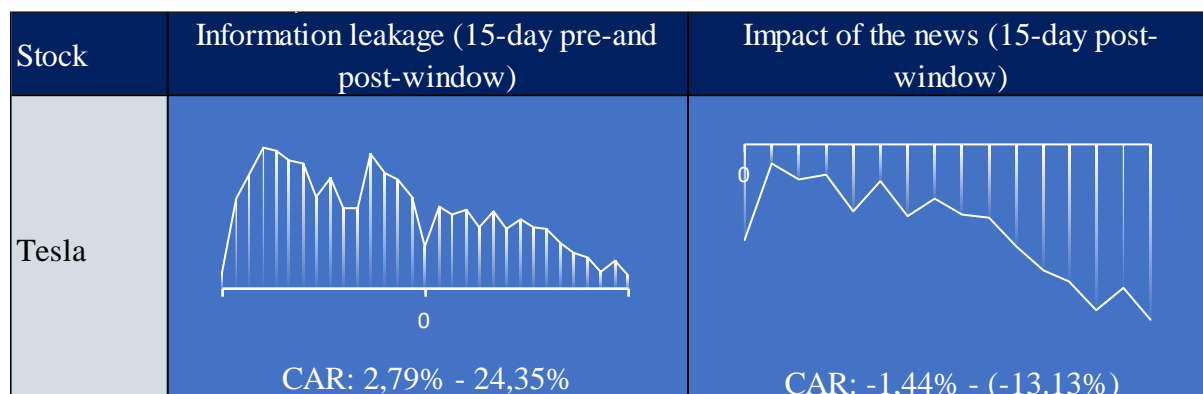
Figure 3. Evolution of the cumulative abnormal return for the May 1, 2020, Tesla news. Source: own edited

Regarding the impact of the news (Figure 3, side) on the day of the announcement, the cumulative abnormal return rate is -7.23%, which takes on a value of -1.44% for the 1st day after the event. The figure also shows that although the negative value decreased on day 1, i.e. it moved roughly 6% points closer to the cumulative abnormal return value of 0, it then started to decrease again until finally, on post-event day 15, a CAR of -13.13% was realised, so that the effect of the interaction can still be seen on day 15.

2. TSLA – Tesla Event: 2021.10.25.

On 25 October 2021, Elon Musk posted on Twitter that Tesla was having production problems (Figure 4).

Figure 4. Elon Musk's 21/10/25 Twitter post. Source: Twitter.com

In terms of information leakage (Figure 5, left side), a break is clearly visible on the day of the event, dropping from 21.42% to 20.52%, after which the CAR value shows a steady increase until day 5 of the post-event window. The cumulative abnormal returns after the day of the event take highly volatile values, jumping between 11.22% and 37.02%. The large decline in the post-window, which occurred between day 9 and day 11, is explained in the analysis of the next news item.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Tesla	CAR: 0,95% - 37,02%	CAR: 1,17% - 25,21%
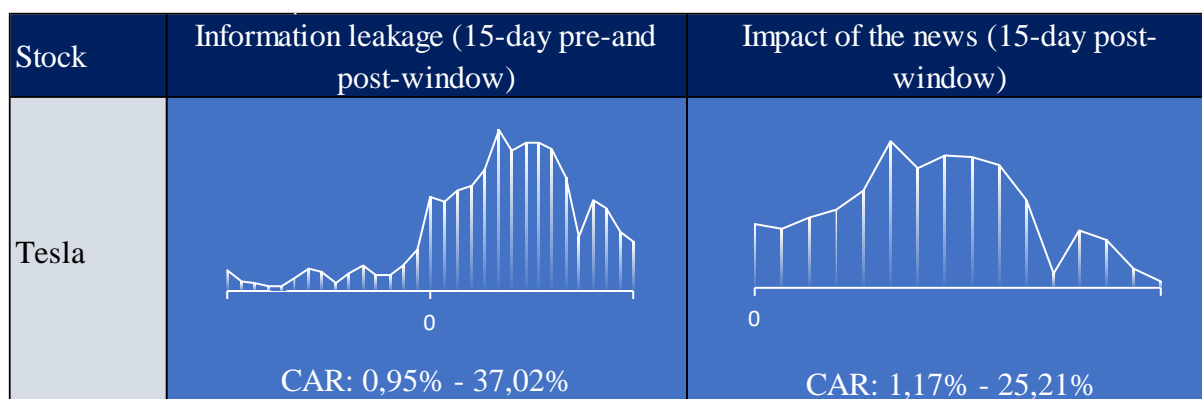
Figure 5. Evolution of the cumulative abnormal return for the October 25, 2021, Tesla news. Source: own edited

Based on the above, the post-window analysis (Figure 5, right side) is also justified, the existence of information leakage is assumed, a positive CAR value can be detected already 10 days before the event. In our case, we can see that the news settles down by the 15th day of the post-window, where a cumulative abnormal return of barely 1% is already visible.

The impact of Elon Musk's tweet peaks on day 5 of the post-window with a cumulative abnormal return of around 25%. However, it can also be observed that the CAR for the pre- and post-window calculation (Figure 5, left side) was 37.02% on day 5 after the event, which was 25.27% when examining the impact of the news (Figure 5, right side), suggesting that there were already strong positive expectations about the share prices before the event.

3. TSLA – Tesla Event: 2021.11.06.

After Musk announced that he would offer to sell 10% of Tesla shares (Figure 6), the cumulative abnormal returns dropped dramatically. In the analysis of the previous event, the decline in cumulative abnormal returns between post-window 9-11 days was postponed, with the reason for the drastic decline seen there being the Twitter post of 6 November 2021.

Figure 6. Elon Musk's 21/11/06 Twitter post. Source: Twitter.com

During the period after the news announcement (Figure 7, left side), the cumulative abnormal return falls from 33.93% to 13.1% on day 2 of the post-window. One additional factor

that is important to note in the analysis is timing. In case we compare the event with the Tesla-related news we examined before, we can see that the shape is remarkably similar.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Tesla	CAR: 2,27% - 37,19%	CAR: (-18,15%) - (-1,15%)
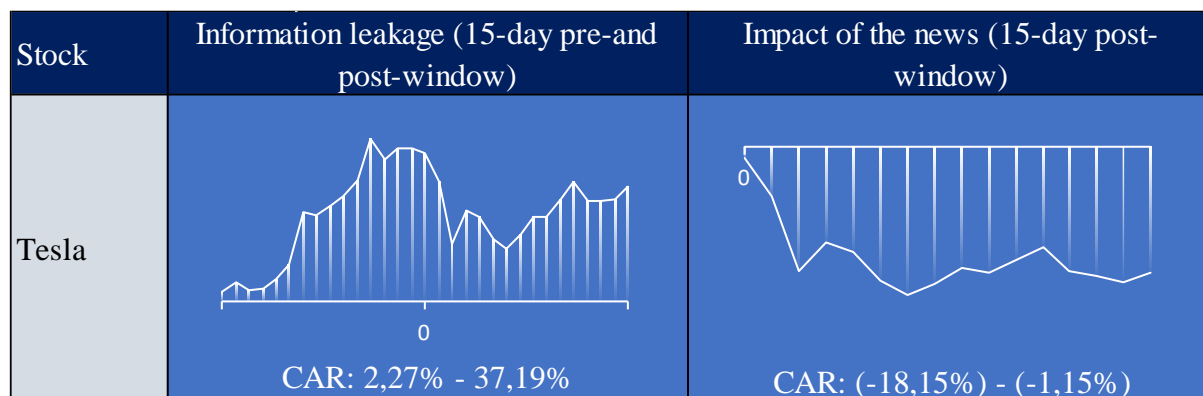
Figure 7. Evolution of the cumulative abnormal return for November 6, 2021, Tesla news.
Source: own edited

Nevertheless, it is not surprising, given that only about 10 days passed between the two events, and the same stock was involved. Therefore, it is reasonable to assume that this event has already been influenced by interactions with the previous one. Examining the post-window (Figure 7, right side), it can be seen that the impact of the news is more clearly visible. In the case of the post-window, a cumulative abnormal return of -1.15% is plotted on day 0, which rises to -16.81% on day 2 after the news, rises and then falls back to -18.25% on day 6.

This event is a good illustration of why the impact of the news is worth looking at separately. The results for the pre- and post-windows are very misleading, given that the calculation only generates positive values, whereas the calculation with the post-window only generates negative values. As it was mentioned in a previous calculation, the expectations in the pre-window resulted in positive abnormal returns (not surprising given the news that was examined before), which the exchange rate corrected after the announcement.

4. <u>GME – Game Stop – Event: 2021.01.26.</u>

On 26 January 2021, Elon Musk posted the shares of the American video game company Game Stop on Twitter (Figure 8), which rapidly became a big news story, with large numbers of shares.

Figure 8. Elon Musk's 21/01/26 Twitter post. Source: Twitter.com

As can be seen from the charts, the stock was already producing extremely high abnormal returns in the days before the event. The CAR turns negative on day -9, and from there it starts to rise, with a cumulative abnormal return of over 187% (Figure 9, left side) already two days before the event.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
GameStop	CAR: (-14,89%) - 1439,54%	CAR: (-63,88%) - 351,93%
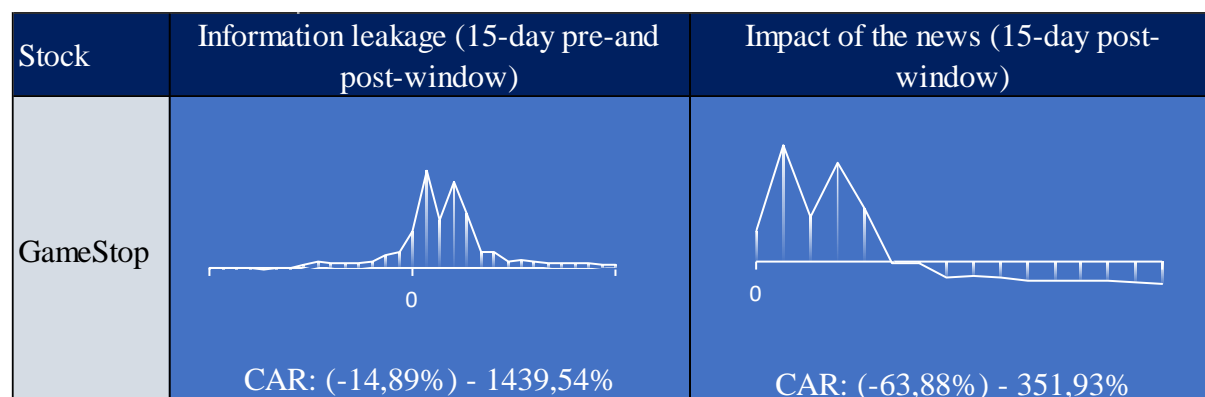
Figure 9. Evolution of the cumulative abnormal return for the January 26, 2021, Tesla news. Source: own edited

Based on the description below, it can be assumed that there has been an information leakage, the expectations were positive, and that this was reflected in a very spectacular rise in cumulative abnormal returns. In such a case, it becomes necessary to examine the post-window per se (Figure 9, right side). The results obtained when analysing the post-window are much lower, but the figures are nevertheless still remarkably high. The difference in magnitude is due to the high level of information leakage, with positive expectations of participation in the days before the news was published. For the 15-day post-event window (Figure 9, right side), the cumulative abnormal return peaked on the 1st day after the event, reaching 351.93%. The plot of the case also shows that the cumulative abnormal return attenuates by day 6 and then steadily increases to negative values until day 15.

The phenomenon just described can be explained by the fact that when the news broke, it started to spread, the stock market participants started to buy shares at a high rate and then, after the news had gone down, they started to sell in an avalanche.

The news about GameStop's share is the most spectacular result in this research, and there are several reasons why. One is that this post by Elon Musk has become the most famous, appearing on portals such as CNN, the New York Times and the BBC, which has naturally led to the news spreading extremely quickly. In addition, other investors have also contributed to the rise in the share price, Chamath Palihapitiya, the investor, founder, and CEO of Social Capital, who said in a tweet that he had bought call options on GameStop, betting that the shares would go up, and that the company had a new CEO. Another explanation, also quite decisive, will be explained in conjunction with the examination of the results of the forthcoming section.

5. OTLGF – CD Projekt – Event: 2021.01.28.

Elon Musk wrote the following about the Cyberpunk video game on 28 January 2021: *"The esthetics of Cyberpunk are incredible btw."* (Figure 10) – This game was published by CD Projekt. The same day, Musk shared a picture of a new Tesla model (Plaid Model S) and added the following: *„It can play Cyberpunk."*

Figure 10. Elon Musk's 21/01/28 Twitter post. Source: Twitter.com

It is not irrelevant that the video game Musk mentioned was launched in December 2020, was riddled with bugs, caused a huge outcry because it took 9 years to develop and was delayed for an exceptionally long time, thus the stock was not exactly in its heyday before Musk's tweet.

For the information leakage (Figure 11, left side), on the day of the news release, a cumulative abnormal return of 28.60% was realised. In the former case, it is also nice to see how the stock starts to revert to its original state, with the post window on day 11 already below 1%.

It can be noticed that positive cumulative abnormal returns have already been spawned in the days before the news. The 2 days before the event, 8.52% shows. The result is due to the company's announcement on Twitter on 25 January 2021 that it would fix one of the biggest bugs in the Cyberpunk video game, along with an option to work around the problem. Further investigation of the news also reveals that on the day of Musk's post, The Witcher 3 video game was announced, the previous versions of which have been exceedingly popular in the gaming community (CD Projekt Mid-Year Report, 2021).

Based on what has been described above, the separate interpretation of the post-window was considered as an important step in this case, focusing on the impact of the news (Figure 11, right side). After the event, negative cumulative abnormal returns of -9.20% are observed on day 3. The results suggest that the positive expectations in the pre-window were highly misleading by the news impact.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
CD Projekt	 CAR: (-10,32%) - 28,60%	 CAR: (-16,48) - 8,12%
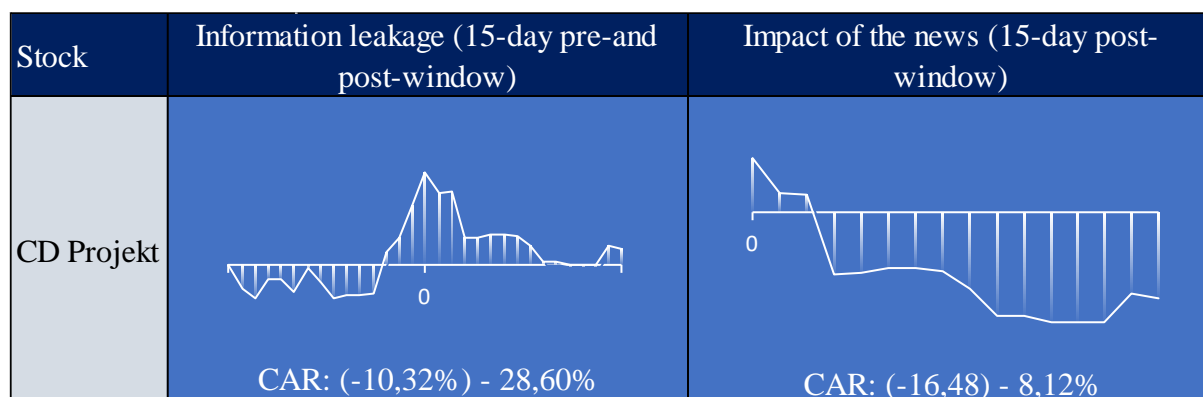
Figure 11. Evolution of the cumulative abnormal return for the January 28, 2021, CD Projekt news. Source: own edited

As in the previous case, a sell-off following the rapid share buybacks is also assumed, which is of course supported by the fact that the video game that the company launched in December 2021 was very much below expectations, which was not forgotten once the news faded.

Explaining the remarkably high cumulative abnormal returns of GameStop stock, another factor that could have affected the stock was mentioned. The explanation for the postponement of the discussion is that the high results may be linked to the CD Projekt news. In addition to the fact that both scenarios are attributed to Elon Musk, the fact that both companies are active in the video games industry and the news was published 2 days apart is of foremost importance. The combination of these 3 factors could have had an exceptionally substantial impact on the cumulative abnormal returns. It is possible that positive expectations were more driven by the spread of the GameStop news. In addition to the above-mentioned, the positive values generated in the pre-window may also include the 25 January post about the Cyberpunk bug fix, as well as the 28 January game announcement. If we look at what has happened to the company, the negative post-window values are not surprising, as the Polish company released a patch for the misguided video game on the very day Elon Musk wrote the post, but this created further bugs in the game, which also caused outrage. On 9 February 2021 (the 8th day of the post-window), the company announced that they had been the victim of a cyber-attack, and the party responsible for the hack demanded a ransom in exchange for the confidential information (bbc.com, 2021). As described above, in case of GameStop, this stock could be an evidence of Musk monitoring stock market trends and reacting to them with his posts.

6. <u>SHOP – Shopify – Event: 2021.01.28</u>

Elon Musk wrote a Twitter post regarding the Shopify e-commerce platform on 28 January 2021 (Figure 12), the same day as he posted about CD Projekt.

Figure 12. Elon Musk's 21/01/28 Twitter post. Source: Twitter.com

In this case, a cumulative abnormal return of 16.69% was also realised on day 15 of the post-event window (Figure 13, left side). The figure also shows that the cumulative abnormal return took a value remarkably close to 0 (0.68%) on day 2 before the event, but before that the positive values suggest that positive expectations about the share had already been expressed before the event.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Shopify	CAR: (-6,37%) - 21,06%	CAR: 0,28% - 29,32%
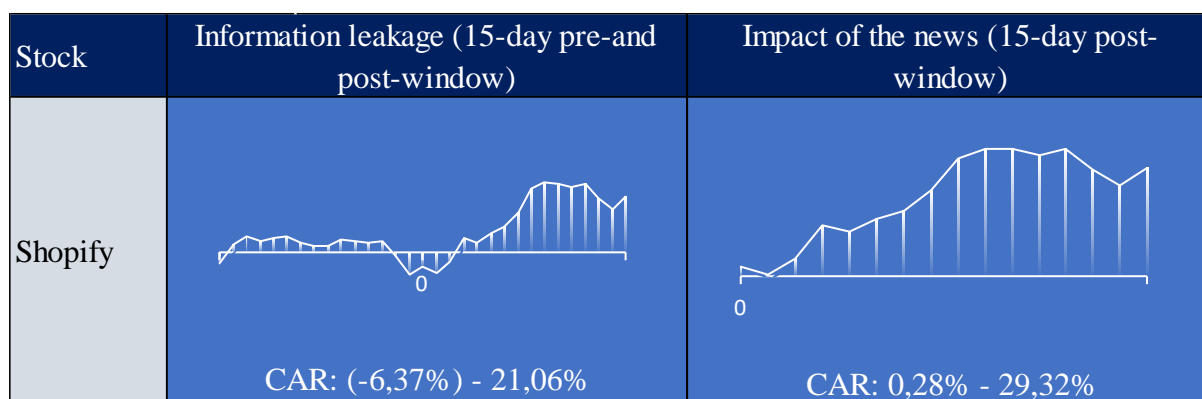
Figure 13. Evolution of the cumulative abnormal return for the January 28, 2021, Shopify news. Source: own edited

Observing only the impact of the news (Figure 13, right side), higher cumulative abnormal returns can be seen, peaking on day 9 at 29.31%. It can also be noticed that the impact of the news has not even faded on day 15, it has had an extraordinarily strong impact on the stock.

This event, like Tesla's news on 6 November 2021, is a great illustration of why it is important to examine the existence of information leakage and the impact of the news separately. In fact, the information leakage distorted the cumulative abnormal returns to such an extent that the analysis generated a negative CAR on the day of the event as well as on the day 1 before and the day 1 after the event. However, an exclusive analysis of the impact of the news showed that the news resulted in positive cumulative abnormal returns.

Certainly, as it was discussed in the previous analysis, the fact that the news occurred on the same day as the CD Projekt news and only 2 days later than the Twitter post about GameStop may also affect the results in this case. The reader may rightly wonder why an e-commerce platform would have a link to changes in the video games industry. The answer this time is not to be found in the relationship between the industries, but in the fact that Elon Musk himself shared the news and caused the changes in each of these events. The businessman's words are followed by countless people, and as a result, the press easily picks up on the events that revolve around him.

7. BMRN – BioMarin Pharmaceutical Inc. – Event: 2015.09.21.

Hillary Clinton expressed her displeasure with the pharmaceutical industry's prices on Twitter on 21 September 2015 (Figure 14).

Figure 14. Hillary Clinton's 15/09/21 Twitter post Source: Twitter.com

It is especially important that in this case the post is not targeted at a specific company, but an industry. Therefore, articles and studies from the past were examined that have analysed this and looked at which company had/has the biggest impact, this is the reason BioMarin stock was chosen for this analysis.

For the pre- and post-event windows (Figure 15, left side), the cumulative abnormal return is -3.51% the day before the event and -10.07% on the day of the event, with the value further decreasing to -23.19% by day 6 of the post-event window.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Biomarin	CAR: (-27,16%) - 1,14%	CAR: (-24,27%) - (-6,78%)
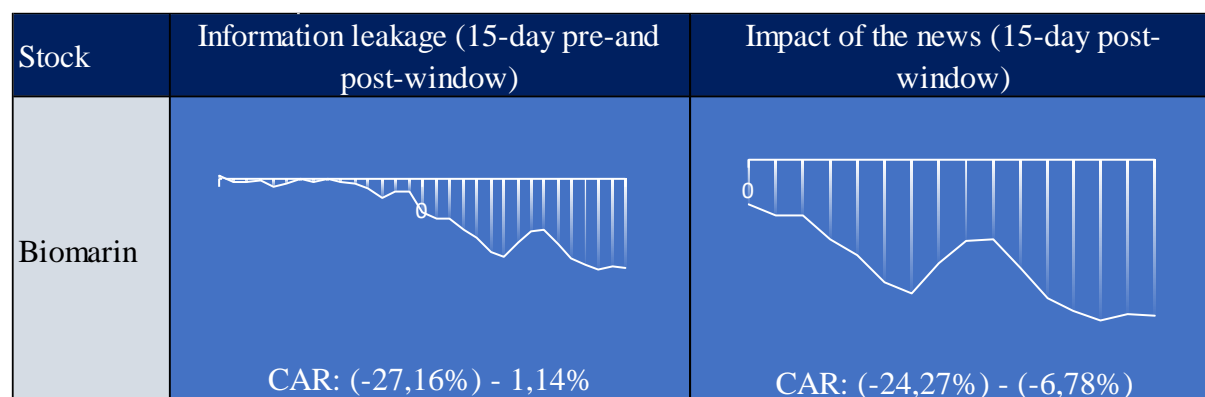
Figure 15. Evolution of the cumulative abnormal return for the September 21, 2015, BioMarin news. Source: own edited

After a temporary increase between days 7 and 10, only lower values are observed, still showing -26.41% on day 15.

As a consequence of the drastic decrease seen in the post-event window, it is also worth looking at the days following the event only (Figure 15, right side). It can be seen that even at 15 days post-event window (Figure 15, right side), the cumulative abnormal returns have not returned to their original state, but there is a drastic decrease, reaching -23.47% on day 15 of the post-event window. On post-window day 7, an upward trend clearly started, dated 30.09.2015, when the company announced that it had enrolled the first patient in the BMN 270 Phase 1/2 trial of gene therapy for the treatment of haemophilia A patients (uclb.com, 2015).

The post-window values examined by separate calculation generated cumulative abnormal returns of remarkably similar magnitude to those of trials where information leakage may be present, so it can be said that information leakage was absent or present only to a negligible extent for the news.

Such a glaring case requires further detailed investigation. Clinton has proposed the creation of a Consumer Oversight Committee to monitor what she calls "unjustified, extraordinary price increases" by analysing trends in production costs and patient value. On condition that the monitoring committee found unjustified price increases, the government would have the power to intervene and fine manufacturers. Such a dramatic policy change may be difficult to achieve, as the power to impose fines would have to be granted to Congress through legislative action, but the fact that Clinton is proposing such a move may send a signal to pharmaceutical manufacturers about their attitude towards potentially unethical price increases (pharmacytimes.com, 2016). That said, the reason for the prolonged negative abnormal returns may be that price regulation has not been enacted since then.

8. BA – Boeing – Event: 2016.12.06.

On 6 December 2016, Donald Trump expressed his displeasure with the costs of the aerospace company Boeing, saying that the prices were out of control (Figure 16).
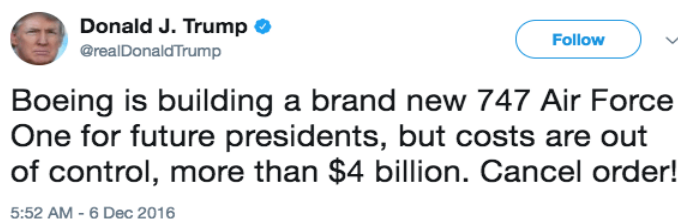
Figure 16. Donald Trump's 16/12/06 Twitter post. Source: sciencetrends.com, 2017

In this case, the CAR values (Figure 17, left side) range between 0.61% and -3.40%, the stocks were examined before this one seemed far more extreme.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Boeing	CAR: (-3,41%) - 0,61%	CAR: (-1,76%) - 0,40%
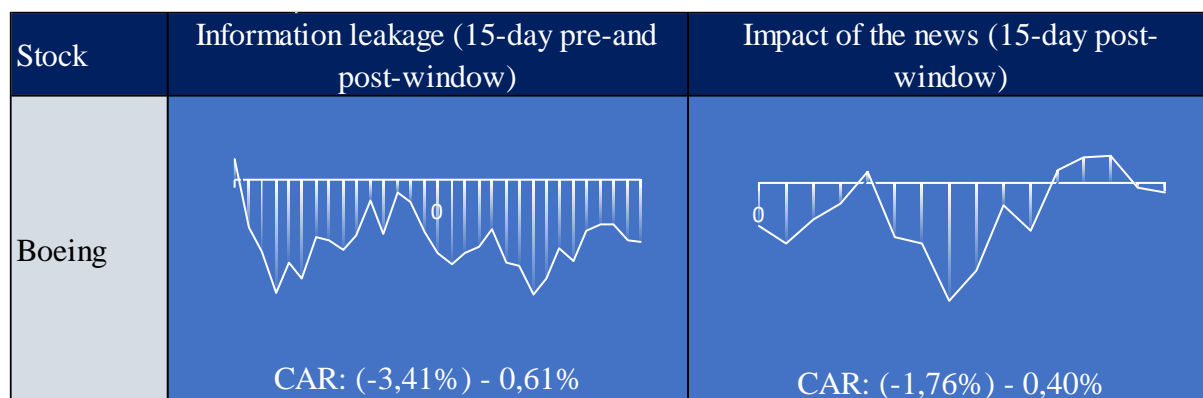
Figure 17. Evolution of the cumulative abnormal return for the December 06, 2016, Boeing news. Source: own edited

Observing only the impact after the news (Figure 17, right side), the largest swing in the post-window was less than 2%, so that the news had a negligible impact on the share price. The charts show that Donald Trump's rejectionist post did indeed have a negative impact on the stock, leading to negative cumulative abnormal returns, but it can also be seen that it had a very slight impact compared to Elon Musk's post.

9. LMT - Lockheed Martin – Event: 2016.12.12

On 6 December 2016, Donald Trump expressed his displeasure with Boeing's prices, saying that they were out of line. Less than a week later, on 12 December 2016, Donald Trump targeted Lockheed Martin in a Twitter post (Figure 18).

Figure 18. Donald Trump's 16/12/12 Twitter post. Source: dailyvoice.com, 2016

Figure 19 (left side) shows that the cumulative abnormal return in the pre-window starts to decrease already 3 days before the news. The cumulative abnormal return in the post-window is -7.39% in the 1st day after the event.
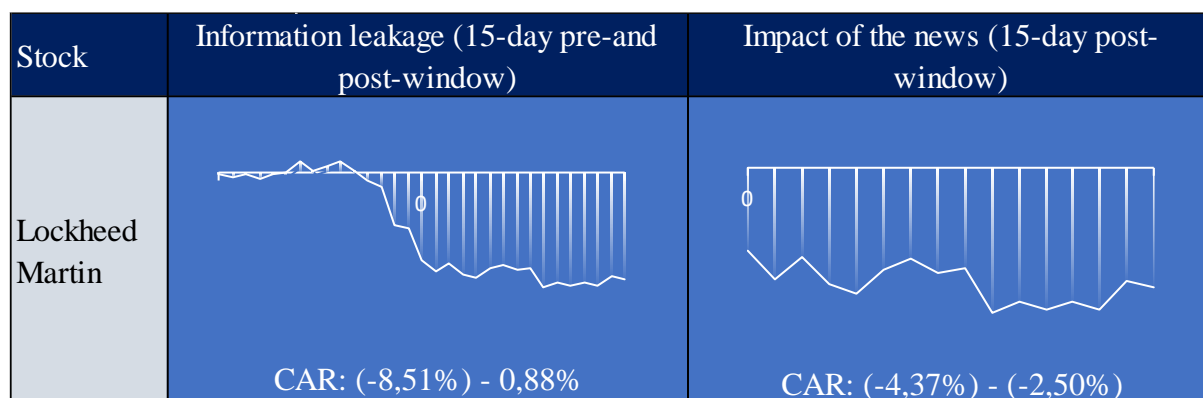
Figure 19. Evolution of the cumulative abnormal return for the December 12, 2016, Lockheed Martin news. Source: own edited

Examining only the information leakage (Figure 19, right side), the magnitude of the decrease (i.e., the effect of the news itself) is much lower.

It is important to note that Lockheed Martin is an aerospace company, like the stock previously examined, and that only 6 days elapsed between the news affecting the share price, and that former US President Donald Trump handles both news items. This suggests that the news may have had an impact on each other.

Comparing the graphs with the previous studies, it is safe to say that Donald Trump's social media interactions had a much lower impact on stock prices than the news from Elon Musk.

10. SNAP – Snapchat Inc. – Event: 2018.02.21.

On February 21, 2018, Kylie Jenner indicated on Snapchat's social media application that she no longer uses it, asking her Twitter followers if anyone else felt the same way (Figure 20).

Figure 20. Kylie Jenner's 18/02/21 Twitter post. Source: Twitter.com

In the case of Jenner's negative Twitter post on the Snapchat application, an incredibly remarkable trend was observed. Specifically, the rise from 6.98% on the 10th pre-window day to 58.18% on the 9th pre-window day (Figure 21, left side). Looking for the cause, it turns out that the company added a live feature to the app that day for the 2018 Winter Olympics that allowed users to stream snippets of key television events, which seems to have had quite an impact on expectations for attendance. The above explains why Jenner's speech did not cause negative cumulative abnormal returns. The decline is noticeable, although still showing remarkably high CAR values, which were even 40.69% on day 15 of the post-window (Figure 21, left side).

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Snapchat	CAR: (-1,11%) - 58,18%	CAR: (-14,52%) - (-1,54%)
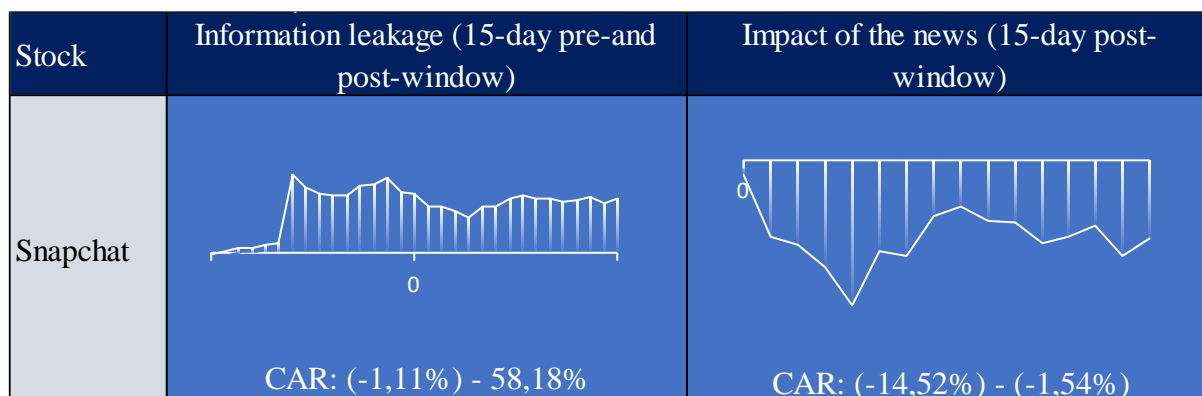
Figure 21. Evolution of the cumulative abnormal return for the February 21, 2018, Snapchat news. Source: own edited

In the light of the above, it is legitimate to wonder whether the decrease is due to the social media posts or simply the end of the Winter Olympics. Assuming that the words of the American businessperson had an impact on the exchange rates, the values calculated for a shorter time frame are more telling in this case.

Given that Snap Inc.'s innovation on 07.02.2018 (pre-window -9) resulted in a remarkably high positive abnormal return, the examination of post-windows separately was necessary, since observing both pre- and post-windows together in our case distorts the actual impact of the social media appearance. The impact of the news is shown in Figure 21 (right side). After the calculations for information leakage, the chart clearly shows a different volume of results. It can be clearly seen that the cumulative abnormal return on the day of Jenner's post

is -1.54%, which drops to -14.52% on the 4th day of the post window, only then starting to rise in a positive direction.

Based on this, it can be said that Jenner has managed to move the stock price and has also created a negative impact with her negatively charged post. We should also bear in mind that the information leakage analysis shows very high positive cumulative abnormal returns (see Figure 21, left side), which leads us to suspect that Kylie Jenner did not make this entry at random time.

11. KO – Coca Cola Company – Event: 2021.06.04.

Cristiano Ronaldo pushed away 2 Coca-Cola bottles at the press conference in Budapest, signalling his displeasure. In addition to his career, the athlete is also famous for not eating any "junk food" (Figure 22).

Figure 22. Cristiano Ronaldo 21/06/04 Budapest press conference. Source: portfolio.hu, 2021

In this case, despite the media attention of Ronaldo's damage to Coca-Cola, the cumulative abnormal returns were quite negligible. For the information leakage (Figure 23, left side), the cumulative abnormal return is 1.55% on the day of the event and -1% on the 15th day post-event.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Coca-Cola	CAR: (-0,89%) - 1,72%	CAR: (-2,70%) - (-0,14%)
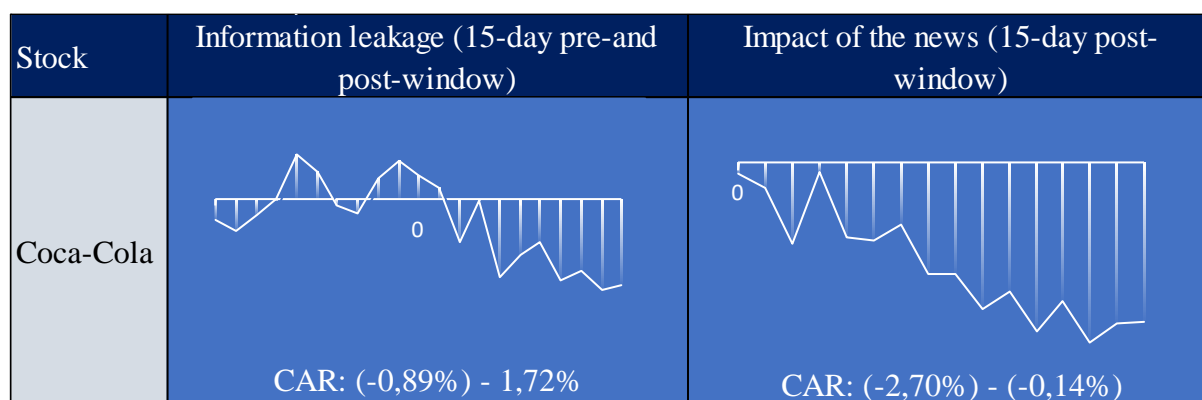
Figure 23. Evolution of the cumulative abnormal return for the June 4, 2021, Coca-Cola news. Source: own edited
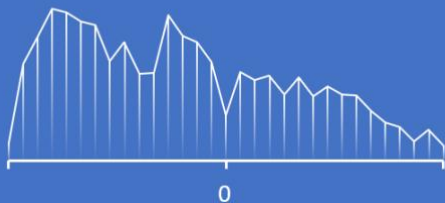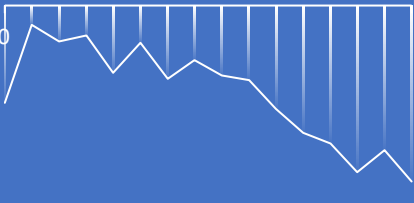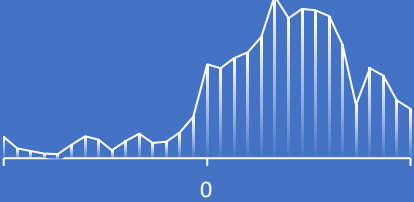
If we look only at the impact of the news (Figure 23, right side), the downward trend is clearly visible for the post-window. However, it is important to note that the cumulative abnormal returns on the day of the event as well as on the day after the event take values close to 0 (-0.18% and -0.3%), and in addition, the CAR does not fall below -2.70% within the days under consideration.

Unlike the previous cases examined, this was a live event and not a social media post. The late reaction may be due to the fact that the news was slower to start spreading before the press picked up the incident and people who do not otherwise follow sporting events were informed late.

IV.5. Summary of results
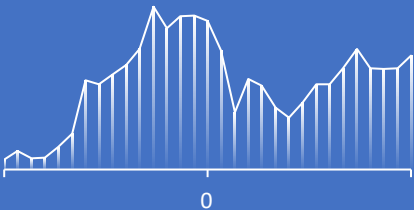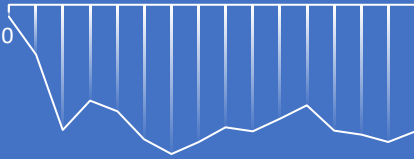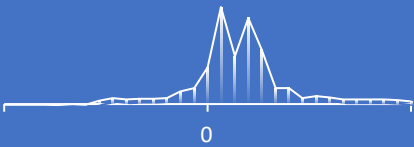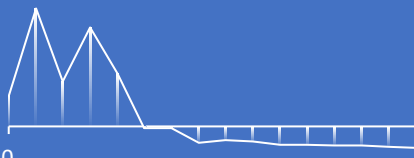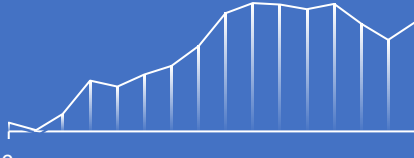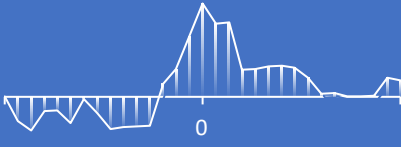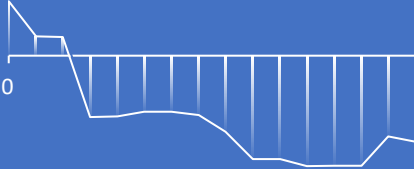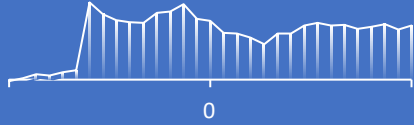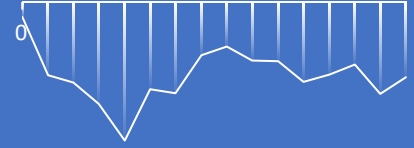
By analysing the impact of the various posts and interactions of people in different fields, it was possible to see which events had an impact (positive or negative), to what extent information leakage was present and to what extent the stock was affected by the news generated by these people alone. The impact of the news was observed on shares of companies in a variety of industries, with the interactions of the influential individuals being either negatively or positively charged. Figure 24 summarises these events, showing the existence of information leakage as well as the impact of the news as a graph. As in the previous exercise, the y-axis shows the cumulative abnormal return, while the x-axis shows the time (days) of the event. The information leakage is shown with a 15-day pre- and post-window, and the news impact is shown with a 15-day post-window, below the minimum and maximum cumulative abnormal return for the stock in question was included. The charts below have all been presented in the results section, the table is only there to help to comprehend the summary.

Examining the graphs, it is immediately apparent that the effect of the news was detectable in all cases. This confirms the hypothesis that the social media interactions of influential and highly reputable individuals associated with a company have an impact on the share price of the company concerned. This means nothing more than that the masses watching them listen to them and follow their actions. Various people decide whether to buy or sell a stock based on the expressions of these individuals.

Stock	Information leakage (15-day pre-and post-window)	Impact of the news (15-day post-window)
Elon Musk		
Tesla	CAR: 2,79% - 24,35%	CAR: -1,44% - (-13.13%)
	CAR: 0,95% - 37,02%	CAR: 1,17% - 25,21%

(Table continues on the next page)

Tesla	CAR: 2,27% - 37,19%	CAR: (-18,15%) - (-1,15%)
GameStop	CAR: (-14,89%) - 1439,54%	CAR: (-63,88%) - 351,93%
Shopify	CAR: (-6,37%) - 21,06%	CAR: 0,28% - 29,32%
CD Projekt	CAR: (-10,32%) - 28,60%	CAR: (-16,48) - 8,12%
Kylie Jenner		
Snapchat	CAR: (-1,11%) - 58,18%	CAR: (-14,52%) - (-1,54%)

(Table continues on the next page)

(continuation of the table)
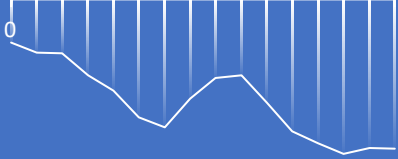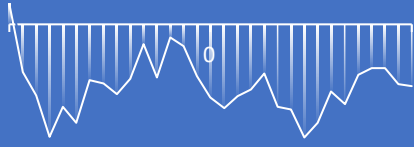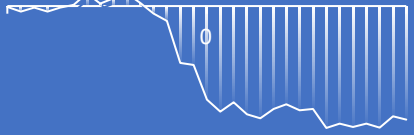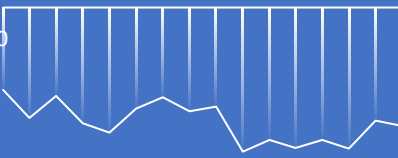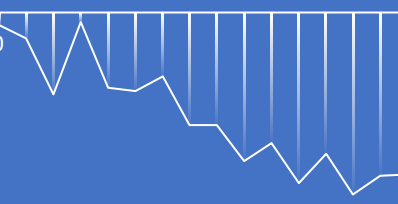
Hillary Clinton		
Biomarin	CAR: (-27,16%) - 1,14%	CAR: (-24,27%) - (-6,78%)
Donald Trump		
Boeing	CAR: (-3,41%) - 0,61%	CAR: (-1,76%) - 0,40%
Lockheed Martin	CAR: (-8,51%) - 0,88%	CAR: (-4,37%) - (-2,50%)
Cristiano Ronaldo		
Coca-Cola	CAR: (-0,89%) - 1,72%	CAR: (-2,70%) - (-0,14%)

Figure 24. Table summarising the existence of information leakage and the impact of the news Source: own edited

Looking at the charts, it is apparent that for the stocks that Elon Musk and Kylie Jenner have written about, there are enormous jumps, with the cumulative abnormal returns varying widely from one day to the next. When examining information leakage for longer windows, it became clear that the maximum of the cumulative abnormal returns for the two mentioned individuals was always higher in the pre-window than for the other actors studied. The maximum values before the news they reported were all above 6%, which was not the case for any of the persons studied next to them. The two actors have in common that they are both businessman/businesswoman among the richest/most famous in the world, Musk is the richest man in the world, while Jenner is being touted as the richest young person in the world. The fact that all their events have high cumulative abnormal returns in the pre-window can be explained by the fact that they are presumably consciously writing posts, reacting to trends, possibly getting access to information earlier than their more famous peers in other professions.

Thus, it can be said that their posts are not made at random times but are deliberate and premeditated.

Aiming on the industries, the impact of news stories about the aerospace industry (Boeing, Lockheed Martin) and the food industry (Coca-Cola) was the most limited. It also suggests that people paid more attention to news related to the pharmaceutical industry, social media industry, video games industry, e-commerce or automotive and energy storage.

V. Discussion and conclusions

In this paper, the impact of certain influential individuals was studied regarding their social media appearances that are aiming companies by the use of event study analysis as a suitable method.

The key figure of this research was Elon Musk, however the news he generated were also compared with other posts shared by equally well-known people around the world. It was also weighty that the companies issuing the shares under study were in different sectors and the individuals were in different professions, thus testing whether the profession and title of the person who posted the news and the industry affiliation of the company issuing the shares could make a difference.

By the end of the empirical analysis, it was clear that the hypothesis had been confirmed, as all the news items could have influenced the evolution of stock prices, as the cumulative abnormal returns were non-zero in all the cases studied without exception. This means that celebrities with profound influence do indeed have an impact on the stock market, and the share prices of the companies they are involved have indeed changed as a result of the news. As it being said earlier, the masses who watch them are in fact highly influenced, and many people decide how to act in relation to stock market transactions based on the statements made by these figures.

The assumption that businesspeople react in trends and can reach hold of certain information earlier has also been proven true. The highest cumulative abnormal returns in the pre-window were generated by Elon Musk and Kylie Jenner, so it can be assumed that their manifestations are not random in time but premeditated.

In addition, it was found that the effects of news related to the aerospace industry (Boeing, Lockheed Martin) and the food industry (Coca-Cola) were the most limited. This also implies that people paid more attention to news related to the pharmaceutical industry, social media industry, video games industry, e-commerce, or automotive and energy storage.

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Reviewer: Dr. Fűrész Diána Ivett, Pécsi Tudományegyetem Gazdálkodástani Doktori Iskola

The Role of Women and Their Use in Propaganda for Space Race in the 1960s

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The aim of this study is to show the role of women in the space race in the 1960s and how the parties involved to convey their messages and ideology to the public, generating a kind of female role models alongside the male astronauts, used this. The focus will be put primarily on the wives of the first US astronaut group (Mercury Seven) and the first female cosmonaut, Valentina Tereshkova.

The space race (1957–1975) opened a new area in the rivalry between the United States and the Soviet Union. Astronauts became the new heroes of the age, bringing victory to socialism or restoring America's prestige. However, the masculine world of astronauts was not missing in female characters.

In 1959, Life magazine signed a contract with the first astronaut team and their wives, which allowed them to report on the astronauts' training and later on their space flights. They were the ones who provided a supportive family environment, and this motif regularly appeared in the articles they wrote. Wives fitted perfectly into the role that was typical of the society of the time. It is an ideal family picture, which is well reflected in the pages of newspapers and on the front pages. Astronaut wives were a model for women. They contributed as mothers, as wives, supporting the chosen ones in all their efforts to win the space race. Like astronauts, who embodied masculine ideals, the perfect American, the patriot, or, on the other side, the new Soviet man.

Propaganda has always been a key factor in the Soviet space program, and Tereshkova's selection was also based on her ability to be used in propaganda and to present the values and messages that the Soviets wanted to represent. She could serve as a role model for young girls and women, while also seemingly representing the realization of gender equality. Her role, however, gradually changed and she became a wife and mother, supporting various women's cases through her work.

The novelty of the space age offered a great opportunity for new characters and role models to appear in the press, who have presented an ideal picture of what a caring wife, a mother, a woman whose husband does dangerous work for the glory of her country. Or it shows that with learning and perseverance, even outer space is not out of reach for girls. Even if the next female astronauts had to wait until the 1980s.

Keywords: Space race, space age, women and space, propaganda

I. Introduction

The 1960s was the era of space age. The United States of America and the Soviet Union were competing to conquer space, extending the Cold War rivalry into a new field. The space race began with the orbiting of Sputnik-1 in October 1957 and continued until the joint US-Soviet mission of the Apollo–Soyuz Test Program in 1975. The most intense period was clearly the decade of the 1960s, thanks to the early Soviet historic firsts and later the fight for the Moon landing. This rivalry was not only a sub-chapter of the arms race, but also, for example, a battle of ideologies. The space age also brought with it the emergence of new heroes and role models. Astronauts and cosmonauts[1] became the new stars of the age. They became the new heroes, and this could be used for propaganda purposes for example bringing victory to socialism or restoring America's prestige.

The space race was essentially a male-dominated rivalry. This was partly due to the selection method of the astronauts and the cosmonauts. In the United States, the first astronaut teams were selected from pilots serving in the Army, Air Force and Navy. At that time, only men were allowed to be fighter- and test pilots, so women were automatically excluded from the astronaut program.[2] This created an ethnically and gender homogeneous group[3] of white/Caucasian men who would later represent the American Dream Maker in terms of canonized image. It was therefore a hypermasculine world where women appeared as wives, lovers or helpers. In this environment, male discourse and traditional gender roles were dominant, just as they were in the military.[4] This was not surprising because the military background of astronauts.

In the Soviet Union, too, the search was on for the ideal candidate for what they called a "special flight" among air force pilots.[5] Six men were selected for the first Soviet cosmonaut team, but the Soviet leadership did not rule out the idea of a female cosmonaut. Although the existence of the female cosmonaut group[6] and the person of Tereshkova somewhat overshadowed the picture, the Soviet cosmonaut world was still essentially a male-dominated environment too. However, the masculine world of astronauts and cosmonauts was not without its female characters.

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[1] In the United States, the term astronaut was used, while in the Soviet Union it was cosmonaut. The two words have the same meaning, but the Americans borrowed the term from the Greek *astron* (star), while the Soviets borrowed it from the Greek *cosmos* (universe, cosmos).

[2] Between 1960 and 1961, 13 women successfully completed the tests that the astronauts selected for the Mercury program had to pass. These tests were privately funded, and the members of the group did not know each other or meet at the same time. The name Mercury 13 also dates from much later, in the 1990s. Jerrie Cobb was the first to pass the requirements and was one of the first to try to get the group to take a formal test, but this effort failed, and they not allowed taking part in the astronaut training. Wally Funk, one of the Mercury 13, was finally given the chance to go into space, taking part in a suborbital spaceflight in 2021 thanks to the Blue Origin space company.

[3] Hersch 2012. 16.

[4] Hersch 2011. 75–80.

[5] Siddiqi 2000. 243–245.

[6] The first group of Soviet female cosmonauts finally selected in 1962. The group included Tatyana Kuznetsova, Valentina Ponomareva, Irina Solovyova, Valentina Tereshkova and Zhanna Yorkina. The group of cosmonauts existed until 1969, but apart from Tereshkova, no other woman from this group was given the opportunity to participate in a space flight.

My study focuses on the wives[7] of the first American astronaut group (Mercury Seven[8]) and the first female cosmonaut, the Soviet Valentina Tereshkova. They were the female characters[9] who received significant media attention during the period under review and their identities were used to some extent for propaganda purposes. They have appeared in newspapers, written articles, and alongside their husbands at many events. They were well known and popular. Through the wives of American astronauts, people were given a glimpse into the daily lives of astronauts, their preparations and the space race for the common person. Tereshkova's case was unique in the sense that she was the only female cosmonaut at the time, which made her particularly interesting for the media. However, she was the only one who represented the Soviet woman abroad, and her character made her a good embodiment of Soviet propaganda messages.

II. Wives of the new American heroes - Astronaut Wives Club

In April 1959, NASA held a press conference to introduce the astronauts who will participate in the Mercury program, the first American manned space program. The first question what journalists asked at the event was how their wives felt about being chosen for this dangerous mission.[10] In fact, they were more interested in their family life, their beliefs and other personal information than in spaceflight itself and possible future missions. So perhaps not so surprising, that the exclusive contract signed by Life magazine and NASA included the astronauts' wives and their personal stories too.

On August 5, 1959, the Mercury astronauts and their wives signed an exclusive contract with Life magazine, one of the most widely read weekly magazines at the time.[11] Under the terms of the contract, the personal stories of the astronauts and their wives were to appear only in the pages of the magazine. The contract was signed for an initial period of four years, until the end of the Mercury program, for a total value of $500,000.[12] NASA's contract with the magazine created the opportunity to commercialize its public relations activities. The contract benefited them for several reasons, but most of all it contributed greatly to building a public image that the space agency would not have been able to achieve on its own. The astronauts themselves saw the benefits of signing the contract, both for financial and personal reasons. According to Alan Shepard and John Glenn, the availability of personal stories contributed to the popularity of the program, and their own stories were essentially the only products that could be sold without having to share professional details and secrets.[13] Moreover, readers were probably more interested in personal, family stories than in technical and engineering information or scientific articles. The weekly newspaper portrayed NASA as the epitome of American

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[7] Like their husbands, they formed a group known as the Astronaut Wives Club. This was essentially an informal group, which later joined by the wives of Gemini and Apollo astronauts. The original group included Rene Carpenter, Trudy Cooper, Annie Glenn, Betty Grissom, Jo Schirra, Louise Shepard, and Marge Slayton.

[8] Mercury Seven were the first group of the seven selected astronauts for the first American manned space program – Mercury. The group included Scott Carpenter, Gordon Cooper, John Glenn, Virgil 'Gus' Grissom, Wally Schirra, Alan Shepard, and Deke Slayton.

[9] In the Soviet Union, the identities of the cosmonauts who participated in space flights were known during this period, so the identity of the other members of the female cosmonaut group was not public. Although the wives of cosmonauts did appear in the Soviet press, they did not receive the same media attention as their husbands or the American astronaut wives. In the United States, Jerrie Cobb's efforts to engage the public in pressuring NASA to address the issue of women astronauts were not as significant as the media coverage of astronaut wives.

[10] Press Conference of Mercury Astronaut Team, 1959. 04. 09.

[11] Kauffman 1991. 60.; Starr 2008. 262.

[12] Kauffman 1991. 62.; Walsh 2016. 17–18. – $ 500,000 in 1959 is equivalent to about $4,874,845 in 2022.

[13] Alan B. Shepard, Jr. Oral History Interview – 6/12/1964; John H. Glenn, Jr. Oral History Interview – 6/12/1964.

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ingenuity and technological triumph, while the organization also recognized that it could have a major impact on public opinion by acting as a vehicle for contemporary values.[14] Also cleverly recognizing that people might be interested in what wives think about dangerous missions, how they support their husbands, what their feelings are, and what life is like in general with America's newfound stars and heroes.

The image of the wives developed to fit the direction of Life and to fit perfectly with the stories told by the astronauts and NASA. The wives, the family, in this context, were given the supporting role, their task being to create the right stable, supportive environment to enable the new heroes of the United States to carry out their exploits in the face of the dangerous challenges of the Cold War and the space race. The wives never worried, they were proud of their husbands and supported them in everything they did, even when they knew that their lives were at stake.[15] This role, and the fact that husbands risk their lives every time, was familiar to them, as they had been wives of test pilots and fighter pilots. After all, it was nothing new for their husbands to have to do dangerous work, as their previous jobs had also been dangerous. In a way, they were used to having to live their daily lives with the phone ringing at any moment or a knock on the door with terrible news.[16] Nor could they show much concern as a pilot's wife, even between themselves. It was sort of the way they kept it, and they adapted to it. Given the social conditions at the time, it was no surprise that they were expected to provide a stable backdrop and a calm environment. During the Cold War, the empowerment of American women also promoted, whether they were active in the public sector or were homemakers. The role of homemaker did not only mean supporting their husbands, raising children. It also represented the superiority of Americans, showing that wives and mothers were not forced to work in order to support their families. They also tried to reinforce the stereotype that American women are feminine and beautiful, while Soviet women are ugly and masculine. They also tried to prove that American/Western society is more advanced than Soviet society.[17]

The fact that Life also presented them as proud, fearless wives and mothers, with a stable background and a supportive environment, even benefited the Space Agency, as the wives gave them extra credibility and reliability.[18] In addition, this was particularly useful in the early stages of the space race, when scientists and engineers could only guess what the astronauts could expect up there. Nor should it be forgotten that in the early 1960s, NASA needed everything it could get to build a positive image of itself and to forget its early failures.

II.1 Portrayal of wives

Following the press conference introducing the astronauts, the article in the 20 April 1959 issue of the magazine already talks about the wives. In addition, how they are the ones who have some concerns about future missions.[19] In the 21 September issue, the wives appear as front-page stories,[20] each with an article about their lives, the selection process, and their doubts about giving up their careers and lives, and their support for their husbands in their work. Marge Slayton even mentions how badly Hollywood films portray pilot wives as tormented, weak women on the screen.[21] These articles, although written by wives, were actually more about

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[14] Starr 2008. 250–251.
[15] Cicero 2007. 66–67.
[16] Wolfe 1992. 9-23.
[17] Hilck 2019. 108–110.
[18] Cicero 2007. 66–67.
[19] LIFE Vol. 46. (1959) No. 16. 22-25.
[20] Although the articles published under the names of the wives, as in the case of the astronauts, the stories actually written by ghost-writers.
[21] LIFE Vol. 47. (1959) No. 12. 142-152.; 157-163.

their astronaut husbands than about them. The articles emphasised family stories, reassurance of support, faith in science and religiosity. There was no sense of fear, but rather pride and joy. For the first two Mercury missions, it was not known in advance, who would carry out the mission. As a result, the accounts of the astronauts and their wives were not published until after the mission had been completed.[22] This practice changed before the third mission, when it was announced that John Glenn would carry out this mission. This meant that personal content about the preparations, about what the astronauts were thinking, or what the wives were experiencing, could be published before the space flights. This kind of dual presentation has accompanied the Mercury program throughout, giving readers' insight into how the wives experienced the events, alongside the astronauts' accounts. These articles were more accessible to readers, as they were essentially written by lay participants for a lay readership. Especially for female readers.[23]

Sometimes even the wives appeared in the cover stories, either as themselves or alongside their husbands. One such was Rene Carpenter, who made the front page twice, first with her husband and then on her own.[24] For understandable reasons, the spotlight was on the astronauts, and in these stories the wives being more prominent supporting characters. These articles were structured in a similar way. They described the days involved, gave an insight into how they prepared, what they did, who was there with them, what their children thought, when and what they talked about with their husbands who were going on the mission. They described their thoughts and feelings, which were positive and full of confidence. If there was some anxiety or uncertainty in the wives' articles, it was usually because the launch had to be postponed for some reason or because of some minor error. Such was the case, for example, of Grissom's mission, where a problem arose on the return flight, which resulted in the sinking of the spacecraft's cabin. However, the real personality traits of the wives, their possible individual characteristics, did not appear in these depictions, or only minimally. It was as if all the women felt and thought alike, had similar backgrounds and personalities. They all reinforced the image of the average American family, the image they presented to the reader. They help and support their husbands in their work, take care of the housework, raise their children, do not complain when they hardly see their spouses.[25] Their former lives were similar, all that has changed is that a whole country knew them and was curious about their lives. After all, they were the ones who married the new heroes of the American people years ago. So, the wives became famous simply by being the partners of the chosen ones.

Ghostwriters played a major role in the portrayal of wives, who were present in the family home to report on women's days and the daily life of the family. All this, of course, in a way that fits in with the idyllic image of the family. This also put a kind of pressure on the wives, because from then on they had to pay attention to their every action and word in order to live up to the media's portrayal of the perfect homemaker and wife. Family problems? They did not exist. Previous marriage that ended in divorce? Not mentioned. Anything that would have cast America's newfound heroes in an unpleasant or negative light? Not reported in the press.[26] As Lily Koppel shows in her bestseller, *The Astronaut Wives Club*, the wives were not nearly as calm and fearless during the pre-launch and mission periods as the press portrayed them. Worry and fear are reactions that were a perfectly natural part of spaceflight, since any small mistake could have serious, even fatal, consequences. Not to mention that at the time it was a completely

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[22] LIFE Vol. 50. (1961) No. 19. 20-31.; Vol. 51. (1961) No. 4. 26-29.
[23] Hilck 2019. 114.
[24] LIFE Vol. 52. (1962) No. 20. Cover; Vol. 52. (1962) No. 22. Cover
[25] Grissom, B.: Nothing so important as 'I Love You' LIFE, Vol. 51. (1961) No. 4. 29-31.; Wainwright L.: For those who cared most, the long watch at home. LIFE, Vol. 52. (1962) No. 9. 28-37; Carpenter, R.: Scott Carpenter and his son and his wife living through 'the time that grew too long' LIFE, Vol. 52. (1962) No. 22. 26-37.; Cooper, T.: 'I felt calm. I guess I was saying, Go, Go' LIFE, Vol. 54. (1963) No. 22. 34-36
[26] Koppel 2013. 29–39.

new and unknown thing, where no one really knew what to expect, what was going to happen. However, if we look at the situation from a public relations point of view, it is perfectly understandable why the representation of these feelings was not given prominence. Spaceflight was a completely new thing at the time, and the competition with the Soviets meant that it had a high stakes. Add to this the fact that in the early 1960s, American space efforts were characterised by failures and a backlog against the Soviets. Therefore, it was of paramount importance to use astronauts as a fundamental force and to create the image in the minds of the people that America's new heroes would be able to defeat their rivals. Moreover, the wives essentially assisted in this. They made the space race more human, because readers could identify with them more easily than with the astronauts. They were similar to ordinary people, doing the same daily routines, not really doing anything special. This is partly why they were in a sense a role model for people. It was also a way of showing that ordinary people could contribute to the fight against the Soviet Union in their own way.

With the arrival of the new astronaut group (Gemini), new wives were introduced to those interested in spaceflight, thanks to the extension of the contract with LIFE, which was valid for the next generation. As the focus was generally always on the wives whose husbands were currently completing the mission, this also meant that the original members of the astronaut wives' club were relegated to the background. However, from the mid-1960s onwards, the space race lost some of its initial momentum, with rivalries not nearly as fierce as before. This also affected interest in the space race, as attention to the events waned. Moreover, by the end of the decade, the space age had lost all the novelty and the driving force that had previously been able to mobilize the masses. The moon landing essentially ended the space race and the focus shifted to scientific research and experimentation. These were no longer of interest to ordinary people. The wives who had been the perfect family for the outside world, the perfect woman, were no longer the focus of media attention. However, what appeared perfect, idyllic and happy on the outside was often the opposite in reality. Indeed, these stories often presented as if the life of the astronauts and their families was the American dream, with a house in the garden, a happy marriage, raising children and, above all, winning glory for the country, while at home the wives provided the background. These were more for the outside world. After the space race died down, and after the end of much media attention, these idyllic marriages ended in divorce in most cases[27].

III. From cosmonaut to wife - Valentina Tereshkova

During the years of the space race, only one woman, the Soviet Valentina Tereshkova was given the opportunity to fly in space. On 16 June 1963, the Vostok-6 spacecraft joined the Vostok-5 orbiting the Earth with Valery Bikovsky on board, marking another space flight for two. With this new double launch, the Soviet Union not only demonstrated its strength, but also achieved new firsts: in addition to the historic success of the first female cosmonaut, Bikovsky broke the previous record for the duration of a mission, which increased to five days. Tereshkova's spaceflight had considerable propaganda value, both domestically and internationally, and the fact that Tereshkova alone spent more time in the cosmos than the Americans had spent in all their spaceflights was an extra. Vostok-6 seems to have opened the door to the cosmos for women. However, the glimmer of hope quickly faded, and it was a relatively long wait of nearly 20 years before the next women, Svetlana Sevitskaya and then Sally Ride, were given the chance to prove themselves again.

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[27] For the Mercury Seven, three out of seven marriages ended in divorce. The second group (Gemini) had five divorces (out of nine), while the third group (Apollo) had eight divorces out of fourteen.

Propaganda objectives always played a key role in Soviet space programs, whether it was the timing of launches or the selection of cosmonauts. They took this ambition to the next level with the Vostok-6 mission and the appointment of the first female cosmonaut. For the decision-makers, the main driving force was to achieve, as many firsts and records as possible, and this mentality was a feature of almost every launch. In contrast, NASA's early focus on landing on the Moon essentially doomed the chances of the American women and the Mercury 13 team and missed an opportunity to achieve a relatively easy first.

The most important factor in deciding the first female cosmonaut was her use in propaganda, and the values, and messages that they wanted to represent and project with her, while her performance in training was less important. This decision later backfired, just think of the alleged problems that later spread about the Vostok-6 mission and Tereshkova's performance in space. The bad experiences may also have contributed to the fact that other trained female candidates in the space race were not given the opportunity to fly in space.

Why was Tereshkova better than the other candidates? Her family background and her youthful years contained elements that were important for the soviet ideology and that provided the right basis for making her a role model for the new Soviet woman. Born into a working-class family in 1937, her mother was a textile factory worker and her father a tractor driver. Her father was killed at the front during the Great Patriotic War, which made the life difficult for the family. Valentina started working when she was young and interrupted her studies at the same time. She joined the local Komsomol and became a member of the party in 1962.[28] This background needed only to be refined and she was already a model for young girls or even adult women. *Pionerskaya Pravda*, for example, created a 'tried and working' role model for children from Tereshkova, especially for young girls.[29] In her study, Sue Bridger points out that Tereshkova's biography contains elements of important key moments in Soviet development, making it suitable for full use by propaganda, with some fine-tuning, to achieve various goals. Elements such as the unification of the countryside and the city, the tragic losses of the Great Patriotic War or the diversity and potential of post-war Soviet life. Valentina Tereshkova's life was essentially a textbook model for the Soviet woman.[30] It would have been a mistake not to take any advantage of this opportunity. Even though it became clear within a relatively short time that Tereshkova's case was a one-off and certainly not repeated in the near future. The Seagull, as they nicknamed her after her call sign, was a bragging success, as her name quickly began to disappear from the news, especially after her marriage to Andriyan Nikolayev.[31]

Although there was a possibility that Tereshkova's space flight might be announced with the same emphasis on her military rank[32] as had been the case in previous announcements and reports, the Central Committee and Nikolai Kamanin[33] eventually decided that Tereshkova would appear in public as a civilian.[34] This was one of the first public signs that both Kamanin and the Soviet leadership had other objectives for her than her male colleagues. This decision also meant that from the very beginning Tereshkova would exist as a separate entity within the

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[28] Sylvester 2011. 198.

[29] Sylvester 2011. 199.

[30] Bridger 2004. 226.

[31] Sylvester 2011. 197.

[32] The women cosmonaut group joined the Soviet space program as civilians, which at the time was military-related. In the case of male cosmonauts, it was clear that they would appear in public in military uniform, even if this made the message of peaceful spaceflight a little controversial. In 1962, female candidates joined the Air Force with the rank of junior lieutenants. The military rank for women was a formal, technical appointment rather than a real one.

[33] Nikolai Kamanin (1908-1982): Soviet pilot, space flight instructor. Between 1960 and 1971, he was responsible for the training and selection of cosmonauts and played a major role in the organisation and service of the image of cosmonauts.

[34] Bridger 2004. 229–230.; Kamanin, 1963. 06. 08.; 1963. 06. 15.

cosmonaut group. Articles about her preparation and space travel emphasized her femininity and highlighted traits that society associates with the female gender. For example, the articles in Ogoniok magazine provided readers with information about Tereshkova's preparation, such as her haircut before the space flight and the importance of her hairstyle for her space journey.[35] After her return, it was clear that the Soviet leadership was finding it difficult to deal with Tereshkova's situation, both because she was a woman and because she was a civilian involved in a military-related program. In examining her role, several motives and constructed roles can observed. Her marriage to Nikolayev was partly for propaganda purposes; as a wife and later as a mother, she had to play a different role. In fact, Tereshkova gradually transformed and made into a kind of cosmonaut wife, a mother of a family, thus eliminating her privileged position. By 1970, the role of the cosmonaut had disappeared from Tereshkova's portrayal, and she was referred only to as Nikolayev's wife.[36]

However, the change of her role was no coincidence. Nikolai Kamanin, who had a major role in determining the image of cosmonauts and the information that published in the press about them and their missions, saw potential in her that the other female candidates did not have. These strengths were already evident during training. Tereshkova was a social activist, her behavior and manners were appropriate, she made a good impression on everyone. On the other hand, Ponomareva, who could have been a suitable candidate based on her performance and training, was considered 'morally unstable' because of her behavior.[37] This also meant that she was considered unfit to properly represent the party and country's messages after the space flight. Participating in various party events, travelling abroad (whether to countries of the Soviet bloc, Third World countries, Western countries), representing the interests of the Soviet Union at events were all part of the Soviet space program. It also meant, in practice, that cosmonauts had to perform public service duties after their spaceflight, instead of returning to their counterparts to work on the next mission. The successful spaceflight participants were too valuable to the Soviet political leadership and propaganda. They did not want to risk losing their newfound heroes. Kamanin later expressed his views on Tereshkova's future in his diary, which essentially decided the fate of the first female cosmonaut. In her, he saw a public figure, while the other candidates only be used in one position, they could not use for public roles. As a leader of Soviet and women's public organizations, Tereshkova would be able to do much more for the Soviet Union than she could ever have done in space.[38] After her return, Tereshkova attended the World Congress of Women in Moscow,[39] where she gave a speech, mainly about her mother and the difficult circumstances she grew up in, but also how much she owes to her.[40] Later, Tereshkova took part in 42 trips abroad between 1963 and 1970[41], mainly to promote Soviet ideology rather than to highlight space successes. This was partly because the cosmonauts not allowed sharing with the world the exact details of their missions, only to talk in general terms about their masters and their preparations, emphasizing that everything went well, everything was trouble-free. This was partly to avoid revealing specifics and to avoid revealing that in fact Soviet technology was not yet at the level that the results would have led them to believe. The majority of Tereshkova's trips linked in some way to events for young girls and women, events for women's equality and women's empowerment.

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[35] Денисов Н.: Космическая неделя [Denisov, N.: Space Week] Ogoniok, 1963. No. 26. 12-15; Peskov V.: "Seagull Calling" The USSR No. 8. (83) August 1963 22-24, 40.
[36] Rockwell 2013. 186.
[37] Kamanin, 1962. 11. 19.; 1962. 11. 29.
[38] Kamanin, 1963. 08. 01.
[39] Sylvester 2011. 205.
[40] Кафанова Л. Конгресс Борьбы и Надежда [Kafanova, L.: Congress of Struggle and Hope] Ogoniok, 1963. No. 27. 26-29
[41] Gerovitch 2015. 143.

The case of Tereshkova seems to indicate the realization, or at least the beginning, of gender equality, but in reality, this kind of equality was not achieved.[42] For the foreign press, Tereshkova's space flight was a very good illustrative example to show, and even to form a critical opinion of her own country, that gender equality was beginning to be achieved in the Soviets. For example, a journalist of LIFE magazine, Clare Luce criticized NASA decision-makers for missing the opportunity to create the first female astronaut and for misinterpreting Tereshkova's mission. Spaceflight and the whole field is too male-dominant, while gender equality is increasingly being achieved by the rival. In other words, the US is also lagging behind in this area.[43] In addition, the critical voices reinforced by Soviet reports. The USSR monthly[44] in the United States also published parts of letters to Tereshkova, which also gave the impression that the Soviet Union was ahead of its rival in this area.[45]

It is difficult to judge which country was actually ahead of the other in the case of gender equality, given the different circumstances. In the United States, after World War II, it was in the national security interest to return women to their traditional roles of child rearing and housework. Women were thought to be able to protect Americans from, for example, extremist political ideology by providing a secure family background. Many household products were available to American women to help them or for their convenience. In this way, they also represented economic and social development. In contrast, in the Soviet Union, a completely different approach was taken. Based on socialist ideology, it was argued that ensuring political, economic and civil equality was in the interests of women. With services such as childcare, canteens or community laundries. This enabled women to fulfil their potential not only in traditional family roles but also, for example, in the labor market. Of course, each side saw its own version as better and perfect. Americans, for example, looked down on and pitied their Soviet female counterparts who could not afford the consumer goods that they could. Meanwhile, it was also widely believed that Soviet women were forced to work to support their families, while men were the main breadwinners. In the Soviet Union, on the other hand, it was believed that American women had lack of equality as long as they only fulfilled the traditional role of homemaker.[46] Outside observers could even conclude that the Vostok-6 mission was indeed a symbolic space flight, paving the way for other similar missions, in which women could now play a part. Moreover, all this at a time when the space race was fierce. At least that was the impression. The secrecy of the Soviet space programs, the anonymity of the parties involved, the artificially controlled cosmonaut reports, made it easy to maintain this illusion in the early days. After the emergence of the first female cosmonaut, it quickly became clear to those involved that there was in fact no real commitment to the female cosmonaut group at the decision-making level that would allow them to follow in Tereshkova's footsteps in the short term.[47]

In hindsight, Valentina Tereshkova's space voyage was nothing more than a well-timed tactical move. On the one hand, it was a way of diverting attention from the shortcomings of the Soviet space program in the eyes of the public and the great rival United States, and on the other, it produced a public figure that the Soviet propaganda machine could use for its own purposes in a completely different field. The Vostok-5 and Vostok-6 missions aimed at achieving new firsts, and thus met the specific objective of the Soviet space program, which was essentially to

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[42] Rockwell 2013. 186.

[43] Luce, C.: But some people simply never get the message. LIFE, Vol. 54. (1963) No. 26. 31-33.

[44] The USSR (later Soviet LIFE, now Russian Life) is a 64-page monthly/bi-monthly publication published in the United States. It features mainly cultural, historical and scientific content. The magazine is published by reciprocal agreement between both governments. The agreement provides for the publication of the USSR in the USA, and the Америка [America] in the Soviet Union.

[45] Mikhailov, V.: Lady Cosmonaut's Mailbag, The USSR, July, 1964 4-5.

[46] Laville 2013. 524-529.

[47] Sylvester 2011. 197.

achieve as many resounding, historic firsts as possible, but lacked a clear objective that would have moved the space program forward in the medium and long term. The initial advantage gained was only apparent as the years went by, and the Vostok missions were able to maintain this illusion for some time. The creation of a female cosmonaut was a logical step to capitalize on the interest in the space age, as it would provide a role model for young girls, young women and adults. The effort to get young girls interested in engineering and the sciences proved successful in the short term.[48] Moreover, Tereshkova played a major role in this, as her career showed that, despite all the difficulties, there was indeed a potential for women in the Soviet Union to succeed in sectors that generally considered male-dominated. The portrayal of Tereshkova's character has changed and taken on a new meaning, partly thanks to her marriage. She appeared in the public eye as a wife and later as a mother, leaving her cosmonaut past behind. The difficulty of fitting into the male cosmonaut community may have played a role in these changes. She simply stood out too much from her peers, and this compounded by her portrayal in the press and the new roles she took on after her return. The world's first female cosmonaut slowly evolved into a wife, a mother and then a spokesperson for women in various capacities. Tereshkova and Nikolayev's marriage also ended in divorce in 1982. She retained her position in public life, and even after the collapse of the Soviet Union, she was able to remain an active participant in public life. From 2008, she was a deputy in the Yaroslav Oblast Duma. Since 2011, she is a member of the Russian State Duma.[49]

IV. Summary

The novelty of the space age offered a great opportunity to introduce new characters and even role models in the press, such as astronauts, cosmonauts or even their wives. The media showed great interest in space exploration and space racing. This accompanied by personal stories, which mostly achieved through family stories, accounts and presentations by wives and family members. These stories were available even when the launch was not taking place, but sometimes they helped to divert attention from the failures and the backlog. Because of the open US space program, the astronaut wives' identities were not a secret, which also allowed them to build their characters, even consciously, and to introduce readers to the astronauts and their families before they had ever been on a space flight. In the early years, NASA needed all the positive PR it could get to compensate for its disadvantage. In contrast, in the Soviet Union, the identity of cosmonauts only made public at the launch of missions. This meant that there was no opportunity to build up the character of the cosmonauts and their families in the press in advance. However, this did not mean that they had not prepared in advance how they would present their cosmonauts to the public.

As the space race subsided, so did interest in space programs, astronauts, and their wives. This tendency intensified after the Moon landing, as there were no other realistic goals of comparable scale left to achieve and sustain interest. It should also be borne in mind that, as the Soviets gradually fell behind, the space race lost its main essence of rivalry and cooperation became more and more important. After the Moon landing, NASA also underwent a change of profile, with the focus now on scientific research following its historic success. This also meant a change in the homogeneity of the astronaut workforce, with more and more so-called "scientist astronauts" joining the space program, rather than the former pilots-turned-astronauts. Whereas positive public relations had previously been of paramount importance to the space agency to

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[48] Gerovitch 2015. 136.
[49] Терешкова Валентина Владимировна [Tereshkova Valentina Vladimirovna], Единая Россия [United Russia] Link: https://er.ru/person/8450dd63-625d-40f5-8a87-67ab208d1f5b (Accessed 04. 01. 2023.)

ensure that it did not lose support in periods of inefficiency, by the late 1960s NASA no longer needed this kind of reinforcement.[50]

Of course, these changes also meant that there was less interest in astronaut wives, and they were less and less in the limelight. Astronaut wives no longer necessarily presented the image of loving, supportive, devoted wives who provided the perfect family life and background. Obviously, the time and the medium itself had changed, i.e. the patterns and roles they represented were no longer necessarily valid. The move out of the limelight also meant the disappearance of the mask of perfection. As long as the space race was burning at a thousand degrees and there was fierce competition in all fields, the wives themselves also embodied the ideals that characterized society in general at that time.

Tereshkova may not have fulfilled the hopes and goals that Kamanin and Soviet propaganda had imagined for her. In her person, however, the Soviet Union had a unique character that it could use not only in the space race. Even if Tereshkova initially found it difficult to gain status as a public figure, by the end of the decade, she had become a routine advocate of women's rights. Although she had long hoped to participate in the Soviet space program again, and for a long time she never gave in to this dream, during the Cold War she suffered the same fate as her predecessors: she had to serve the interests of the Soviet Union as a public figure, perhaps in some official political position.

Women may not have been able to break the dominance of men in the space age (it may not have been possible at the time), but they contributed in their own way to the space race, either as a prominent supporting role or as the only female cosmonaut. Their personalities served as role models for their female counterparts. They embodied the values that society held dear, whether it was patriotism or the role of women in the family. They set an example of what the ideal, idyllic, perfect marriage, family, husband and wife, should be. In Tereshkova's case, they went even further, as she was a role model for countless young girls interested in science, engineering and aviation. She also embodied the ideal of the new Soviet woman.

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[50] This was helped by the fact that the space programs were no longer about defeating the Soviets, but about scientific experiments, which meant that there was no longer any need to use NASA's activities and the astronauts and their families for propaganda purposes.

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Deconstruction and Philosophy in Western and Chinese Architecture

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Introduction

Jacques Derrida, French philosopher, literary theorist and aesthete, introduced the term deconstruction in 1967. Deconstructivism is a design style that has been widely used in architecture from the 1980s to the present day and has spread from Europe to the USA and the Far East.

In this paper, I would like to focus on the dialogue between Western and Eastern philosophy and architecture. Using Derrida's five key terms – *deconstruction, impossible possibility, event, parergon, Khôra* – as a framework for dialogue, I will argue that each term corresponds to an architectural case that also reflects on these terms. Derrida is one of the best-known contemporary Western philosophers in China, with a major influence on philosophy and architecture. Many of his texts have been translated into Chinese, he gave public lectures in China in 2001, and the journal *Derrida Today* published a special issue *Derrida in China Today* in 2018. Using the comparative method, I would like to investigate the relationship between deconstruction and architecture in the West and the East, to explore their different cultural and philosophical backgrounds, and to analyze the works of a new generation of deconstructive architects in China.

I would like to investigate four deconstructive architects: Bernard Tschumi, Peter Eisenman, Zaha Hadid and Ma Yansong, all of whom have been involved in architectural projects in the West and the East. Bernard Tschumi and Peter Eisenman collaborated with Jacques Derrida on *Park de la Villette* project in Paris (1982-1998). Tschumi's "event architecture" and Eisenman's deconstructive architecture open up a dialogue between philosophy and architecture. Derrida is actively involved in this dialogue, he wrote texts on Tschumi – *No (Point of) Madness-Maintaining Architecture* (1986) – and with Eisenman – *Chora L works* (1997) – and participated in the *Any*-project initiated by Eisenman (1990-2000). Ma Yansong, a disciple of Zaha Hadid, invents a new architectural language based on Chinese philosophy advocating "harmony between man and nature". Returning to the idea of *Shanshui City*, in his latest projects, he is paying more attention to the development of the ecological environment and the interaction between man, building and nature.

Keywords: Deconstruction, Philosophy, Architecture, Jacques Derrida, Shanshui city

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III.   Summary

I. Deconstruction and Philosophy

I. 1. The Philosophical Background of Deconstruction

In the first half of the 20th century Hegel, Husserl, and Heidegger payed an important role in the Western philosophy. The phenomenology and the existentialism represented by them had a great impact on philosophers in France also, namely on Jean-Paul Sartre, Jean Hyppolite, Maurice Merleau-Ponty. Vincent Descombes in his book *Modern French Philosophy* argues that "we can trace the passage from the generation known after 1945 as that of the 'three H's' to the generation known since 1960 as that of the three 'masters of suspicion': the three H's being Hegel, Husserl and Heidegger, and the three masters of suspicion Marx, Nietzsche and Freud." (Vincent Descombes, 1989. 3) Michel Foucault, Jean-Francois Lyotard and Jacques Derrida are philosophers of the 1960s who were simultaneously, but not identically, affected by the "three H's" and the "three masters of suspicion". Each in their own way challenged the metaphysical discourse of Western philosophy, questioned the formalism of structuralism, and introduced a post-structuralist (Foucault), post-modern (Lyotard) and deconstructive (Derrida) way of thinking and writing. Deconstruction is a notion created by Derrida himself. He was inspired by the word "destruction" introduced by Heidegger's *Being and Time*. Translating Heidegger's destruction into French as "deconstruction" he argues that deconstruction is different from "destruction". "Destruction" in the literal sense means destroying the object, while "deconstruction" in philosophical sense given by Heidegger means *Abbau* – dismantling the metaphysical tradition. Derrida's main critique is directed at the logocentrism, phonocentrism and ethnocentrism of the metaphysical tradition, which is as characteristic of Western philosophy as it is of architecture.

I. 2. Jacques Derrida and the definition of deconstruction

Derrida introduced the notion of deconstruction in his texts published in 1967. "Deconstruction" as a highly subversive and sophisticated philosophical thinking is first and foremost a rebellion against traditional philosophy, but at the same time it offers a new perspective for understanding the world and the artwork. His deconstruction of traditional philosophy is reflected in the following aspects:

Deconstructing logocentrism. In his text *Of Grammatology* (1967), Derrida argues that Western philosophy is fundamentally logocentric, and that logocentrism is related to phonocentrism and ethnocentrism *Logos* comes from ancient Greek and is a very important concept in Greek philosophy. The connotation of *logos* includes: reason, speech, intelligence, and the soul of the universe, in short, something that can be the basis of all thought, language, and experience. In Derrida's view, the relentless pursuit and insistence of logocentrism on "center", "truth", "essence", "identity" and "structure" are actually futile, because in his interpretation there is no absolute truth, there are no universal laws or eternal essences in the world. According to the logical requirements of logocentrism, the "center" should ensure the coherence of the philosophical system and the connection between different philosophical systems, but in fact this logic has always been contradictory throughout the history of philosophy. According to Derrida, the series of substitutions from one center to another characteristic for the whole history of Western philosophy actually means that there is no center, consequently to question the center is to question "logocentrism": "If this is so, the whole history of the concept of structure, before the rupture I spoke of, must be thought of as a series of substitutions of center for center, as a linked chain of determinations of the center. Successively, and in a regulated fashion, the center receives different forms or names. The history of metaphysics, like the history of the West, is the history of these metaphors and metonymies. Its matrix – if you will

pardon me for demonstrating so little and for being so elliptical in order to bring me more quickly to my principal theme—is the determination of being as presence in all the senses of this word. It would be possible to show that all the names related to fundamentals, to principles, or to the center have always designated the constant of a presence – *eidos, arché, telos, energeia, ousia* (essence, existence, substance, subject) *aletheia*, transcendentality, consciousness, or conscience, God, man, and so forth." (Derrida, 2012. 353.)

Deconstructing phonocentrism. Jacques Derrida's deconstruction of phonocentrism is closely related to Husserl's phenomenology. In his book *Speech and Phenomena* (1967) Derrida focuses on Husserl's sign-theory explored in *Logical Investigations*. Husserl distinguished between "expression" and "sign". "Expression" tends to describe meanings present to consciousness on the spot; whereas "sign" generally indicates meanings that can only be presented indirectly. Therefore, the meaning of expression is often inherent; but the meaning of signs is always added, and people need to fill in the meaning later. Husserl believed that all uttered speech can convey meaning once spoken, and the meaning that the speaker intends to express can be presented to the listener at the moment. Although writing can also convey meaning, it will lose the immediacy and directness of voice expression. Derrida calls this view phonocentrism, but its essence is subjectivism. In Derrida's view, logocentrism is actually the use of speech to control words in this way. In the traditional Logos-era, words were devalued as "intermediaries". From this point of view, logocentrism is also a combination of "metaphysics of presence" and "phonocentrism". Moreover, Derrida believes that speech and writing have the same nature, and there is no central and subordinate relationship between them, and there is no dualistic relationship between them. They should be an equal and complementary relationship: writing is the form in which speech is recorded, speech is also a supplementary form of writing. Both writing and voice are forms of expression of thought, and the two are interdependent and indispensable.

Deconstruction aims to shake the foundations of "logocentrism" by subverting the binary oppositional structure of present and absence, speech and writing. But Derrida does not think that this inversion will put words above phonetics, because it will make words a new center, which would be also logocentrism. Derrida's deconstruction of "metaphysics of presence" and "phonocentrism" is to eliminate the "center" itself, remove the ropes of metaphysics that have always been tied in people's minds, and enable people to live in the era of pluralism, and to gain new perspectives and methods to understand the world. In Derrida's interpretation deconstruction "cannot limit itself or proceed immediately to a neutralization: it must, by means of a double gesture, a double science, a double writing, practice an *overturning* of the classical opposition *and* a general *displacement* of the system. It is only on this condition that deconstruction will provide itself the means with which to *intervene* in the field of oppositions that it criticizes, which is also a field of non-discursive forces." (Derrida, 1982. 329) Architecture was one of the first between non-discursive forces to recognize the importance of deconstruction for itself, and was one of the first to ask for Derrida's collaboration, notably the architect Bernard Tschumi of the Parc de la Villette in Paris in 1985.

Deconstructing ethnocentrism "The relationship between logocentrism and ethnocentrism is indirectly invoked in the very first sentence of the *Exergue*. Yet, paradoxically, and almost by a reverse ethnocentrism, Derrida insists that logocentrism is a property of the *West*. (…) Although something of the Chinese prejudice of the West is discussed in Part I, the *East* is never seriously studied or deconstructed in the Derridean text" – argues Gayatri Chakravorthy Spivak, the translator of Derrida's *Of Grammatology*, very sensitive to the question of ethnocentrism. (Translator's Preface, *Of Grammatology*, 1997, lxxxii) In the last few years,

many texts have been written on ethnocentrism, but here I would like to mention only two excerpts from Derrida's interview with Ning Zhang, in which he refers to the difference between Western philosophy and Chinese thinking and culture. Regarding the question of philoposhy and thinking Derrida argues as follows: "Obviously, as we are speaking for Chinese readers, I have very often been tempted, and still am, by the Heideggerian assertion according to which, basically, philosophy is not thinking in general, it is linked to a finite history (finite, that is to say limited), tied to a language, to a Greek invention: it is a Greek invention first of all, that afterwards underwent transformations in the form of Latin translations, German translations, and so forth, but that is in the end something European, and if there is a kind of thinking or knowledge that at least has an equal dignity outside of the Western European culture, it would be illegitimate to call that "philosophy." So if there is a Chinese thinking, a Chinese science, a Chinese history, and so on, to speak of a "Chinese philosophy" is a problem for me, inasmuch as obviously this Chinese thinking, this Chinese culture, has not imported European models. If it imports European models, then it also becomes European, partly European. Hence the question of Marxism, of Chinese Marxism, and so forth. But I am tempted to say, without any disrespect towards this non-European thinking, that those ways of thinking can be very strong, very necessary, but that one cannot call them, strictly speaking, "philosophy." (Derrida – Ning Zhang, 2000).

The second question concerns the cultural embeddedness of logocentrism and phonocentrism: "I have tried to distinguish logocentrism from phonocentrism. Logocentrism, then, is philosophy as ontology, that is as a science of what is. And the '-logy', be it ontology or any other science with '- logy,' is the idea of a rationality which gathers. And my feeling is that, despite all the differences, all the ruptures, that have taken place in Western philosophy, the pattern of the gathering unity (in its relation to reason and discourse), so the logocentric pattern, has been constant: one finds it everywhere. And so, in all my texts, whether it concerns texts on Plato, on Descartes, on Kant, on Husserl, on Heidegger even, I have tried to show this constancy of the logos, this justification by the logos. And at a given moment I have tried to link logocentrism to phonocentrism, that is to a culture that privileges the voice. Readers have often confused the two. I don't. I think there can be phonocentrism without logocentrism. There could be non-European cultures that privilege the voice, there can be, I guess, elements or aspects of that privilege of the voice in Chinese culture. Very often Chinese writing has seemed interesting to me in its non-phonetic aspects. But in Chinese culture or other cultures there could be a privilege accorded to the voice that is not logocentric" ((Derrida – Ning Zhang, 2000).

To the question of whether deconstruction is a philosophy or a way of thinking, Derrida gives the following answer: "I believe that when one wants to think philosophy, what philosophy is, that thinking itself is not philosophical. And that is what I find interesting. Deconstruction is in a way a non-philosophical thinking of philosophy." (Derrida – Ning Zhang, 2000).

My hypothesis is that deconstruction initiates a dialogue between Eastern and Western "non-philosophical thinking of philosophy" and architecture and applies it to a reinterpretation of the relationship between architecture, nature and society.

I. 3. Derrida's five key terms applied to architecture

I. 3.1. *Deconstruction*
Deconstruction is not a method, it cannot be learned, it is a language strategy – argues Derrida in his text *Letter to a Japanese Friend*: "Deconstruction takes place, it is an event that does not await the deliberation, consciousness, or organization of a subject, or even of modernity. It

deconstructs itself. It can be deconstructed. [Ça se deconstruit.]" (Derrida, 1985. 3) Deconstruction can take place in philosophy in literature and also in architecture. On the one hand, philosophy is the art of architecture. Philosophy has always used architecture as a metaphor. For example, Kant's three major criticisms use architecture as a metaphor, and so does theology, such as Augustine's analogy of two buildings. On the other hand, architecture is neither fixed nor enclosed space, but fracture, fragmentation, juxtaposition, collage, interpenetration, folding, dislocation, distortion, transformation, rotation, blurring boundaries, decentralization, non-hierarchy, etc., which breaks the complete rules of modernism and structuralism and forms broken, dynamic and curved architectural forms. For the structure, the immobilized closed system is dismantled, but not to rebuild a system, but to constantly disassemble and construct in the process of change.

I.3.2.*Impossible possibility*

Architecture, on the one hand, is the first labyrinth, such as Joyce's Ulysses text as the labyrinth, DeDalus' labyrinth. On the other hand is the inexpressible expression, the impossible possibility: das *Unheimliche*. Humanity is already a homeless terrifying specter. The Jewish Museum Berlin (Libeskind, 2001) (As shown in Figure 1.1) is a truly deconstructed building. In the face of trauma, it can be weakened, the memory can be preserved without exaggerating hatred; there is forgiveness and reconciliation, and there is a tear in space and lightning-like traces. The face of the ghost-like mask will make us feel the memory of horror, but in a certain sense, the trace of this horror is dissolved in the museum, which is why Derrida likes it. (As shown in Figure 1.2)

Figure 1.1 The Jewish Museum Berlin
Source https://www.berlin.de/ [2001]

Figure 1.2 The Jewish Museum Berlin
Source https://www.berlin.de/ [2001]

I.3.3. *Parergon*

Parergon is an ancient Greek philosophical concept defined as a supplementary issue. It is "beside, or additional to the work". Plato considered *parergon* as something that is secondary and that his philosophical discourse is often against it, explaining how it is against and beyond the *ergon*, conceptualized as the work accomplished. .According to Kant, *parergon* is what is beyond *ergon*. It is what columns are to buildings or the frame to a painting. He provided three examples of parergon: 1.clothing on a statue; 2. columns on a building; and, 3. the frame of a painting. He likened it to an ornament, one that primarily appeals to the senses.

Derrida cited *parergon* in his wider theory of deconstruction, using it with the term "supplement" to denote the relationship between the core and the periphery and reverse the order of priority so that it becomes possible for the supplement – the outside, secondary and inessential – to be the core or the centerpiece. In *The Truth in Painting* (1978), the philosopher likened *parergon* with the frame, borders, and marks of boundaries, which are capable of "unfixing" any stability so that conceptual oppositions are dismantled. *Parergon* in architecture means not simply a decoration or an ornament but is it as important as the *ergon* as for example in the case of the *Hutong Bubble* (2018) of Ma Yansong (As shown in Figure 1.3).

Figure 1.3 The Hutong Bubble (Beijing)
Source https://www.dezeen.com [2018]

I. 3.4. *Event*

Events determine the location of the building, events give meaning to the space. Derrida pointed out that the word „event" is the same root as „creation" and "invention". The event is his interpretation is "the always unique, exceptional, and unpredictable arrival of the other, of the event as other, and that I must remain absolutely disarmed". (Derrida, 2007. 450)

Many ideas of deconstructive architect Bernard Tschumi came from Foucault and Derrida. In his article "Event Architecture", in a provocative and subversive tone, Bernard Tschumi proposed the idea of establishing a shocking "event architecture". He argues that "The relationship between architecture and the events that take place in a certain space is equivalent to its relationship with the space itself. In today's world where 'a railway station becomes a museum, and a church becomes a nightclub, we have to accept this extraordinary interchangeability of form and function, and we have to accept the loss of the traditional or dogmatic causality recognized by modernism" (Tschumi, 1994). He embodies this point of view in the planning of *Park de la Vilette* (As shown in Figure 1.4). Tschumi believed that an equal, heterogeneous mixture was the best option: "If architecture is both conceptual and experiential, both spatial and functional, and both structural and surface, then architecture can no longer separate these categories, but integrate them into an unprecedented mixture of planning and

space." (Tschumi, 1994) From the perspective of anti-typology, Bernard Tschumi proposed a theory of chaos in the field of architecture, that is, the theory of non-functional characteristics of architecture. He envisioned that, within the framework of a non-functional identity, architecture would be imbued with a strong subversive force when one makes an impossibly compulsive mix of events and spaces. If the concept of time is added, everything that was originally determined will be completely gone, and there are many such examples around: the original courtyard house has been transformed into offices, restaurants, museums, etc.; the original factory is now transformed into an art exhibition space and a leisure park and so on. Today's complex buildings are gradually increasing, and the mixed functions have gradually transferred from the city to a single building. It is this deconstruction and multidimensional elaboration of meaning that Derrida sees to come through Tschumi's work: "the imminence of what is happening to us now [de ce qui nous arrive maintenant] announces not only an architectural event [événement]: rather a writing of space, a mode of spacing that makes a place for the event [un mode d'espacement qui fait sa place à l'événement]."(Derrida, 2008. 88)

Figure 1. 4 Park de la Villette (Paris)
Source https://www.dezeen.com [1987]

I. 3.5. *Khôra*

Derrida reading Plato's Timaeus argues that Khôra is not emotional or rational, it is alien, unpredictable, and impossible to articulate (Jacques Derrida, *Khôra*, 1993). It's a certain material that the world needs, but it's not just a material. It's a certain space, but it's empty, like a woman's womb, a receptacle that receives traces but erases them. It provides nourishment, but is constantly changing. It is a but not a concrete element, a mixed logic, a mixture of water, fire and earth, an illusion in a dream, an oscillating dance.

In his collaboration with architect Peter Eisenmann in Bernard Tschumi's project *Parc de la Villette* (Paris, 1985) (As shown in Figure 1.5) Derrida included a sieve, or harp-like structure that he envisaged as a physical metaphor for the receptacle-like properties of the *khôra*. "Eisenman gives the trace the meaning of impression, and thus the trace is not only understood as the actual presence of a past presence but still retains the latter insofar as it carries the impression of the past: Trace is a complex phenomenon—it is a suggestion of something before, or maybe the premonition of something after—the not yet present or the imagined past. . . ." (Vitale, 2018. 93) To some extent, *Khôra* calls on us to go into the nature, from the man-made world to the natural world, and this world is not ‚Foucault's utopia. There is a real inner integration between architecture and nature, which is *Khôra*'s original intention.
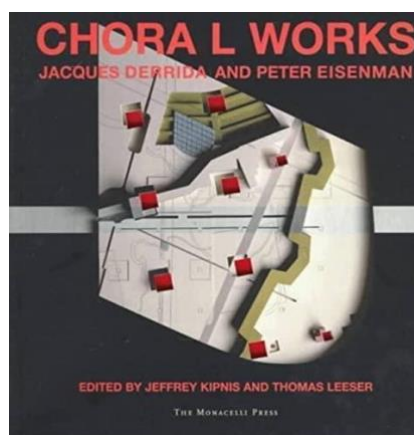
Figure 1.5 Chora L Works: Jacques Derrida and Peter Eisenman (1997)
Source https://www.amazon.com/ [1997]

II. Deconstructive Architecture

II. 1. The background of deconstructive architecture

The birth of a new artistic style is always confined to a certain background of the times. The emergence of deconstructive architecture was not only directly influenced by the philosophical thoughts at that time, but also depended on the guidance of relevant factors such as social history and artistic development. In the 1960s and 1970s, after the Second World War, most western countries experienced rapid economic development, realized the process of industrialization, and gradually moved towards the post-industrialization era characterized by new technological revolutions. At this time, as the intellectuals first felt the crisis awareness of culture and belief, the feminist movement also began to rise, and the whole society strongly questioned and challenged all kinds of authority and orthodox culture in history. From the perspective of artistic development, the popular modernism at that time had a strong rational color and industrial atmosphere, and its aesthetic standards were also far-reaching, such as some subsequent art schools: Cubism, Abstractism, De Stijl, Constructivism, etc. , from the overall characteristics, they reflected the pursuit and embodiment of simplicity, geometry, rationality and other styles. With the penetration of postmodernism in various fields of art and literature, the architectural world has also begun to think accordingly. Robert Venturi, as an American architect, first started thinking about this aspect. In his book "Complexity and Contradiction in Architecture" published in the 1860s, he expressed his views on the problems of modernist architecture. He began to oppose the simplicity and coldness of modernist architecture, and advocated the adoption of eclectic decoration methods for improvement, and the Venturi mother's house (As shown in Figure 2.1) he designed and built in 1962 fully demonstrated his own architectural ideas. At the same time, it had become a typical representative of postmodern architecture.

Figure 2.1.Vanna Venturi House (1964)
Source https://www.archdaily.com/

Since the late 1980s, many architectural designers have begun to explore the guiding form of deconstruction theory for architectural design. Bernard Tschumi took the lead in introducing Derrida's deconstruction theory into his architectural design, and Peter Eisenman also did a lot of research on deconstruction in both theory and architectural design practice. Along the way, he maintained his connection with Derrida and continued to apply his understanding of deconstructivism to architecture. In addition, there are many master architects who belong to this genre active in the field of international architecture, such as Bernard Tschumi, Peter Eisenman, Daniel Libeskind, Coop Himmelb(l)au Group, Rem Koolhaas, Zaha hadid and Chinese architect Ma Yansong et al. Since the birth of deconstructivist architecture, there have been many related academic theoretical studies, and there have been a large number of buildings that reflect the concept of deconstruction standing around the world. The following will introduce several representative deconstructionist architects and as well as some of their works.

II.2. Deconstructionist architects

II. 2. 1. Bernard Tschumi

The representative architectural work designed by Bernard Tschumi is the *Park de la Villette* built in Paris in 1987, with a total area of 55 hectares. (As shown in Figure 2.2) In 1982, the French Ministry of Culture solicited proposals from all over the world, hoping to create a unique 21st century urban park, and Tschumi's proposal was finally selected. When Bernard Tschumi designed the *Park de la Villette* in Paris, he divided the building site into a grid with a spacing of 120 meters, and then neatly arranged various types and forms of buildings at the intersection of the grid. These buildings are all made of red steel pipes and steel plates; the roads, corridors, and plants in the park are arranged outside the grid; they are arranged in straight lines or curves; the rest is a large area of green space or gardens. These points, lines, and planes go their own way; they seem disorganized, but they can concentrate on the accidental, coincidental, split, uncoordinated, discontinuous, and unstable emotions pursued by deconstructionism.

Figure 2.2. Park de la Villette (1987)
Source https://omrania.com/ (1995)

In the design, he did not follow the traditional model, so that the overall structure of the park is formed by the superposition of three different elements: point, line and plane. After the building was completed, it was called "the largest discontinuous building in the world", because here he brought the deconstructivist split and fragmentation skills to the extreme. The whole design form is full of contradictions, but originality, in a series of uncoordinated and discontinuous extensions, it reflects fresh beauty and strong tension. This work embodies Bernard Tschumi's understanding of deconstructive architecture, just as he himself thinks: "The building itself is just some materials piled together, which cannot be called a building. Human activities add content to it, so that it has functional uses, so it can be called a real building." (Liu Jian, 2009)

Bernard Tschumi placed the three geometric elements of point, line, and plane unharmoniously in the northeast corner of Paris, and was divided into two by the Urk Canal, just like a 1:1 complete map. Among them, the three elements are self-contained, separated from each other, and superimposed on each other, subverting the traditional principle of harmonious aesthetics. The three element systems seem to be separated from each other, but when they are combined together, they reflect an order and a rationality. Bernard Tschumi believed that there is no architecture without program (space), no architecture without events, and no architecture without movement. Architecture is composed of spaces, events and activities. (Vitale, 2018, 71-75.) According to Derrida's understanding of the deconstruction of space: "Pure spatiality is determined by the negation of the indeterminate nature that constitutes it, that is to say, determined by negating itself." (Derrida, 2006)

The point is a space that does not occupy space, a position that does not have a position; it cancels and replaces the position, it replaces the space it negates and preserves, it negates space spatially, it is the first determination of space. The design of Bernard Tschumi's *Park de la Villette* actually uses the spatial superposition of points, lines, and surfaces, and pursues the "disunity" of a spatial system through the negation of sublation and negation. In conflict there is harmony, and in harmony there is conflict. In terms of architectural expression style, he once said very radically: "Architecture is no longer the former building of function and form. Only when events and plans are aroused around and inside the building can it become a building. Function and form should be abandoned!" (Works and Ideas of Bernard Tschumi. 2006)

II.2.2. Peter Eisenman

American architect Peter Eisenman said in his architectural practice: "We have to exhibit art, but do we have to exhibit art in a traditional way, that is, in a neutral background? Does architecture have to serve art, in other words, must be the background of art? Absolutely not, architecture should challenge art, it should challenge the idea that architecture should be the background." (Works and Ideas of Peter Eisenman, 2006) It can be seen from his architectural work *Wexner Visual Arts Center* (As shown in Figure 2.3), and this building is also considered to be a manifesto that can represent all deconstructivist architects to redefine architecture.

Figure 2.3.Wexner Visual Arts Center (1989)
Source https://www.dezeen.com/

The *Wexner Visual Arts Center* of Ohio State University, built in 1989, uses the interpenetration of iconic grid components in the form of the building, presenting an "unfinished" visual experience to people as a whole. A large number of grid structures are arranged in an irregular form, all using white, which is very eye-catching in comparison. The reason for this design is to imply the role of scaffolding in the process of building construction, so that the scaffolding that will never be dismantled brings people the illusion that the building is not yet completed. And the whole building is between the campus and the city, passing through this white grid corridor can just connect with the outside city. So Peter Eisenman wants to use this method to dissolve the binary opposition between the school building and the city, interior and exterior, so that the architectural design can get rid of the previous shackles and become vivid and fresh. Some people also call this building an "archaeological site", because Peter Eisenman discovered a deserted ammunition depot when investigating the foundation of the building, and he incorporated this ammunition depot into the whole building, skillfully transforming it into a metaphorical，which is a symbol of environmental history. It can be said that the *Wexner Visual Arts Center* is a non-architecture that Peter Eisenman "built" with deconstruction thinking, which makes us deeply feel the infinite possibilities of creativity that deconstruction brings to designers.

II. 2. 3. Zaha Hadid

After entering the 21st century, coupled with the rapid economic development, Chinese society began to accept various architectural styles with a more open and confident attitude. Accordingly, a number of international deconstructivist architects have worked in China, with British architect Zaha Hadid and Dutch architect Rem Koolhaas being the best known. Zaha Hadid's representative architectural work in China is the *Guangzhou Opera* House "Round and Double Gravel" designed for Guangzhou. (As shown in Figure 2.4) It has a total construction

area of about 46,000 square meters, is located in the south of the central area of Zhujiang New Town, and has been put into use since 2010. The overall appearance of the building is like two stones of different sizes. Under the rounded appearance, it presents an irregular straight section. The appearance of the whole design is unique and full of novelty, leaving a deep impression on people.
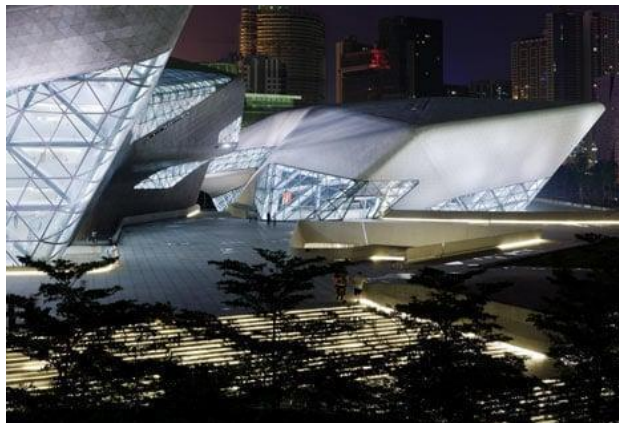
Figure 2.4. "Round and Double Gravel" (2010)
Source https://www.dezeen.com/

"The design responds to the varied contextual relationships and dynamic conditions of Beijing – said Zaha Hadid at the opening of the building. "We have created a variety of public spaces that directly engage with the city, reinterpreting the traditional urban fabric and contemporary living patterns into a seamless urban landscape inspired by nature." (Hadid, 2012) *The Galaxy SOHO* project (As shown in Figure 2.5) in central Beijing for SOHO China that will become an integral part of the living city. Its architecture is a composition of five continuous, flowing volumes that are set apart, fused or linked by stretched bridges. These volumes adapt to each other in all directions, generating a panoramic architecture without corners or abrupt transitions that break the fluidity of its formal composition. Her architectural style is basically white, which is also one of hers.

Figure 2.5.The Galaxy SOHO project in Beijing(2012)
Source https://www.archute.com/

The lower three levels of *Galaxy SOHO* house public facilities for retail and entertainment. The levels immediately above provide work spaces for clusters of innovative businesses. The top of the building is dedicated to bars, restaurants and cafés. These different functions are interconnected through intimate interiors that are always linked with the city, helping to establish *Galaxy SOHO* as a major urban landmark for Beijing.

Judging from the conception and expression of Zaha Hadid's many design works, her unique Islamic cultural background is obviously weaker than the traditional British conservative spirit she accepted. But it is undeniable that many of her design techniques and concepts seem to be enthusiastically inspired by the spirit of Arab culture. At the same time, she also reveals a romantic taste close to nature in some "formal" and flowing architectural design schemes. With the goal of "breaking the architectural tradition", Zaha Hadid has been practicing the idea of "making architecture more architectural" so that there will be breakthrough novel works that go beyond the realistic thinking mode. Antoni Gaudí said: "The straight line belongs to Man. The curved line belongs to God." Le Corbusier said: "The curve is the Roman line; the straight line is the human line". Two architects with completely different design concepts seem to have the same understanding of straight lines. For now, Hadid seems to agree with Antoni Gaudí.

II. 2. 4. Ma Yansong

Compared with the development of Western architecture, under the influence of the philosophy of neutrality for thousands of years, Chinese architectural creations have shown soothing, balanced, and serene artistic features, while those that can show differences and strong contrasts There are few buildings. In addition to the dominant factors in economy and technology, Chinese architecture's aesthetic thinking of seeking perfection and willingness to be moderate also makes traditional buildings often lack an internal renewal mechanism, resulting in almost no major changes in architectural styles for thousands of years. The value of deconstructive philosophy is because it brings us a new perspective, prompting us to break through the existing cognition, and to understand or reflect on the original things from a broader and objective attitude.

Ma Yansong is a student of Zaha Hadid and one of the leading architects in China. The signature of Zaha Hadid it's white, the signature of Yansong is green. He made at the beginning Hadid-like-White Buildings, but later on the green appears on this houses, first at the top of the buildings or between different levels as in the case of *Vertical Canyon* (As shown in Figure 2.6). Green is dominant in the „extraterrestrial" *Quzhou Sports Campus* to be accomplished in 2023 and designed by *MAD Architects*, "a young trio with the future in mind and nature in their souls" lead by Ma Yansong. He also introduced in the architecture the notion of „landscape city" and of „Shanshui city".

Figure 2.6.„Vertical Canyon" in Colorado, America, (2023)
Source https://www.dezeen.com/

„Today, we're building spaces, not spiritual environments – said Ma Yansong in his interview by *Forbes China* in 2021. "That's the real challenge for architecture: can we create buildings, cities or urban spaces that are spiritual and can connect with people? The coronavirus crisis is related to population density in cities. We challenge nature too much; we should learn to fit into nature instead' … 'Also, I don't think we should design cities to try to divide people or make social distancing permanent. We still need to encourage people to gather, share and communicate." Architect Ma Yansong's "landscape" does not want to be retro, but strives to transcend various concepts at the technical level and pursue spiritual things between people and nature.

The "Vertical Canyon" itself is a 2,620-square-meter. Among them, its "crack" is the most important feature of the whole building. It can be seen that the "cracks" are the public spaces and living unit balconies covered with drought-tolerant landscape greenery. Fill the city with organic nature and vitality, and allow residents to enjoy both pristine and artificial nature at the same time. In addition, what is more interesting is that starting from the "canyon" starting layer at the waist of the building, the facade of the upper four floors is designed with a hiking trail-like trail. Residents can walk up and down to the public facilities in the building, such as gymnasium, public reception room, outdoor garden, etc.

Positioned on the southern edge of Beijing's *Chaoyang Park* (As shown in Figure 2.7) ─ the largest remaining park in Beijing's central business district area ─ the 220,000 sqm complex includes 10 buildings which unfold as a classic *Shanshui* painting on an urban scale. Having a similar position and function as Central Park in Manhattan (As shown in Figure 2.8), but unlike the modern box-like buildings that only create a separation between the park and the city, *Chaoyang Park Plaza* instead is an expansion of nature. It is an extension of the park into the city, naturalizing the CBD's strong artificial skyline, borrowing scenery from a distant landscape ─ a classical approach to Chinese garden architecture, where nature and architecture blend into one another.

Figure 2.7 Chaoyang Park Plaza, Beijing China, (2017)
Source https://www.dezeen.com/

Figure 2.8 Central Park in Manhattan, NewYork. (1857)
Source https://www. NewYork.cn

"In modern cities, architecture as an artificial creation is seen more as a symbol of capital, power or technological development – writes Ma Yansong in his book *Shanshui City* in 2015 –; while nature exists independently. It is different from traditional Eastern cities where architecture and nature are designed as a whole, creating an atmosphere that serves to fulfill one's spiritual pursuits. (…) We want to blur the boundary between nature and the artificial, and make it so that both are designed with the other in mind. Then, the argument in the modern logic of humans to protect or to destroy nature will no longer exist if we understand and see humans and nature as co-existing. Human behavior and emotion is part of nature, and nature is where that originates and ends."

Inspired by traditional Chinese landscape paintings (As shown in Figure 2.9), the design remodels the relationship of large-scale architecture within our urban centers. It introduces natural forms and spaces ─ "mountain, brook, creek, rocks, valley and forest" ─ into the city. The asymmetrical twin tower office buildings on the north side of the site, sit at the base of the park's lake and are like two mountain peaks growing out of the water. The transparent and bright atrium acts like a "drawstring" that pulls the two towers together by a connecting glass rooftop structure. *Chaoyang Park Plaza* completely transforms the model of building found in the cities' central business districts. But even though it is located in the center of Beijing's CBD,

the intention is for it to have a dialogue with the traditional and classical city of Beijing – reflecting the interdependence between man and nature, both in urban planning, and the large-scale presentation of the Shanshui garden.

Figure 2.9 The traditional Chinese landscape painting, Wang Mingxian(1109)
Source https://www.wikiwand.com

Nanjing Zendai Himalayas Center (As shown in Figure 2.10). Along the site's perimeter, mountain-like towers appear "carved out by wind and water." White curved glass louvers "flow" like waterfalls, merging with ponds, waterfalls, and brooks to echo Nanjing's surrounding mountains and rivers.

Figure 2.10 Nanjing Zendai Himalayas Center, Nanjing China (2021)
Source https://www. dezeen.com

The tower located on the outside of the base is like a high mountain, with vertical shading glass blinds, shading and transparent light, providing pleasant light and wind for the indoor space, flowing like a waterfall on the mountain, making the whole building full of artistic conception. The tower plays the vision of high mountains and flowing water, and the water features of pools, waterfalls, streams and pools in the base undertake the image and present the metaphor, blurred the edge of the vision and close view.

Beijing *Baiziwan Public Rental Housing* (As shown in Figure 2.11). The building plan is Y shaped shape, and the design of the top floor makes the complex form a scattered "mountain" shape. The connection between the building and the building forms a round and semi-enclosed space. The pleasant scale brings the sense of home intimacy and belonging to the space. The simple white facade, undulating gable roof enrich the city skyline.

Figure 2.11 Beijing Baiziwan Public Rental Housing,
Beijing China (2021). Source https://www.dezeen.com

After the first floor is returned to the city, MAD leaves the second floor for the community residents, forming a series of three-dimensional roof greening, a circular running path will six blocks into a whole, into a huge park. All these reflect the architect's shift from architecture to pay more attention to the interaction between man and nature, rather than thinking in isolation. Future cities will shift from pursuing material civilization to pursuing nature. This is the result of human experience of industrial civilization at the expense of their natural environment. The emotional and harmonious relationship between heaven and people will be rebuilt on the "landscape city".

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Figure 2.12 Beijing Baiziwan Public Rental Housing,
Beijing China (2021). Source https://www.dezeen.com

As the world's largest manufacturing base, due to the lack of cultural spirit, a large number of homogeneous cities without characteristics have appeared in contemporary China. The concept of "landscape city": let the garden surround the building, rather than have a few green space in the complex. The power of modern cities leads to maximization and utilitarianism. Buildings in a city should not be living machines. Again powerful technology and tools, also can never give the soul of the city. For Ma Yansong, landscape is not only about nature, but also about

individuals. Emotional reactions to the world around you. "Landscape city" is the combination of urban density, function and natural landscape artistic conception. It aims to build a future city centered on the human spirit and emotion.

"Shanshui" is an ideal realm of the idealistic worldview that the ancient Chinese people combined the lofty spirit learned from nature with the daily world. "Landscape city" is not only a simple "eco-city" or "rural city", but also does not imitate the buildings in the city into mountains. It represents people's feelings about nature and the pursuit of their own spiritual world in Oriental philosophy. The artistic conception in the building is actually a kind of emotional appeal and realm, summed up by Ma Yansong as "mountains, rivers, water, white space, and empty space, borrow scenery, space greening rate, human body scale of urban space, invisible traffic". (Ma Yansong, 2015)

The design concept of "Shanshui City" (As shown in Figure 2.13) embodies Ma Yansong's attitude towards nature and feelings of landscape art. He embodied the ideas of "natural way" and "harmony between man and nature" in Taoist philosophy in the form of architecture. Let people get the maximum aesthetic pleasure while being infinitely close to nature in real life. As an important part of Chinese culture, Chinese landscape art is still based on the feelings of the Chinese nation for landscapes, which is also the emotional characteristic of our nation that is different from other nations. Ma Yansong hopes to re-evoke this emotional experience in people's hearts, so he found a way of architecture.

Figure 2.13 "Shanshui City" by Ma Yansong 2015
Source https://www.i-mad.com

He placed the "Shanshui City" as a man-made natural object in the city, making the whole building an integral part of the city, tightly integrated with the city. This is not only the pursuit of Ma Yansong's artistic ideal of "paying attention to landscape", but also his return to Taoist landscape thought. In Ma Yansong's architecture, we see the inspiration of Taoist philosophy and landscape art, as well as his return to traditional culture, and the "natural way" in his architecture also brings us endless inspiration. What we need to think deeply is: our architecture needs a philosophy of re-entering nature. Only by returning architecture to the roots of nature and traditional culture can we make human beings return to life in this world.

III. Summary

„Philosophy is Tao, architecture is an instrument" from the metaphysical philosophy of duality to the post-modern deconstruction philosophy, and then to the huge impact of deconstruction

on the field of architecture, which reflects that the world itself is an organism that constantly deconstructs and constructs. (Si Cheng, *Deconstructive architecture under the guidance of deconstructive philosophy*, 2019) Deconstructive architecture is the architectural school most faithful to deconstructive philosophy. The term deconstruction originated from Heidegger's "Being and Time". Later, it was deeply studied by the French philosopher Derrida. The most prominent feature of the deconstruction philosophy proposed by Derrida is the questing the opposition between presence-absence, nature-culture, center-margins, speech-writing, East and West.

In the field of Western architecture, Peter Eisenman and Tschumi were the architects who applied deconstructive philosophy to architectural design earlier. What they had in common was that they opposed the binary opposition and emphasized building new buildings in a more tolerant, free and pluralistic way. Between East and West, there is another very important deconstructionist architect – Zaha Hadid. Her designs always show the impossibility of architecture. She makes bold use of various curves to design buildings, which always give people a bright feeling. She also emphasizes the interaction between people and the building, and maximizes the division of functional areas. Meanwhile, the color Zaha Hadid uses most is white, which may also be her uncertain judgment on the future of architecture.

In the field of Oriental architecture, there is also a deconstructionist architectural designer named Ma Yansong. As a student of Zaha Hadid, he partially inherited Zaha Hadid's bold innovation and use of white in architectural design, and he added a unique Oriental element -- landscape in his design. This concept comes from the ancient Chinese thought. The concept of landscape pays more attention to the interaction between people and architecture, and at the same time, it adds more concern for the natural environment. Due to the acceleration of industrialization, urban green space is becoming less and less. More care for the environment is actually creating welfare for human beings themselves.

In general, Chinese and Western deconstructivist architects have their own characteristics under different cultural backgrounds and theoretical supports, but the world is changing all the time, and the concept of deconstructivism also emphasizes dismantling and reconstruction. Personally, I am also questioning the theory of binary opposites. Only by continuous optimization can we better adapt to the needs of social development. Let people live in harmony with the environment.

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A metadiszkurzivitás olvasás-etikai vonzatai: a metaleptikus írás sikertelensége és megváltástana J. M. Coetzee *Elizabeth Costello* című regényében

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Az *Elizabeth Costello* (2003) egyes fejezeteinek előzményei, már a szerző Ausztráliába való emigrációját megelőzően hangsúlyeltolódásokat jeleznek az írásainak tematikáját és prózapoétikáját illetően. Legyen szó a J. M. Coetzee által, akadémiai környezetben, performansz-jelleggel felolvasott történetekről, vagy a később regénybe foglalt elbeszélésekről; a bennük megjelenő és a szerző szurrogátumaként is értelmezhető címadó fiktív írónő alakja kulcsfontosságú a metafiktív alapokon szerveződő írásmód és létmód megértéséhez.

A szövegek, miközben együtt és külön-külön is, az irodalom nyújtotta megértés komplex allegóriájaként működnek, egy attól elválaszthatatlan etikai elköteleződést is színre visznek. A hypotextusokban megidézett kafkai példázatosság és a metalepszisek által közvetített gondolatiság vizsgálata egy olyan önelemző írásmód működésére mutat rá, amely ellenáll az interpretatív redukcionizmusnak. Ez az ellenállás – a szerzői autoritás folyamatos megvonásaival társulva – a metadiszkurzivitást érintő megfontolások kapcsán is kihívás elé állítja az értelmezőt: fogalmi eszközeinek hatékonysága és csődje egyaránt az olvasásban történő megértés állomásai közötti dinamizmus függvénye. A narratív szintek leírását célzó fogalmi apparátus regény általi kimozdítása együtt jár a főhősnő, Elizabeth Costello, és így a Coetzee által kínált „beágyazódás" és „megtestesülés" etikai-esztétikai tapasztalatának követelményével. A regény metafiktív eljárásaiban megvalósuló epifánia velejárója az olvasói felelősség átértékelése; ugyanakkor annak a tudatosítása is, hogy az alakzattól a fikcióig vezető „út" során végbemenő metamorfózis ontológiai következményeinek megértéséhez ugyanúgy szükség van a rendszerigényű fogalomhasználatra.

Az *Elizabeth Costello* vizsgálata rámutatott, hogy a bölcseleti és a rétegzetten dialogikus igénnyel szervezett szövegek metaleptikus jellege nemcsak belső viszonyrendszerük, azaz a megidézett etiko-politikai problematikák (állatjogok, posztkoloniális hatalomkritika, az irodalom és a humanitások kortárs helyzete stb.) allegorikus összefűzésében bontakozik ki. A metadiszkurzivitás kérdése így nemcsak a vizsgált szöveg, hanem egyben irodalomelméletre vonatkozó kérdés is, vagyis az értelmezésnek magának is számolnia kell belső diszparitásaival. Mindezt úgy foglalhatjuk össze, hogy Coetzee *Elizabeth Costello*-jának sikeressége az interpretáció következetességének sikertelenségében és az „értelem" bukásában érhető tetten.

Kulcsszavak: Coetzee, metalepszis, metafikció, metadiszkurzus, autoritás

I. Bevezetés

Többen megfigyelték és szóvá tették már, hogy John Maxwell Coetzee post-apartheid (vagy más néven ausztrál) regényeiben hangsúlyos poétikai és tematikai elmozdulás érhető tetten.[1] Ezen hangsúlyeltolódás alatt azt értjük, hogy a szerző apartheid-tematikájú szövegeit követően – melyeknek utolsó markáns darabja a *Szégyen (Disgrace)* című regény – sokkal tágasabb és általánosabb fókuszt kapnak az életműben felvetett kérdések.

Ennek a váltásnak a leginkább szembetűnő példája a 2003-as *Elizabeth Costello* című regény, melynek megjelenése időben többé-kevésbé egybeesik Coetzee Nobel-díjának átadásával, illetve a szerző Dél-Afrikából Ausztráliába való emigrációjával. Ez utóbbi, vagyis az emigráció ténye, magában az *Elizabeth Costello*-ban is tükröződik, mivel a regény az ausztrál származású és rég befutott idős címszereplő írőnő szellemi kalandjairól és utazásairól szól.[2] A dél-afrikai háttérrel való formális szakítás a továbbiakban Coetzee *Slow Man* című (magyar nyelvre sajnos még le nem fordított) regényében kap megerősítést, ahol a mű közvetlen helyszíne is egy Ausztrál város, Adelaide, ahol maga a szerző is él.

Az *Elizabeth Costello*, miközben egy látványos szakítást képvisel, egy jelentős poétikai jellegű elmozdulást is tükröz. Coetzee korábbi regényeihez képest sokkalta hangsúlyosabban szembesülhetünk metanarratív, metaleptikus, vagyis az elbeszélés tekintetében transzgresszív, „határsértőnek” nevezhető megoldásokkal.

A Gérard Génette-től ismert, tágabb értelemben vett metalepszisen[3] alapvetően a narratológiai és diszkurzív szintek határainak áthágását kell értenünk, amely egy önreflexív, tehát a műegészre is kiterjedő önolvasó és önértelmező jelentésszintet nyit meg; továbbá felveti a metadiszkurzus és a metanyelv sokat vitatott problémáját is. A metalepszis mint alakzat tehát a határok átlépését jelöli. Ilyen határsértés (transzgresszió)[4] lehet például a történet és a diszkurzus, vagy a szerző, a szereplő és az olvasó, illetve a történet világa és a „valóság” közötti határ megsértése.

Ez a fajta önreflexió azonban nem csak technikaként jelentkezik Coetzee regényében, hanem szorosan összefügg egyrészt azzal, ahogy a műben kifejezett gondolatiság érvényre jut, másrészt pedig azzal, ahogyan a szerző előző regényeiben fellelhető problémák és kérdések újból, ám általánosabb érvénnyel kerülnek terítékre.

Ilyen értelemben az *Elizabeth Costello* nemcsak egy határnak tekinthető Coetzee munkásságában, hanem egy összetett megértési és feldolgozási folyamatnak, amelyben a korábbi munkái és kérdésfelvetései is tükröződnek. Egy olyan folyamat vagy megértésmód tükrözése ez, amely leglátványosabban a metanarratív, metaleptikus cselekményszövés eszközeinek használatában bontakozhat ki.

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[1] Ehhez lásd a *Strong Opinions, J. M. Coetzee and the Authority of Contemporary Fiction* című tanulmánykötet vonatkozó fejezeteit. Danta, C. - Kossew, S. - Murphet, J.: Strong Opinions, J. M. Coetzee and the Authority of Contemporary Fiction. Continuum International Publishing Group. New York – London, 2011.

[2] A regény első fejezetében az írőnő tömör biográfiájával is megismerkedhetünk: "Elizabeth Costello írőnő 1928-ban született, vagyis 66 éves, nemsokára betölti a 67-et. Írt kilenc regényt, két kötet verset, egy könyvet a madárvilágról, meg egy rakás újságcikket. Ausztrál, Melbourne-ben született, ahol ma is él, igaz, 1951-től 1963-ig külföldön tartózkodott, Angliában és Franciaországban. Kétszer ment férjhez, és két gyereke van, mindkét házasságból egy./ Elizabeth Costello nevét negyedik regénye, *Az Eccles Street-i ház* (1969) tette ismertté. A mű főszereplője Marion Bloom, annak a Leopold Bloomnak a felesége, aki maga is főszereplő egy másik regényben, James Joyce *Ulysses*ében (1922). […]" Coetzee, J. M.: Elizabeth Costello (ford. Barabás András). Art Nouveau. Pécs, 2005. pp. 5-6.

[3] Genette, G.: Metalepszis. Az alakzattól a fikcióig (ford. Z. Varga Zoltán). Kalligram. Pozsony, 2006. pp. 11-12, 20, 54, 119.

[4] Lényegre törő még Alexandra Effe meghatározása: „I use metalepsis to describe ontological, rhetorical, and metaphorical transgressions of boundaries, including the reader's engagement in the production of textual meaning and the theoretical doubling back of a narrative that comments on itself." Effe, A.: J. M. Coetzee and the Ethics of Narrative Transgression: A Reconsideration of Metalepsis. Palgrave Macmillan. Cham, 2017. p. 23.

Jelen dolgozat célja, az *Elizabeth Costello* egyik kulcsfontosságú és ellentmondásos pillanatának rövid értelmezése, illetve a regény ide vonatkozó hypertextuális hálózatának bemutatása és rövid értelmezése.

A regény utolsó, az „At the Gate" vagyis „A kapuban" című fejezetében egy különös helyzet áll elő: a főszereplőnknek saját hitéről kell tanúságot tennie, egy látszólag purgatórium-szerű, szimulált világ bírái előtt. A vallomás vagy tanúskodás kvázi-alaphelyzete a mű valamennyi fejezetében adott.

A regény inter- és hypertextuális hálózatából kiemelt fontossággal bír a Kafka-életmű megidézése (többek között *A jelentés az Akadémiának* c. novella, *A Törvény kapujában* c. parabola, illetve ez utóbbit magába ágyazó A *Per* című regény reiterálása); de ugyanúgy hangsúlyos az *Elizabeth Costello* nyolc fejezetét követő *Utóirat*, vagyis az *Elizabeth, Lady Chandos levele Francis Baconhoz* című posztkszriptum, ami expliciten is megidézi Hugo von Hofmannsthal 1902-es *Ein Brief*, avagy *Lord Chandos levele Francis Bacon*-höz című jelentős hatású írását.

Coetzee regényének utolsó fejezete, a metanarratív, „Realizmus" című első fejezethez hasonlóan kiemelt fontossággal bír, ugyanis a szerző itt hozza leglátványosabban játékba a metafiktív önolvasás problematikáját és a regényben mindvégig kulcsfontosságú, nem-emberi Másikkal való viszonyunk etikai kérdéseit.

A mű epizodikus fejezeteiben, többnyire posztkoloniális és állatjogi (mondhatni poszthumán) aktivizmus szempontjaiból kritizált antropocentrikus metadiszkurzus leépítésén, pontosabban a nyelv és a „nyugati ember" rációvezérelt gondolkodásának kritikáján van a hangsúly. Mindeközben a szerző egy olyan *limináris tér* kialakításán munkálkodik, amelyből rálátásunk lehet a nem-emberi másik, és közvetetten a műalkotás lényegének megragadhatatlanságára; illetve egy voltaképp poszthumán etikai viszony kialakításának szükségességére is. (Ennek kapcsán az olvasó leginkább a regény *Az állatok élete* című ikerfejezeteiben tájékozódhat, ahol Costello voltaképpen a „nyugati tekintet" dekonstruálását célozza.)

Coetzee és az ő szurrogátumaként is értelmezhető Elizabeth Costello is a szerzői-, a metadiszkurzív nézőpont és az autoritás kimozdítását célozza. Mindezt az autoritás önmegvonását előidéző elbeszélői stratégiák egész sorozatával igyekszik elérni. Fontos megemlítenünk, hogy Elizabeth Costello alakja Coetzee néhány régebbi regényében is fel-felbukkan, amolyan prototipikus formában (*In the Heart of the Country* (1977); *Age of Iron* (1990)); illetve jelen regényt követően, további írásokban is visszatér (*As a Woman Grows Older* (2004); *Slow Man* (2005); *The Old Woman and the Cats* (2013)). Az idős írónő szerepeltetése a tárgyalt (esszé)regényen kívül leglátványosabban a *Slow Man*-ben jelentős, ahol a metaleptikus utazó szerepében tetszelegve közvetlenül is megidézi az írás, az elbeszélés és nem végső soron az olvasás aktusában felmerülő szerzői/elbeszélői autoritás problémáinak etikai vonatkozásait. Az *Elizabeth Costello*-ban, noha felmerül az a lehetséges értelmezés, miszerint a főhősnő „saját" elbeszéléseit olvashatjuk, melyeknek értelemszerűen ő maga lenne a főszereplője, mégis visszatérő körülmény, hogy Costello – Hofmannsthal Philip Chandos-ához hasonlóan – az elnémulás különböző fokozatait éli meg. Ez az alaphelyzet érzékletesen előrevetíti a metafiktív történetmondás inherens konfliktusát, az elbeszélés lehetőségeire vonatkozó metadiszkurzus önellentmondását. A regény fejezetei (különösen a „Realism" és „At the Gate", vagyis az első és utolsó „lecke", de ide sorolható a „The Lives of Animals" ikerfejezetek is) a szépirodalmi reprezentáció és az írói felelősség kérdéseit boncolgatják, különös figyelmet fordítva a nem-emberi Másik ábrázolásának körülményeire.

Vizsgálódásunk elsődleges tárgya az utolsó fejezet, amely a fiktív írónő tanúságtételét/vallomását viszi színre: hitéről és ezáltal írói hitvallásáról kell a Kafka-

írásokból ismerős bírák előtt tanúságot tennie, hasonlóan ahhoz a szituációhoz, melyben Hofmannsthal hőse, Lord Chandos folyamodik mesteréhez, Francis Bacon-hoz, amikor nyelvkríziséről ad – egy megszerkesztettségét tekintve igencsak ellentmondásos – beszámolót.

II. Az irodalmiság terei

A Coetzee-regény utolsó fejezetének helyszíne egy kafkai, irodalmi közhelyekből szőtt *világot* idéz, s erre maga a főszereplő is visszatérő jelleggel reflektál. Erre a közegre utal már a fejezet címe is, „A kapuban", avagy az „At the Gate", ami a híres Kafka parabola, a *Vor dem Gesetz* (*A törvény kapujában*), *A per*-ből vagy *A kastély*-ból is ismert dramaturgiai alapállapotát tágítja a hypertextus cselekményének „tényleges" és egyben metaforikus színhelyévé. A Kafka-szövegek – mint hypotextusok – egy metaforikus totalizáció keretei között elevenednek meg. A közeg, amelyben hősünk találja magát, egy Osztrák-Magyar Monarchia-beli határmenti kis település alakjában jelentkezik, s az egész túlságosan kafkainak és irodalminak, vagyis megszerkesztettnek, mesterségesnek hat: „[…] mi végre hajszolták bele ebbe a *mise en scéne*-be, amely – nem szereti a kifejezést, de nincs rá jobb – olyan Kafka-szerű?"; „Kafka, de csak a felszínt kapirgáló, paródiává lealacsonyított, paródiává ellaposított Kafka."[5]

Magában Costello-ban is felmerül a gyanú, hogy egyfajta irodalmi purgatóriumon kell áthaladnia, vagyis a Franz Kafka „A törvény előtt" című példázatából ismert szituációval van dolgunk, ahol a *vidékről jött ember* célja a törvény kapuján való áthaladás.

„Pont ezt várnánk egy ismeretlen olasz vagy osztrák-olasz határhoz közeli városkától 1912-ben. Mintha egy könyvből került volna elő, akárcsak a házikó az emeletes ágyakkal, a szalmazsákokkal meg a negyvenes égővel, de az egész bíróságosdi is könyvszagú, a bóbiskoló törvényszolgával bezárólag. Az ő kedvéért állították volna össze mindezt, csak azért, mert író? Így képzeli valaki az író számára a poklot, vagy legalábbis a purgatóriumot – a közhelyek tisztítótüzét?"[6]

Az írói hitvallásról való tanúságtétel színhelye tehát egyszerre hordozza az ún. „irodalmi(as)ság" – ez egyébként önmagában is igencsak kérdéses fogalomkör –, a szimuláció, illetve a nagybetűs Ítélet és a vallomásosság jegyeit. Valamint az ezek mentén felmerülő (és magára az írásra és olvasásra is vonatkoztatható) elméleti kérdéseket, a tapasztaltakra reflektáló írónő személyében.

III. Vallomás és tanúságtétel

A kapun való átjutás feltételeként a főszereplőnek tanúságot kell tennie hitéről, a szimulákrumként leleplőződő világ bírái előtt. Az a feladata, hogy előterjessze saját hitét, vagyis azt, amiben személyesen Ő hisz. Costello azonban ellenkezik, mondván, hogy ő egy író, és neki az a kötelessége, hogy mentes legyen mindenféle hittől és ideológiától. Ha magára is ölt néha egy-egy hitvallást, az írás folyamatában lépten-nyomon kénytelen levetkőzni azt, és egy másik szereplő perspektívájához és ontológiai valóságához igazodni.

Costello az egyik ilyen meghallgatás, vagy vallomástétel során a regényegészből és Coetzee gyakorlataiból[7] ismert eljárással él, nevezetesen azzal, hogy megszólalásakor a

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[5] Coetzee (2005) p. 335.
[6] Uo. p. 330.
[7] J. M. Coetzee performanszaihoz, felolvasásaihoz, illetve az ezek mentén később megjelenésre kerülő elbeszélések filológiai hátteréhez lásd Derek Attridge és Gyuris Kata vonatkozó írását. Attridge, D.: A Writer's Life, Elizabeth Costello by J. M. Coetzee. The Virginia Quarterly Review. 2004. Vol. 80. no. 4. pp. 254-265.

vallomása helyett egy *fikciót* olvas fel. Tehát: amikor saját létének referencialitásáról kellene beszámolnia, ahol értelemszerűen szükség lenne az igazság és hamisság kategóriáinak, analitikusan nyomonkövethető és racionális működtetésére, akkor ő a fikciót választja. Ez a fikció pedig természetesen a vallomás minőségében mint *igazság* kerül terítékre, amelynek nem mellesleg maga is szereplője.

Ez az alaphelyzet, nevezetesen a hősnő – többnyire akadémiai környezetben közvetített – előadásainak nagy része (*The Lives of Animals, What is Realism?, Humanities in Africa, The Problem of Evil* stb.) az olvasóknak Coetzee személyes felolvasásaiból lehet ismerős. Ezeket a felolvasásokat a szerző, még a kötet megjelenése előtt több előadás formájában, a fiktív írónő alakja mögé rejtőzve performatív módon vitte színre, a regényből is ismerős konferenciákon, díjátadókon és egyéb alkalmak során.

A regény utolsó fejezetében említett beágyazott történet azonban szintén közbeszólásokkal és reflexiókkal van tarkítva. A vallomás alaphelyzete (vagyis a saját hitét megvallani kénytelen írónő meghallgatása) összemosódik a kitalált történet elbeszélésével. Ebben a beékelt történetben számol be Costello gyermekkoráról, meghatározó élménye egy ausztrál folyó áradása, melynek során az iszapból életre kelő békák élettel teli korporealitása lesz az életbe és az állatokkal közös testi létezésbe vetett hit fedezete, és – végső soron – allegóriája.

„Amikor a víz lecsillapodott – s most elsősorban a Dulgannon folyóra gondolok –, hektárszámra hagyta hátra az iszapot. Éjszakánként kis békák tízezreinek kuruttyolását hallottuk, akik örvendeztek az égiek bőkezűsége miatt. […] Honnan került elő ilyen hirtelen ez a sok ezer béka? A válasz egyszerű: mindig is ott voltak. A száraz évszakban bebújnak a föld alá, egyre mélyebbre ássák be magukat a nap melege elől, míg végül mindegyik megássa a maga kis sírját. […] Pulzusuk lelassul, légzésük leáll, a bőrük átveszi az iszap színét. És ekkor ismét elcsöndesednek az éjszakák. / Egészen a következő esőkig, amelyek, mondjuk így, sok ezer kis koporsófedélen kopogtatnak. A koporsókban újból verni kezdenek a szívek, a hónapokon át élettelen végtagok megmoccannak. Feltámadnak a holtak."[8]

A valóság és fikció problémája tehát már ebben a többszörösen beágyazott elbeszélésben is megjelenik. Costello úgy adja elő a békákról szóló történetet mint vallomást, holott a beszédét követően a bírák maguk is szkeptikusan fogadják az elmondottak igazságtartamát. A főszereplő mindeközben annyira kardoskodik a békák valós léte mellett, hogy az olvasó maga is elbizonytalanodik: „Léteznek, akár beszámolok róluk önöknek, akár nem; akár hiszek bennük, akár nem. A kis békák számára közömbös, hogy miben hiszek […], s én éppen azért hiszek bennük, mert az irányomban tökéletesen közömbösek."[9] Amikor viszont a kíváncsi olvasó rákeres, mondjuk egy internetes böngésző segítségével az említett Viktória állambeli folyóra, még csak hasonló elnevezésűt is alig talál. Costello mindeközben kiemeli, hogy ő maga ott töltötte a gyermekkorát. A bírák viszont hangsúlyozzák, hogy ilyesmi nem szerepel a dossziéjában: „– Ezt a dulgannoni gyerekkort is maga találta ki, Mrs. Costello? A békákkal meg a mennyből hulló esővel?"[10] Costello, amikor a hitére vonatkozó nyilatkozatának módosításával vádolják, egy Rimbaud-aforizma fejtegetésével reagál:

„–Azt kérdezi, megváltoztattam-e a beadványomat. De ki vagyok én, ki ez az *én*, ez a *maga*? Napról napra változunk, miközben ugyanazok maradunk. Egyik *én*, egyik *maga* sem fontosabb a másiknál. Akár fel is tehetnénk a kérdést: melyik az igazi Elizabeth Costello: az,

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Gyuris, K.: A megismerés módozatai, J. M. Coetzee: Elizabeth Costello. Filológiai közlöny. 2016. Vol. 62. no. 3. pp. 154-167.

[8] Coetzee (2005[2004]), 346[216].

[9] „They exist whether or not I tell you about them, whether or not I believe in them./ It is because of the indifference of those little frogs to my belief […] it is because of their indifference to me that I believe in them." Uo. p. 348 [217].

[10] Uo. p. 349.

aki az első nyilatkozatot tette, vagy az, amelyik a másodikat. Erre azt tudom mondani: mindkettő igazi. Mind a kettő. És egyikük sem. *Én – az mindig valaki más.* Bocsássanak meg, hogy nem a saját szavaimat használom, de nem tudok jobbat."[11]

A fejezetben visszatérő jelleggel utalt intertextuális létmód, valamint az írónő Én-re vonatkozó létemléleti fejtegetése végül a nevetség tárgyává teszi Costello-t, aki így vélhetően kénytelen lesz vallomását újból megismételni:

„– Nem vagyok összezavarodva. / – Igen. Maga nincs összezavarodva. Bár *ki az*, *aki* nincs összezavarodva?"[12]

Láthatjuk, hogy Coetzee regényének kafkai szituációjában nem csak az identitás és a szubjektum rögzíthetőségének és megragadhatóságának problémája a tét, hanem magának az irodalmi műalkotásnak a működése is vizsgálat tárgyává válik. Kafka megidézett, reiterált parabolája révén ugyanis a mű egyszerre teremti, azaz meséli el, és értelmezi, kommentálja a hypotextus ismeretében olvasott miliőt.

A kérdés tehát az lesz, hogy hogyan számolhat el az irodalmi műalkotás, nevezetesen a regény a vallomás és a hit kérdésében? Az *Elizabeth Costello*-ban mindvégig hangsúlyos etikai kérdésfelvetés (gondoljunk csak az előző fejezetekben felvetett problematikákra, mint a posztkolonializmus, az animal studies, a realista ábrázolás etikai vonatkozásai, korporealitás stb.) szintén elválaszthatatlan a Coetzee által kínált megértésmódoktól.

Az érvelésünk elsősorban abból indul ki, hogy ez a fentebb bemutatott hazugság-pillanat kulcsfontosságú nem csak az írónő vallomása, vagy a fejezet, hanem az egész regény szempontjából. A hipotézisünk az, hogy a vallomás megtagadásának, *elhalasztás*ának aktusa, mely pontosan a fikció közbeékelésével zajlik, a regényt statikus olvasatokban értelmező interpretációk ellenében működik. Fogalmazhatnánk úgy is, hogy az *Elizabeth Costello* azért is kiemelt fontosságú alkotás Coetzee életművében, mert ezt az értelmezés kimerevítésének ellenálló regénytechnikát fejleszti ki és működteti.

Azonban, ha ezen logika mentén tovább indulunk, világossá válik, hogy önellentmondásba ütközünk. Hogy lehet egy a regény interpretációját lehetetlenné tevő regényt értelmezni? Hiszen jelen pillanatban is ezt tesszük. Hogyan kínálhatná a regényben a szerző ezt az értelmezést, ha éppen az értelmezés ellehetetlenítésében érdekelt? A narratív szintek leírását célzó fogalmi apparátus regény általi kimozdítása együtt jár a főhősnő, Elizabeth Costello, és így a Coetzee által kínált „beágyazódás"[13] és „megtestesülés"[14] etikai-esztétikai tapasztalatának követelményével. Ahhoz tehát, hogy az írónő hitelesen tudjon alkotni, nem engedheti meg magának, hogy megszilárdítsa hitrendszerét: „A láthatatlan dolgok titkára – sietve teszem hozzá, hogy ez nem a saját kifejezésem. Magasabb rendű titkártól vettem kölcsön, Czesław Miłosz költőtől, aki talán önök előtt sem ismeretlen. […] – Mielőtt folytathatnám, nyilatkozatot kell tennem hitemről – olvassa. – Azt felelem: a jó titkárnak nem lehet hite. Nem egyeztethető össze a funkciójával."[15] Részint – tehetnénk hozzá

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[11] Uo. p. 353.

[12] Uo. p. 354 (kiemelés tőlem).

[13] „Kafka majma beágyazódott az életbe. És ebben a *beágyazottság* a fontos, nem az élet. Az ő majma ugyanúgy van beágyazódva, mint mi: te belém, én beléd." Uo. pp. 53.

[14] „A realizmusnak mindig meggyűlt a baja az eszmékkel. Nem is alakulhatott másként, hiszen a realizmus premisszája szerint az eszméknek nincs autonóm létük, csakis a dolgokban léteznek. […] . A *megtestesülés* fogalma döntő fontosságú. Ezekben a vitákban az eszmék nem lebegnek szabadon (erre nem is képesek): ehelyett beszélőkhöz kötődnek, akik hangoztatják őket; illetve a beszélők életét behálózó egyéni érdekek szövevényéből jönnek létre." Uo. pp. 17-18. A korporealitás hangsúlyos regénybeli jelenlétéhez lásd Louise Bethlehem írását: Bethlehem, L.: *Elizabeth Costello as Post-Apartheid Text* In: Boehmer, E. - Iddiols, K. - Eaglestone, R. (eds.): J. M. Coetzee in Context and Theory. Continuum International Publishing Group. New York, 2009. p. 20.

[15] Coetzee (2005) pp. 319-320.

– ugyanez vonatkozik az olvasóra is, aki ahhoz, hogy ráhangolódhasson a regényben kínált megértésmódhoz, és a metalepetikus gondolkodás folyamatszerű működéséhez, fel kell adnia a statikus értelmezésekre kihegyezett gondolatiságát. És ezzel együtt a ráció-centrikus és az analitikus érvelés által vezérelt gondolkodást.

Ennek megfelelően a hit és etika kérdése is elképzelhetetlen logocentrikus és antropocentrikus viszonyrendszerben. Ezért is lesz Coetzee számára fontosabb a testi valóság, a korporealitás, mint bármely embert meghatározni igyekvő etika és filozófia.

Az *Elizabeth Costello* szerkezete és a benne felkínált gondolatrendszer nemcsak az értelemzés lezárását lehetetleníti el. A Kafka parabolájának megidézésével a Jacques Derridától ismert *différance* és a – fentebb már utalt – *elhalasztódás*[16] gondolatát is megidézi.[17] Az *Elizabeth Costello* és a Franz Kafka szövegének kapcsolatát elsősorban Derrida *Before the Law* (*Devant la loi*) című írása felől értelmezem. Derrida olvasatában a „A törvény kapujában" című Kafka példázat alapvetően az irodalmi szöveg működését mutatja be. Ezen belül az olvasás értelemkeresésének parabolája is, illetve az értelem és „üzenet" művön belüli fellelhetőségének illúzióját is játékba hozza.

Ennek megfelelően a hazugság és a fikció játéka a regény utolsó fejezetében – illetve az egész fejezet maga egy tükörszöveg minőségében – szintén az olvasás allegóriájaként működik. A címszereplőnek a kafkai példázat kapuját őrző bírák előtt kell megvallania hitét. Az elbeszélésből azonban kiderül, hogy ez a vallomás önfeladással jár, és hogy ez az önfeladás magának az elbeszélésnek a szükséges része. A regény a vallatást a vallomás tagadásaként mutatja be, amellyel szemben a főhősnő éppen a vallomás tagadásával próbál védekezni. Ez a tagadás egy „életrajzi hazugság" történetként való beillesztésében ölt testet.

Coetzee egy 1985-ös esszéjében[18] tárgyalja a vallomás-irodalom főbb kérdéseit. Az autentikus vallomás – mint ahogyan azt Tolsztoj, Rousseau és Dosztojevszkij példáin keresztül bemutatja – könnyen az önreflektív szubjektum végtelen regresszusába torkollhat. Ha a megbánandó tett mögött egy lehetséges okot fedezünk fel igazságként, az azt is feltételezi, hogy esetleg egy még igazabb igazság rejlik a megvilágosodásunk jelen pillanata mögött. Az esszé szerzője szerint a vallomás az áthágás/vétek (transgression), a vallomás (confession), a bűnbánat (penitence) és a feloldozás (absolution) sorának egyik eleme, majd meghatározását kiegészíti Francis R. Hart megfogalmazásával, aki szerint a vallomás „személyes történet, amely az Én lényegi természetét, igazságát igyekszik közölni vagy kifejezni"[19] (saját fordítás).

A vallomás beszédhelyzete az önámítás veszélyét is magában hordozza, főleg ha olyan kényes problémáról van szó, mint a „hitről" és a „nem-emberiről" való beszámolás kérdései. Vagy egyenesen a műalkotás és az olvasás viszonyáról, amelyre Jacques Derrida is érzékletesen rátapint az említett Kafka-parabola, vagyis „A törvény kapujában" kapcsán írt írásában. (Emlékezzünk csak a jelenetre, amikor *A per*-ben a börtönkáplán Josef K.-t önámítással vádolja, magát a parabola szövegét is az önámítás kérdése kapcsán recitálja.) A vallomás beszédhelyzete ekképp kapcsolódik össze Coetzee regényében az elbeszélés és az olvasás, összességében az értelmezés folyamataival, illetve az önmagára visszahajló, metaleptikus szerkesztettségű szöveg működésével. Az említett esszé nemcsak a vallomás és

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[16] „The present prohibition of the law is not a prohibition in the sense of an imperative constraint; it is a *différance*." Derrida, J.: *Before the Law* In: Attridge, D. (eds.): Acts of Literature. Routledge. New York – London, 1992. pp. 202-203.

[17] Ehhez lásd még: Derrida, J.: *Az el-különböződés (La différance)* (ford.: Gyimesi Tímea) In: Bacsó B. (eds.) Szöveg és interpretáció. Cserépfalvi Kiadó. Budapest, 1991. pp. 46-47.

[18] Coetzee, J.M.: Confession and Double Thoughts: Tolstoy, Rousseau, Dostoevsky. Comparative Literature. 1985. Vol. 37. no. 3. p. 193.

[19] Uo. p. 194.

a potenciális öntévesztés módozatait tárgyalja, hanem különös figyelmet fordít az öntudatosságban és önreflexióban (self-consciousness)[20] rejlő kétkedés (doubting) és megkérdőjelezés (questioning) folyamatában rejlő végtelen regresszus veszélyeire, s az elbeszélés fokozott (ön)tudatosságát[21] mint egyfajta *betegséget* tárgyalja.

IV. Limináris tér

Ahogy Coetzee a hegemón és gyarmatosító nyelv totalizáló diszkurzusával szemben a nem-emberi/állati perspektíva és a velük közös testi létezés és a szenvedés nyújtotta empátia képességét hangoztatja, úgy a regényének megszerkesztettsége is egy diszkurzziválhatatlan, interpretálhatatlan síkot idéz, mégpedig a vallomás fikció általi elodázásának, ha máshonnan nem, hát Derridától ismert stratégiáknak, a metalepszis általi működésbe léptetésével.

Ha Elizabeth Costello vallomásába ágyazott történetét a megbízhatatlan elbeszélés eseteként kezeljük, fontos kikötnünk, hogy nem a fiktív szöveg valóságra vonatkozó igaz vagy hamis voltát kérjük számon a regény ezen pontján, még kevésbé a reáliák pontosságát. Azaz nem a referencialitás kérdése bizonytalanít el. A megbízhatatlan elbeszélő megbízhatatlanságát az adja, hogy önmagához képest, saját viszonyrendszeréhez képest mutat valamiféle ellentmondást. Fontos itt tehát szétszálazni azt a kontextust, amelyen belül egyáltalán megbízhatatlannak nevezhető Elizabeth Costello. A metanarratív transzgresszió formái és a *mise en abyme* struktúrákban megsokszorozódó jelentéssíkok összjátéka megnehezíti ezt a munkát. Egyes meglátások szerint a posztmodern műalkotásokban már eleve fölösleges az elbeszélés megbízhatatlan voltát egyáltalán számításba hozni. A 2003-as *Elizabeth Costello* esete, noha telítve van a posztmodernből is ismert metaleptikus megoldásokkal, mégsem olvasható egyedül a posztmodern poétika felől. Épp ellenkezőleg, hatását tekintve ezek a narratív megoldások, még a metalepszis is, épphogy egy olvasásetikai attitűd affirmációjában játszanak fontos szerepet, s nem a relativizáló jelentésszóródás tendenciái felől értendőek. A diszkurzusok pluralitása, a beszédmódok hierarchiájának megbontása is a nem-emberi (és elsősorban testi valójában adott és értelmezhető) Másik ontológiai *elkülönböződésének* fényében értelmezhető.

A regény utolsó fejezetében tehát a hazugság mint a megbízhatatlanság forrása épp abból adódik, hogy kettős, eldönthetetlen érvényű. A beágyazott fikció szintjén természetesen nem beszélhetünk hazugságról. Ha azonban nem fikcióként (tehát nem beágyazott történetként) kezeljük, hanem a vallomás aktusának részeként, mint ahogyan azt a bírák elvárják, úgy igenis, az elbeszélés ezen síkján értelmezhető hazugságként.

Costello olyat állít saját életéről – még ha azt történetbe is szövi –, ami biografikusan nem igaz. S ezt a bírák kéréseit követő hallgatása is megerősíti. (Azt, hogy a bírák hatásköre a fejezet színhelyének „túlvilági" dimenziója értelmében kiterjed a tényszerűségek „teljeskörű" ismeretére, azt az egyik törvényszolga megjegyzése bizonyítja: „– Nem az útlevelét kérem. Az útlevelének itt nincs jelentősége, gondolom, ezt már észrevette. […]"[22]

A Kafka-életmű Coetzee prózájára gyakorolt hatása kapcsán érdemes megemlíteni Kyle Wanberg és Gyuris Kata egy-egy vonatkozó írását. Wanberg a „kisebbségi irodalom"[23] fogalomköre felől olvassa az *Elizabeth Costello*-ban megjelenő Kafka-hagyomány (illetve a

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[20] Molnár Gábor Tamás felhívja a figyelmet a *self-consciousness* és az (ön)tudatosság fogalmak eltérő jelentésére. Molnár, G.T.: *Kánon és nem-olvasás – Egy példa John Barthtól*. In: Bengi, L. – Zsávolya, Z. (eds.): Kánon és olvasás – Kultúra és közvetítés I. kötet. Fiatal Írók Szövetsége. Budapest, 2002. p. 83.

[21] „[…] it feeds upon itself, finding behind every motive another motive, behind every mask another mask, until the ultimate motive, which must remain masked (otherwise the endless regression would be ended, the disease would be cured). We can call this ultimate motive the *motive for unmasking* itself." Coetzee (1985) p. 220.

[22] Coetzee (2005) p. 354 (kiemelés tőlem).

[23] Wanberg, K.: The writer's inadequate response: Elizabeth Costello and the influence of Kafka and Hofmannsthal. European Journal of English Studies. 2016. Vol. 20. no. 2. pp. 152-153.

szintén hangsúlyos Hofmannsthal-i referenciák) jelentőségét. Gyuris szintén a Deleuze-Guattari szerzőpáros felől közelít Coetzee munkáihoz, hangsúlyozva többek között a *Szégyen*ben (*Disgrace)* megjelenő „állattá-leendés" folyamatának mozzanatait.[24] Egyes kritikák szerint Coetzee *Elizabeth Costello*-ja annyiban visszalépés az 1999-es *Disgrace*-hez képest, hogy míg ez utóbbiban, a főszereplő, David Lurie, megélésében az állattá-leendés poszthumán etikai elmozdulása egyfajta autentikus megigazulás-történetet közvetít, addig a Costello köré szerveződő elbeszélések nem mozdulnak ki „az irodalomelméleti vagy kultúrakutatási sémákból"; vagyis: „Az átélt tapasztalatot aligha pótolhatja az irodalomelméletben vagy a kritikai elméletben való jártasság. Ehhez képest Costello alakja, és ezt ő maga is elismeri, tragikus módon benneeked az irodalomelmélet domesztikált territóriumában."[25] A kritika tehát úgy foglalható össze, hogy a *Szégyen*ben az állattá-leendés folyamata, vagyis a nem-diszkurziválható Másik – jelen esetünkben az állati-lét tapasztalata – felé való, antropocentrizmust kerülő elmozdulás hitelesebben van ábrázolva, mint a *Costello*-ban, ahol – ezek szerint – többnyire önkényes elméleti fejtegetéseket olvashatunk, melyek maguk is akadémiai környezetben hangzanak el. Vagyis, ha a címszereplő állatjogi aktivizmusa szerint ugyanolyan fontos a Másik, és lázad a Másikat az értelem hegemóniája alá szervező/racionalizáló emberi *tekintet* diszkurzusai ellen, akkor miért is nem ülteti inkább gyakorlatba állásfoglalását.

Igencsak leegyszerűsítő ez az olvasat, amennyiben az *animal studies* gyakorlat-fetisizáló tendenciái felől fogalmaz meg elvárásokat a műalkotással szemben. Noha a két regény közötti megállapítás helytálló, a következtetésbe szőtt értékítélet aligha tartható, mivel az *Elizabeth Costello* – a metaleptikus stratégiák alkalmazása révén is – eleve más megvilágításban közelít az emberi–nem-emberi kapcsolatának kérdéseihez. A regény más stratégiát választ az ontológiai másságból fakadó etikai igény problematizálására, s a regénystruktúra (illetve annak filológiai háttere) önmagában is jelzi ezt a másfajta közelítést, mint ahogyan a címszereplő írónő karakterének és az elbeszélések sokosztatúsága is: epizodikus szerkesztettség, többszörös beágyazás, hypertextuális hálózatosság, metaleptikus szerző-szurrogátum, aki más művekben is felbukkan stb. Egy összetett prózapoétikai stratégia rajzolódik ki a regény többszöri olvasásában, ami alapvetően – számos vonatkozásában (mint ahogyan a metafiktív alkotások általában) – önellentmondásosnak tűnhet. Egyrészt körvonalazódik az a törekvés, ami az állati-másikkal való közös testi létezést a Coetzee-féle *realizmus* értelmében hangsúlyozza; másrészt viszont a nem-emberiről való antropocentrikus gondolkodás megkérdőjelezése is szükségszerűen visszaíródik az értekezés hangvételében megvalósuló metanyelv diszkurzusába. Ez az önellentmondás mindaddig feloldhatatlan, amíg egyedül az értelem hagyománya és az állattá-leendés tapasztalatainak alteritása közötti bináris oppozíciójának függvénye marad. Coetzee (és Costello) azonban jól láthatóan abban „érdekelt", hogy az antropocentrikus ráció és értelemképzés *antropológiai gépezet*ének tautologikus működésével szemben a szerzői autoritás rétegzett és folyamatos visszavonásának gyakorlatai által egy olyan *harmadik,* – ha úgy tetszik – „üres teret" jelöljön ki, amely a metaleptikus transzgresszió *limináIis tereiből* érzékelhető. Egy olyan *térre* kell gondolnunk, amely érzékelhető, következtethető, de nem leírható, nem megragadható, s legkevésbé sem verbalizálható.

A limináIis tér kialakításában azonban Coetzee és Costello hozzájárulása eltérő módon érvényesül: a fiktív írónő (írói és intellektuális) autoritásának visszahúzódása fia, John, és felesége, Norma, nézőpontjából különbözőképpen nyer értelmet. John fokalizátori szerepe

[24] Gyuris, K.: *Kisebbségi irodalmak – Kafkai fordulatok J. M. Coetzee két regényében* In: Boldog-Bernád, I. - Szabó, P. - Tanos, M. (eds.): Identitás, emlékezet, történelem. Irodalomtudományi Osztály. Budapest, 2016. pp. 80-87.

[25] Horváth, M. - Lovász, Á. - Nemes, Z.M.: A poszthumanizmus változatai. Ember, embertelen és ember utáni. Prae Kiadó. Budapest, 2019, pp. 132-133.

Costello etikai elköteleződését juttatja érvényre például azáltal, hogy a *realizmus* meghatározásához saját, kijózanító, vagy éppen undort keltő konnotációit rendeli.[26] A beszédes nevű Norma („Az állatok élete" c. fejezetben) a diszkurzusok dialógusának – anyósáéval ellentétes – „végpontját" képviseli; kettejük szembenállását Coetzee látványosan kihegyezi. Ennyiben sem fedhetik egymást maradéktalanul Coetzee és Costello álláspontjai. Elizabeth Costello tehát korántsem szinguláris aktora és közvetítője a regényben tetten érhető gondolkodásmódnak. A metaleptikus működésmód a különböző diszkurzusok és a – sokszor fokalizációban is leképeződő – ontológiai perspektívák perforálásában és kifordításában, illetve a jelentéssíkok folyamatos átrendeződése és a *szövegtükrök* egymásra vetítése során valósul meg.

A korábban említett *megtestesülés* reprezentációs-etikai igénye szorosan összekapcsolódik a metaleptikus elbeszélésmód, illetve a lehetséges világok szemantikájának értelmében a metaforikus totalizáció követelményével. Az empátia képessége, az állatokkal való közös szenvedés és testi létezés kapcsolata, vagyis a nem-emberi Másik perspektívájának felmutatása elválaszthatatlanul összefügg a más szövegek szemantikai hálózataiba való beágyazódással, az inter- és hypertextuális összefüggések alkotta *irodalmi létmód* realizációival. Ezen kapcsolódások, illetve a *beágyazódás* fontosságát jelzi Costello, amikor a „Realizmus" fejezet rádióbeszélgetés-jelenetében arra a kérdésre, hogy „vajon könnyű-e egy férfi nézőpontjából írnia?", a következőképpen válaszol: „– Hogy könnyű-e? Nem mondhatnám. Ha könnyű volna, mi értelme volna csinálni? Épp a dolog mássága jelenti a kihívást. Megalkotni egy egészen más figurát, megalkotni a világot, amelyben él és mozog. Megalkotni egy másik Ausztráliát."[27] Kafka *Jelentés az Akadémiának* című elbeszélése kapcsán Costello a sebzett Rőtpéter beszédhelyzetébe, Joyce *Ulysses*ének átirata kapcsán pedig Molly Bloom alakjába *ágyazódik*; csakúgy mint Coetzee, amikor a *Foe* című regénye megírásakor a *Robinson Crusoe* világába és beszédpozíciójába helyezkedik, egészen átértelmezve és továbbgondolva azt. Ennek az eljárásnak még tömörebb és találóbb példáját olvashatjuk a regény utóiratában, a mintegy mellékletként funkcionáló tükörszövegben, az Elizabeth, Lady Chandos levelében.

Az a látszólagos önellentmondás, mely szerint a metadiszkurzus széttörésének etikai irányultságú gyakorlata összeférhetetlen a Costello által is fenntartott elméleti keretekkel, a regényvégi Hofmannsthal-hypertextus felől gondolható újra. Costello a regény utolsó fejezetében („Az állatok élete" c. fejezetekhez hasonlóan) akadémiai közegekbe igyekszik becsempészni a Másik testi létezésének etikai megfontolásától elrugaszkodott, (elsősorban) „nyugati-tekintet" dekonstrukcióját. A „lecke" alaphelyzete tehát annyiban ellentmondásos, mint a Kafka novellájából ismert ember-majom hibrid Rőtpéteré, akinek szubjektuma – bármennyire is közelíthet egy lehetséges emberéhez – alapvetően sebzett marad: az emberré-leendés traumája határozza meg,[28] s igazán csak erről a sebzettségről számolhat be, egy olyan emberi nyelven, amely nyelv maga is a megcsonkítottság okozója. Ez az ellentmondás ugyanakkor az önreflexív, metaleptikus szöveg ellentmondása is egyben, pontosabban a metanarrációé, amely a „Realizmus" című fejezetet is jellemzi: hogyan számolhat be a szöveg saját magáról, azon a *nyelven* és abban a diszkurzus*ban*, amelyből maga is felépül? A metadiszkurzus és a ráció tautologikus voltának megállapítása visszatérő feszültségek okozója a regényben.

De honnan lehet még ismerős ez a fajta ellentmondásosság? Coetzee Hofmannsthal-átiratát a hypotextus egy idézett részlete előzi meg. Az *Elizabeth Costello* magyar

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[26] „Miért szedted elő az irodalomtörténetet? És épp egy ilyen nyomasztó fejezetét! Realizmus – erre itt senki sem volt kíváncsi. […] – Ha azt hallom, realizmus – folytatja John –, jégtömbbe fagyott parasztokat látok. Norvégokat pállott alsóneműben. Mit érdekel ez téged?" Coetzee (2005) pp. 52-53.

[27] Uo. p. 22.

[28] Horváth (2019) p. 144.

fordításában Györffy Miklós közvetítésében olvashatjuk az említett részletet: „Ilyen pillanatokban valaminő semmis teremtmény, egy kutya, egy patkány, egy bogár, egy elsatnyult almafa, egy a dombon átkígyózó szekérút, egy mohalepte kő többet jelent nekem, mint a leggyengédebb kedves valaha is jelentett. Ezek a néma és olykor élettelen teremtmények olyan dúsan, telten, a szerelem olyan jelenvalóságával magasodnak elém, hogy megittasult szemem körülöttük sem tapad semmire, ami holt lenne. Úgy tűnik fel előttem, minden, ami csak létezik, minden, amire csak emlékszem, minden, amit csak megérintenek kusza gondolataim: valami."[29] Már csak ezen kiragadott rész alapján is kimutatható, hogy Hofmannsthal Phili Chandosa, miközben a nyelvvesztés különböző stációiról számol be mesterének, Francis Baconnek, precízen megmunkált képi világban és retorikai magaslatokban gazdag szöveget kínál levelében. Coetzee a „Chandos-mikroverzumba" ágyazódva írja tovább a Hofmannsthal írásában megelevenedő tapasztalatok tragikumát: Elizabeth, Lady Chandos férje említett levelének ismeretében ír Baconnek, beszámolva Philip ragályos betegségének őrá is kiterjedő következményeiről. A szóképekből építkező világlátás ragálya ez: „[…] ám míg *ez* vagyok (utak vándora a malomban), azon közben nem is vagyok *ez*; és nem is ragály az, ami folytonosan rám támad, s nem is patkányok okozta csapás vagy lángoló kard, hanem valami más. *Soha nem az, amit mondok, hanem mindig valami más.* […]"[30] Ugyanakkor, ez a betegségként értelmezett, Másik jelenlétére való érzékenység egyben a korábban tárgyalt *beágyazódás* megvalósulása is: „Minden csak allegória, mondja az én Philipem. Minden egyes lény kulcs az összes többi lényhez. […] úgy kavargunk, mint a malomkereket hajtó örvény, más lények ezreibe hatolunk bele, s más lények ezrei hatolnak belénk."[31]

A strukturális ellentmondás tehát önmagában – mint ahogy azt a metafikciós stratégiákról gyakran megjegyzik – önfelszámoló tendenciát mutat, csakhogy, mint ahogyan azt Leonardo F. Lisi Hofmannsthal *Level*éről szóló tanulmányában kifejti, egy olyan stratégiáról beszélhetünk, amely a műalkotás egységét nem a szöveg immanens szerkezetéből meríti, hanem extra-textuális, non-diszkurzív, kvázi-transzcendentális referenseket képez;[32] vagyis egy harmadik, meghatározatlan „üres teret", amely felől nézve maga a műalkotás struktúrája is transzcendentális érvényt nyer.

V. Összefoglalás

Visszatérve Coetzee vallomásról szóló esszéjéhez, fontos még megjegyeznünk, Coetzee arra jut, hogy a vallomás önreflexív és önfelszámoló stratégiája mellett létezik egy olyan vallomásosság, melyben nem az igazság analitikus és maradéktalan feltárása a tét, hanem egyfajta megváltás, vagy üdvözülés felől értelmezhető megbocsájtás lehetősége.

Az *Elizabeth Costello* korábbi fejezetének ismeretében kijelenthetjük, hogy a főhősnő is ezt a fajta konfessziót választja, ehhez pedig a kafkai bírák metadiszkurzusának, kiüresítő nyelvi autoritásának elutasítására van szükség: vagyis egy allegorikus történet szubverzív beiktatására.

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[29] Coetzee (2005) p. 360.
[30] Uo. p. 363.
[31] Uo. p. 364.
[32] „The negative critique of modernity that Hofmannsthal's text encompasses is in this way supplemented by a positive alternative that, although transcendent, provides a guiding principle with respect to which its liberated structures can be reorganized." Lisi, L.F.: *Hugo von Hofmannsthal and the Language of the Future* In: Lisi, L.F. (eds.): Marginal Modernity: The Aesthetics of Dependency from Kierkegaard to Joyce. Fordham University Press. New York, 2013. p. 219.

A beágyazott történet mint hazugság ugyan értelmezhető a megbízhatatlan elbeszélés felől, ugyanakkor magát egy fikciót is takar, ami Kafka parabolája felől olvasva épphogy az irodalom etikai jelentőségét domborítja ki.

Hogy mi az etikai az elhalasztás mozzanatában? Az, hogy miként Elizabeth Costello az állatot is a korporealitása felől közelíti meg (a korábbi fejezetekben), s nem az emberi értelem *antropológiai gépezete* felől, úgy a műalkotás Mássága és a benne rejlő *différance* (avagy *iterabilitás*) tudatosítása is ontológiai másságok tudatosítására kötelez.[33]

Ilyen értelemben pedig a regény csakis egy értelem-leépítő struktúrában képes artikulálni gondolatiságát. Azáltal, hogy a szerzői autoritások visszavonulnak, illetve azáltal, hogy a jelentés és értelem, allegorikusan és parabolikusan áthelyeződik; ez pedig elsősorban a regény variatív, epizodikus és metaleptikus működése és prózapoétikai stratégiái által valósul meg.

A vizsgálódásunk arra mutat rá, hogy ahhoz, hogy az etika és a hit (ahogyan azt a Másik testi létezése tételezi) működhessen, a maga olvashatatlanságában kell megvalósulnia. Coetzee regényét egy paradox kétirányú mozgás jellemzi, amely a kitárulkozó-visszahúzódás fogalmával írható le. Az Elizabeth Costello által kínált megértési mód etikai következménye, hogy a regény egyszerre szervezi át a jelentés és a narratológia kereteit. Ami a Costello által beágyazott történet szintjén a békák testi létéről való tanúságtétel („[…] maga a béka nem allegória, a béka maga a dolog, az egyetlen dolog"),[34] az a vallomás intézményes, rációt totalizáló diszkurzusában puszta ferdítés, a korábbi vallomások felülírása.

A metadiszkurzus szintje tehát ellehetetlenül, de ez a transzgresszió révén koherenciáját vesztett struktúra azáltal nyeri el létjogosultságát, hogy csak a közvetítésével teremthető meg az a *liminális tér*, amelyből – ha csupán allegória szintjén is – de hír adható a nem-emberi alteritásáról, egy diszkurzív téren kívüli ontológiai tér létezéséről.

Mindezt úgy foglalhatjuk össze, hogy Coetzee *Elizabeth Costello*-jának sikeressége az interpretáció következetességének sikertelenségében és az „értelem" bukásában érhető tetten. Az olvashatatlanná válás és a nagybetűs Másik megpillantása noha összefügg, csakis a metadiszkurzus és az azt aláásó metalepszis által létrehozott *közöttes*, *liminális térben* történhet meg.

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[33] Hasonló álláspontot képvisel Derek Attridge a *The Singularity of Literature* (2004) című munkájában, illetve J. Hillis Miller a *The Ethics of Reading* (1987) című írásában. Derrida szintén fontos kapcsolódási pont a két mű érvelésében.

[34] Coetzee (2005) p. 347.

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Ottoman Tobacco Pipes in al-Marqab Castle

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This presents a study of a typology of an unpublished collection of clay tobacco pipes that were discovered in al-Marqab Castle during systematic archaeological excavations performed in 2011, dating from the 17th until the 19th century, based on their comparison with related pipes found at other sites as in northern Palestine, Greece, and Turkey, this enabled us to demonstrate that the site was continuously populated during the 17th–19th centuries. This study also provides a historical overview of al-Marqab Castle in the Ottoman period as well as a brief of the history of Ottoman pipes, their development, and characteristics in different eras.
The Syro-Hungarian Archaeological Mission (SHAM) carried out excavations in the northern part of the inner suburbia of Qal'at al-Marqab. Where it found an Ottoman complex of buildings, built in medieval origins, and a Late Ottoman house with a garden and several rooms. The systematic archaeological researches at the al-Marqab castle have also led to the discovery of a large collection of ottoman pottery, glass fragments, iron fragments, coins, and animal bones. Among these archaeological materials discovered were complete or fragmentarily preserved smoking pipes.

I. Introduction

al-Marqab Castle (Qalʿat al-Marqab, Syria) is located on a hill formed by an extinct volcano high about 360 meters (1,180 ft) above sea level on the road between Tarabulus and al-Ladziqia, overlooking the Mediterranean Sea, it is one of the most significant fortifications on the Syrian coast. For nearly a millennium, the site was continuously inhabited from its foundation at the end of the eleventh century until 1958.

In 2007 the Syro-Hungarian Archaeological Mission (SHAM), began its work in the castle and one of the main aims of its work was to clarify the construction history of the site. In 2011 summer, excavation were carried out in the northern part of the inner suburbia of Qal'at al-Marqab. Where it found an Ottoman complex of buildings, built in medieval origins, and a Late Ottoman house with garden and several rooms. The systematic archaeological researches at the al-Marqab castle have also led to the discovery of a large collection of ottoman pottery, glass fragments, iron fragments, coins, and animal bones. Among these archaeological materials discovered were complete or fragmentarily preserved smoking pipes. These clay pipes constitute an important corpus of evidence for popular and material culture and daily life in the castle during the ottoman period.

II. Brief historical background

In 922 AH/1516 AD, the Battle of Marj Dabiq put an end to the Mamluk rule in the Levant and became part of the Ottoman Empire.[1] During the reign of Sultan Sulayman al-Qanuni (927-974 AH / 1520-1566 AD), the Levant was divided into three administrative districts known as Vilayet (states): Damascus Vilayet (states): included ten brigades (sanjak). Aleppo Vilayet (states): included nine brigades. Tarabulus Vilayet (states): included five brigades. al-Marqab district was followed by the Tarabulus al-Sham Brigade.[2] In 929 H/1523 the Turkmen Prince Mansur Ibn Hasan Asaf, undertake wide authority in the Tarabulus area, In 979 AH / 1572 AD, where his province extended from the al-Kalb River north of Bayrut to Hama (It was within his province al-Marqab area).[3] According to the table excerpt from Daftar al-Tabu (Ottoman archives) No. 998 (Istanbul), the area was divided in 954 AH / 1547AD two provinces, each headed by an independent prince, the northern province was Jabla and the southern was Tarabulus, and there were 30 districts belonging to the province of Tarabulus at that time, including al-Marqab, according to the table, the area of al-Marqab was included: 39 villages, 112 farms, and 346 families.[4] During the reign of Sultan Murad III (986 AH / 1579 AD), he issued an order to take Tarabulus from the rule of Asaf family, and delegated instead of them Sifa family under the rule of Yusuf Sifa..[5] According to the Ottoman census of the year 1003 AH / 1594-1595 AD, the population of province Tarabulus were 14,728 people, included the al-Marqab area which was containing: 35 villages, 148 farms, 853 Muslims, and 49 Christians.[6] During Yusuf Sifa rule, conflicts began between the Sifa family and al-Maeni family led by Emir Fakhar al-Din al-Maeni II. After the death of Yusuf Sifa in 1033 AH / 1624 AD, Fakhar al-Din endeavored to take control of the Sifa family areas, which forced the Sifa family to give up the fortresses of al-Husn and al-Marqab.[7] After a while, Emir Fakhar al-Din dominated all

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[1] Meier 2004: 420.
[2] Bayat 2007: 166.
[3] Salim 1966: 361.
[4] Ughli 1959: 74-77.
[5] Druza 1959: 286.
[6] Ughli 1959: 74-77.
[7] Maeluf 1934: 237.

the Eyalet of Tarabulus.[8] By 1042 AH / 1633 AD, Fakhar al-Din had extended his territory. Wherefore, the Ottoman grew increasingly uncomfortable with the Emir's increasing powers, the Ottomans determination to remove him from power, wherefore the Ottoman Empire was dispatched an army to capture Fakhar al-Din, then the army seized al-Marqab Castle. Thus, al-Ladziqia and Tarabulus returned under the government of one Wali, as it was before the rule of Fakhar al-Din.[9]

al-Marqab Castle was visited in 1104 AH / 1693 A.D by the Damascene traveller al-Shaykh Abd al-Ghani al-Nabilsi (1050-1143 AH / 1640-1731 A.D), where he said: "al-Marqab Castle, it is one of the greatest castles, high in the air, and it has a major mosque, and the castle has five layers".[10] In 1210 AH / 1796 A.D, a huge earthquake occurred in al-Ladziqia, most of the houses were destroyed, and the castles of al-Marqab and Qadmus were massive damage.[11]

The Ottoman ruler of Egypt, Ibrahim Pasha ibn Muhammad Ali, launched a campaign to Syria in 1247AH/ 1832 AD and extends his power over the Levant. At that time, there was an important incident the ruler of al-Marqab Abdallah Agha Adra, was killed because he insulted an Egyptian officer while he was passing in the area of al-Marqab.[12] After the Ottomans regained the Levant from Egyptian rule in 1255 AH / 1840 AD, they achieved administrative changes in the al-LadziqÐa brigade where it was divided into fifteen provinces. The province of al-Marqab had 78 villages, divided into two districts: the Zamrin area with 35 villages, and the area of al-Marqab with 43 villages, it was ruled by Sunni Muslims.[13] In the year 1279 AH / 1863 AD, a split occurred in al-Marqab between the Bani Adzra of the Muslims and the Bani Arnuq of the Christians, this dispute ended with arrested 17 of the Muslim movement's leaders from Bani Arnuq, some of them were temporarily banished it to beyond the Asitana, and most of them died in exile, and some of them returned after serving their sentences to al-Marqab. During the reign of Midhat Pasha in 1296-1298 AH / 1879-1881 A.D. Lutfallah Afandi Nufal al-Tarabulsi from the Greek Orthodox was appointed as a surrogate (Qaim Maqam) of the district (Kaza) al-Marqab, he was the first Christian selected to be surrogate in the Syria Vilayet.[14]

According to the Salnamah, (official ottoman annual books): "al-Marqab castle described as one of the most important castles, and was inhabited by Bani Adra. the fortified castle located on a towering mountain rising about 1,000 feet above the equality of the sea, the Salnamah mentioned that the citadel was a center of the government as well as a residential residence for the people and Bani Adra, there were 78 houses inhabited by Muslims, including one Christian family, and there was a mosque (which was a church), 10 shops and one oven".

At the end of the 19th century, the coastal area was followed to Bayrut Vilayet, which included five Sanjaks: Bayrut, Aka, Tarabulus, al-Ladziqia, and Nablis, Sanjak al-Ladziqia included the districts (Kaza) of al-Ladziqia, Sahiwn, Jabla, and al-Marqab. In 1338 AH / 1918 AD, the French navy fleet occupied the Syrian coast and that year was the end of the Ottoman era in the Levant and the beginning of a new period in the history of the region.[15]

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[8] Yani 1881: 406.

[9] al-Ladziqi 2013: 209.

[10] al-NÁblsÐ 1986: 55-56.

[11] Sbeinati 2005: 398.

[12] al-Ladziqi 2013: 231-235.

[13] Iwad 1969: 64.

[14] al-Ladziqi 2013: 88-89, 256.

[15] Umairi 1995: 321-322.

III. Brief history of tobacco

At the end of the sixteenth century, about a hundred years after its arrival into Europe from America, tobacco first arrived to the Ottoman Middle East.[16] As early as 1599 AD, tobacco smoking was practiced in the Levant. Between 1601 and 1603 AD, it was introduced into Egypt, and from there it became popular in Turkey by 1605 AD. Then the custom of smoking quickly spread across the Ottoman Empire[17] and people very soon became addicted to smoking. The pipe-makers guild was established in Sofia, in 1604 and soon afterward, pipe-making shops appeared in all the major cities of the empire.[18] Although tobacco was primarily the concern of physicians in the beginning, as noted by Ottoman historian Ibrahim Peçevi, and appeared in medical manuals by the end of the sixteenth century, as its leaves were prescribed as a cure for bites and burns,[19] tobacco relieves headaches, coughs, stomach diseases.[20]

Before the seventeenth century, Middle Easterners did not smoke cigarettes, as demonstrated by the number of Islamic fatwas expressed at this period by the Ottoman administration regarding the legality of smoking.[21] During the time of the Prophet, tobacco was not known and was therefore not mentioned in the Koran or the Sunnah.[22] Shortly after tobacco's rise in popularity, issued a fatwa banning it as an intoxicants, as religious authorities in Mecca combined it with alcohol, opium and coffee.[23] The discussion about the use of tobacco was not only religious but also political. In Istanbul in 1610 AD, physical penalties for smokers were already published. A temporary ban was issued in 1612 AD by Sultan Ahmed I (r. 1603-1617 AD). After that, Murad IV (r. 1623-1640 AD) imposed a strict ban on smoking. He began a campaign against tobacco cultivation and consumption in 1631 AD, but the sultan chose to punish smokers by death after the great fire of 1633 AD in Istanbul.[24] Despite the smoke ban, many districts of Istanbul were completely burned down in 1637 due to a burning pipe; it must be borne in mind catch fire.[25] During the reign of Sultan Ibrahim (r. 1640-1648 AD), the severest anti-smoking laws were rescinded, followed by a decree in 1646 AD permitting the consumption of tobacco and coffee because they were bringing a large profit to the treasury of the country.[26] By 1700 AD, most of the tobacco produced by the Ottoman market was grown in Macedonia, Anatolia, and northern Syria, particularly in the hills around the port of Latakia, al-Marqab used to produce the finest tobacco,[27] and after some time in Lebanon, and Palestine,[28] these cities were already supplying most of the needs on the internal market. In this way, tobacco became cheaper compared to Western European areas, which still imported from America.[29] In the early 1720s, smoking was finally legalised under a fatwa entitled al-Slh bayn al-Ikhuan Fi Hukm Ibahit al-Dukhkhan ["Peace Among Brothers Concerning the Legalisation of Smoking"] and issued by the Damascene mufti al-Shaikh 'Abd al-Ghani al-Nabulsi (1641-1731 AD). Justification was provided on the grounds that "smoking is like food: if it hurts, stop

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[16] Grehan 2006: 1352.

[17] Robinson 1985: 151.

[18] Craiovan 2017: 156.

[19] Grehan 2006: 1354.

[20] Gaşpar 2016: 260.

[21] Keall 1993: 279.

[22] Gruia 2013: 23.

[23] Simpson 2000 a: 14.

[24] Gruia 2013: 24.

[25] de Vincenz 2020: 101.

[26] Simpson 2013: 251-277, at 254-255.

[27] al-Ladziqi 2013: 178.

[28] Simpson 2000 b: 147-171, at 171.

[29] Gaşpar 2016: 260.

it; if it does not, why not smoke?"[30] By the middle of the eighteenth century, regardless of age or social position, pipe-smoking was fashionable for men and women.

Clay pipes characteristics, aspects relevant to typology for pipe and dating:

The smoking pipes used in Africa and the Eastern Mediterranean, the so-called in Turkish as the chibouks,(Arabic: shibuk).[31] While north-western Europeans used kaolin pipes primarily, the English-style kaolin pipes were likely to be more influential to styles in Istanbul, the imperial center of the Ottoman empire, where tobacco and the English pipes reached Turkey by the agency of Thomas Dallam's shipmaster,[32] and arrived the chibouk consisting of three parts to the Middle East from North Africa and was readily adopted as the main means of smoking tobacco early in the seventeenth century.[33]

The chibouk consists of several elements: the head or bowl: the main part of a pipe, containing the tobacco. Differed in shape: cylindrical, figurative, and polygonal. Could be open or closed with a metal lid, it was made of a variety of materials including stone, metal,[34] or wood, jasmine was the favoured wood since it is said to absorb nicotine, but clay is the preferred material.[35] the keel: the lower part of the bowl, the chamber where tobacco actually burned. The Shank: connected the keel and the ring, channelling the smoke. The ring: the prominent end of the shank, where the stem was inserted to channel the smoke. Two other important parts of the pipe should also be mentioned: the stem and the mouthpiece that archaeological excavations typically do not discover, stem: a bone, wood, or metal tube inserted into the ring. The stem length could range from one meter to four meters.[36] Mouthpiece: the part of the pipe connected to the stem and placed between the lips. These mouthpieces were made of bone, reed, wood, or more rarely of coral or ivory, and it was possible to add gold, enamel, and precious stones: "according to the buyer's taste and purse".[37]

Archaeologically, the bowls are the most recovered objects exhibiting tobacco use, the other parts are seldom uncovered because the organic stems do not preserve, and mouthpieces tended to be reused.[38]

In Europe and the Ottoman Middle East, climate and cultural differences contributed to the production of two different styles of pipes. There is an opinion that the hot weather generated a preference for the inhalation of 'cold smoke' in most of the Middle East, whereas smokers favoured 'hot smoke' in the cooler weather of Europe,[39] the technological solution to this problem of smoke cooling in a three-part style inside a dry pipe compensation. The longer stem length, for example, helps the smoke to cool until it reaches the smoker, and wet silk has also been used to cover the stem to improve its cooling capabilities. In the hotter climates of the southern portions of the empire, the longer stems, up to four meters, were favoured, while shorter stems, twenty centimetres to one meter, were used in the more northern, cooler climates.[40]

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[30] Simpson 2013:255.
[31] de Vincenz 2020: 101-102.
[32] Baram 2002: 137-159 , at 149.
[33] Bouzigard 2010: 18.
[34] Robinson 1985: 265.
[35] Bakla 2007: 367.
[36] Demjén 2018: 222.
[37] de Vincenz 2020: 103.
[38] Baram 1999: 142.
[39] Fairholt 1876: 208.
[40] Dekkel 2008: 114.

Pipes gradually changed with the availability of tobacco. Changes in the shapes and styles of tobacco pipe - bowls from the seventeenth to the twentieth centuries used in the empire provide a way of dating Ottoman sites accurately.[41] Hayes is responsible for one of the first typologies of clay-pipes, which for researchers dealing with Ottoman material culture is still a valuable reference. Where it enables archaeologists working in different regions that were once part of the Ottoman Empire have been able to use these typologies to describe their findings based on studies undertaken by Hayes and also other works for others, such as Robinson, and thus date clay pipe - bowls with centurial precision.[42]

III.1. Early styles of clay tobacco in the seventeenth century

Typically, the earliest forms of pipe-bowls are fashioned from light, fine grey clays, resulting in an off-white, grey, yellow, light brown, or tan-colored fabric. The use of white or pale grey clay probably echoes an English or Dutch prototype, it was an imitation of European style but was replaced by red or buff clay by the end of the seventeenth century.[43] These pipes were very small in dimension, in comparison to later versions, as tobacco was still costly at the beginning of the seventeenth century because it was an imported commodity, and have a small rounded bowl and a short shank with a stepped ring.[44] Other characteristics present on early forms recovered at Suba in Palestine were narrow bore diameters stepped-ring terminations, and restrained pattern-wheel rouletted decoration on the shank-end, or an absence of decoration. [45]

III.2. The eighteenth century

The eighteenth-century types demonstrated a great diversity of shapes and colors. The fabrics tended to be earthen shades of red or reddish-brown to light brown, occasionally with a coarser material and often lightly polished.[46]There were also heavily decorated grey pipes. Bowl shapes included rounded, sack-like, cylinder-shaped, or disc-shaped. The pipe-bowls also increased in size as tobacco became more easily available and less costly. The shanks were shorter with a stepped ring, and rounded bowls with a cylindrical upper portion and the bowls tended to break along this junction.[47] The keel is not formed yet but usually outlined either by incised lines or rouletted bands. The pipes from this time are characteristically heavily decorated with a variety of motifs and designs, rouletted and moulded decoration were characteristic of the eighteenth century.[48] The body was decorated at the end of the eighteenth century with carved floral and arabesque decorations and rouletting. The shank is also decorated with a rouletted band and the ring is carved to form petals.[49]

III.3. The nineteenth century

Pipes started to be standardized in the early and mid-nineteenth century, as an expansion of mass manufacturing also restricted the variation of the pipe-bowl to just a handful of types. The dominant colors were reddish browns, and the typical shapes were rounded or disc-shaped bowls. Pipes were spread of red-slipped burnished, with larger bowl capacity, and thickening of the ends of the shank, as well as the appearance of simple, or painted bowls and stamps that may or, may not be markings of the manufacturers. There were usually several rows of notch-

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[41] Bouzigard 2010: 22.
[42] Baram 1995: 301.
[43] Robinson 1983: 266.
[44] de Vincenz 2020:114-115.
[45] Simpson 2000a: 147.
[46] Hayes 1980: 5.
[47] Baram 2002: 153.
[48] Simpson 2008: 438.
[49] de Vincenz 2020: 137.

rouletting on the swollen shanks.[50] Pipe-makers started to use fewer motifs or designs by the mid-to-late nineteenth century. Large lily-shaped bowls were predominant, often decorated, and exhibited maker's marks.[51] The lily shape of the pipe was dated in Istanbul from the mid to the late nineteenth century, although this form was present in Rosetta, Egypt, in the late eighteenth or the early nineteenth century.[52]

III.4. The end of clay tobacco in the twentieth century

The pipes were mainly brownish red lily-shaped bowls that were plain and rather large from the late nineteenth to the early twentieth century.[53] In the 1920s, the last manufacturer of clay tobacco pipes closed down in Istanbul, phasing out the common use of these items in the area. The prevalence of the current smoking cigarette fashion has also been attributed to the abrupt end of the tobacco consumption system of the clay pipe-bowl.[54]

IV. Catalogue

This study is based on 29 pipes are previously unpublished fragments recovered from excavations conducted by the Syro-Hungarian Archaeological Mission (SHAM).

In this catalog, the pipes are arranged chronologically, by comparing them with similar pipes in other regions.

Table 1. Ottoman pipes in al-Marqab Castle from the seventeenth and the early of eighteenth centuries

No.	Description, Dating, Comparison	Illustration
1	Pipe; grey, pale; the base of the bowl, that has no keel, is spherical and decorated with scarifications and two lines of rouletted at the end of scarifications. The straight and short shank, the shank ends in a stepped-ring termination, framed by a notch-rouletted line above and below. Dating the seventeenth. Comparison: Beltrán de Heredia 2012: fig.10.1: 123.[55]	
2	Bowl; fine clay with small white and micaceous inclusions; grey ware, central part decorated with two registers of impressed pointed leaves stamp impressions, framed by incised and notch-rouletted lines above, bowl slightly broken. The Shank is broken. (Syrian style). Dating the seventeenth–eighteenth centuries. Comparison: de Vincenz 2011: fig.1.13: 47.[56]	

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[50] Bouzigard 2010: 26.
[51] Baram 2002: 153.
[52] Bouzigard 2010: 26.
[53] Baram 2002: 153.
[54] Robinson 1985: 152.
[55] Beltrán de Heredia 2012: 123.
[56] de Vincenz 2011: 47.

3	Semi-complete pipe; with part of the rim missing; light grey fabric and surface; the shank end is decorated with vertical grooves, framed by a rouletted line above, the bowl decorated with leaves stamps, rouletted in diagonal lines on the keel, line of larger rouletting along the center of a keel, like (zipper). (Syrian style). Dating late seventeenth to the early eighteenth century. Comparison: Simpson 2000 b: fig.13.1:4; Robinson 1985: C3.Pl 47: 174.	

Source: own photos [2021]

Table 2. Ottoman pipes in al-Marqab Castle from the eighteenth centuries

4	Semi-complete pipe; with part of the end rim missing; made of reddish-grey clay, weak red slip, the bowl has around shape, the bowl underside it is decorated with "V" shape line with the toothed wheel; the shank is undecorated, only the ring of the shank prominent, with an incised line surrounding the diameter of both the ends.(Turkish-Style). Dating the eighteenth century. Comparison: Gaşpar 2019: fig.1.4-10: 147.[57]	
5	Semi-complete pipe; with part of the rim and shank missing; grey fabric and surface; the bowl is round shape and decorated with grooves arranged vertically, the keel resemble the "V", incised motifs can be found also on diameter of shank and in the upper part of the bowl. The shank is short, with very well embossed ring, it is decorated with motifs that are not apparent due to the missing part. Dating the eighteenth century. Comparison: Gaşpar 2016: fig.9.12: 273; Gaşpar 2019: fig.1.1: 147.	
6	Bowl; grey fabric and surface; bowl decorated with three rows of impression belonging to a single clover leaf stamp, framed by double notch-rouletted lines above and below. (Syrian-style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.14: 434.	

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[57] Gaşpar 2019: 147.

7	Bowl; grey fabric and surface; central part decorated with three rows of alternating rayed-dot-and-handle stamp impressions, framed by double-incised and notch-rouletted lines above and double-incised and squiggly lines below, broken at the rim and shank junction. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.17: 434.	
8	Shank and part of bowl; grey fabric and surfaces, lightly swollen shank-socket decorated with two rows of repeated leaf-stamp, framed by double-incised and notch-rouletted lines above and below, the remainder part of the bowl decorated with four rows of leaf-stamp impressions executed with the same tool as on the shank-socket, framed by double incised below. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.14: 434.	
9	Fragment pipe, with part of the rim missing, made of reddish clay, round bowl, vertical rim, the short shank has a swollen end. Dating the eighteenth century. Comparison: Wood 2008: fig.QH029: 37.[58]	
10	Semi-complete pipe; light grey fabric and surfaces, lightly swollen shank-socket decorated with four rows of dotted circle stamp impressions, framed by notch-rouletted line above and incised line below. The bowl decorated with four rows of dotted circle stamp impressions, framed by incised and notch-rouletted lines above and below, the rim is missing. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.24: 434.	

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[58] Wood 2008: 37.

11	Semi-complete pipe; light grey fabric and surfaces; swollen shank-socket decorated with two rows of repeated leaf-stamp impressions, formed by notch-rouletted above and below. The bowl decorated with four rows of rayed-dot-and handle stamp impression; framed by incised and notch-rouletted lines, the rim missing. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.14: 434.66	
12	Semi-complete pipe; reddish-brown clay and slip, burnished; wide bowl, shallow keel; short shank ending is swelling and part of ring missing, a single line of rouletting below the waistband, in the bowl underside it is decorated with "V" shape lines with the toothed wheel. Dating the eighteenth century. Comparison: Robinson 1985: C23.Pl 49: 176.	
13	Semi-complete pipe; light grey fabric and surfaces; partially blackened; lightly swollen shank-socket decorated with impressed pointed leaves, framed by incised and notch-rouletted lines above and below. The lower part of the bowl decorated with impressed pointed leaves, the underside of the bowl decorated with four diamonds with rayed dots impressed in the center keel. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.7-10: 434.	
14	Semi-complete pipe; light grey fabric and surfaces; lightly swollen shank-socket decorated with two rows of alternating cypress-tree stamp impressions, framed by incised and notch-rouletted lines above and below. The lower part of the bowl decorated with two rows of alternating cypress-tree stamp impressed, executed with the same tool as on the shank-socket, notch-rouletted and incised lines above; cypress-tree stamp impressions underside the bowl, the rim missing. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.8: 434.	

15	Part of the bowl; light grey fabric and surfaces; central part decorated with three rows of alternating cypress-tree stamp impressions, framed by notch-rouletted and incised lines above, the upper part of a bowl broken. Shank broken off. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.10-11: 434.	
16	Semi-complete pipe; light grey fabric and surfaces; partially blackened; lightly swollen shank-socket decorated with three rows of a rhomboid impressed, framed by incised and notch-rouletted lines above and below, the lower part of bowl decorated with three rows of circular starburst stamp impressions, framed by incised and notch-rouletted lines above and double squiggly lines below, the upper part of bowl straight, part of a bowl broken. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.13-14: 434.	
17	Semi-complete pipe; light grey fabric and surfaces; lightly swollen shank-socket decorated with two rows of leaf-stamp impressed, framed by incised and notch-rouletted lines above and below, the lower part of bowl decorated with three rows of rayed dot stamp impressions, framed by incised and notch-rouletted lines above and below, the upper part of bowl straight, part of a bowl broken. (Syrian style). Dating the eighteenth century. Comparison: Simpson 2008: fig.268.13-14: 434.	
18	Complete shank and fragmentary bowl. The bowl is round, the shank is short and there is a small hand underside the shank. The ring is thickened, decorated with two incised lines and successions of oblique lines. Pinkish ware, unslipped but yellow glazed. Dating the eighteenth century. Comparison: de Vincenz: fig.8.6: 132.	

Source: own photos [2021]

Table 3. Ottoman pipes in Marqab Castle from the late eighteenth and early nineteenth century.

19	Part of the bowl; made of fine black fabric. The shank is broken, the bowl decorated with transverse lines, framed by double notch-rouletted lines above, the rim is straight and part of rim missing. Dating the second half of the eighteenth century. Comparison: Demjén 2018: fig.101: 244.	

20	Fragmentarily preserved pipe, made of grey clay. Lower part of the bowl is decorated by use of the toothed cogwheel and rosette shaped stamp. Ring is decorated with the toothed cogwheel. Dating late the eighteenth–early the nineteenth centuries. Comparison: Costea 2007: PI.VI.1-5:354.[59]	
21	Only bowl preserved, part of the rim broken; grey clay with dark red burnished. The bowl decorated with floral motifs, framed by a notch-rouletted line below. Dating the eighteenth - nineteenth century. Comparison: Demjén 2018: fig.101: 244; Jašarević 2018: fig.1.10: 225.[60]	
22	Half bowl and slightly chipped shank, the bowl is large and round; decorated with carved flowers in medallions, the straight upper part is set-off by the rouletted band. The shank is very short and upturned decorated with carved crenellation giving the appearance of leaves. Light grey ware with reddish-brown slip and burnishing. Dating the late eighteenth and early nineteenth century. Comparison: de Vincenz: fig.8.41-45: 138-140.	

Source: own photos [2021]

Table 4: Ottoman pipes in al-Marqab Castle from the nineteenth and the middle of the nineteenth century.

23	Only bowl preserved, fine, hard, red clay and slip, burnished. Bowl compressed to a wide disk. The lower part of the disk ends in a rectangular sole, decorated with a wide squiggly line, a group of dots in the spaces in the form of triangles, while the contour of the sole is decorated with the toothed wheel. Dating nineteenth century.	

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[59] Costea 2007: 335-362.
[60] Jašarević 2018: 213-237

	Comparison: Robinson 1985: C101.Pl 57: 188.	
24	Semi-complete pipe; with part of the ring missing; reddish-yellow clay, red slip, burnished; lily-shaped bowl, multi-faceted, in center of each bowl facet there are floral motifs made printing technique on polygonal surfaces on the bowl, the decoration consists of leaves with serrated ends. The ring is broken in the shank, there are two lines around the diameter of the ring, stamp on the left side of the shank. Dating the nineteenth century. Comparison: Costea 2007: PI.VII.5:355.	
25	Semi-complete pipe; shank and lower bowl; fabric varies from reddish-brown to dark grey with dusky red burnished slip. Bowl compressed to wide disk molded-in petal from; and upper part of a bowl is broken, swollen shank-socket decorated with vertical incised lines, below notch-rouletted shank-socket with an additional notch-rouletted band near the bowl/shank junction, there are between vertical incised lines triangles containing small blobs in the low relief. Dating the nineteenth century. Comparison: Robinson 1985: A26.Pl 63: 198.	
26	Fragment pipe with partial shank and upper part of a bowl broken, the bowl was shaped in the form of a flower, and only decorated with rouletted lines that outline the petals. The shank is missing, the keel is decorated with rouletted lines and double lines in the form of "V". Light grey with dark red slip and burnishing. Dating the second half of the nineteenth. Comparison: de Vincenz: fig.8.106: 174; Rauchberger 2017:14.6: 262.[61]	
27	Only bowl preserved, very large tulip-shaped bowl with exaggeratedly flaring rim, the front of bowl decorated only one a diamond in the center bowl, the lower part of the bowl is decorated with leaf-like shapes. Reddish-brown fabric with partial grey core and dusky red burnished slip. Dating second half of the nineteenth century. Comparison: Simpson 2008: fig.269.49: 438; Robinson 1985: A30.Pl 63: 198.	

[61] Rauchberger 2017: 249-269.

28	Semi-complete pipe; only part of shank broken, reddish-brown surface. Lily-shaped bowl decorated with floral motifs; deeply incised petalled swollen shank-ends, the petalled being separated by triangles in the low end, and framed at the lower end by rouletted line, maker's stamp containing a geometer's emblem, impressed on the right side of the shank. Dating the middle of the nineteenth century.	
29	Fragmentary pipe. Part of shank and upper part of bowl is broken. Upper section of the bowl is decorated with stressed grooves, lower section of the bowl is decorated with incised lines forming intersecting V patterns on the bowl underside. The shank is short, swollen and undecorated, light grey ware with dark red brown slip and burnishing. Dating the middle of the nineteenth century. Comparison: Craiovan 2017: fig.37: 168.[62]	

Source: own photos [2021]

V. Conclusions

The Ottoman clay pipes found at al-Marqab Castle pipes can be classified into the type of eastern or Mediterranean pipes dated to the 17th–19th centuries. These pipes are characterized by Fine sifted clay, high-quality development, fine finishing, and the richness of geometric and floral designs. Rouletted stamped and impressed patterns decorate the pipes bowls, their wreaths, and much of their shank, sometimes it was the shape of the pipe itself is a decoration, because they are very often modeled in the shape of a flower, most often tulips. It is possible to consider pipe-making an art rather than a craft. where craftsmen began work on the manufacture of pipes shortly after the introduction of pipe smoking, the workshops of pipe-makers flourished in the Ottoman Empire, varios new designs were produced by pipe-makers.

In terms of quality, one notes two categories of items: modest pipes, probably used by common people and soldiers, and higher quality pipes used by the wealthy. Clay tobacco pipes are the only evidence of human activity, though at times neglected, they can help visualize everyday life within the castle, as well as the cultural and commercial ties that surround this culture of tobacco consumption.

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[62] Craiovan 2017: 155-172.

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MÁSKÉPpMÁS - A numinózus helye az aranyborjú történetében

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Az aranyborjú esemény értelmezésekor jellemzően az ókori Közel-Keleti párhuzamokból, hagyományokból indulnak ki a kommentátorok, illetve magát a szöveget próbálják szóra bírni. Ezek – az amúgy egyáltalán nem haszontalan – vizsgálódások azonban mintha elfeledkeznének arról az alapvető tényről, hogy a Szentírás elsősorban a Szent és a választott nép kapcsolatáról szól.

Célom ennek a különleges kapcsolatnak a feltárása, melyet módszertanilag Rudolf Otto numinózus elméletének az Exodus szövegére alkalmazásával kívánok kivitelezni. Ezen belül az irracionális-racionális dinamika feltárása várhatóan előmozdítja a sínai-hegyi teofániát a narratíva szerint követő meghökkentő emberi reakció jobb megértését.

Eredmények: A szöveg vizsgálata feltárta, hogy az irracionálisként jellemzett numinózusra adott elvárt emberi reakció szintén irracionális, különösen amennyiben figyelembe vesszük Kirkegaard jellemzését is Ábrahámról, a hit hőséről. A hit, az ismeretlenbe vetett bizalom ugyanis irracionális. A „hit valóságaként" azonban a próbatételek Izrael népe racionális reakcióit mutatják be (zúgolódás, aranyborjú), melyek nagyfokú bizalmatlanságot mutatnak. JHWH és népe kapcsolatának dinamikáját Vattamány Gyula a bábel-élmény (Otto kifejezésével: megütközés) - túllétel - illogikus reménység fogalmak segítségével írja le, vagy másképp az akció-reakció-korrekció mintázat segítségével is megragadható.

Következtetés: Otto elmélete, melynek egyik döntő mozzanata a Szent és az általa kiváltott vallási élmény irracionális jellegének „visszaperlése" megnyugtató választ ad az aranyborjúesemény problematikájára, irracionális-racionális megközelítésbe helyezve azt. Otto alapján Vattamány mutat rá a sensus numinis retorikájáról írt tanulmányában: „Az irracionálissal való találkozás feldolgozása során az ember a racionális talaján állva próbálja meg megmagyarázn, megélni, illetve átkonvertálni azt az élményt (és kiváltóját), ami minden, csak nem racionális".

Kulcsszavak: aranyborjú, numinózus, (ir)racionális, Otto, bábel-élmény

I.   Bevezetés

Az aranyborjú narratíva elemzésekor jellemzően az ókori közel-keleti párhuzamokból, hagyományokból indulnak ki a kommentátorok, illetve magát a szöveget próbálják kritikai módszerekkel szóra bírni (Childs, 1974; Propp, 2007; Meyers, 2005; Hundley, 2017). Egy éve magam is így jártam körbe tanulmányomban az aranyborjú elutasítottságának, illetve a másik emberkéz alkotta kultikus tárgy: a frigyláda elfogadottságának kérdését. Megállapítottam, hogy emberi nézőpontból *bizonytalan* a határ szent és profán között, ezért most is fontosnak tartom a továbbiakban áttekinteni, melyek a szöveg szerint elfogadott, *orthodox* megjelenítések. Ugyanakkor további vizsgálódást éreztem szükségesnek, mert az említett korábbi, kritikai megközelítéseket felhasználó exegézisem során nem kaptam kielégítő választ arra a kérdésre, hogy miért is akarhatott a nép aranyba foglalt istenséget imádni az élő Isten helyett. A válaszadásban vélhetően az emberi, azon belül is a vallásos emberi viselkedés megfigyelése vezethet eredményre.

A következőkben tehát röviden felidézem korábbi kutatásom eredményeit, majd az Exodus releváns szövegeit (Ex 19-32) a vallásos tudat és viselkedés fenomenológiájának nagy úttörője: Rudolf Otto numinózus-elmélete segítségével értelmezem. (Otto, 2001) Otto rendszerét Vattamány Gyula (WJLF, irodalomtudományok doktora) megfigyelése jól kiegészíti, és előmozdítja a Szenttel való találkozásra adott emberi reakció jobb megértését. Vattamány ezen találkozás paradigmáját a Bábel-torony elbeszélésében találta meg, amely JHWH-t diabolikus lényként mutatja be, legalábbis emberi *nézőpontból*. (Vattamány, 1999) Mégis látni fogjuk, hogy nem a racionális, emberi nézőpont elfogadott a numinózusra adott reakciók tekintetében.

II.   Témakifejtés: Túllétel a numinózus okozta traumán

II.1. Megjelenítés vagy kiábrázolás?

A bevezetőmben említett bizonytalanság jelen van a Szent *megjelenésében* és *megjelenítésében* egyaránt. Carol Meyers úgy fogalmaz a frigyláda kapcsán: a bibliai adaptációk JHWH egyéb megjelenítésére annyira hasonlóak voltak az ókori Közel-Kelet elgondolásaihoz és gyakorlatához, hogy a Szent kiábrázolásainak szigorú tiltása meglehetősen sajátságos. (Meyers, 2005) A narratívában eddig a pontig Isten *megjelenése* főként természeti jelenségekben (tűz-és felhőoszlopban, mennydörgésben) vált érzékelhetővé. A korabeli közel-keleti párhuzamok azonban rámutattak, hogy más népek ezeket a természeti jelenségeket is élettel, isteni erővel ruházták fel, illetve ezeknek hatását és tevékenységét megtapasztalni vélték mindennapjaikban. A felhő például a kivonulás korabeli istenségek szimbólumaként szolgált úgy mint vihar-istenség Mezopotámiában, Egyiptomban pedig teremtő istenségként. A tűzoszlopról (Ex 13,21. 22; Num 14,14; Neh 9,12. 19) pedig Baukal összefoglalásában tudhatjuk meg, hogy a perzsák és görögök a tüzet és a füstöt seregeik vezetésére használták, ami – Propp kiegészítésével – az isteni gondviselés, (katonai) vezetés és védelem motívuma volt. (Baukal 2018; Propp, 2007)

Ami pedig a *megjelenítést* illeti, aligha lepődünk meg, ha azt találjuk, hogy még a Héber Biblia szerinti legszentebb kultikus tárgy is szinte minden részletében azonosságokat mutat az ókori Közel-Kelet, azon belül is Egyiptom szakrális ládáival (Eichler, 2016).

Ezen hasonlóságok mellett, a korabeli párhuzamok alapján meg lehetett állapítani különbségeket is. JHWH immanenciáját, jelenvalóságát a fizikai síkon orthodox módon érzékelhetővé tevő megformálások csak „*megjelenítik*" (re-present) az isteni világot, de nem kapcsolnak konkrét formát vagy funkciót hozzá. Az aranyborjú viszont a kivonulás korának szokásai szerint feltehetőleg azzal a szándékkal készült, hogy kiábrázolja az istenséget magát vagy annak valamely attribútumát, illetve a szöveg szerint is Izrael népe „istenek" készítését

követeli Árontól. Ezekre a helytelenített törekvésekre a „*kiábrázolás*", „*ábrázolás*" szavakat használtam. Ezen megkülönböztetés azonban nem árul el semmit arról, hogy valaki miért akar egyáltalán istenszobrot faragni azért, hogy imádhassa.

II.2. Vallásfenomenológiai megközelítések

Úgy vélem, mindaddig érthetetlen marad ez a kérdés, amíg az aranyborjú történetének elemzéséből kimarad a *vallásos ember tudatának* megismerése. Kálvin jegyzi meg fő műve, az Institutio első fejezete első mondatában: „*Egész bölcseségünk, már t. i. amelyet igaz, valóságos bölcseségnek kell tartanunk, kétrészből áll: Isten s önmagunk ismeretéből.*" (Kálvin, 1986) Luther pedig az észről – Orosz Gábor Viktor interpretációjában – úgy beszél, mint aminek „természetes világossága képessé teszi az embert Isten létéről, részben lényegéről is, helyes kijelentések megfogalmazására, azonban a Szentlélek nélkül valódi bizodalmon alapuló kapcsolat mégsem lehetséges Istennel." (Orosz, 2017)

Istent azért tudjuk megismerni, azért tudunk a numinózusról egyáltalán beszélni, mert meg akar mutatkozni, és belép a mi világunkba. A vallásos ember legelőször is megkülönbözteti a szent és a profán világát. Mircea Eliade nyomán egyetlen mondatba sűrítve úgy fogalmazhatunk: a vallásos ember számára Szent az, ami ekképpen megnyilvánul, amit szentként ismer fel a vallásos tudat. A gyakorlatban viszont ez nem ennyire egyszerű. A már említett bizonytalansági tényező abból ered, „*hogy minden hierophánia – még a legelemibb is – paradoxon. A tárgya* [ti. az a tárgy, amiben a Szent megmutatkozik], *amennyiben a szent nyilatkozik meg benne, valami „egészen mássá" lesz, mindazonáltal továbbra is megmarad annak, ami, hiszen továbbra is része kozmikus környezetének*". (Eliade, 2019) Ha viszont ez mégsem ilyen spontán módon történik, az adott istenség aprólékos utasításokat ad a kultikus tárgy elkészítésének legapróbb részletei tekintetében is. Ezeket az utasításokat a szentíró az Ex 25,10-22 verseiben részletezi, Eliade pedig tovább is megy: „*Izrael népe számára Jahve az* idők kezdetén *teremtette meg a tabernákulum, a szent tárgyak és a templom mintáit; a mintákat elárulta kiválasztottjainak, hogy azok a földön utánozzák őket.*" (Eliade, 2019) Az aranyborjú története viszont jelenlegi formájában azt mutatja, hogy a nép olyan istenséget akart magának, ami nem felelt fenti kritériumoknak. Azaz, sem Isten nem választotta megnyilvánulásának formájául, sem pedig nem adott készítéséhez leírást.

Továbbmenve Otto elmélete tár fel mélyebb összefüggéseket: az orthodox megjelenítésekben (így a frigyládában is) nemcsak az a közös, hogy elrejtik az istenséget, hanem az is, hogy a priori is *rejtélyesek*. Egyúttal félelmetesek és egyszerre mégis vonzóak. Otto volt az, aki ezeket a paradox tulajdonságokat a mysterium tremendum et fascinans kifejezésben összesűrítve az általa alkotott névvel *numinózusnak* nevezte. Ez a fogalom a szent, azaz JHWH *irracionális* oldalát jelöli, hogy elkülönítse *racionális* vonásaitól. A szóalkotást az tette és teszi szükségessé, hogy a szent fogalma túlságosan is egyoldalúan racionális, morális kategóriává vált. Szentnek ugyanis rendszerint az abszolút erkölcsös, tökéletes jót kifejező predikátumot tekintjük, ami nem mellesleg fogalmi rendszereinkbe tökéletesen beilleszkedik. (Otto, 2001)

A racionális, azaz ember- és észközpontú fogalmakkal operáló kritikai megközelítések pedig mintha elfeledkeznének arról, hogy a Szentírás elsősorban a Szent és a választott nép *kapcsolatáról* szól. Ezt korrigálandó Otto rendszerében a racionális-irracionális területe nem pusztán a tudatos, tudott, vagy ésszerű, hanem az *otthonosság* kérdése mentén válik szét, ahol a racionális „*a megszokott, a megértett és a meghitt*" területe (Otto, 2001) az irracionális pedig az „*egészen más*". Vagyis Otto számára a racionális-irracionális fogalompár elsősorban nem mentális, filozófiai vagy tudományos, hanem érzelmi, empirikus és szociológiai kategória. Horváth Orsolya megfogalmazásában: „*az ember tapasztalati mezeje az otthonos és az idegen kettőse által meghatározott, és a racionalitás-irracionalitás kettőse nem az intellektusban,*

hanem az ember világhoz – és benne önmagához – való eredeti viszonyulásában alapozódik meg." (Horváth, 2017) Most, hogy megértettük a racionális-irracionális fogalompár fontosságát, a továbbiakban az aranyborjú eseményére alkalmazzuk azt.

II.3. Az aranyborjú-esemény mint racionális reakció az irracionális, azaz a numinózus megjelenésére

Ebben az alfejezetben a numinózus okozta „trauma" feldolgozását fogjuk vizsgálni, hogy megértsük a nép „megromlását" (Ex 32,7), mely ebben a konkrét helyzetben a borjú készítésében manifesztálódott. Először is az a legfontosabb kérdés, hogy miért számít „megromlásnak" a borjú készítése. A rövid válasz erre: mert az nem viseli magán a numinózus jegyeit.

Egyrészt azért nem, mert nem felel meg az „egészen más" kritériumának, mivel formája a kor szokásának megfelelően szolgált az isteni világgal való kapcsolódási pontként. A borjú feltételezett funkciói ugyanis az ókori Közel-Kelet gyakorlatához kapcsolhatóak, melyet többek között Propp (2007), Houtman (2000) és Childs (2004) is alaposan feltárt: az isteni erő, hatalom, fertilitás és vezetés szimbolóma lehetett. De akármi is volt a nép konkrét terve a borjúval, az Exodus papi írójának perspektívájából ebben a jelenetben nyilvánvalóvá válik a nép hajlandósága, sőt akár kifejezett szándéka is, a bálványimádásra.

Másrészt azért nem lehet numinózus tárgy, mert a narratíva ezen pontján (vagyis amikor a frigyláda készítésének elrendelése még csak Mózes számára ismert) az aranyborjú a megszokott, a megértett és a meghitt, vagyis a *racionális* területéhez tartozik.

Ezzel szemben a numinózus tárgy külső jegyei a numen irracionalitását, másságát jelenítik meg. Ezek a külső jegyek a mysterium, a tremendum és a fascinans elemei, melyek egyaránt jellemzik a természeti jelenségeket, és a frigyládát is. A teofánia még akkor is megőrzi mysteriumát, amikor úgy tűnik, hogy a beszámoló közvetlen személyes találkozásról beszél (Gen 18, 32; Ex 24,9-10). A szöveg ezeket a helyzeteket is valamilyen közvetett formában éri, mutat rá Walsh Brueggemann alapján. (Walsh, 2013) Azaz Izrael vénei is csak JHWH „lábát", illetve az alatta található köveket látják csak (Ex 24,9-10). Tremendum elemét tükrözi mikor több igehely is figyelmeztet a Szent közelségének veszélyességére (19,22; 33,3. 20) és tárja elénk mégis vonzó, fascinosum voltát (15,1-20; 24,9-11; 33,8. 15-16)

Mi a gond azzal, ha az ember az irracionális megjelenésére racionálisan reagál? Otto megfigyelése szerint nemcsak a numinózus elemei irracionálisak, hanem az erre adott vallásos reakció is az. Ezen irracionalitás lényege legjobban Kierkegaard jellemzésében tárul elénk amikor Ábrahámot úgy jellemzi mint a hit hősét, aki a hit ugrását az abszurd erejénél fogva viszi végbe. A hit, az ismeretlenbe vetett bizalom ugyanis irracionális, egy hajszál választja el a hívőt az őrülttől. „*Hit által ment ki Ábrahám atyáinak földjéről, és lett idegen az ígéret földjén. Egyvalamit maga mögött hagyott, és egyvalamit magával vitt; földi gondolkodását hátrahagyta, és hitét magával vitte: különben nem ment volna ki, hanem azt gondolta volna, hogy az mégiscsak* értelmetlen.*"*[1] (Kierkegaard, 1986)

Ekképpen az Írás szerint „elvárt" vallásos viszonyulás is irracionális. Ezzel szemben a próbatételek Izrael népe hitetlenségét domborítják ki a numinózus megjelenésére válaszul. Otto „megütközésnek" nevezi a teofániára adott első emberi reakciót, a nép hitetlensége pedig lehet az a „megütközés", amely „*időnként olyan szellemi produktumok megalkotását is előidézheti, amelyek a racionalitás keretein belül próbálják meg magyarázni azt a Bábel élményt* [megütközést]*, amelynek természetéből fakadóan ehhez a racionalitáshoz az égvilágon semmi köze*". (Vattamány, é.n.)

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[1] Kiemelés tőlem.

JHWH és népe kapcsolatának dinamikáját Vattamány a bábel-élmény – túllétel – illogikus reménység fogalmak segítségével írja le. A bábel-élmény lényegét tekintve Istent egy fennálló, rend(nek tűnő valami) szétzúzójaként, a logosz felforgatójaként, azaz diabolikus lényként mutatja be. E felforgatást itt az egyiptomiak által meghatározott kultuszból kivezetéssel viszi véghez. Ennek során a csodák megrengetik az ismert világ működésébe vetett hitet, emberi értelem útján érthetetlen módon egyszer csak bekövetkezik a botlás. A nép valahol beleütközik a vonatkoztatási rendszer valóságából „kilógó" döbbenetbe, és visszaesik korábbi állapotába és valamivel később aranyból öntött ismerős istenformát készíttet. Ezt a numinózusban való megbotránkozást a túllétel teszi egyáltalán elbeszélhetővé az adott viszonyítási rendszer szerves részeként – azaz mintha megértett vagy érthető eseményről lenne szó. (Vattamány, 1999)

A túllételben először valami érthetetlenről, zavarba ejtőről, titokzatosról van szó, amelyet pl. a frigyládában, a szent sátorban érzékelhető Isten-jelenlét racionális fogalmakkal már bensőségessé tett. „Isten haragja" (Otto szóhasználatában gyakran *orgé* vagy *ira*) ugyanis zavarba hozza azokat, akik az isteniben csak a jóságot, a gyöngédséget, a szeretetet, a megbízhatóságot és általában csak a világhoz való odafordulást akarják elismerni. A szövetségkötés és annak megszegése során elszabaduló *numinózus ira* racionalizálása úgy történik, hogy „*megtöltik azt az isteni igazságosságnak azokkal a racionális-etikai elemeivel, amelyek az erkölcsi vétkek megtorlását és büntetését szolgálják.*" (Otto, 2001)

Végül Vattamány kiemeli: a bábel-élmény határpozíciója és a túllétel közötti kapcsolat nem jeleníthető meg egyfajta irreális reménység nélkül, mely a 34. fejezetben fogalmazódik meg és válik Izrael egész történelmének vezérgondolatává. „Az ÚR, az ÚR irgalmas és kegyelmes Isten! Türelme hosszú, szeretete és hűsége nagy! Megtartja irgalmát ezer nemzedéken át, megbocsátja a bűnt, hitszegést és vétket" (34,6-7). Ezt a felkiáltást Brueggemann Izrael központi hitvallásának tekinti, mely „*az Ószövetség egyik legszebb és legtömörebb hitvallása Istenről: az „öt melléknév krédója", amely legfontosabb jelzőit, tulajdonságait sorolja föl*". Istennek ez az irgalmas odafordulása teremti meg a kohéziót Isten-ember és ember-ember közösségében. (László – Varga, 2019; Brueggemann 1997, ld. 269-279).

Ezen elméleti kitérőt követően visszatérünk a narratíva próbatétel motívumához. A borjú elkészítését egy próbatétel előzi meg, ahol a próbahelyzet a törvényadás eseményéhez kapcsolódik (Ex 19-31, kül. 20,18-21), és ahol a 32. fejezetben elbeszélt aranyborjú-esemény a nép *ismételt* „bukását" hivatott bemutatni. Ugyan teológiai értelemben „bukásról" még nem beszélhetünk, amikor még a narratíva ideje szerint a törvényadás és szövetségkötés eseménye előtt vagyunk. Tart a moratórium, és a zúgolódásnak, megütközésnek nincsenek *még* következményei. Mégis, a három motívum: Márá vizei, a manna hullatása és a sínai-hegyi teofánia a „próbatétel" vezérszó használata által összekapcsolódnak. Hasonlóképpen a próbatételekben megnyilvánuló emberi reakciók is.

Ilyen előzmények még a szép ígéretek ellenére is valószínűsítik, hogy egy ilyen sarokba szorított helyzetben a „mi mindent megteszünk" is inkább azt jelenti, hogy „mi mindent megígérünk", csak hogy a pillanatnyi (élet)veszély elháruljon. Ez a feltételezés épp az aranyborjú ünneplésében válik igazolttá. Az irracionálissal találkozva a nép távolabb húzódik, Mózes háta mögé menekül JHWH elől, és annyira eltávolodik, mintha a fascinans felszabadult örömét a már csak borjú-bálvány ünneplése kapcsán tapasztalná meg. Ez a folyamat meglátásom szerint egyfajta „túllétel" racionális mozzanata, melynek során a bálvány kézzelfoghatóvá (sőt kézzel gyártottá) és otthonossá teszi a meg- és felfoghatatlant.

Otto megfigyelése is ezt tűnik alátámasztani alá: amennyiben – a 19,21-22 versekben is megnyilvánuló – isteni orgéval szemben érzett félelem nem a numinózus teljesebb élményének az eleme, akkor a nép megmarad a racionalitás talaján, és nem tud a numenhez pozitív érzelmekkel fordulni. „*Ebből a félelemből csak az „apaiteiszthai" és az „apotrépein", az*

engesztelés és a megbékítés, a harag csillapítása és a haragtól való eltérítés értelmében vett kultusz alakulhat ki." (Otto, 2001)

Hogy ez történik itt a nép életében, akkor tudjuk megállapítani, ha elfogadjuk, hogy a numinózus elemei *mindig* együttesen vannak jelen egy vallásos megtapasztalás során, bár arányuk a teofánia jellegétől függően természetesen változó. Abból indultam ki, hogy ez a kritérium fog segíteni nekünk eligazodni a bibliai beszámolók tekintetében. Amennyiben ugyanis olyan félelmi reakciók leírásával találkozunk, amelyhez nem kapcsolódik a fascinans, illetve a misztérium eleme, nagy valószínűséggel csak „természetes" félelemről beszélhetünk. Otto ugyanis a tremendumról úgy beszél, mint ami a mysterium semleges fogalmát nemcsak félelmetes, negatív, hanem az érzéseinkben megélt pozitív tartalommal is megtölti, tehát egy paradox érzés. Hasonlóan: ha hiányzik a titokzatos, vagyis a misztérium eleme, akkor a tiszta racionalitás, pragmatizmus területére érünk, ha pedig hiányzik a félelem, akkor csak egyszerű álmélkodásról, csodálkozásról, kíváncsiságról beszélhetünk.

III.   Eredmények

Fentiek alapján megerősítést nyert, hogy az isteni jelenlétet érzékelhetővé tevő jelenségek, emberkéz alkotta tárgyak tekintetében nem az számít, hogy milyen mintára készültek, hanem az, hogy miként tekintenek rájuk. Otto a természeti tárgyak kapcsán fogalmazza meg a következőket: „*Pusztán attól, hogy élnek, a hegy, a Nap, a Hold még semmiképp sem lesznek „istenekké". Sőt még attól sem válnak istenekké, ha az ember hozzájuk fordul kívánságaival és kéréseivel. A kérés ugyanis még nem imádság, és a bizalom nem szükségképpen vallásos. Csak akkor válnak istenekké, ha a numinózus kategóriáját alkalmazzák rájuk. És erre csak akkor kerül sor, ha az ember egyrészt kísérletet tesz arra, hogy ezeket a dolgokat is numinózus eszközökkel, vagyis mágiával befolyásolja, másrészt pedig ha ezzel egyidőben tevékenységük jellegét is numinózusnak tartja.*" (Otto, 2001) Úgy vélem, ezek a sorok nyilvánvalóan alkalmazhatók a borjú aranyszobrára is.

Továbbá Rudolf Otto és Vattamány Gyula gondolatmenetét az aranyborjú eseményre alkalmazva megállapítható, hogy a nép bálványimádása a numinózus, a Szent irracionális megnyilvánulása okozta sokkreakció egyfajta *racionalizáló* feloldása, amely azáltal vált egyáltalán elbeszélhetővé, hogy a biblia szerző már „túl van rajta", már évszázadok távlatából tekint vissza az eseményekre az isteni megbocsátás, a numinózus folyamatos jelenlétének bizonyosságában. Ezt a tapasztalatát, hitvallását és „mégis reménységét" épp az Exodus lapjain fogalmazza meg az aranyborjú botrányának *irracionális* feloldásában, azaz hitvallásában Isten irgalmasságáról népe iránt Izrael minden bűne, hitszegése és vétke ellenére (34,6-7).

IV.   Összefoglalás

A fentiekben Rudolf Otto numinózus elméletének segítségével tekintettem át az aranyborjú elbeszélés körülményeit egyrészt azért, hogy jobban megértsem a borjúábrázolás elutasítását és a frigyláda elfogadottságának miértjét. Megállapítottam, hogy a frigyláda magán hordozza az „isteni" numinózus tulajdonságait főként rejtélyessége, ill. a láthatóvá tett isteni jelenlét „mégis" rejtettsége miatt. Az aranyborjú – ezzel szemben – minden szimbolizmusa, többértelműsége ellenére mégis nyers kiábrázolása a természetfelettinek.

Még izgalmasabbnak tűnt a kérdés, hogy egyáltalán miért fordul az ember az élő Isten helyett bálványképekhez. Az aranyborjú készítésének vonatkozásában megállapítottam, hogy az a sínai-hegyi próbatételre adott, a racionális talaján álló emberi reakció, mely a nép ismételt, és egyben legnagyobb bukását hivatott bemutatni, mely egyben paradigmává vált a későbbi korok parainéziseiben. És legyünk őszinték: korunkban is a ráció, az elme próbál uralkodni tetteink, kapcsolataink felett, Isten helyett.

A Héber Biblia egy „másképp más" istenképet tár elénk, amellyel nehezen összeegyeztethető a végtelen szeretet istenének hamiskás, egyoldalú ábrázolása. Láthattuk, hogy nemcsak mi, hanem a bibliai idők embere is küzdött azzal, hogy racionalizálja Isten „diabolikus" megnyilvánulásait. Törekedett, hogy otthonossá tegye, emberi fogalmak vonatkoztatási rendszerébe illessze azt, akit Otto „egészen más" kifejezéssel tudott csak illetni, szavakkal, fogalmakkal megfoghatatlan volta miatt. Végül azt is láthatjuk, hogy az ember racionális „megoldásai" irracionális, isteni korrekcióra szorulnak, amely megtapasztalt irgalmasság és bizonyosság Isten hosszútűrésében ébren tarthatja bennünk is a „mégis" reménységet Isten és mindenkori népéhez tartozóként.

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Cesare Borgia's Supposed Papal Sword

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The topic of the following article is about the *cinquedea* of Cesare Borgia that is on display in the Caetani Palace in Rome, Italy and sometimes is referred to as the papal sword of Cesare Borgia. The original owner of the sword is beyond question but whether it is a papal or blessed sword is disputable.

To decide if the sword should be called a papal sword one should examine the remaining swords of the centuries-old gifting ceremony of the blessed sword and hat. Firstly their origin, their part in the third mass of Christmas and what conditions they must meet to be considered a papal sword. The second aspect is the appearance; one must identify the uniformed elements, the symbolism and compare these aspects on the group of remaining swords and the *cinquedea.*

After this thorough examination and comparison one can determine if the sword should be included in the group of papal swords and if it was once part of a diplomatic gift, the blessed sword and hat or it should be regarded as an exquisite decorative weapon engraved with the personal iconography of Cesare Borgia that has no ties with the Christmas liturgical cycle.

Keywords: Cesare Borgia; blessed sword and hat; papal sword; decorative weapon; third mass of Christmas

I. Introduction

The subject of this study is the *cinquedea* from the collection of the Caetani Foundation in Rome, Italy that belonged to Cesare Borgia.[1] This sword is often referred to as a consecrated or papal sword, which means it should be a part of a papal gift, the blessed sword and the hat that was blessed on the third mass of Christmas by the pope and gifted to a prominent figure of Christianity. The papal or blessed swords are a group of artifacts that currently consists of 29 known remaining specimens if we include this *cinquedea*.

The research concerning the history of the blessed sword and hat runs on multiple threads such as diplomacy, liturgy, but most importantly the papal goldsmiths' work. Written sources provide an approximate picture of the swords, their recipients, the ceremonial background, historical events and political relationships of the Holy See but to see the full picture we must include the methods of art history. Because after all these objects can be considered more to be work of art rather than weapons.

The masters who created these swords were usually employed by the Holy See and later the Goldsmiths' Guild in Rome. The commissions were recorded in the papal exchequers therefore we know most of the masters and their list of creations so we can deduct the timeframe of each master's activity in the papal court. We can use that information to identify which master was commissioned to make a sword for Cesare Borgia as part of the blessed sword and hat if he ever received the gift. Even if one can find proof that Cesare was gifted a papal sword it does not prove that the *cinquedea* in question is that sword because it does not fit the profile of the remaining artifacts and the symbolism of papal swords.

Looking at the corpus of the remaining blessed swords and the sword of Cesare Borgia one can hardly notice any similarities. So the question is where does this supposition originate? Although various authors mentioned this sword in connections with papal swords – as of yet – I have no knowledge of a study that compares the sword to other papal swords from the same timeframe. In the following text the author wishes to remedy this deficiency. To reach a conclusion one must examine the object, its iconography in comparison with the uniform elements of the papal swords and their symbolism and review the sources about blessed swords in that period to see if Cesare Borgia's supposed papal sword should be included in the group of consecrated swords or if one should discard this assumption and therefore reduce the number of the known remaining examples to 28.

II. The Sword of Cesare Borgia

II. 1. Provenience

The dating of the sword is uncertain. Some authors claim that it was the blessed sword from the year 1501 but this does not necessarily coincide with the date of the sword's manufacture, as the inscriptions suggest that the sword was most likely made between 1493 and 1498 and the engravings could be later additions. Unfortunately, the weapon disappeared from public consciousness for a long time, but it reappeared in the 18th century. From that time on, its first known owner was Gioacchino di Montallegro, who brought the sword back to Naples from Spanish territory in 1734.[2] The next known owner is Ferdinando Galliani, who already mentions the sword in a letter in 1773.[3] During his lifetime, he made an

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[1] Gori, L.: 2008. cat. 158.
[2] Ademollo, F.: "La Famiglia e l'eredita dell'abate Galliani," 1880. p. 662-665.
[3] Asse, E.: 1881. p. 93.

agreement with Onorato Caetani, Duke of Sermonte (in another version of spelling: Gaetani) about the sale of the sword after his death, which he confirmed in his will. [4] The relationship of the Caetani family with the Borgias cannot be called friendly, because Pope Alexander VI deprived the family of its possessions, and the Borgias were also held responsible for the death of Giacomo Caetani. The Estates and the Dukedom of Sermonte were returned to the family during the pontificate of Pope Julius II. [5] These events made it a personal matter for the Caetani family to acquire the sword. Originally, they wanted to display the sword in Sermonte next to the list of crimes committed by the Borgias, but this plan was never realized, so today the sword can still be seen in Rome under the care of the Caetani Foundation in the palace of the family.
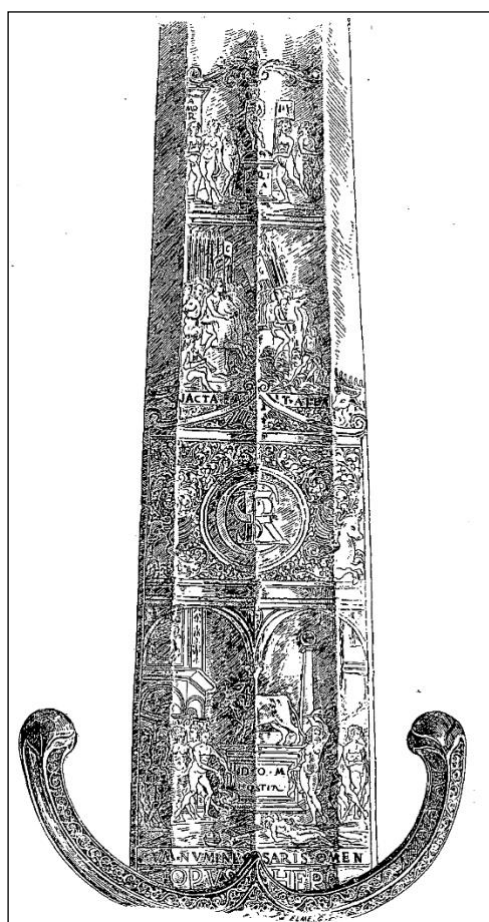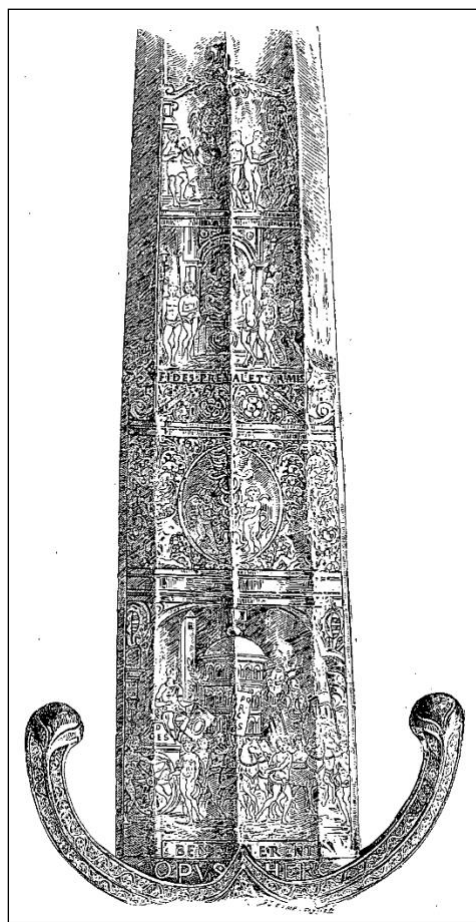
Figure 1 Side "A"   *Figure 2 Side "B"*

II.2. Technical description

This specific type of sword is the so-called a *cinquedea* and it became a popular weapon in the northern areas of Italy in the 15th and 16th centuries. Its name means five fingers, which refers to the width of the blade. In its balance, the emphasis is on the blade that is particularly heavy. The quillons are typically narrow. Since its size varies, it could play the role of a dagger or a sword equally well because the the design of the blade is suitable for both stabbing and cutting.[6] The scabbard that belongs to the blade can be seen separately in the

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[4] Yriarte, C.: 1891. p. 149.

[5] Ibid

[6] Gelli, J.: Guida del raccoglitore e dell'amatore di armi antiche. Milano. 1900. p. 222.

collection of the Victoria & Albert Museum. Although the literature considers the two objects to be related, it is likely that the scabbard was created later so it could not have been present at the ceremony when Cesare first received the sword therefore it is not included in the article.[7] The richly engraved and partially gilded blade is pattern welded or in simpler words damascened and 87, 5 cm long and has two shallow fullers running almost till the tip of the blade. There are four registers on both sides so this calls for a differentiation for the different sides for which I will use side "A" (Figure 1) and side "B" (Figure 2). At the base of the blade there is an OPUS HERC inscription on both sides above it there are other inscriptions. On the "A" side CUM NUMINE CESARIS OMEN and on the "B" side BENEMERENT is inscribed.

The figural engravings on side "A" from the base of the blade to the end of the gilded part are the following.

A/1: The scene represents a sacrificial ritual with a bull. In the foreground lies a naked female figure. The presentation of the sacrifice itself can be seen in the central square, and the inscription D. O. M. HOSTIA can be seen on the sacrificial altar. In the scene, several naked figures surround the altar. In the background architectural elements can be seen.

A/2: This part contains Cesare's monogram in a manner when each letter is written on top of each other. The letters are enveloped in floral ornaments is flanked by winged bulls and on both sides. The top of the segment is closed by a tympanum ending in a volute.

A/3: The caption helps in identifying the next part, which reads: IACTA EST ALEA, this scene can be interpreted as the crossing of the Rubicon. Below in the foreground are half-bulls, on both sides of the river are female figures, perhaps water nymphs or river personifications. In the middle square, naked horsemen wade through the water, and their flags show the monogram C.

A/4: In the uppermost scene, a naked woman can be seen raised on a pedestal, blindfolded, surrounded by naked figures. The following letters can be seen on the substructure: T. Q. I. S. A. G. [8] In the background, on a part of a building, the inscription AMOR can be seen, thereby clarifying the figure's identity. The scene can thus be interpreted as the triumph of Cupid or love.

B/1.: The first scene of side "B", depicts a triumphal procession in the foreground, and on the chariot D. CES is inscribed. The man in the chariot wears a laurel wreath. In front of the chariot a flag-bearer displays a flag with the letters S. P. Q. R. There are buildings in the background and the entire scene is framed by a triumphal arch decorated with the Borgia coat of arms on both sides.

B/2: In the second segment, the floral decoration and the two bulls reappear, and in a medallion a caduceus is held by puttos.

B/3: In the foreground, on the edge of the segment, bulls appear again on both sides with the inscription FIDES PREVALENT ARMIS at the same height. In the center of the scene, a female figure sits in a statue niche, and nude figures appear around her. The figures probably approach the statue in homage, which is probably the personification of faith.

B/4: A festive scene with figures playing musical instruments in the foreground. A part of the building can be seen on the left side, but the main element of the picture is an eagle enthroned on a globe placed on a pedestal with an animal resting at its base.

The total length of the grip is 15 cm, it is decorated with filigree and blue enamel, which is already heavily damaged, and the other surfaces have been gilded. The quillons are narrow

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[7] The data sheet for the scabbard can be find here: https://collections.vam.ac.uk/item/O67243/sword-scabbard-unknown/ [last accessed: 30-December-2022]

[8] Yiriarte cites an interpretation for the letters from the notes of Ferdinando Galliani: TIBI QUEM ILLE SEXTTUS ALEXANDER GENUIT but this is as I said just an interpretation. The original intention of the engraver remains unclear. Yriarte C.: Autour des Borgia Paris. 1891. p. 174.

that fits the typical form of this type of weapon, and in line with the center of the blade you can see an enameled decoration in the shape of a triangle, of which the following inscription can be read on one side: CES BORG CAR VALEN. The inscription clearly refers to the rank of cardinal, and it is positioned in line with the center of the blade. The pommel has a circular form, in which a smaller circle has been formed in the middle, which divides the filigree and enamel work into three concentric circles. In its entirety, the sword is 102.5 centimeters, which is considered a particularly large size among *cinquedeas*.

II. 2. Iconography in context of Cesare Borgia's life

Cesare was born around 1475 as the second son of Rodrigo Borgia, who was elected Pope in 1492 as Alexander VI. He spent his youth preparing for the ecclesiastical career. In 1493, he received the rank of bishop, but after the death of his brother, he renounced his title in the hope of a secular career, and through his marriage with Charlotte d'Albert, he also obtained the title of Duke of Valencia. Following his military successes, he entered Rome in 1501 with a triumphal procession ceremony, where he received the title of Duke of Romagna and *gonfalonier*.[9] He eventually became famous due to his military successes, however, after the death of Alexander VI in 1503 the new pope Pius III was only able to support his position for 26 days, but after the ascension of pope Julius II, he withdrew all support from him and He was imprisoned on accounts of treason. After his escape, his brother-in-law, king John III of Navarre employed him as a military leader from 1506. He died in battle in 1507 during the recapture of Viana.[10]

The year 1501 is a key point in understanding the iconography of the *cinquedea*. In this year in spring Cesare and his troops successfully recaptured the city of Faenza which Burchard mentions in his correspondence[11]. After this conquest he entered Rome in a luxurious triumphal parade, this scene can be familiar after taking a look at the engravings of the blade especially the A/3 and B/1 segments. On the A/3 panel the crossing of the Rubicon as depicted is a tribute to Julius Caesar and his military achievements. The procession on the B/3 panel serves as a tribute to the great triumphal marches of the antiquity. While lingering over this scene, we can ask whether the triumphal procession of Julius Caesar or Cesare Borgia appears, but it could easily be that Cesare, true to Renaissance traditions, identifies himself with the role of Julius Caesar as a new, second Caesar. Just as his contemporaries did, for an earlier example, in the case of King Mathias I of Hungary, however, in his case they named the ruler as Attila the Second.[12] In this case, the inscription may be interpreted as Divus Caesar, but it may also refer to the title of duke that Cesare Borgia received in connection with his military success in Romagna.

These events certainly link the engravings to the year 1501 however, the enamel panel at the base of the blade clearly refers to the title of cardinal which he held between 1493 and 1498 Therefore there is at least a 3 year difference between the blade and the pictorial depiction of military success of Cesare Borgia. The imagery undoubtedly contains the elements of conquest which coincides with the events of the current war for recapturing lost territories in Romagna for the Papal State.

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[9] https://www.encyclopedia.com/people/history/italian-history-biographies/cesare-borgia#3404700788 after Bradford**, S**.: Cesare Borgia, His Life and Times, New York: Macmillan; London: Weidenfeld and Nicolson, 1976. [last accessed: 30-December-2022]

[10] https://www.encyclopedia.com/people/history/italian-history-biographies/cesare-borgia#3404700788 after Bradford**, S**.: Cesare Borgia, His Life and Times*,* New York: Macmillan; London: Weidenfeld and Nicolson, 1976. [last accessed: 30-December-2022]

[11] Burchard III: p. 131.

[12] Read more: Szabados, Gy.: Attila and Mátyás- Paralells and Contemplations in Bárány-Györkös(eds) Mathias and his Legacy. (SDH 1) Debrecen. 2009. p. 55-62.

III. The Blessed Sword and Hat

III. 1. Origins and Ceremony

To have a better understanding on the topic the history, appearance and symbolism of papal swords should be clarified so one can decide if the sword in question qualifies to be a part of this group. The papal swords or blessed swords, were decorative weapons and parts of a certain type of diplomatic gift that were consecrated by the Pope at the third mass of Christmas each year, which is why it is also called the Christmas sword. [13] The consecration was one of the main moments of the mass. If the designated owner was present at the mass, they were girded with it on the spot as part of the ceremony and received the accompanying hat. However, if the person was absent, the papal legate handed it over *extra curiam*, in a special ceremony that repeated parts of the Christmas mass celebrated by the legate. The richly beaded and embroidered hat that was lined with ermine fur was placed on the tip of the sword, and with it pointed towards the sky, the legate took it with an escort to the destination where the ceremony took place.[14] This important moment determined the original point of view of the sword that the original view of the sword is with the pommel facing to the ground.

The earliest data on this gift is uncertain, one can came across very early dates, for example, Ferdinand Gregorovius and Lord Edward Twinning mark the year 758 as the beginning of the tradition[15], regarding the sword given to Pepin the Short by Pope Paul I as the first papal gift of this kind. Gateano Moroni notes the sword presented by Innocent III to King William I of Scotland in 1202 as the first possible papal sword. [16] Other authors cite the year 1294, which falls under the pontificate of Boniface VIII; although it is not supported by a concrete source, it is highly possible that the custom of gifting the blessed sword and hat on Christmas was already established in the 13th century.[17] There is information about the appearance of the sword at papal masses from Jean de Sion in papal ordinaries dating between 1342 and 1356, but it is merely a mention and the exact function cannot be identified[18]. Searching the records of the masters of ceremonies, Heinrich Modern identified the appearance of the consecration of the sword at the Christmas mass in the works of Peter Amelius in 1397 at in the Ordo Romani XV. However, according to the works of Karl Schäfer, based on the records of the papal exchequer, a payment was made for a sword of this value in 1357[19], this seems to be the first consecrated sword of which the research shows concrete data, but we do not know anything else about it. As the first recipient, Eugèn Müntz name Louis I duke of Anjou, from 1365, and the sword was commissioned by pope Urban V[20], while Moroni names Fortiguerra Fortiguerri as the earliest candidate for the gift, he received the sword from pope Urban in 1386. Since Müntz derives his evidence from the sources, we can accept the earlier date he sets, it is possible that Moroni did not know about this previous entry. [21]

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[13] Kovács, T.: 2002. p. 55-56.
[14] Lakatos, B.: 2010. p. 20.
[15] Burnes, C.: 1969. p. 162.
[16] Moroni, G.:1854. p. 39–61.
[17] Burnes, C.: 1969. p. 161.
[18] Warmington, F.: 2000. p. 98.
[19] Modern, H.: Geweihte Schwerter Und Hüte, In Jahrbuch Der Kunshistorisches Sammlungen Des Allerhöchsten Kaiserhauses. vol. 22. 1901. p. 127-166.
[20] Kalmár, J.: 1958. p. 10.
[21] The source material that Müntz used is in the Vatican Apostolic Arhive from the Introitus Et Exitus Camera Apostolicae. He found the entry in the materiel from the year 1365 and cites it this exact way: Archives scrètes du Saint-Siège, Int. et Exit. Cam. 1365. no 302. fol 50. v, Cf. Reg. 317, fol 99.

III. 2. Uniformed Elements of the Swords

The sword and hat had basic formal elements that can be identified on almost all extant examples. If not, it is mostly the result of replacing individual parts. To create the list of this elements I used the remaining swords from the 15th and 16th century. The wooden core of the scabbard of the swords was covered with dark-colored, mostly red or black velvet, which was covered with a metal cover of gilded silver plate with *repoussée*. It is mostly decorated with floral ornamentation, which is supplemented with *all'antica* elements characteristic of the era. In addition to the embossed plate, enameled or engraved decorations with the symbol of the papacy and the pope's family crests also appear. The blades were often pre-ordered from Spanish or Catalan masters, in many cases the papal goldsmith was only responsible for the engraving and the openwork, as we know from the ordered works recorded in the sources.

The figures of St. Peter and St. Paul appear on the blade bases, followed by a long inscription above them, which includes the commissioner and the year, and to close this, changing motifs, mostly rosettes or Christ's ship, can be seen in a medallion. In many cases, the inscription on the blade deems the owner of the sword as the defender of Christian communities.

The grips are also made of embossed plate, usually divided in the middle by a knot, which can take many forms that resemble a sphere or a globe. The pommel is also decorated with enameled plates and has globe-like or globe shape. [22] The quillons curve towards the blade and are most often shaped like dolphins in addition to floral ornamentation, but there are also examples that are completely plain or decorated with the papal insignia.

The belt is also decorated with the papal insignia and the current pope's family coat of arms, they are mostly made of silk brocade woven from red and gold thread, the buckles are also gilded, and the holes of the belt are also decorated with small gold *apliquées*. In many cases, the decorations of the holes take the form of leaves or small rosettes. Belt buckles are also often decorated with enameled elements.

The red - sometimes dark green or black - velvet hats were, according to some descriptions, trimmed with ermine fur. Two decorative woven ribbons hang from the back. On the top, there is a sun motif embroidered with gold thread and sewn with pearls. On the right side of the hat, there is a dove embroidered with pearls as a symbol of the Holy Spirit.

III. 3. Symbolism

Basically, the object itself has symbolic power even without the symbols placed on it. In the second half of the 12th century, the sword became part of the coronation equipment, thus becoming a symbol of royal power in the Christian cultural circle. [23] It became a symbol of justice, moderation, and judgment during the Renaissance. However, the display of weapons has many meanings in art as well. In Christian iconography, it is a symbol of martyrs, but Mary's heart is also pierced by seven swords, symbolizing her seven sorrows. [24]

The sword also appears as a symbol of power in the theory of two swords from Pope Gelasius I. He uses two swords as symbol in his theory about power according to which the world is governed by two powers: "*auctoritas sacra pontificum*" which is the papal power and "*regalis potestas*", the secular or royal power. However, the papacy in the 10th-13th century was more inclined to believe that the successor of St. Peter was the rightful judge of both

[22] Lessing, J.: 1895. p. 137.
[23] Warmington, F.: 2000. p 96.
[24] Hall, J.: 1997. p. 88.

types of power. This is counterbalanced by the imperial theory, according to which both representatives of ecclesiastical or secular power receive it directly from God. [25]

Listing the individual symbols appearing on the blessed sword and hat in order, one can say with certainty that there is a conscious concept and connection between them. On the top of the hat appears the sun, which can also refer to Christ, but is usually an expression of God's glory, and together with the dove symbolizing the Holy Spirit. In addition, the sun specifically represents the protective nature of the Lord " For the Lord God is a sun and shield; the Lord bestows favor and honor; no good thing does he withhold from those whose walk is blameless." (Psalms. 84:11) [26]

The figure of St. Peter and St. Paul appear on the base of the blade, they stand as pillars and representatives of the Catholic Church with their attributes dividing the blade for the side of Peter and the side of Paul indicating the origin of the power that the sword represents, which is the church itself. [27] The swords bear insignia representing whom they were commissioned by, namely the crossed key and the papal tiara, which make it clear that the sword and everything it represents was given to the person by the will of the pope. The, which inaugurate the bearer of the sword as the defender of Christian communities, also contain the name of the pope, thereby emphasizing that the power that the sword and the accompanying title bears can only be conferred on the wearer by the pope. In addition to these permanent features, there are also some cases where some parts may have secondary meanings. These are the dolphin shaped cross irons and the globe grip buttons. The dolphin often represented a kind of psychopomp that helps souls reach the afterlife, in this case salvation. [28] And the globus shaped pommels represent the earthly realm.

In the interpretation of the symbolism of the sword, the sphere/globus pommels facing the ground and the sun motif on the hat facing the sky determine a kind of power hierarchy, which, starting from the cap downwards, determines the relationship between the Holy Spirit, the church and secular power. With the placement of the dolphin between the earthly and heavenly symbols confirms the function of the animal as a messenger between spheres. The symbolic system of the sword and helmet can definitely be interpreted together, although they also have their own meaning separately. The figures of St. Peter and Paul appearing on the swords as symbols of the church make it clear that the sword, as a means of effective protection, merely borrows its power from the institution of the church and, as the inscriptions confirm, uses it to protect Christian communities. On the other hand, the dove symbol appearing on the hat plays a more passive role, the sun that also appears symbolizing the heavenly power that pours down from the top of the hat, as if covering the wearer with this power as a shield.

Reading the two objects combined, they represent primarily the special protection and power of the owner of the sword and hat that provides the background necessary for him to fulfill his special role as the protector of Christian communities. At the same time, the relationship also exists as a two-way street, namely in the sense that the owner of the sword receives the authority for his actions directly from God's earthly representative.

The donation of the papal sword could also be interpreted as a symbol of the fact that the church, which forms the right to both secular and ecclesiastical power, as a donor, temporarily transfers part of its power to the recipient as a secular leader in the name of the Holy See - whose power is permanent - so he can use this newly bestowed power in the name of the pope. On the other hand, the hat symbolized the unceasing protection of the Holy Spirit. The

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[25] http://lexikon.katolikus.hu/K/k%C3%A9t%20kard-elm%C3%A9let.html [last retrieved: 30-December-2022]
[26] https://www.biblegateway.com/passage/?search=Psalm%2084%3A11&version=NIV [last retrieved: 30-December-2022]
[27] Seibert, J.: 1986. p. 264.
[28] Seibert, J.: 1986. p. 69.

two objects together thus symbolize power from two different aspects: while the sword is the object of, active protection, the temporal extension of papal power, the hat is the embodiment of the protective power of the Holy Spirit. This complex symbolism further strengthens my view that such a sword, as a symbol of power or a tool of agitation, is much more likely to be considered a work of art than a weapon.

IV. Cesare Borgia's sword in context of the criteria of the blessed swords

The main question is that if this sword can be regarded as a papal sword. To answer this question, one must identify what criteria a sword must meet to be considered a papal sword.

1. It has to be commissioned by the pope, to be a part of the blessed sword and hat.
2. Play a key role in the third mass of Christmas, and it has to be consecrated by the pope and presented personally or *extra curiam*.
3. It has to contain the uniform elements of the blessed swords.
4. It has to bear the system of symbols that represents the transfer of heavenly power to bestow it to the wielder thus making him the protector of the Christian communities.

In the following I will go through all four of the points to check if the sword meets the criteria.

To find out if the sword was commissioned by the pope, one should examine who was the favored goldsmith at the time the sword was created. The dating of the sword *terminus post quem* is 1493. The name Angelino da Sutri or in other version Angelino di Domenico da Sutri appears in the exchequer from this year. Among his many works were the golden rose for following years: 1494, 1495, 1497, 1499, 1501, 1502, and he certainly made the consecrated swords in 1493, 1494, 1497, 1498 and 1501. It cannot be ruled out that he received orders for such items in other years as well, but there is no written evidence of it. However, some believe that it can be stated that he could have made the swords every year from 1492 to 1501. [29] Among his works that we know of one can find perhaps one of the most famous papal swords, the sword of Bogislav X from 1497, which later became part of the Prussian regalia. The sword of King Ferdinand of Naples from 1493, for which he received 196 ducats, the sword from 1494 that was given to Maximilain I is also linked to Angelino. We have no information about the owner in the year 1495. However, the sword from 1496 was not 100% his work he was only commissioned with restoration, so the sword of Philip the Fair, the later King Philip I of Castile is a work of collaboration. However, the sword of 1497 as I mentioned before survives to this day. The sword from 1498 for which the extremely high payment of 253 ducats was recorded was given to King Louis XII of France, and we have no significant information about the one in 1499. Angelino's last known sword is the one commissioned in 1501 and given to Alfonso d'Este. [30] It is also assumed that a sword was given to Cesare Borgia in 1500, but we still do not know exactly what happened to the latter. But the date is problematic because the sword predates this timeframe, but the iconography coincides whit the events of his life in this year because he served as a military advisor under Louis XII of France. In the written sources, we cannot find any clear evidence of the existence of the sword, nor of what payment was made for its manufacture.

There are further complications concerning the master's identity. For example, S. J. Churchill in his 1907[31] work that was reprinted by Bunt attributes the sword to Angelino and

[29] Bemis,E.: 2007. p. 35.

[30] Müntz, E.:1890. p. 290-292.

[31] Churchill, S. J. A. : The Goldsmiths Of Rome Under The Papal Authority: Their Statutes Hitherto Discovered And A Bibliography, In: Papers Of The British School At Rome. vol. 4, No. 2 , 1907.

records it as a papal decorative sword[32], but he agrees that the engravings are not his work. [33] The source of this confusion can be identified in the name Domenico that the two master shares. According to Elizabeth Bemis, the papal decorative sword of Cesare Borgia can also be identified with this[34], but it is highly unlikely that this sword is Angelino's work. As for the engravings, they can be linked to another goldsmith Ercole dei Fideli. This attribution is based on the inscription OPUS HERC, and this is consensually accepted.[35] Taking into account that usually the blades of papal swords were pre-purchased –that is backed by the fact that the blade has the mark of the original smith's guild, which forms a tower, and this refers to a Castilian origin[36] – only the enameling could be linked to Angelino, but due to the lack of surviving works, an attribution based on comparison is unfortunately not possible. Another obstacle to attribute the sword to Angelino is the lack of entries to order enameling from him in the timeframe. [37]

According to the available information, Churchill's claim that Angelino was the master may be wrong, there was another time when he made a mistake in the attribution. He also linked the sword of James IV king of Scots to Angelino but in fact it was created by Domenico di Michele da Sutri. [38] Many very similar *cinquedas* are associated with Ercole dei Fideli, so indeed he is most likely to be the creator. So, contrary to Churchill's claim, we unfortunately have to dispute that the sword belongs to the body of works of Angelino di Domenico da Sutri therefore there is no evidence for the commission of a sword of this type. If we disregard the absence of sources on the commission, we can examine the possible years in which Cesare could have received the sword and the only possible option is 1499 but Burchard does not mention who received the sword that year. [39]

The evets in which the sword was presented cannot be linked to the third mass of Christmas. Elisabeth Bemis in his 2009 work states that there is no written source about the ceremony in which the sword was gifted to Cesare. [40] In L. Thusane's publication of Burchard's Diarium, we really do not read about the presentation of Cesare Borgia's papal sword at the Christmas ceremonies. However, we do know that he was given the title of Duke of Romagna in 1501 and that he entered Rome in a great triumphal procession, an event that would be an excellent occasion to hand over a sword with such a narrative. [41] Also, Burchard writes about the capture of Faenza in a letter on April 26, 1501. Here, the description is accompanied by a footnote, which contains details of a letter written on May 17, 1501. In it, an eyewitness describes that Cesare Borgia was given a hat and a sword in addition to the golden rose, and that's when his father appointed him Duke of Romagna. For this reason, we do not necessarily have to connect the sword to the Christmas liturgy. [42]

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[32] Bunt, C. G. E.(ed): 1926. P. 20.

[33] Ibid

[34] Bemis,E.: 2007. p. 36.

[35] More information about the attribution in: Yrairte, Charles: "Le Graveur D'epees De Cesar Borgia," Les Lettres Et Les Arts, Vol. 1 (Jan.,1886) : 163-184.

[36] Ademollo, F.: 1880. p. 662.

[37] The sources were published in Latin and French in Müntz, Eugène: Les Arts À La Cour Des Papes Pendant Le Xve Et Le Xvie Siècle: Sixte Iv-Léon X. 1471-1521: 1. Sect. Sixte Iv Párizs. 1882 and Müntz, Eugène: Les Arts À La Cour Des Papes Pendant Le Xve Et Le Xvie Siècle: Innocent VIII, Alexandre VI, Pie III. (1484-1503). Párizs, 1898.

[38] Bunt, C. G. E.(ed): 1926. p. 21.

[39] Burchard III. 1-2.

[40] Bemis, E.: 2007. p. 53-45., 48.

[41] Https://Www.encyclopedia.com/people/history/italian-history-biographies/cesare-borgia#3404700788 based on Bradford**,** S.: Cesare Borgia, His Life and Times, New York: Macmillan; London: Weidenfeld and Nicolson, 1976. [last retrieved: 30-December-2022]

[42] Burchard III.: 131.

Table 1 List of swords used for comparison

Year	Patron	Recipient	Institute	Goldsmith
1486	Innocent VIII	Inigo López de Mendoza count of Tendilla	Museo Lázaro Galdiano Inv.: IM 3204	Giacomo Magnolino
1490	Innocent VIII	Williem III landgrave of Hessen	Hessisches Landesmuseum Inv.: KP B II.613	Hyeronymus da Sutri
1497	Alexander VI	Bogislaw X duke of Pomerania	Burg Hohenzollern Inv.: no data	Angelino da Sutri
1506	Julius II	James IV king of Scotland	Edinburgh Castle Inv.: EDIN053a	Domenico da Sutri
1509	Julius II	Vladislaus II king of Hungary and Bohemia	Hungarian National Museum Inv: 55.3235	Domenico da Sutri
1510	Julius II	Switzerland	Zürich Landesmuseum Inv.:DEP 852.1-3	Domenico da Sutri

As for the elements and the symbolism one look is enough to see that this type of sword has no similarities with the papal swords from the 15th and 16th centuries. To make a clear comparison in *Table 1* the extant swords are listed that were made fifteen years prior and fifteen years after the potential dating of the sword. The elements and engravings are listed in *Table 2* the inscriptions are listed in *Table 3*.

This thirty-year interval provides six examples. Unfortunately the sword of Bogislaw X from 1497 is problematic because some parts of it were replaced therefore it will be excluded from the further examination. In the next table the other five swords will be described in detail. Each sword will be referred to by the name of the recipient. To avoid redundancy *Table 2* does not contain a description of the sword of Cesare Borgia because of the extensive description in a previous chapter.

Table 2 Technical data of the swords for comparison

Sword of		Inigo López de Mendoza count of Tendilla	Williem III Landgrave of Hessen	James IV king of Scots	Vladislaus II king of Hungary and Bohemia	Switzerland
BLADE	Length	110cm	103 cm	99 cm	110 cm	110 cm
	St. Peter and Paul	present	present	present	present	present
	medallions	papal insignia with family crest	papal insignia with family crest Peacock with motto	lost due to damage	papal insignia with family crest	lost due to damage
GRIP	quillon decoration	dolphins	inscription	dolphins	dolphins	dolphins
	rain-guard	lost due to damage	shell shape	leaf shape	leaf shape	lost due to damage
	nodus form	disk	globular with ring	oviform	oviform	disk
	pommel	globular	flattened globular	flattened globular	flattened globular	flattened globular

Although the swords from the thirty-year interval are not grate in number, they make up a little more than 17% of the swords that survived to this day. Reading the date, it can be

clearly stated that the figure of St. Peter and St. Paul are present on all the specimens. The engraved decorations are containing the papal insignia and family crest in every case when they can be examined. One of the swords shows a slight differentiation from the others. On the sword of William III landgrave of Hessen, the quillons are plain and instead of dolphins they are decorated with inscriptions. The other difference is the shape of the rain-guard with its shell shape. Even if there are slight differences among the listed swords the similarities are without a doubt intentional. In comparison with the technical description of the supposed papal sword of Cesare Borgia one can ascertain that the elements that are created in the same manner on the five blessed swords are completely missing from it. The inscriptions on the five swords contain the name of the pope who ordered the sword and a date. The form of the date varies. In two case there is a direct reference of the protection of Christian communities but no reference at all to the recipient.

On the other hand, the sword of Cesare Borgia is decorated with a complex imagery instead of symbolic elements. The Borgia coat of arms appears multiple times even though the pope – his father – used the same insignia it is highly unlikely that in this case the Borgia bull refers to Alexander VI so the reference to the pope is missing. The narrative of the *cinquedea* is in contrast of the blessed swords. Although the protection of Christendom sometimes requires military intervention these maneuvers are usually directed against the rising Ottoman threat. The iconography depicts the owner a man of power with great glory instead of deeming them the medium of the power bestowed on them. At this point all four points listed above were exhausted by the author and therefore a direct conclusion can be derived from the data.

Table 3 Inscriptions

	Inscriptions
Inigo López de Mendoza count of Tendilla	+ GLADIVS · PROTECTIONIS · VNIVERSI · POPVLI · CHRISTIANI INNOCENTIVS · VIII · PONT · MAX · PŌTIFICATVS · SVI · ANN III CCCCLXXXVI
Williem III Landgrave of Hessen	Side of Saint Peter: Blade: ECCE + GLADIUM + ADDEFENSIONEM + CHRISTIANEM + VERE + FIDEI INNOCEN + CIBO + GENVEN + PP + VIII + PONTIFICA + SUI + VII Crossguard: + INNOCEN • CIBO • GENVEN • PONT • MAX • ANNO • SAL • MCCC(abrasion) Side of St. Paul : Blade: INNOCEN + CIBO + GENVEN+PONT + MAX + ANNO + SAL + MCCCCLXXXX) Crossguard: (abrasion)OCEN • CIBO • GENVEN • PAPAPA • VIII • PONTIFICA • SUI • VII Motto on the medallions: LEAVTE PASSE TOUT
James IV king of Scots	IULIUS II. PONT. MAX. ANNO VI
Vladislaus II king of Hungary and Bohemia	IULUIS II. PONT. MAX.
Switzerland	IULIUS II. PONT. MAX. ANNO VIIII

V. Conclusion

One can say with certainty that the symbolism of papal swords represents the protection of Christian communities. The vertical system that symbolizes the transaction of power from the Holy Spirit through the sword to its wielder is present on every remaining papal sword that are from the same era. On the other hand, the crossing of the Rubicon on panel A/3 and the triumphal procession on panel B/1 sets the narrative of a conquest on the *cinquedea*. Even if we disregard the differences in appearance and symbolism of the swords there are other factors that needed to be considered. To meet the criteria of a papal sword it has to be commissioned by the pope with the intention of making it a part of the blessed sword and hat, blessed on the third mass of Christmas with the ducal hat and gifted by the pope *in curiam* on the same day or a legate *extra curiam* with the armed ceremony repeated.

The inscription of the enameled panel on the grip links the sword to the time of Cesare's cardinalship but the imagery and iconography of the blade is connected to Cesare's famous military career therefore the engravings are probably later additions. One of Cesare's famous military achievements was the conquest of Faenza in 1501. After that he enters Rome in a luxurious triumphal procession and receives the title of duke of Romagna from his father, pope Alexander VI. In a letter written by the master of ceremonies Johannes Burchardt it is stated that at this event Cesare receives a sword and a hat with the golden rose along with the title, these events are in connection with the iconography of the blade. Even if this sword is the same that Buchard mentions in his letter one can only say for certain that the sword was presented by the pope, not on Christmas day but in April and there is no source for the commission or its purpose. For further clarification one should check Burchards work again to find out if he states at some point that a blessed sword was gifted to Cesare. Sadly there is no mention of such an occurrence in his works.

As for the time of Cesare's cardinalship we know the recipients of the sword. In 1499 Burchardt doesn't say who the recipient was. There is no written information from the recipient in 1500 and in 1501. In 2009 Elisabeth Bemis dates the sword to 1500 but the base of her reasoning is not from the source material. She cites Robert Burnes who cites S. J. A. Churchill whose work contains some disprovable information and does not back this statement with any source. Thus, there is no conclusive evidence that this sword was commissioned as the part of the blessed sword and hat, blessed and on the third mass of Christmas presented on the same day or later with an *extra curiam* ceremony. Compared with the fact that it does not bears the uniform elements and symbolism of blessed swords the conclusion is that the object does not meet any of the listed criteria that is required to be considered a papal sword.

VI. Summary

The research of the Blessed Sword and hat as a papal gift is still in an early stage. One of the first tasks is to determine the exact definition and criteria that makes these objects. The next step is to determine the number of the number of remaining objects. Sadly, most of the hats were lost to time so the swords are represented in a greater number. In this article the author examined Cesare Borgia's decorated *cinquedea* that was often referred to as a papal sword that indicates that it is one of the remaining papal swords. After the technical description and outline of Cesare Borgias personal iconography some context was provided about the blessed sword and hat to guide the reader to a better understanding of the base of the problem. After a thorough inquiry about the possible patron and creator of the sword the origin of the supposition was located. The sword was submitted to an examination in context

of the established criteria of papal swords and due to a lack of sources and a contradicting iconography the author came to a conclusion that Cesare Borgia's supposed papal sword does not meet any of the criteria of papal swords therefore should be excluded from the group reducing the number of known specimens from 29 to 28.

List of figures

Figure 1 Side "A"

Source: Yrairte, C.: 1886. = Yrairte, Charles: "Le Graveur D'epees De Cesar Borgia," Les Lettres Et Les Arts, Vol. 1 (Jan.,1886) p. 166.

Figure 2 Side "B"

Source: Yrairte, C.: 1886. = Yrairte, Charles: "Le Graveur D'epees De Cesar Borgia," Les Lettres Et Les Arts, Vol. 1 (Jan.,1886) p. 169.

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A felnőtté válás reprezentációja Szabó István korai nagyjátékfilmjeiben (*Álmodozások kora* (1964), *Apa – egy hit naplója* (1966), *Szerelmesfilm* (1970))

Milojev-Ferkó Zsanett, *ELTE BTK*

Tanulmányomban Szabó István első trilógiájában megjelenő Bildung narratíva, azaz a fiatalokról szóló változás-történetek tematikus és formai sajátosságait elemzem.

Szabó István egyike volt azoknak a fiatal rendezőknek, akik személyes hangú, modern alkotásaikkal átformálták a magyar filmtörténet stílustérképét az új hullám időszakában (1963-1969). A fiatal rendezők (Szabó mellett Gaál István, Kósa Ferenc, Sára Sándor, Sándor Pál) önéletrajzi ihletésű, szubjektív hangvételű Így jöttem-filmjeikben tematizálták generációjuk felnövésének személyes és kollektív, nemzedéki élményét.

Az *Álmodozások kora*, az *Apa – egy hit naplója* és a *Szerelmesfilm* főszereplője Bálint András, akinek személyét a rendező alteregójaként értelmezhetjük. Ez a három alkotás egy fiatal felnőtt küzdelmeit mutatja meg a felnőtté válás útvesztőjében. A protagonista transzformációját ezekben az alkotásokban a szerelem, a munka, a halál és az utazás (legyen az fizikai helyváltoztatás vagy mentális utazás) alakítják. Szabó filmjeiben a fiatal felnőttek identitásválsága a történelemmel szoros összefüggésben reprezentálódik: a múlttal (II. világháború, nyilas üldözés, 56-os forradalom) való szembenézés és számadás a rendező nemzedéki élményeiből fakad.

A változás-narratívákban a modern filmművészet jellemző jegyei közül a szubjektivitás és a reflexió is hangsúlyos szerepet tölt be. A szubjektivitás megjelenése a rendező önéletrajzi jellegű történeteiben jelenik meg, ezt az alteregó szereplő alkalmazása is hangsúlyozza. Ezekben az alkotásban narrátort is alkalmaz Szabó, mely szintén a személyességet erősíti; ráadásul a narrátori pozíciókban történő váltások is a felnőtté válás dilemmáját hangsúlyozzák. Több esetben lírai, szubjektív felvételeket alkalmaz a személyességet és a nézői azonosulást elősegítendő. A reflexió ezekben az alkotásokban a mozi gyakori reprezentációjában, és – a francia új hullám hatását mutató –, a filmtörténeti hagyományra reflektáló utalásokban azonosítható, mellyel Szabó lesz az egyik első, ezt meghonosító rendező a magyar film történetében.

Ebben a tanulmányban azt mutatom be, hogy miként vált meghatározó tematikus-formai jeggyé a Bildung narratíva Szabó István első trilógiájában.

Kulcsszavak: Magyar filmtörténet; modernizmus; Szabó István; Bildung; fiatalok

I. Bevezetés

Tanulmányomban a Szabó István első trilógiájában (*Álmodozások kora* (1964), *Apa – egy hit naplója* (1966), *Szerelmesfilm* (1970)) megjelenő Bildung narratíva, azaz a fiatalokról szóló változástörténetek tematikus és formai sajátosságait elemzem a modernizmus jegyeivel összefüggésben.

II. Témakifejtés

II.1. Filmtörténeti, kultúrpolitikai és műfajelméleti háttér

A magyar új hullám 1963 és 1969 közötti időszaka a hazai filmtörténet kiemelkedő periódusa. Ebben az időszakban sok jelentős mű született, és több alkotó életműve meghatározó alkotását készítette el (Gelencsér, 2014, 33), ezért is nevezik aranykornak ezt az időszakot. A poétikai modernizmus és a politikai reformizmus törekvései egyaránt formálják a kor filmtörténetét (Varga, 2004, 431). Előbbi alatt az európai modernizmus eredményeinek hazai megjelenését, utóbbi alatt a kádári konszolidáció enyhülő kultúrpolitikai klímájának és a filmekben megjelent politikai aktivizmusnak a sérülékeny egyensúlyát értjük. Az ebben az időszakban készült filmek végképp elszakadnak az ötvenes évek sematikus, ideológiavezérelt szemléletmódjától, és a szerzői film megjelenésének következményeképp a személyesség jegyében a fiatal rendezők megújítják a magyar filmet.

Egy új filmrendező-nemzedék, a Máriássy-osztály tagjai (Elek Judit, Gábor Pál, Gyöngyössy Imre, Huszárik Zoltán, Kardos Ferenc, Kézdi-Kovács Zsolt, Rózsa János és Szabó István) és korban hozzájuk közel álló alkotók (Gaál István, Novák Márk, Sára Sándor) kezdik meg pályafutásukat az új hullámban. Ők lesznek az elsők, akik – Makk Károly szavaival élve – *„én-filmeket"* készítettek, és tudatosan kezdtek életműépítésbe (Varga, 2019). A magyar új hullámra jellemző személyesség elterjedéséhez a kádári konszolidáció kultúrpolitikája, a modern film paradigmája, a szerzői elmélet hazai térnyerése, az intézményi (pl. BBS megalakulása)- és technikai változások (pl. kézikamera, direkt hang, fényérzékenyebb nyersanyag, teleobjektív) egyaránt szükségeltettek.

Szabóék generációja a hosszú ötvenes évek alatt szocializálódott nemzedékhez (Róbert-Valuch, 2013) tartozik, akik számára az eszmélés traumatikus eseményekhez kötődik: a kommunista hatalomátvétel és a diktatúra kiépülése, majd az 1956-os forradalom és az azt követő megtorlás, valamint az erőszakos kollektivizálás traumája lesz meghatározó élmény számukra. Az ilyen horderejű változások mindig az identitás megkérdőjelezéséhez vezetnek és ahhoz, hogy ezek hatására újradefiniáljuk önmagunkat a világban a megváltozott viszonyrendszerek mentén. Eriksson *Gyermekkor és társadalom* című munkájában hangsúlyozza, hogy *„az identitással kapcsolatos dolgokról a történelemnek abban a pillanatában kezdünk el fogalmat alkotni, amikor ezek problémává válnak"* (Eriksson, 2002, 280). Tengelyi László (Tengelyi, 1998) a sorseseményt úgy definiálja, mint egy narratívát megtörő válsághelyzet, mely magából meginduló, uralhatatlan módon lejátszódó dolog. Tengelyi arra a következtetésre jut, mint Eriksson: akkor definiáljuk újra önmagunkat, amikor önazonosságunk felszakad. Ezzel magyarázható tehát a történelmi traumák tapasztalatai nyomán megjelenő jelenség értékű identitás-teremtési jelleg az alkotásokban, mely véleményem szerint Szabóék így jöttem-filmjeiben jelenik meg először a magyar filmtörténetben és válik kardinális elbeszélőformává.

A felnövekedéstörténetek elterjedésének aktualitását – a személyesség megjelenése mellett – az ötvenes évek végétől megjelenő fiatalságkultusz is elősegítette. Ez a generáció saját kultúrát, hangot, divatot, zenét és filmet követelt magának szerte a világon, vagyis a kultúra (önkényes)

újrafelosztásakor maga is helyet követelt benne. Míg az ötvenes évek szocialista realista filmjeiben az ifjúság (saját jogán) nemzedékként nem jelenhetett meg a filmvásznon, csak ha azt az osztályszempont indokolta, addig a Kádár-kori fiatalok már saját fiatalságuk jogán is, eszmélésük folyamatát bemutatva jelentek meg (pl. Herskó, Mészáros) (Hirsch, 2013). Fontos kiemelni, hogy a Kádár-rendszer számára a nevelődés, önnevelés kiemelkedő fontosságot kaptak. György Péter *Kádár köpönyege* című tanulmányában kifejti, hogy a szocializmusban a társadalmi nevelődés programja középponti szerepet játszott (György, 2005). Mindezek alapozták meg azt, hogy a nevelődési narratíva kardinális elbeszélői mód legyen a magyar újhullám filmjeiben (Milojev, 2021).

A Bildung narratívát tartalmazó történetek, azaz felnövekedéstörténetek rokonságot mutatnak a nevelési regény, fejlődésregény vagy Bildungsroman műfajával. Bahtyin a nevelődési regényt olyan szövegformaként határozza meg, amelyben *„a hős megváltozása szüzséképző jelentőségre tesz szert"* (Bahtyin, 1986, 436). Megkülönbözteti a nevelődési regény öt típusát. Ezek közül az egyik a realisztikus forma, melynek legfőbb jellemzője, hogy a szereplő a történelmi idővel szoros összefüggésben változik. Bizonyos szerzők különbséget tettek aközött, hogy a főszereplő változása természetes vagy kívülről jövő folyamat eredménye lesz. Wilhelm Dilthey (Dilthey, 1925) hangsúlyozza, hogy a főhős változása egy természetes folyamat eredménye, melynek megvannak a kikerülhetetlen stációi és az ideje, amikor az szükségszerűen bekövetkezik egy fiatal életében. Moretti (Moretti, 1987) értelmezésében a Bildungsroman 20. századi darabjai (pl. Conrad, Mann, Musil) látszólag jelentéktelen történések láncolatai, ezek a szövegek fragmentáltak és térbeliek, míg a romantika idején a fejlődésregények diakronikus és evolúciós természetűek voltak. A változás okát az I. világháború traumájában látja: a felnőtté válás ettől kezdve nem egy természetes és békés folyamat, hanem egy kívülről jövő változás eredményeként aposztrofálódik.

A magyar új hullám fiatal rendező generációjának markáns képviselője, és egyik legnagyobb hatású alkotója Szabó István volt. Több sikeres BBS-rövidfilm után (*Variációk egy témára*, 1961; *Te*, 1962; *Koncert*, 1962) készítette el az *Álmodozások kora (Felnőtt kamaszok)* című filmjét, mely az *Apá*val és a *Szerelmesfilm*mel együtt trilógiát alkot. Mindhárom filmben Bálint Andrást láthatjuk a főszerepben, aki Szabó alteregójaként vet számot a szakmai élet (*Álmodozások kora*), az apahiány (*Apa – Egy hit naplója*), valamint a szerelem (*Szerelmesfilm*) kérdéseivel, összefüggésben a nemzedékét érintő történelmi hatásokkal.

II. 2. Hipotézis és módszer

Hipotézisem szerint Szabó István itt vizsgált filmjeiben a felnőtté válás reprezentációja a nevelődési narratíva és a modernista jegyek (szubjektivitás, reflexió) összefonódásán keresztül jelenik meg. A módszer illusztrálására nem csak Szabó filmjeit, hanem a magyar új hullám fejlődéstörténeteit hozom példaként, ugyanis meglátásom szerint ez a narratíva meghatározó eleme lesz a hatvanas évek filmtermésének.

Ennek alátámasztására a következő szempontok szerint elemzem az alkotásokat: rendszerezem, hogy a protagonista milyen események hatására válik felnőtté, azaz lép át egy érettebb pszichológiai-mentális állapotba a történet végére. Ennek modellezésére bevezettem a nevelődési marker fogalmát. Megkülönböztetek három típust: külsőt, belsőt és vegyest. Külsőnek azokat a tényezőket nevezem, melyek nem a főszereplővel történnek, de hatással vannak az ő fejlődésére. Ilyen pl. a halál eseménye: Iliász halála fontos mérföldkő Pásztor Balázs felnőtté válásában, és Lacié is meghatározó pont Jancsi életében. Fontos, hogy ezek természetét is megfigyeljük: a *Feldobott kő*ben Iliász megölése az erőszakos kollektivizálás következménye, míg Lacié az *Álmodozások korá*ban című alkotásban természetes folyamat (betegség) eredménye. Belső tényezőnek azokat nevezem, melyek a szereplővel történnek meg.

Érzelmi lehet a szerelmi (pl. Jancsi és Éva történetszála az *Álmodozások korá*ban), testi lehet a betegsége (pl. Laci leukémiája az *Álmodozások kora* című filmben), szakmai lehet a munka területét érintő változás (pl. *Álmodozások kora*). A vegyes kategóriájába olyan eseménytípusokat sorolok, amely külső és belső is egyaránt, tehát a szereplővel is és a többiekkel egyidejűleg történik. Erre példa a közösség szétesése (pl. *Álmodozások kora, Sodrásban*). Emellett azt is megvizsgálom, hogy a protagonisták erkölcsi transzformációja milyen irányba mozdul el. Továbbá az is érdekel, hogy a fiatalok felnőtté válása értelmezhető-e a társadalomba való integrációként vagy sem, illetve interpretálható-e a vizsgált jelenség nevelési célzatú történetként és ha igen, hogyan jelenik ez meg. Érdekel az is, hogy milyen visszatérő tematikák jelennek meg a felnőtté váláshoz kapcsolódóan ezekben a nevelődési történetekben. Korábbi tanulmányomban (Milojev, 2021) rámutattam arra, hogy a generációs konfliktus, a mobilitás (utazás/helyváltoztatás) és az identitás kérdése szoros összefüggésben van a fiatalok felnőtté válásával. Ebben a tanulmányban is ezek jelenlétét keresem a vizsgált alkotásokban; kiegészítve azzal, hogy a helyváltoztatás szocializmusban kialakult sajátos formáját, a disszidálást is megvizsgálom. Továbbá megnézem, hogy a szubjektivitásnak és reflexiónak mint modernista jegyeknek milyen megvalósulási formái jelennek meg a fiatalok változástörténeteiben.

Tanulmányomban kvalitatív módszerrel dolgozom és induktív jellegű munkát végzek, azaz az egyes filmek elemzése után vonok le általános következtetést.

III. Eredmények

III.1. Álmodozások kora (Felnőtt kamaszok)

Az *Álmodozások kora* Oláh Jancsi nevelődési története. Ebben a filmben *„lélektanilag pontosan kimért rendben bomlik ki az a bizonyos eszmélési folyamat”* (Hirsch, 2013). Jancsi Bildungjának középpontjában a film első részében szakmai problémák állnak, mely az idősebb mérnökökkel, valamint a volt egyetemista társaival szemben kialakult konfliktusokban ölt testet. A generációs konfliktusok és a baráti közösség szétesése mellett Jancsi nevelődési markere a szerelem lesz. A főszereplő Bildungjának fontos részét képezi barátjának, Lacinak a halála, mely a főszereplő és fiatal barátai számára sorseseményként jelenik meg, és saját identitásuk megkérdőjelezéséhez vezeti őket.

Jancsi Bildungjának kardinális része lesz a nemzedéki konfliktus. A pályakezdő elektromérnökök egy vállalatnál dolgoznak, majd a gyakorlati évük lejárta után a munkáskáder Harrer tájékoztatja a fiatalokat, hogy a továbbiakban ki melyik részlegen fog dolgozni. Feszültséget szül közöttük az, hogy az összetartó baráti-szakmai közösségüket „felsőbb utasításra”, a „vállalat érdekében” mesterségesen feloszlatják, ennek következtében eltérő fizetést kapnak. A fiatalok az egység felbontását és az eltérő bérezést igazságtalanságnak élik meg, ám ezt csak Jancsi teszi szóvá Harrernak. Kettejük szóváltásában két eltérő értékrend és világnézet csap össze: Harrer munkáskáder, akinek nem volt lehetősége tanulni, szemben Jancsiékkal, akiknek ez a lehetőség már eleve adatott volt. Harrert a párthoz való lojalitása és jó kádersége miatt emelték ki, nem szakmai hozzáértése okán, mely Jancsiékat bosszantja. Ez a jelenet a film elején megfogalmazott narrátor szöveg fényében még jobban kiélezi kettejük konfliktusát, amennyiben Jancsi és a többi tehetséges, okos, elszánt, ambiciózus fiatal legfőbb feladata az, hogy áttörjék az idősebbek falát (*„Íme, ők az ellenség. Az idősebb mérnökök. A fal, melyet át kell törni. A tehetségtelenek, középszerűek, öregek fala!”*). Az ellenségként tekintett idősebb mérnökök ósdi, elavult nézeteket vallanak, a fiatalok nem tudnak velük érdemi szakmai párbeszédet folytatni.

Jancsi felnőtté válásának fontos állomása lesz az, amikor Flesch főmérnökkel szakmai egyetértésre lel. Már nem a baráti közösségből, hanem a felnőttek világából talál szövetségest,

ezáltal is jelezvén érettségét. Flesch főmérnök saját ötletein dolgozik, őt is fűti a szakmai ambíció és felismeri a középszerűséget annak előnyeivel és hátrányaival együtt; Jancsi felnőttkori önmagát lát(hat)ja meg benne. A generációs konfliktus felszámolásaként értelmezhetjük ezt a barátságot, mely egyben a protagonista társadalmi integrációjaként is interpetálható.

Jancsi messianisztikus, lázadó és újító szellemű attitűdjét párhuzamba állíthatjuk Szabó István filmrendező személyével. A *„középszerűek, az öregek fala”*, *„a fal, amelyet át kell törni”* gondolat értelmezhető az idősebb filmrendező generációk sematikus, történetmesélő, szocialista-realista szellemiségű filmkészítésének kritikájaként, míg Szabó új hullámra reflektáló, játékos-könnyed, személyes filmnyelve pedig a filmkészítés korszerű, azaz modern tendenciáinak hazai, úttörő jelentőségét hivatott demonstrálni. Ahogyan Létay Vera fogalmaz: *„A filmművészetet a kollektív művészetből a személyes művészet rangjára emelni — ennek a törekvésnek a jegyében született az „Álmodozások kora””* (Létay, 1965, 6).

A nemzedéki konfliktust, mely az idősebb és a fiatal mérnökök között áll fent, az összetartó baráti közösség lassú felbomlása követi. Miután mindannyiukat (Anni, Gergely, Laci, Matyi és Jancsi) más részleghez helyezik, azután kevesebbet találkoznak, majd az élet természetes hangsúlyainak áthelyeződései is megtörténnek: a szerelmek színeváltozásai, a munka monotóniája és a hétköznapok szürkesége okán a közösség háttérbe szorul és az individuum szükségletei kerülnek előtérbe.

Jancsi felnövekedésének fontos részét képezi a szerelem. Barátnői a szerelem más-más arcát rajzolják meg: Ági a nyári futó kalandot, Ani a delíriumos baráti csókot, Gabi (Habgab) a kissé egyoldalú vonzalmat testesíti meg. Éva a nagybetűs nő, aki nemcsak szépségével, de intellektusával és érzékenységével is magával ragadja Jancsit. Ez a szerelmi evolúció Jancsi érettségét is jelzi. Ám a nagy beteljesülés elmarad: míg Jancsi nem találja meg önmagát a világban, addig a szerelem is várat magára.

Az *Álmodozások korá*ban a fiatalok felnőtté válásának sorseseménye a közösség egyik tagjának halála lesz. Lacit fehérvérűséggel diagnosztizálják. A társaság tagjai két alkalommal látogatják meg Lacit a kórházban: az első alkalommal a látogatás után még jókedvűek és bizakodóak, ám itt is a közöttük lévő feszültségek domborodnak ki (*„Eltűntél!”* – mondja Jancsi Gergelynek. *„Én? Inkább te!”* – válaszolja). A narrátor leíró jelleggel és bőbeszédűen tájékoztat bennünket Laci betegségéről, leépüléséről, majd miután a diagnózisról tudomást szereznek a fiatalok és másodszorra is kijönnek a kórházból, Szabó a csenddel ellenpontoz. Nem szólnak egymáshoz, csak bolyonganak a városban. Közelképeik arról tanúskodnak: nem tudnak mit kezdeni a rájuk leselkedő tragédiával.

Fontos momentum továbbá, hogy Laci halála felszínre hozza Jancsi és Éva kételyeit, így ez a sorsesemény közvetett módon kettejük szakításának katalizátora is. Éva azt mondja, hogy megint elveszítette önmagát (*„S megint ugyanott vagyok. Teljesen elvesztem magam. ...Én nem akarok úgy élni, ahogy Te; én úgy akarok gondolkodni, ahogy én!”*), vagyis személyes identitásának megkérdőjelezéséhez vezeti őt. Jancsi esetében az identitás problematikája a múlt, a család intézményét érinti. Kiderül, hogy Jancsi elvesztette édesapját, még azt sem tudja, hol van eltemetve. A családi fotóalbum ismeretlen portréit egymás mellé rakosgatva beszél arról, hogy nem ismeri a saját múltját.

Jancsi identitásának részét képezi a múlttal való találkozás vagy szembenézés is, mely ugyan hangsúlyossá a későbbi Szabó-filmekben válik (lsd. *Apa, Szerelmesfilm*, stb.), azonban itt is megjelenik. Az *Álmodozások korá*nak egyik kulcsjelenete az, amikor Éva és Jancsi beülnek a moziba, hogy megnézzenek egy történelmi összeállítást, amelyben Éva gyerekként látható az úttörőtáborban. Filmtörténeti jelentőségű pillanat, ahogy dokumentum és fikció egymásnak

feszül Szabó játékfilmjében (erről részletesen: Milojev, 2020). Éva és Jancsi a gyerekkori szerelmek és csínytevések vidám pillanatait idézi fel, ám ezeket az archív felvételeken megjelenő világháborús borzalmak képei ellenpontozzák. A személyes narratíva és a történelem mozgóképes lenyomata az 1956-os résznél ér össze: itt már nem nosztalgiáznak, hanem számot vetnek, hiszen fiatalként részesei voltak a „drámai eseményeknek". Fontos filmtörténeti tény, hogy ebben az alkotásban láthatunk először manipulálatlan 56-os felvételeket (Fazekas-Pintér, 1988, 48). A szubjektív és az objektív történelem képei a néző fejében adódnak össze egy lehetséges, egyszerre személyes és történelmi léptékű sorsértelmezéssé. A hangnemváltással együtt komolyabb témákra terelődik a szó: felmerül a disszidálás kérdésköre, majd a sokat idézett párbeszéd következik („-*Te kommunista vagy? - Igen. - És te? - Én mérnök vagyok."*). Éva elmondja, hogy gyerekkori szerelme már külföldön él. Ő azonban nem ment vele, mert félt, hogy *„kimarad a történelemből"*, és be akarta bizonyítani, hogy magyar. Jancsi hozzáteszi, hogy benne fel sem merült ez az opció igazi választásként.

A film epilógusában Jancsit látjuk, aki az ágyában fekszik és elmélkedik a vele történt eseményekről. A narrátor – Jancsi hangján – egyes szám harmadik személyben értelmezi a fiú lélekállapotát (*„Jancsi most úgy érzi, kusza és érthetetlen számára minden. Éva távolivá és idegenné vált, és ezáltal teljes kétségbeesést érez"*). Ez a megoldás hideg távolságtartással, a külső szemlélő objektivitásával ruházza fel a homodiegetikus narrátori pozíciót. Ezután az elbeszélői helyzetben váltás következik be, és Jancsi többes szám első személyben – egy nemzedék nevében – vonja le a felnőtté válás keserédes konzekvenciáját (*„Miért kell fájdalom ahhoz, hogy felnőtt legyen az ember? Meddig tart a fájdalom s mikor válik egyszerű tapasztalattá? Mert nem akkor lettünk felnőttek, mikor megtudtuk, hogy gyerekkorunk eszméi hazugságok között értek. Nem 56-ban, mikor döntenünk kellett, hol akarunk élni, a Föld melyik országában. Nem mikor megváltoztak körülöttünk a barátok, s már pontosan megismertünk egy-egy ember. Nemcsak a munka felfedezésétől, nemcsak a haláltól, s nemcsak szerelmeinktől, hanem mindentől együtt. Az ember lassan megtanul gondolkodni. Furcsa dolgokat tapasztal és egyszercsak észreveszi, hogy a sok furcsa teljesen természetesen. Aztán rájön, ez nemcsak számára kell, hogy természetes legyen. És ez csodálatos élmény!"*). Jancsi (és rajta keresztül Szabó) tanító, nevelő célzattal summáza önmaga felnőtté válással kapcsolatos tapasztalatait, ám a többesszám első személy használatával elősegíti a nézői azonosulást, valamint személyes indíttatású történetét kollektív, nemzedéki élménnyé növeszti. A reggeli telefonébresztés során elhangzó *„Tessék felébredni!"* nemcsak Jancsinak, hanem generációja álmodozásának végét jelentheti: az illúziókkal való leszámolásra való felhívásként értelmezhető. Erre ráerősít a telefonos kisasszonyok megsokszorozódott képe, mely ugyancsak a kollektív cselekvésre sarkall, ezáltal mintaként szolgál(hat) Jancsi fejlődéstörténete a fiatal nemzedék számára.

Az *Álmodozások kora* az első olyan magyar szerzői film, amelyben a rendező tudatosan reflektál a filmtörténeti hagyományra, méghozzá különböző módokon, ezáltal a modernizmus egyik meghatározó elemének, a reflexivitásnak a különböző formáit azonosíthatjuk az alkotásban. Adódnak bizonyos helyzetek, melyekben közvetlenül utal egy-egy filmre: ilyen például az a jelenet, amelyben Jancsi és Éva a moziba igyekezvén elmorzézzák, hogy négyszáz csapás, és eközben Truffaut elsőfilmjének plakátja kétszer is feltűnik mellettük. Hasonlóan egy plakátot azonosíthatunk akkor, amikor Jancsi és Éva Habgabbal futnak össze az utcán. Ekkor Herskó János *Párbeszéd* című filmjének plakátját ismerhetjük fel egy mozi kirakatában, mely előtt épp a dialógust problematizáló helyzetnek vagyunk tanúi: Jancsi zavarban van Gabi társaságában, szégyelli magát és mindannyian kényelmetlenül feszengenek a kínos szóváltás alatt. Emellett Jancsi a film egyik jelenetében a világvevő rádión keresztül mutat meg ismerősen csengő részleteket Hitchcock, Fellini (*Nyolc és fél*), Truffaut (*Jules és Jim*) és Wajda (*Hamu és gyémánt*) filmjeiből Habgabnak. Az *Álmodozások kora* azonban közvetett módon is megidéz

egy olasz új hullámos alkotást, méghozzá Bernardo Bertolucci *Forradalom előtt* (1962) című filmjét. Ebben a műben Gina Fabrizio-t próbálja elcsábítani és felvidítani különböző stílusú szemüvegeket próbálva. Erre a megoldásra rímel az, amikor Szabó filmjének egyik jelenében Éva és Jancsi egy optikába mennek, ahol a lány különböző szemüveget próbál fel, ezzel is a kor divatját idézi meg és Jancsi szívét ejti rabul. Több szálon is kapcsolható az *Álmodozások kora* Marlen Martinovics Hucijev *Mi, húszévesek* (1961-1962) című szovjet filmhez. Mindkét film jelen idejű történetet mesél el és középpontjában a fiatal értelmiségiek útkeresése áll és egy baráti társaság felnőtté válása áll a fókuszban. Szergej Jancsihoz hasonlóan mérnök szeretne lenni: Szergej Ányát egy trolibuszon látja meg és szeret bele, Jancsi Évát egy másik tömegközlekedési eszközön, villamoson látja újra. Szabó nem véletlenül idézi meg ezeket az alkotásokat, hanem ezek *„következetes ábrázolásmódbeli választások”* (Fazekas, 1988, 45). Hitchcocktól a karakter pszichológiai árnyaltsága, Truffaut esetében játékos-felszabadult kameramozgása és történeteinek személyessége, Wajdánál *„a heroikus közösségélmény”* (Fazekas, 1988, 46) és Herskó esetében az egyén és a történelem viszonyrendszerének ábrázolása az, amely Szabót hommage-ra inspirálhatta, valamint az a személyes kötődés, hogy Szabó Herskó stúdiójából indult el.

III.2. Apa – egy hit naplója (1966)

Az *Apa – egy hit naplója* önéletrajzi ihletésű történet, hiszen Szabó is fiatalon vesztette el édesapját, ennek következtében ebben az Így jöttem-filmben gyászfeldolgozását kamera-töltőtollával írta vászonra. Takó Bence felnövekedéstörténetében két életkorban láthatjuk a protagonistát: először a kisiskolás fiút, majd az egyetemista ifjút követjük nyomon. A gyermekkor történelmi kontextusa a Rákosi-rendszer, a fiatal felnőttkoré a kádári konszolidáció. A kisfiú felnőtté válásának folyamatát nem látjuk: az időmúlást az ajtófélfába vésett barázdák mutatják, majd a narrátorszöveg is erre utal *(„Évek múltak és már magasabb, mint apa volt.”)*. Az életkori transzformáció lineáris módon következik be, és Szabó nem mutat átmenetet a két (történelmi) kor(szak) között.

A történet kiindulópontja az, hogy Takó Bence a háború ideje alatt szívbetegség következtében elveszítette édesapját. A kisfiú számára három emlékkép maradt meg apjáról: amint az udvaron tyúkokat kerget, a kórházban magához öleli őt, és amikor az udvaron felemeli őt és megforgatja a világban. Ezek az emlékek szubjektív nézőpontból láthatóak. Ezzel a plánválasztással Szabó a nézői azonosulást segíti elő, és a gyermeki perspektívát hangsúlyozza. Az apa a kisfiú jelenében szubsztitúciók formájában, tárgyi helyettesítőkben reprezentálódik (ahogy később látni fogjuk, akárcsak a főszereplő történelem tudata). Bence a saját maga kreált történetekkel tartja életben édesapja emlékét, melynek során egyúttal a magyar történelem elmúlt húsz évének fontos állomásait is felvázolja, vagy ahogy a New York Times kritikusa írta: Szabó filmje *„a történelmi örökség szükségességének gyönyörű tanulmánya…”* (Ipper, 1967, 9).

Takó Bence egyik nevelődési markere édesapja halála lesz. Azonban ez a trauma nem egyedi veszteségként, hanem kollektív tapasztalatként rekonstruálódik, azaz az édesapjukat a háborúban elveszített, ún. apátlan nemzedék élményeként jelenik meg. Ennek példája az a jelenet, melyben a Szent Benedek Rendi Gimnázium paptanára felszólítja a kisdiákokat, hogy álljanak fel azok, akiknek nem élnek a szülei, majd azok, akiknek meghalt az apjuk. Az osztály tanulóinak nagy része feláll. Ők adományban részesülhetnek. Ebben a jelentben szépen megmutatkozik az, hogy egy generációt érintő árvaságról beszélhetünk Szabóék nemzedéke esetében.

Szabó a felnőtté válást ebben a filmjében az identitás legelemibb kérdésével kapcsolja össze. Bence az által válik felnőtté, hogy saját identitását nem az apjáéhoz képest, hanem saját cselekedetei és képességei szerint határozza meg. Bence számos esetben próbál apjához

hasonlítani, szinte azonosul vele: az apja óráját hordja; az iskolai farsangon orvosnak öltözik, melynek során apja szemüvegét és orvosi eszközeit viseli; az apja különleges betűjét felhasználva ír az iskolában; felnőttként apja szemüvegét viseli az egyetemi bálon, melyre apja zakóját szabatja magára. Felnőtté válásának kulcsmomentuma az lesz, hogy saját identitását nem az apjához képest határozza meg, hanem önmagára attól független individuumként tekint. Ennek a gondolatnak a jelképes foglalata a film vége felé található jelenet is, melyben az egyetemista Bence átússza a Dunát. A narrátor így kommentálja az eseményt: *„Át kell úsznom a Dunát. Egyszer kell érnem valamit a magam erejéből. Csak a magam erejéből, ami erőt és kitartást igényel. … Nem mesélni, hogy apa átúszta"*. Bence figuráján keresztül Szabó arra biztatja a nézőt (és az ifjúságot), hogy a múltban élés helyett cselekedjenek a jelenben! Nevelő szándék jelenik meg itt is, ezáltal az *Apa* is nevelődési történet, mely az *Álmodozások kora Tessék felébredni!* záróakkordjára rímel a társadalmi-kollektív szerepvállalásra való felhívással. Helytállónak érzem Máriássy Judit konklúzióját: *„A mai huszonegynéhány éveseknek meg kell szabadulniok az illúzióktól, a szülők árnyékától és a történelem árnyaitól. Az egész film a tegnappal való szembesítés és ezen belül önvizsgálat és biztatás"* (Máriássy, 1966, 33).

Az irreális, nem valós apaképpel való leszámolás, azaz a hamis illúziók realitásra cserélése az egyik része a felnőtté válásnak, mely az *Apá*ban egyet jelent a múlttal való szembenézéssel és annak lezárásával. Ez két szinten történik meg. A *személyes szint* az, amikor Bence reflektál arra, hogy apjáról szóló történetei élénk képzeletének termékei. Ez akkor valósul meg, amikor a mentális utazás alapvetően modern műfaji mintázata kiegészül egy fizikai helyváltoztatással is: Jancsi Adorjánpuszta mellett halad el a vonattal és a helységnév tábla eszébe juttatja, hogy édesapja innen származik. Ennek az utazásnak azért is lesz kiemelkedő jelentősége, mert itt vált át a Bálint András hangján megszólaló homodiegetikus narrátor egyes szám harmadik személyből (*„Évekig büszke volt, míg azt hitte, aznap az ő apját siratta mindenki"*) egyes szám első személybe (*„Itt bujkált apa, vagy én találtam ki?"*). Tehát a ráébredés, az eszmélés a narrátor pozíciójában következő változással is együtt jár. Jancsi idővel ezt a változást már más előtt is fel meri vállalni: Aninak mesél arról, hogy már ő maga sem tudja, mi volt igaz az apjáról szőtt történeteiből. Emellett édesanyja is kijózanítja Bencét: míg a kisfiú és a kamasz fiú fantáziája egy háborús hőst, tisztességes férjet, kiváló orvost, partizánt kreált magának, addig az anyja szerint „alkalmazkodnia kellett", vagyis legkevésbé sem volt kiemelkedő ember.

A *társadalmi-történeti* szint az, amikor édesapja alakját nem a saját fantáziavilágában, hanem tágabb kontextusban helyezi el és a magyar történelem kontextusában ábrázolja. A kisfiú nézőpontja a történelmi tényeket és eseményeket gyermeki perspektívából közvetíti, ezáltal hangsúlyozottan szubjektív szűrőn keresztül reprezentálódnak. Az iskola államosítása Bence számára azt jelenti, hogy nem találkozik többé a paptanárral, akiről apjával közösen megélt kitalált történetet mesélt el iskolatársainak. Az 1948-as változás számára fellélegzést jelent, hiszen nem fogják fülön csípni hazugságáért. A május elsejei felvonulás során a személyi kultusz gyermeki interpretációját láthatjuk. Ez a gyermeki nézőpont a május elsejei felvonuláson megjelenő kommunista vezetőket ábrázoló transzparenseket édesapja arcképével váltja fel, és az ünneplő-dorbézoló tömeg az apját emeli piedesztálra és őt ünnepli. Itt fontos elem, hogy Szabó archív felvételeket mos egybe a gyermeki fantázia képeivel, ezáltal mintha hitelesítené, realisztikussá, legitimmé változtatná Bence sajátos történelmi vízióját.

Szabó István *„filmben lát, filmben érez",* írja róla egy kritikus (Hámori, 1967, 4). Az új hullámra jellemző filmtörténeti utalások az *Álmodozások kora* után az *Apa – egy hit naplója* című filmben is tetten érhetőek. Ezek itt is a szerző tudatos választásai, így nemcsak korábbi mesterek vagy inspirátorok hommage-ai, hanem egyben önmeghatározások is, mellyel Szabó kijelöli önnön ars poeticáját egy élő művészeti tradícióban. Meglátásom szerint, Szabó filmje nemzetközi kontextusban vizsgálva legkevesebb két filmmel állítható párhuzamba. Több szálon is kapcsolható az *Apa* Marlen Martinovics Hucijev *Mi, húszévesek* (1961-1962) című szovjet

filmhez, amely, ahogy fent kifejtettem, az *Álmodozások korá*val is rokonítható. A film fiatal főhőse, Szergej a háborúban vesztette el apját, és bár Bencéé váratlanul halt meg szívleállásban, mégis a fantázia és az álom nem reális közege lesz az a pont, ahol apa és fiú újra találkozhat. Ily módon Andrej Tarkovszkij *Iván gyerekkora* (1962) című elsőfilmjével is rokonságba állítható az Apa: mindkét film a mentális utazás modern formáját használja fel ahhoz, hogy egy kisgyermek (majd Szabónál egy kamasz) esetében tudati folyamatokon (fantáziák, álmok) keresztül rekonstruáljon személyes érzéseket a háború kontextusát is felelevenítve.

A reflexivitás mint a filmre mint művészetre való utalás két konkrét módon valósul meg. A kis Takó Bence édesanyjával születésnapja alkalmából moziba megy, amelyet *Chaplin, a diktátor* című filmjének plakátja díszít. A film előtti híradófelvételek a háborús bűnösök kivégzését mutatják, melyek a kisfiút borzongással töltik el. Édesanyja megjegyzi, hogy édesapját is elvitték ezek a rossz emberek (nyilasok). Ez a megjegyzés elindítja Takó édesapjáról szóló fantáziaképeinek sorozatát, mely a film egész narratív szerkezetét meghatározza. A mozi azért lesz fontos helyszín, mert Bence édesapjáról szóló fantázia-sorozata itt kel életre elsőként.

Ebben az alkotásban a mise-en-abyme, azaz film a filmben szerkezettel találkozunk. Szabó filmjében a fiatalok statisztaként vesznek részt egy holokausztról szóló filmben. A sokat idézett jelenet során Takó barátaival sárga csillagot visel. A rendező instruálja a statisztákat, megfeddi a vigyorgó embereket és tragédiát kér az arcokra. Egyik pillanatról a másikra kiemelik Jancsit a tömegből, megfosztják Dávid-csillagától és nyilas kiegészítőket kap: sapkát és fegyvert nyomnak a kezébe, melyek új identitását fémjelzik: zsidóból nyilas lesz; üldözöttből üldözötté válik egy parancs hatására. Az identitás kérdése nemcsak az édesapjához való személyes viszonyában jelenik meg ebben a filmben, hanem nemzeti kontextusban is, ezáltal Szabó a zsidóság, a magyarság kérdését is exponálja itt. Szabó felkínálja itt a rendező-teremtő-diktátor párhuzamot, mint a (film)történelmet írók hatalmát és kreatív erejét; bár kétségkívül nem ez lesz itt hangsúlyos, hanem az, hogy a múlttal a fiatalok a mozi, a film által szembesülnek. Láttuk, hogy ez történt az *Álmodozások kora* és az *Apa* mozi-jelenetében is: a történelem nem a saját életük része, hanem áttételes formában van jelen: számukra csak bizonyos távolságtartással, mediatizált formában érhető el, vagy történetek formájában (lsd. Ani által elmesélt családi história vagy Éva szüleiről szóló anekdotája) élnek tovább. (És ők maguk, a rendezők is történetet mesélnek el róla (reflexió)). Az *Apa* esetében a statiszta jelenet is ezt indukálja. Ennek hatására a fiatalok a presszó teraszán a történelmi múltról kezdenek el beszélgetni, arról, hogy ők a családjuk révén hogyan érintettek a háborúban. Itt „*Szabó nyugtalansága, ha úgy tetszik egy nemzedék nyugtalansága. Kik vagyunk? Hova tartozunk? Hol élünk voltaképpen? Kik után?*" (Máriássy, 1966, 31). Emellett ez a jelenet a történelem relativitásáról is beszél, abban az értelemben, hogy milyen esetleges az, hogy kiből mikor válik üldöző és üldözött.

III.3. Szerelmesfilm (1970)

Szabó első színesfilmjében, az 1970-ben megjelent *Szerelmesfilm* című műben a helyváltoztatás a szüzsé markáns eleme, ugyanis a film első része egy kettős utazásra épül: Jancsi meglátogatja gyerekkori szerelmét, Katát, aki tíz éve Franciaországban él. A vonatút során a fizikai utazás egy mentálissal is kiegészül: flashback formájában és asszociatív elbeszélőtechnika segítségével tárul a néző elé kettőjük kapcsolata. Vagyis a jelenen keresztül az emlékezéssel tárul fel a múlt, azaz a történelmi kontinuitás ezzel a modern formával teremtődik meg. Előképként Alain Resnais, Margarite Duras és Alain Robbe-Grillet időrendfelbontó filmjeit említhetjük, de fontos kiemelnünk az épp ebben az évben (!) megjelenő, szintén ezt a formát alkalmazó két magyar remekművet is: Huszárik Zoltán *Szindbád* és Makk Károly *Szerelem* című korszakindító munkáit.

Jancsi és Kata felnövekedéstörténete három idősíkban reprezentálódik: 8 éves gyerekként a háború alatti évek, kamaszként az 56-os forradalom, és fiatal felnőttként pedig a filmbeli jelen, a franciaországi találkozás jelenik meg. Jancsi felnőtté válása, akárcsak az *Apá*ban, korellál a történelem változásával: a viharos gyermekkori emlékek (háború, éhínség, bujkálás) és a kamaszként megélt forradalmi események traumái után érettebb társadalmi-politikai berendezkedésként reprezentálódik a Kádár-korszak: a Nyugatra utazás ennek a politikai engedékenységnek a megvalósulása, hiszen ez a lehetőség korábban nem volt elérhető a „legvidámabb barakk" országában élők számára.

Jancsi és Kata gyerekkori barátok, akik együtt tapasztalták meg a gyerekszerelem, a háború és a felnőtté válás vidám és borzalmas epizódjait egyaránt. A borzalmak, a traumák a múlt idősíkjához tartoznak, azonban a gyermeki perspektíva itt is, akárcsak az *Apá*ban, a gyerekkor szubjektív szűrőjén át mutatja be a közelmúltat, így – Katához kapcsolódóan – sok kedves emlék is felsejlik a Tűzoltó utcából. A gyerekkori epizódokból arra következtethetünk, hogy Kata az erősebb, a határozottabb egyéniség, akit egy jelenetben őszinte vallomása és bátorsága miatt megfosztanak rajtparancsnoki címétől (a hivatalos narratíva szerint bomlasztotta az egységet). Jancsi passzívabb figura, ő csak megrovásban részesül. A filmből sejthetjük, hogy Kata az 1956-os forradalom után hagyja el Magyarországot. Az, hogy miért megy el, arra egyrészt erre nem érkezik konkrét magyarázat a filmből, másrészt a narráció a maga nem lineáris jellegével az erre vonatkozó ok-okozatiságot fellazítja, erre csak következtetni lehet a történetből. Értelmezésem szerint itt 56 csak mint a nagybetűs Történelem *egyik* traumája jelenik meg a vészkorszak és a háború viszontagságos periódusai mellett, a kivándorlás okát ezek együttes magyarázataként (is) megjelölhetjük.

A *Szerelmesfilm*ben Jancsi nevelődési markerei közé a háború, a halál (Bözsi) sorseseménye, az 56-os forradalom, a szerelem, a szex és az elválás lesznek. Jancsi felnőtté válásának egyik meghatározó eleme a disszidálás lesz, mely az *Álmodozások korá*ban a mozi-jelenetben jelenik meg elméleti síkon a két főszereplő közötti dialógusban, valamint a pingpongozás során derül ki, hogy Jancsi egy régi osztálytársa Kanadában fogorvosnak tanul. A *Szerelmesfilm*ben Jancsi ugyan kiutazik Katához, ám ennek a fizikai és mentális utazásnak épp az a célja, hogy a fiú végképp elengedje a lányt. Nemcsak Katáról, hanem a kinti életről is dönt: nem neki való. Jancsi nem akar külföldön élni, Kata pedig nem szeretne Magyarországon maradni, ezért kapcsolatuk nem teljesedhet be. Nincs jövőjük, csak múltjuk. A disszidálás tehát mindig a Másikkal történik meg, és nem a Szabó-alteregóval ezekben az alkotásokban.

Kata és Jancsi a film egyik jelenetében egy házibuliba mennek, ahol a lány emigráns barátaival találkoznak, akik 56 után hagyták el az országot. Mindannyian felelevenítik Magyarországot, ám az ország meglehetősen negatív konnotációt kap: a megjelentek többségének a fasizmus, a világháború, az ínség és a borzalmak földje ez. Olyan világ, ahonnét menekülni kellett, mert nem volt más lehetőségük a túlélésre. A Nyugat itt azt reprezentálja, hogy külföldön van lehetőségük túlélni, újrakezdeni, és a legtöbb esetben: felejteni. Ám Szabó mégsem ezt a narratívát hangsúlyozza itt, hanem az államszocializmus alatti élet kilátástalanságát emeli ki. Megjegyzendő, hogy a házibuliban lévők többségének az álmokon keresztül rekonstruálódik Magyarország, tehát a tudattalan szférájához tartozik, nincs vele élő, tudatos kapcsolatuk. Ebben a jelenetben van egy közel öt perces monológ, melyben egy barna hajú zsidó nő, Klári azt meséli el, hogyan menekült meg a halál elől, hogyan élte túl azt, hogy negyvenötben a Dunába lőjjék. Szabó itt nem használ flashbacket, csak a nő arcát látjuk a történet elmesélése alatt, ami a film egész – nem lineáris, asszociatív – struktúrájától eltér, vagyis tudatos rendezői döntésre vall. Ezen a ponton Szabó a nézőre bízza a borzalmak rekonstrukcióját.

A *Szerelmesfilmben* a disszidálás az identitás kérdését veti fel, mint sok más Szabó-filmben. Kata barátai egy része még őrzi magyar identitását, a nyelvet, a kultúrát, de nagy részük

integrálódott a francia társadalomba és új identitást vett fel. Ennek két példáját találjuk ebben a házibuli-jelenetben: a bajszos férfi a kórusvezetőnő magyarul megkezdett úttörő dalát a Marseille-ra cseréli, illetve Pattantyús kisfiának Magyarországot a tévében mutatja meg, mediatizált formában férnek csak hozzá, méghozzá a francia nyelv segítségével. Ebben ragadható meg Kata és Jancsi személyiségének különbsége is a kivándorlás összefüggésében: a lány képes új identitást felvenni, és integrálódni egy külföldi társadalomba, a fiú azonban erre képtelen.

A film utolsó jelenetében egy általánosító jellegű zárlattal fejezi be a fiatalok történetét. A magánéleti szerelmes történetet kollektív szintre emeli: a külföldön élő szeretteiknek levelet író embereket mutatja a kamera, *„kifejezve ezzel a magyar társadalom széleskörű érintettségét az emigrációs léthelyzetben”* (GG. fordítása - Gelencsér, 2017).

IV. Összefoglalás

Szabó István trilógiájában a fiatal protagonistát mind természetes, mind traumatikus események formálták. A főszereplő felnőtté válása az utazás különböző formáival (disszidálás, fizikai és mentális helyváltoztatás), valamint az identitás kérdésével összefüggésben jelentkeztek. A főszereplő nevelődési markerei a szerelem, a generációs konfliktus, a szexualitás, a halál (természetes (Laci betegsége) és nem természetes (lelövik Bözsit a németek)), a közösség szétesése, és a történelmi sorsesemények (második világháború, vészkorszak, 56) voltak. A történelmi események nemzedéki élményeket fogalmaznak meg: Szabó a háború utáni „apátlan" generáció nevében beszél a felnőtté válásról. A nevelési célzatú zárlat gyakran kollektív cselekvésre való felhívást tartalmaz, és egyúttal egy lehetséges alternatívát kínál fel a fiatalok társadalmi integrációjáról. Az *Apa* és a *Szerelmesfilm* esetében azt láthattuk, hogy a protagonista transzformációja a történelem változására reflektál: a gyermekkorból a felnőttkorba való határátlépés leköveti a történelmi idők transzformációját is. A Kádár-korszak egy érettebb, megnyugvást hozó politikai berendezkedésként reprezentálódik a második világháború és a Rákosi-éra diktatórikus és nyomorúságos időszakai után. Míg az *Apa* című filmben a két időszak közötti lehetséges átmenet hiányzik, addig a *Szerelmesfilm*ben az időrendfelbontó elbeszélésmód a két időszak közötti kontinuitást és a lehetséges párhuzamokat gyengíti. A felnövekedéstörténet két film esetében (*Apa, Szerelmesfilm*) is a modern mentális utazás műfajával egészül ki. A reflexivitás pedig az *Álmodozások kora* és az *Apa* című filmeket teszi játékos, ma is elevenen lüktető alkotássá.

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The role of bacterial two-component system inhibitors in lipopolysaccharide biosynthesis

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Two-component systems are important molecules that have regulatory role in microbial organisms. Like many other cellular processes, lipopolysaccharide biosynthesis is also under the control of bacterial two-component systems. Lipopolysaccharides are macromolecules that are present in all Gram-negative bacteria and play important role in regulating their biological properties. This study describes the connection between the biosynthesis of lipopolysaccharides and bacterial two-component systems, allowing insight into previous studies too.

Keywords: bacterial two-component system; lipopolysaccharide; antimicrobial resistance

I. Introduction

I.1. Lipopolysaccharides

Lipopolysaccharides (LPSs) are complex and important molecules, playing a crucial role in the biology and pathogenicity of Gram-negative bacteria [1,2]. These molecules cover about 75% of all Gram-negatives. LPSs are composed of three main parts: a lipid A, a core oligosaccharide, and a variable region called the O-antigen or O oligosaccharide (see Figure 1).
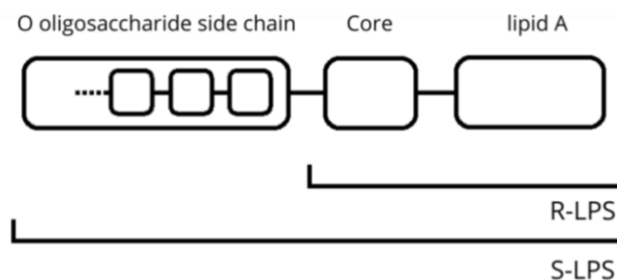
Figure 1: General structure of lipopolysaccharide molecules

Lipid A is a highly toxic component of LPS that is responsible for many of the adverse effects associated with Gram-negative sepsis. The core oligosaccharide is a more conserved region that is found in all LPSs, while the O-antigen is a variable region that is specific to each strain of bacteria. The O-antigen is important for the bacterium's ability to evade the host's immune system, as it can rapidly mutate and change, making it difficult for the host to recognize and mount an effective immune response.

LPSs serve several important functions in Gram-negative bacteria. It helps to maintain the structural integrity of the outer membrane, which is important for the survival of the bacterium. It also plays a role in the bacterium's ability to adhere to and colonize host tissues. In addition, LPSs are involved in the ability to form biofilms, which are communities of bacteria that are encased in a protective matrix and making bacteria resistant to antimicrobial agents.

I.2. Bacterial two-component system

LPS biosynthesis is regulated by the so-called bacterial two-component system (TCS) to change surface properties in different environment [3]. A bacterial TCS is a signaling system used by bacteria to sense and respond to changes in their environment. It is composed of two proteins: a sensor protein, which is usually located in the cell membrane, and a response regulator protein, which is typically a transcription factor.

The sensor protein is able to detect specific stimuli, such as changes in temperature, pH, or the presence of a particular chemical compound. When it senses a change, it undergoes a conformational change, which activates the response regulator protein. The response regulator protein then modulates gene expression in the cell in order to help the bacterium adapt to the new conditions.

Two-component systems are important because they allow bacteria to quickly and efficiently respond to changes in their environment, which is essential for survival. They are also important because they can be used to regulate various cellular processes, such as metabolism, motility, and virulence.

Bacterial two-component systems can play a role in the regulation of LPS biosynthesis by controlling the expression of genes involved in the biosynthesis of both core and O oligosaccharide molecules (figure 2).
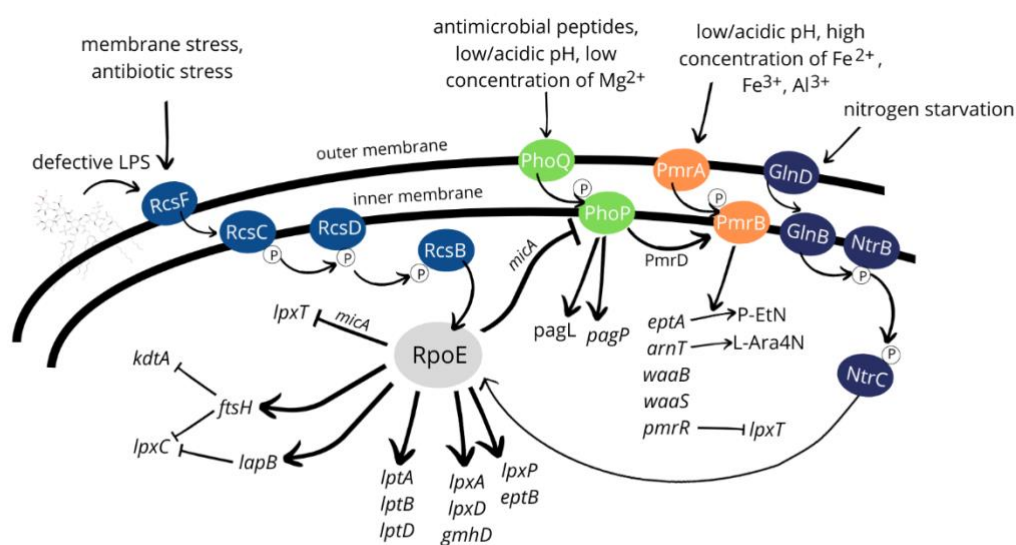
Figure 2: Networks of lipopolysaccharide biosynthetic genes known to be regulated by bacterial two-component system components according to Gracjana Klein and Satish Raina [3]

II. Materials and methods

A *Shigella sonnei* strains (*Shigella sonnei* 4303 and 4351) were involved the experiments with known LPS structure [4]. After preliminary tests, optimal culturing properties and optimal Closantel concentration were determined. Cells were cultured for 36 hours on 37°C in LB medium with 16mg/L Closantel.

Effect of the drug was examined with quantitative PCR (qPCR) focusing on the expression of *gmhD*, to determine the amount of target sequence that is present in a sample and make a conclusion about the level of expression of the target.

III. Results and discussion

In general, two-component systems can help bacteria fine-tune the synthesis of LPS in response to different environments, such as changes in temperature or the presence of specific chemicals. This can be important for the survival and virulence of the bacterium.

In terms of a broad-minded examination of TCS regulation on LPS biosynthesis, there are some important hot points. Addition of phosphorylethanolamine (P-EtN) provides resistance to the antimicrobial Polymyxin B and the edition of aminoarabinose (L-Ara4N) has a role in Colistin resistance. Both processes are regulated by PhoP-PhoQ and PmrA-PmrB TCSs.

As it was demonstrated before [5], genes in this system, like *gmhD* may cause drastic change in bacterial fitness, suggesting further investigation to discover new potential antimicrobial agents. *GmhD* mutant *Shigella sonnei* 4351 is thermosensitive, more sensitive to certain antibiotics among other changes in bacterial survival. The search for two-component system

inhibitors should attract more attention, as compounds that interfere with the function of bacterial two-component systems may be potentially used to inhibit the growth and survival of the bacteria.

There are different types of two-component system inhibitors, including:

1. Sensor protein inhibitors: These compounds bind to and inhibit the activity of the sensor protein, which prevents the two-component system from being activated in response to stimuli.

2. Response regulator inhibitors: These compounds bind to and inhibit the activity of the response regulator protein, which prevents the protein from modulating gene expression in response to the sensor protein.

3. Enzyme inhibitors: Some two-component systems rely on enzyme activity to transmit the signal from the sensor protein to the response regulator protein. Inhibitors of these enzymes can disrupt the function of the two-component system.

Two-component system inhibitors are of interest as potential antimicrobial agents because they can target specific signaling pathways in bacteria and potentially have fewer side effects than traditional antimicrobials.

While traditional antibiotic discovery efforts have aimed to disrupt bacterial viability with bacteriostatic or bactericidal molecules, novel complementary strategies target bacterial virulence, where the goal of therapy is to attenuate pathogen virulence. In an earlier study [3], we tried to downregulate the expression of a gene, named *gmhD* through bacterial TCS. As previous studies described a hypothetic inhibitory effect of Closantel on a two-component system regulator [6], and NtrC is related to the targeted gene [7], we tested the effect of Closantel directly on our target gene (Figure 3). While results showed neutral effect (RQ=0.91) under the examined conditions, the possibility of a connection cannot be dismissed completely.

Figure 3: Network of Closantel and LPS biosynthetic gmhD gene. While the effect [a] of Closantel on the expression of NtrC was known [6], and downregulation [b] of NtrC led to the downregulation of gmhD [7] in a Vibrio vulnificus *strain. Direct relationship between Closantel and gmhD was not described in literature.*

Short and defective lipopolysaccharides are known to initiate mucoid phenotype and enhanced binding effectivity to antimicrobial chemokines too [8]. This initiate envelope stress response and stimulate the activation of RpoE through the Rcs phosphorelay system [3] (Figure 2).

Envelope stress mechanisms are important to response to different environmental factors through RpoE, PhoP and BasR related two-component signal mechanisms. RpoE is the most extensive among them, where processes tend to stabilize the outer membrane, activating genes of LPS component biosynthesis, assembly and translocation. Mutations of the gene gmhD have an effect of constitutive elevation of heat-shock regulon RpoE, resulting other changes, like decreasing OMP content [9]. The key element in of sensing the defect in the mentioned RpoE pathway is the loss of core phosphorylation in these strains. LPS phosphorylations are essential for creating cation-mediated cross-bridges between LPS molecules in the outer membrane to stabilize the structure. Activation of RpoE have effect on the expression of *lpxA*, *lpxD*, *gmhD*, *lptA*, *lptB*, *lptD*, *lpxC* (through *lapB* and *ftsH*), *lapB*, *kdtA* (through *ftsH*) and *eptB* too. The

process will both support and inhibit different genes of lipid A synthesis, assembly and translocation of LPS molecules. While the mutation of *gmhD* lead to the inactivity of GmhD epimerase, analysis showed elevated expression of the gene in the mutant strain, seemingly by the activation of RpoE-dependent envelope stress.

Interestingly, other LPS-modifying envelope stress mechanism using BasS/BasR (PmrA/PmrB) and PhoP/PhoQ sensing mechanisms are not activated by defective LPSs. Bacteria alter LPS structures obtaining antimicrobial peptide resistance in response to environmental changes, like low pH and high concentration of Fe^{3+}, Zn^{2+} and Al^{3+} using *eptA* and *arnT* to add phosphoetanolamine and 4-amino-4-deoxy-L-arabinose to the structure. Activation of RpoE also inhibit PhoP activation through *micA* sRNA, blocking *pagP* and preventing the transfer of an additional (seventh) acyl-chain to the normally hexa-acylated lipid A by the response to low Mg^{2+} and Ca^{2+} concentration or low pH.

These processes are important as bacterial adaptation to the environment is known by changing the structures of LPSs, and these processes may lead to resistance to antimicrobial peptides, most commonly by the addition of phosphoetanolamine (PEtN) and 4-amino-4-deoxy-L-arabinose (Ara4N) to the core and lipid A regions. Acetylation of the O antigen region, or changing hydroxylation of fatty acid chains on lipid A sections has potential effect in these processes too. Changing LPS structure in this way may lead to the ineffectiveness of some antibiotics as interactions on surface changes. The addition of PEtN or Ara4N cause decrease in the overall negative charge and lower affinity for cationic molecules resulting polymyxin resistance. Analyzing these processes have the potential to find new targets to hinder resistance evolving pathways and are important to select proper antibiotic susceptibility tests conditions.

While these compounds have shown promise as antimicrobials in laboratory studies, more research is needed to determine their potential as therapeutic agents in humans. It is also important to note that the development of antimicrobial resistance is a concern with any antimicrobial agent, and this issue should be carefully considered when developing new therapies.

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A mediáció alkotmányos alapjai a Magyar Alaptörvényben

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Absztrakt

Jelen tanulmány célja, hogy bemutassa a mediáció alkotmányos megalapozottságát és felhívja a figyelmet arra, hogy a magyar Alaptörvény mely pontjai utalhatnak az alternatív vitarendezésre. Nagyon fontos, hogy a mediáció, a viták vagy vitás jogi helyzetek békés megoldására való törekvés egy össztársadalmi érdek, amelynek áttételesen létezik alkotmányos megalapozottsága. A tanulmány erre keresi a választ.

Kulcsszavak: mediáció, alternatív vitarendezés, jogállamiság, rule of law, alaptörvény, jog

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I.   A közvetítés és annak előnyei

Az alternatív vitarendezési formák alkotmányos megalapozottságának feltárásához alaposan vizsgálni szükséges Magyarország Alaptörvényét[1] (továbbiakban: Alaptörvény), amely ugyan konkrétan nem tartalmaz olyan rendelkezést, amely kimondaná az alternatív vitarendezés fontosságát, de utalás szintjén következtetéseket azért levonhatunk belőle.

Érdemes azonban tisztázni, hogy alternatív vitarendezés alatt mit is kell érteni, annak milyen formái ismertek. Az alternatív vitarendezés egy gyűjtőfogalom, amely két vagy több fél vitájának bíróságon kívüli rendezésére ad lehetőséget és ebbe a gyűjtőfogalomba tartozik:

(a) választottbírósági eljárás,

(b) mediáció,

(c) békéltetés,

(d) facilitáció,

(e) egyeztetés.

A bíróságon kívüli vitarendezés Magyarországon is aktívan jelen van, olyannyira, hogy jogi szabályozottsága nagyon kiterjedt. Jelentőségét az adja, hogy amellett, hogy lehetőséget ad a bíróságok tehermentesítésére, a vitában álló feleknek megadja a lehetőséget, hogy saját maguk döntsenek, alkossanak megállapodást a közöttük fennálló vita megoldására. Önmagában az a tény, hogy két fél képes arra, hogy egy harmadik, semleges fél (közvetítő) segítségével oldják meg vitás helyzetüket, ad egyfajta súlyt is a jövőbeni megállapodásuknak, azaz az ilyen eljárás során kötött megállapodások betarthatósága nem fog gondot okozni. Jelen tanulmánynak nem célja annak ismertetése, hogy a mediációs eljárásnak milyen előnyei lehetnek a rendes bírósági (peres) eljárással szemben, de mégis érdemes kiemelni pár fontosabb momentumot.

Véleményem szerint a közvetítői eljárás több szempontból is pozitív hatást gyakorol össztársadalmi szinten:

(a) kevesebb stressz éri a feleket, mivel megkíméli őket az elhúzódó peres eljárástól;

(b) pozitívan hat a vitában álló felek egészségügyi állapotára;

(c) megkíméli a feleket a jelentős, perrel járó kiadásoktól;

(d) pozitívan hat a felek munkahelyi produktivitására ezáltal pedig a gazdaságra;

(e) sokkal kevesebb esetben van szükség további jogi eljárásoka (pl: bírósági végrehajtás).

A fent felsorolt előnyök tükrében kijelenthető, hogy komoly jelentősége van annak, ha egyre többen vesznek igénybe különféle alternatív vitarendezési módokat. Egy modern, párbeszédre épülő társadalom egyik alapeleme, hogy megtanítja tagjait jól kommunikálni és ennek egyik eszköze lehet a mediáció (közvetítés) intézménye.

A mediáció ugyanis sokkal több, mint egy eljárás. A mediáció egy folyamat, amelynek során a vitában álló felek újra képesek lesznek kommunikálni egymással, újra képesek lesznek bizalmat építeni és esélyt kapnak arra, hogy a jövőben (legyen az közös vagy külön) is együtt tudjanak működni egymással.

A fentiek tükrében érdemes megvizsgálni, hogy hazánk Alaptörvénye mely pontjain utal a mediáció jelentőségére, mely részekből vonhatunk le olyan következtetéseket, amelyek megalapozzák, hogy a mediációnak van alkotmányos beágyazottsága, megalapozottsága.

II.   A mediáció fogalma és viszonya a jogállamisággal

Ahhoz, hogy az Alaptörvény és a mediáció viszonyát elemezni lehessen, a mediáció fogalmát kiterjesztően szükséges értelmezni, akár a jogszabályi[2] definíción kereteit is meghaladva. A közvetítői törvény szerint a közvetítés olyan sajátos permegelőző, konfliktuskezelő,

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[1] Magyarország alaptörvénye 2011. április 25. (továbbiakban: Alaptörvény)

[2] 2002. évi LV. törvény a közvetítői tevékenységről (továbbiakban: Közvetítői törvény)

vitarendező eljárás, amelynek célja a vitában érdekelt felek kölcsönös megegyezése alapján a vitában nem érintett, harmadik személy bevonása mellett a felek közötti vita rendezésének megoldását tartalmazó írásbeli megállapodás létrehozása (Közvetítői törvény 2.§). A mediáció fogalma tehát tartalmaz olyan kötelező elemeket, amelyek hiányában maga a békés vitarendezés ezen módja nem valósulhat meg:

(a) Permegelőző;
(b) Konfliktuskezelő;
(c) Vitarendező;
(d) Vitában érdekelt felek;
(e) Kölcsönös megegyezés;
(f) Semleges, harmadik személy közreműködése;
(g) (Írásbeli) megállapodás létrehozása.

A felsorolt definícós elemek közül valamennyinek teljesülnie kell ahhoz, hogy közvetítésről beszélhessünk. Ebből az a következtetés vonható le, hogy a jogalkotó legalább a fogalom szintjén keretek közé szorította ezt a területet, megadván számára azt a jogi hátteret, amely nélkül ez az eljárás nem alkalmazható.

II.1. A mediáció és a jogállamiság viszonya

A definícióból az alábbi alkotmányos alapelv további elemzésére nyílik lehetőség: jogállamiság (Rule of Law). A jogállamiság elve – amely az alkotmányjog alappillére[3] - teljesen átszövi az élet azon területeit, amelyek találkoznak a joggal, a jogszabályokkal és a mediáció pont egy ilyen terület. Elkerülhetetlen ugyanis a jognak való megfelelés, függetlenül attól, hogy a megállapodások minden esetben a felek egységes akaratát tükrözik. Tisztában kell tehát lennie minden egyes mediátornak az alapvető jogi normákkal, alapvető jogszabályokkal, mivel ezek alkalmazása átszövi a teljes közvetítői eljárást. A jogállamiság fogalmának jobb megértését szolgálja a Velencei Bizottság jelentése[4] a Rule of Law tartalmi elemeiről, amelyek a következők:

(a) Jog uralma, a törvényesség biztosítása;
(b) Jogbiztonság követelménye;
(c) Az önkényesség tilalma;
(d) A független bírói szervekhez fordulás joga;
(e) Az emberi jogok védelme;
(f) A diszkrimináció tilalma, a törvény előtti egyenlőség elve[5].

A jogállamiság fogalmának kibontásával láthatóvá válik az, hogy maga a mediáció minden szempontból megfelel a követelményeknek, mivel biztosítja a jog uralmát, a törvényességet, megfelel a jogbiztonság követelményeinek, nem ad lehetőségek az önkényességre, senkit nem akadályoz meg abban, hogy bírósághoz forduljon, védi az emberi jogokat és a mediációban egyik fő alapelvi kérdés a felek egyenlősége. Fontos hasonlóság a jogállamiság és a mediáció között még az egyensúly kérdése. A mediációs eljárás egyik fő alapelve az egyensúly megteremtése a vitában álló felek között, míg a jogállamiság egy olyan egyensúly kialakítására alkalmas alapelv, amely a megfelelő alkotmányos rendszer fenntartását egyedül képes biztosítani.[6]

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[3] KRUZSLICZ Péter Pál: Alkotmányos ellensúly politikai mérlegen: néhány gondolat a jogállamiság elvének jelenkori védelméhez. *Fontes Iuris* 2018/2., 23-27.

[4] 2011. március 24. CDL (2010)141rev2 Draft Report on The Rule of Law, 40-63.

[5] TRÓCSÁNYI László – SCHANDA Balázs: *Bevezetés az Alkotmányjogba.* HVG-Orac Kiadó, Budapest, 2012, 72.

[6] KRUZSLICZ Péter Pál: Alkotmányos ellensúly politikai mérlegen: néhány gondolat a jogállamiság elvének jelenkori védelméhez. *Fontes Iuris* 2018/2., 23-27.

A fentiek alapján tehát kijelenthető, hogy a mediáció is a jog uralma alatt áll, annak szerves része és attól elválaszthatatlan, mégis egy szabadabb és emberibb keretet ad a feleknek egy közös, mindenki számára elfogadható megállapodás létrehozására. Érdemes felhívni a figyelmet arra, hogy a jog nem csak a paragrafusok logikus rendje, nem csupán az ész dolga, hanem a szív dolga is[7] és ez a gondolat egyértelműen partneri kapcsolatot teremt a közvetítői szakma és a jogi hivatás, a jogászság között, mivel a mediáció is meghatározott keretek között zajlik és teret kap a „szív" is, amikor a felek képesek megérteni egymás nézőpontjait.

III.   Az alaptörvény és a mediáció

A nemzeti alkotmány identitást képez, kohéziót teremt a nemzet tagjai, intézményei között[8]. Magyarország Alaptörvénye ebben a kontextusban kohéziót teremt a jog uralma és az azt kiegészítő, segítő, támogató eljárások, módszerek között is. Kapcsolatot teremt a mediáció és a jog, a mediáció és az igazságszolgáltatás, a mediáció és családok védelme és a mediáció és a szabadságjogok között. Ez a kapocs biztosítja azt, hogy mindenkinek jogában áll úgy dönteni, hogy vitáinak rendezése érdekében közvetítő segítségét veszi igénybe és teheti ezt a bírósági eljárást megelőzően, a bírósági eljárás közben, de akár az eljárást követően is.

Az Alaptörvénynek több olyan szakasza is van, amelyek mélyebb elemzésével felszínre hozhatók olyan megállapítások, amelyek feltárják előttünk a mediáció alkotmányos alapjait.

A Nemzeti Hitvallás részben rögtön számos olyan fontos tételmondat kapott helyet, amelyek nagyon fontos alapelveket mondanak ki és ezek mind a békés együttélésre, az emberek egyenlőségére, a méltányosságra, az elesettek védelmére és a családok védelmére vonatoznak. A mediáció szempontjából fontos mondatok elemzése rávilágít arra a nagyon fontos és véleményem szerint keveset hangoztatott tényre, hogy a jogalkotó egyik fontos célja lehetett a társadalmi béke megteremtésére való törekvés.

III.1. A Nemzeti Hitvallás és a mediáció kapcsolata

A Nemzeti Hitvallás – amely önálló egység az Alaptörvényen belül[9] - több fontos "etikai parancsot[10]" tartalmaz (pl.: közösségért való felelősség), amelyek sok esetben lehetnek tárgyai nézeteltéréseknek, vitáknak és ezeket a mediáció módszerével az Alaptörvény szellemiségének is megfelelően a felek meg tudják oldani. A Nemzeti hitvallás több, mint az Alaptörvény preambuluma. Értékeivel, megállapításaival Magyarország jogrendjének, azaz a jogszabályalkotás és -értelmezés alapjaként kell rá tekinteni[11]. A viták békés megoldására való képesség egy olyan erény, amely fontos alappillére lehet egy jól működő társadalomnak, aminek tartópillére az Alaptörvény, amely "szerződést jelent a múlt, a jelen és a jövő magyarjai

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[7] TRÓCSÁNYI László: Bevezetés In: *Mediáció a nemzetközi jogellenes gyermekelviteli ügyekben* (Szerk.: Németh Zoltán) Igazságügyi Minisztérium, Budapest, 2015, 4.

[8] TRÓCSÁNYI László: *Válogatott miniszteri beszédek.* Magyar Közlöny Lap-és Könyvkiadó Kft., Budapest, 2019, 37.

[9] HORKAI HÖRCHER Ferenc: A Nemzeti Hitvallásról In: *Alkotmányozás Magyarországon és máshol: politikatudományi és alkotmányjogi megközelítések* (Szerk: Jakab András), 2012, 287-309.
Mediáció a nemzetközi jogellenes gyermekelviteli ügyekben (Szerk.: Németh Zoltán) Igazságügyi Minisztérium, Budapest, 2015, 4.

[10] SCHANDA Balázs: Vallási és erkölcsi utalások az Alaptörvényben In: *Mire való egy alkotmány? Nemzeti sajátosságok és az európai konszenzus* (Szerk.: Károlyi Elisabeth) Károlyi József Alapítvány, Helikon Kiadó, Budapest, 2014, 120.

[11] TÓTH Zoltán József: Az Alaptörvény szellemisége: a Nemzeti hitvallás értékei, a jogfolytonosság és az Alapvetés, *Polgári Szemle* 9/3-6., 2013, 275-292.

között"[12]. Trócsányi László korábbi igazságügyi miniszter mondta egy beszédében, hogy "Az Alaptörvény élő keret, amely kifejezi a nemzet akaratát, amelyben élni, s amelyet érvényesíteni szeretne.[13]" Ebbe az élő keretbe a Nemzeti Hitvallás tág értelmezése alapján a viták békés rendezése is beletartozik.

1. Táblázat – A Nemzeti Hitvallás mediációs vonatkozásai (a szerző saját szerkesztése)

Alaptörvényi megállapítás	Mediációs vonatkozás
Valljuk, hogy az emberi lét alapja az emberi méltóság.	A mediáció és annak eszménye minden tekintetben előtérbe helyezi az emberi méltóságot. A közvetítői eljárás során a felek egyenlőek és emberi méltóságuk védelmet élvez.
Valljuk, hogy az egyéni szabadság csak másokkal együttműködve bontakozhat ki.	A sikeres mediáció egyik alapfeltétele a felek együttműködése. Betartható, a jövőt formáló megállapodás kizárólag a felek hatékony együttműködéséből jöhet létre.
Valljuk, hogy együttélésünk legfontosabb keretei a család és a nemzet, összetartozásunk alapvető értékei a hűség, a hit és a szeretet.	A mediáció, különösen a családi mediáció biztosítja a családok védelmét és lehetőséget teremt akár a család összetartására is illetve ha ez nem sikerül, akkor egy nyugodt, kiegyensúlyozott jövő megalapozására.
Valljuk, hogy a közösség erejének és minden ember becsületének alapja a munka, az emberi szellem teljesítménye.	A mediáció egy komoly munka, a mediátor által végzett közvetítői tevékenység kiemelt társadalmi haszonnal jár és nem csak az egyén, hanem a közösség szintjén is kiemelt hasznossága van. Fontos kiemelni, hogy az ember abszolút értéket hordozó érintetlen méltósággal rendelkező valaki, de ez az érintetlen méltósága csak a közösségben tud realitássá válni[14]. Ebben tud a mediáció, a párbeszéd módszere segítséget nyújtani.
Valljuk az elesettek és a szegények megsegítésének kötelességét.	A mediáció mindenkinek lehetőséget ad vitáinak rendezésére az élet bármely területén és segíti az embereket abban, hogy megpróbálják megérteni egymást.
Valljuk, hogy a polgárnak és az államnak közös célja a jó élet, a biztonság, a rend, az igazság, a szabadság kiteljesítése.	A polgároknak és az államnak is érdeke a mediáció intenzívebb biztosítása, mivel a mediáció során kötött megállapodások igazságosak, megkímélik a feleket a további eljárásoktól és csökkentik az igazságszolgáltatás terheit is.
Valljuk, hogy népuralom csak ott van, ahol az állam szolgálja polgárait, ügyeiket	Magyarországon a 2002. évi LV. Törvény részletesen szabályozza a polgári és

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[12] SALAMON László: Magyarország új Alaptörvényének válaszai a XXI. Század kihívásaira. In: *Mire való egy alkotmány? Nemzeti sajátosságok és az európai konszenzus* (Szerk.: Károlyi Elisabeth) Károlyi József Alapítvány, Helikon Kiadó, 2014, 254.

[13] TRÓCSÁNYI László: *Válogatott miniszteri beszédek.* Magyar Közlöny Lap-és Könyvkiadó Kft., Budapest, 2019, 41.

[14] SULYOK Tamás: Az alkotmányos identitás alapkérdései In: *Párbeszéd és identitás* (Szerk.: Sulyok Márton) Magyar Közlöny Lap-és Könyvkiadó Kft., 2016, 150.

méltányosan, visszaélés és részrehajlás nélkül intézi.	kereskedelmi ügyekben végezhető közvetítést, megfelelve az EU elvárásainak[15]. A törvényi alapok további szélesítésével, bizonyos területeken a mediáció jobb megismertetésével ez az alkotmányos tétel is maradéktalanuk megvalósítható.

III.2. Az Alaptörvény konkrét rendelkezéseinek és a mediációnak a kapcsolata

Az Alaptörvény több olyan rendelkezést is tartalmaz, amelyeknek lehet ún. mediációs magyarázata, de természetesen konkrét jogalkotói szándék a mediáció alkotmányos alapjainak megteremtésére ezekben nem fedezhető fel, azonban mégis fontos szabályok, jogi alapnormák ezek és hatnak a közvetítés intézményére is. A társadalmi párbeszéd fontossága is megjelenik az Alaptörvényben és ez a párbeszéd a mediációnak az egyik szívcsakrája is egyben. A beszélgetés lehetőségének megteremtése, a vitában álló felek részére a lehetőség megadása arra, hogy párbeszédet folytassanak jelenti a közvetítés egyik legfontosabb hozzáadott értékét. Kijelenthető, hogy párbeszédre igenis szükség van[16] és azt is látni kell, hogy nagyon sok esetben párhuzamos igazságok „futnak" egymás mellett, amelyek sok esetben valahol találkoznak egymással. A párbeszéd, amelyet egy mediátor irányít, megteremti az esélyt arra, hogy megértsük a másik álláspontját, igazságát és megkeressük a közös pontokat.

2. Táblázat – Az Alaptörvény egyes rendelkezéseinek mediációs vonatkozásai (a szerző saját szerkesztése)

Alaptörvényi rendelkezés	Mediációs vonatkozás
L) cikk (1) Magyarország védi a házasság intézményét mint egy férfi és egy nő között, önkéntes elhatározás alapján létrejött életközösséget, valamint a családot mint a nemzet fennmaradásának alapját. A családi kapcsolat alapja a házasság, illetve a szülő-gyermek viszony. Az anya nő, az apa férfi. (2) Magyarország támogatja a gyermekvállalást. (3) A családok védelmét sarkalatos törvény szabályozza.	A családok védelme, a megromlott kapcsolatok helyreállítása vagy egy nyugodt jövő megalapozása egy nagyon fontos célja a mediációnak is. A válási mediáció során a szülők biztonságos körülmények között, a gyermek érdekeit előtérbe helyezve képesek olyan megállapodást kötni, amely megalapozza a jövőbeni együttműködésüket. A mediátor értő figyelme, a kialakított bizalmi légkör, az asszertív kommunikáció, a minősítésmentes párbeszéd mind-mind elősegítik, hogy a felek jobban megértsék egymás nézőpontjait. A válások során a gyermekek a legnagyobb vesztesek, nem ők akarták, nem ők tehetnek róla, mégis megtörténi velük. Éppen ezért érdemes ezeket a folyamatokat békés mederben tartani.
M) cikk	A mediátori tevékenység értékteremtő képessége vitathatatlan és ezzel nagyban

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[15] Az Európai Parlament és a Tanács 2008/52/EK Irányelve (2008. május 21.) a polgári és kereskedelmi ügyekben végzett közvetítés egyes szempontjairól

[16] TRÓCSÁNYI László: Az alkotmányos identitás alapkérdései In: *Párbeszéd és identitás* (Szerk.: Sulyok Márton) Magyar Közlöny Lap-és Könyvkiadó Kft., 2016, 43.

(1) Magyarország gazdasága az értékteremtő munkán és a vállalkozás szabadságán alapszik. (2) Magyarország biztosítja a tisztességes gazdasági verseny feltételeit. Magyarország fellép az erőfölénnyel való visszaéléssel szemben, és védi a fogyasztók jogait.	képes támogatni a társadalmi békét, a konfliktusban álló felek között a kommunikáció helyrehozatalát. A gazdaság területén a mediációt igénybevevő cégek biztosítani tudják a hatékony konfliktuskezelést, a jó hírnév védelmét és fenn tudják tartani a produktivitásukat is. Összgazdasági érdek is lenne a mediáció megismertetése a gazdaság minden szereplőjével.
XV. cikk (1) A törvény előtt mindenki egyenlő. Minden ember jogképes. (5) Magyarország külön intézkedésekkel védi a családokat, a gyermekeket, a nőket, az időseket és a fogyatékkal élőket.	A törvény és a mediátor előtt is mindenki egyenlő. A mediációs eljárás egyik sarokpontja a felek egyenlősége, a felek közötti egyensúlyi helyzet megteremtése és fenntartása. A közvetítői eljárásban mindenkinek "igaza" van és nincs vesztes fél sem. Az Alaptörvény által védett társadalmi csoportok életében keletkező kisebb. nagyobb konfliktusok megoldására is alkalmas módszer lenne.
XVI. cikk (1) Minden gyermeknek joga van a megfelelő testi, szellemi és erkölcsi fejlődéséhez szükséges védelemhez és gondoskodáshoz. Magyarország védi a gyermekek születési nemének megfelelő önazonossághoz való jogát, és biztosítja a hazánk alkotmányos önazonosságán és keresztény kultúráján alapuló értékrend szerinti nevelést. (2) A szülőknek joguk van megválasztani a gyermeküknek adandó nevelést. (3) A szülők kötelesek kiskorú gyermekükről gondoskodni. E kötelezettség magában foglalja gyermekük taníttatását. (4) A nagykorú gyermekek kötelesek rászoruló szüleikről gondoskodni.	Véleményem szerint a szülői felelősség körébe beletartozik az is, hogy a szülők egy esetleges válás esetén is figyelemmel legyenek a gyermekük érdekeire, jóllétére. Amennyiben mediációs folyamat segítségével kerül sor a válásra, úgy a szülők maradéktalanul eleget tesznek az alaptörvényi elvárásoknak és megkímélik magukat és gyermeküket a jövőbeni további konfliktusokról. A közvetítői eljárás során a szülők egy kvázi edukatív folyamaton is keresztülmennek, amikor megtanulnak tisztelettejesen és minősítés mentesen kommunikálni egymással. A mediáció egy konfliktuskezelési művészet is egyben. Mindenkinek joga van megválasztani, hogy bíróságon kívüli módszerekkel kívánja-e megoldani a fennálló konfliktusait vagy inkább a bírói utat választja.
XVII. cikk (1) A munkavállalók és a munkaadók - a munkahelyek biztosítására, a nemzetgazdaság fenntarthatóságára és más közösségi célokra is figyelemmel - együttműködnek egymással. (2) Törvényben meghatározottak szerint a munkavállalóknak, a munkaadóknak, valamint szervezeteiknek joguk van ahhoz, hogy egymással tárgyalást folytassanak, annak alapján kollektív szerződést kössenek, érdekeik védelmében együttesen fellépjenek,	A munkavállalókról és a munkaadókról rendelkező XVII. Cikk egy egyértelmű utalás arra, hogy a felek közötti vitás helyzeteket a lehetőségekhez mérten igyekezzenek békés úton rendezni. Ennek a tárgyalási folyamatnak már nagy hagyománya van és ezek hatékonysága mediátorok igénybevételével tovább fokozható, maximalizálható.

amely magában foglalja a munkavállalók munkabeszüntetéshez való jogát. (3) Minden munkavállalónak joga van az egészségét, biztonságát és méltóságát tiszteletben tartó munkafeltételekhez. (4) Minden munkavállalónak joga van a napi és heti pihenőidőhöz, valamint az éves fizetett szabadsághoz.	
XXVIII. cikk (1) Mindenkinek joga van ahhoz, hogy az ellene emelt bármely vádat vagy valamely perben a jogait és kötelezettségeit törvény által felállított, független és pártatlan bíróság tisztességes és nyilvános tárgyaláson, ésszerű határidőn belül bírálja el.	Elvitathatatlan joga a magyar embereknek az igazságszolgáltatáshoz való hozzáférés és egy ésszerű időn belül meghozott bírói döntés. Amennyiben a feleket támogató jogi szakemberek fel tudják ismerni a békés, peren kívüli vitarendezésben rejlő lehetőségeket, akkor úgy tudják ügyfeleiknek biztosítani a hatékony ügyintézést, hogy közben nem sérül az igazságszolgáltatáshoz való hozzáférés alapjoga.
28. cikk A bíróságok a jogalkalmazás során a jogszabályok szövegét elsősorban azok céljával és az Alaptörvénnyel összhangban értelmezik. A jogszabályok céljának megállapítása során elsősorban a jogszabály preambulumát, illetve a jogszabály megalkotására vagy módosítására irányuló javaslat indokolását kell figyelembe venni. Az Alaptörvény és a jogszabályok értelmezésekor azt kell feltételezni, hogy a józan észnek és a közjónak megfelelő, erkölcsös és gazdaságos célt szolgálnak.	A mediátorok a mediációs eljárás során abban segítik a feleket, hogy az adott jogszabályi kereteken belül a lehető legoptimálisabb megállapodást foglalják írásba. Fontos szempontja a megállapodásnak, hogy legyen betartható, egyértelmű és feleljen meg a jogszabályoknak. A mediátor támogatja a feleket, azonban a döntés felelőssége nem az ő kezében van. Éppen ez adja a mediáció csodáját, ugyanis a felek tudnak elég felnőttek lenni ahhoz, hogy saját életükkel kapcsolatban döntést hozzanak. A mediációs eljárás tehát a jogi keretek betartása mellett ad egy rugalmasabb keretet.

IV.   Összegzés - Konklúzió

Az Alaptörvény egyes megállapításainak fent bemutatott értelemzése rávilágít arra, hogy nagy szüksége lenne a mediáció további népszerűsítésére és annak széleskörű igénybevételére egyaránt. Az a kísérlet, hogy megtaláljuk a mediáció alkotmányos alapjait, egy nagyon fontos és érdekes folyamat és egy olyan munka, amelyet szükséges elvégezni ahhoz, hogy alkotmányos-jogi szinten is kontextusba lehessen helyezni ezt a területet. A jelenkorban rengeteg helyi és globális szinten is jelentkező konfliktus (pandémia, háború, gazdasági válság) vár megoldásra, amelyek megkövetelik azt az emberi képességet, hogy próbáljuk meg megérteni a másik fél álláspontját.

Egymás megértése csak párbeszéddel lehetséges, amelynek jogi alap-kereteit a mediáció szempontjából az Alaptörvény megteremti és szellemisége mindenki számára lehetővé teszi, hogy a béke útját járja.

A közvetítés módszere komoly történelmi múltra tekint vissza és ez a múlt kötelezi a jelen mediátorait is arra, hogy tovább fejlesszék és alakítsák ezt a csodálatos szakmát. Ha tisztában

vagyunk azzal, hogy ez egy interdiszciplináris terület és a mediáció nyit a jog, a jog pedig a mediáció irányába, akkor ez az együttműködés elhozhatja a kreatív, hatékony, mindenki számára megfelelő és jogi értelemben is megkérdőjelezhetetlen megállapodások reneszánszát. Ez lenne ugyanis a jog és igazságkeresők érdeke is, de ez egy kiemelt társadalmi érdek is egyben. Együttműködéssel, párbeszéddel és a jogszabályoknak való megfeleléssel megvalósulhatnak a tényleg működő és hatékony kooperációk. Természetesen szükséges még további elemzések készítése és a jogösszehasonlító módszerrel más országok alkotmányos kereteinek feltérképezése is ahhoz, hogy ez a folyamat tényleg teljeskörűen megvalósulhasson. A jogállamiság és a jogbiztonság mediációhoz való viszonyának kutatása és kibontása is segítheti ezt a munkát.

Végül ne feledjük: mi emberek, az egész világon ugyanazon utazásban veszünk részt, ami nem más, mint az egymás megértésére való törekvés.

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Egyházszakadások mintázata a kommunizmus[1] idején

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A pártállami egyházpolitika több szinten is akadályozta az egyházak rendeltetésszerű működését. Jogbizonytalanságot teremtett azzal, hogy nem volt egységes vallásügyi törvény. Másrést minden eszközt felhasznált az egyházi személyek politikai befolyásolására, ügynöki beépítésére. A külső nyomás, az egyházak négy fal közé szorítása, a vezetők beszervezése feszültséget okozott a tagságban, ami elégedetlenségben, vezetők elleni lázadásban és sokszor szakadásban nyilvánult meg. A kutatás célja az egyik kisegyház példáján keresztül megvizsgálni a kommunizmus idején történő szakadások mintázatát, melynek megismerése után arra keresi a választ, hogy mindez a felekezetre, a magyar politikai környezetre jellemző, vagy követi az egyházszakadások általános szociológiai és lélektani törvényszerűségeit. A Hetednapi Adventista Egyházban 1956-1975 között lezajlott három szakadás mintázatát hasonlítja össze egy történelmi egyház első világháború utáni két szakadásával, valamint nemzetközi színtéren ismert és vizsgált szakadások általános jellemzőivel. Az esettanulmányban vizsgált kisegyház három szakadásánál egyértelműen kimutatható a kommunista diktatúra egyházellenessége, mint kiváltó ok. A kívülről gerjesztett hatalmi harc, a belső elégedetlenség, a protestálók fegyelmezésének módja, a hatósági beavatkozás szintén a mintázat részét képezi. A másik példa a Trianoni döntés utáni időszakban vizsgálja a Református Egyházban történt két szakadás, eltérő helyszíneken. A mintázatban szerepel a legitimációs válság, a vezetők sérelme, a helyi politikai helyzet befolyása, teológiai köntös megjelenítése. A harmadik, nemzetközi elemzés több nagyegyházi szakadásából rakja össze a közös pontokat, amelyek közül a legfontosabbak: a külső körülmények és a belső kegyességi irányzatok hatása, a hatalmi csomópontok dinamikája, az identitás deficit és a karizmatikus vezetők szerepe. A három elemzés összegzésében az derül ki, hogy bár a szakadások eltérő időszakban és helyszíneken valósultak meg, a sarokpontok azonosak. A Hetednapi Adventista Egyházban történt három nagyobb szakadás nem tekinthető sem adventista, sem specifikusan magyar, sem az önkényuralmi rendszer által kikényszerített jelenségnek. A szakadások szociológiai, társadalmi, lélektani és vezetéstechnikai törvényszerűségeket követnek, annak ellenére, hogy a szellemi vezetők mindig megtalálták a teológiai, lelki indoklást.

Kulcsszavak: *egyházszakadás, pártállam, mintázat, kisegyházi, lázadás*

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[1] Az időszak pontosabb meghatározása érdekében az 1956-1975 közötti, a forradalom és a helsinki záróokmány aláírása által behatárolt periódus jelölhető meg. A tanulmányban vizsgált három szakadás ebben a periódusban robbant ki.

I. Alapvetés

A szakadás kifejezést mindig az az egyházszervezet használta, ahonnan a tagok egy csoportja kivált. Pejoratív értelme miatt a protestálók gyakran megbélyegzésként értelmezték, annak ellenére, hogy a fogalom jelentése nem azonos az eretnekséggel. Érvelésük szerint legtöbb esetben a kiválást kényszerként élték meg, ami a kritizált egyházvezetés fegyelmi intézkedéseinek elkerülhetetlen következménye volt, az ellenszegülők felmentése, kitiltása vagy kiközösítése miatt. Ezzel együtt a görög szkizma szó használata indokolt, mivel a hasadás, szakítás jelentéstartalmat nem a szándék határozza meg, hanem a végeredmény, ami az egyház szervezetében beállt szakadásban nyilvánul meg.

A pártállami egyházpolitika több szinten is akadályozta az egyházak rendeltetésszerű működését. A vallásos életet ideológiai szinten támadta a Kommunista Párt Központi Bizottságának agitációs osztálya; a Belügyminisztérium megszervezte az egyházi ügyekkel foglalkozó osztályát az Állami Egyházügyi Hivatalát (ÁEH), a kisegyházakat pedig a Szabadegyházak Tanácsa (SZET) által ellenőrizte, amely széles jogköröket kapott, mint például a lelkészi igazolványok kiadása, belső választások befolyásolása, egyházi körlevelek cenzúrázása, kiadványok engedélyeztetése és így tovább (Rajki, 2003). 1952-ig inkább a nagy egyházak rombolásával foglalkoztak, amelybe a protestánsokat is próbálták bevonni. Felső szinten garantálták a felekezetek működését, de helyi szinten gátolták. A pártállam a „szocializmus képére formálódás útjára terelte az egyházakat" (Köbel, 2008), és a „törvényes" működésük garantálásáért cserébe politikai lojalitást követelt annak vezetőitől. Az 1956-os forradalom megbukott és új korszak kezdődött a kommunista vezetésben. Kádár irányításával elkezdődött a puha diktatúra, ami fokozatosan „szelídült", okulva a Rákosi korszak kudarcaiból. Nyílt támadás helyett, a beépített ügynökök, a befolyásolás színfalak mögötti eszközeit használta (Rajki, 2012). A békés működést a külső körülmények enyhülése és az egyházvezetők fokozott együttműködési készsége eredményezte. Az ÁEH csak az általa jóváhagyott, államhoz lojális lelkészeket engedte „megválasztani" vezetői tisztségre. Az ellenőrzésről, az egyház „államosításáról" a hatalom nem mondott le. Az állam jogbizonytalanságot teremtett azzal is, hogy nem volt egységes vallásügyi törvény. A külső nyomás, az egyházak négy fal közé szorítása, a vezetők beszervezése feszültséget okozott a tagságban, ami elégedetlenségben, vezetők elleni lázadásban és sokszor szakadásban nyilvánult meg.

II. Módszer

A kutatás célja az egyik kisegyház példáján keresztül megvizsgálni a kommunizmus idején történő szakadások mintázatát, melynek megismerése után megválaszolni azt a kérdést, hogy mindez a felekezetre, a magyar politikai környezetre jellemző, vagy követi az egyházszakadások általános szociológiai és lélektani törvényszerűségeit. A Hetednapi Adventista Egyházban (HNA) 1956-1975 között lezajlott három szakadás mintázatát hasonlítja össze egy történelmi egyház első világháború utáni két szakadásával, valamint nemzetközi színtéren ismert és vizsgált szakadások általános jellemzőivel. Mintázatot keresni egyházszakadásokban nem egyszerű feladat, mivel azok drámai megnyilvánulásai elfedik a felszín alatti, látens okokat. A felszínen lévő, jól kommunikált ügyek általában keveset árulnak el a rejtett ellentétekről. A különböző példák összevetésével, az összehasonlító elemzés módszerével, lehetőség nyílhat a színfalak mögötti, valós problémákat, szakadást kiváltó okokat felszínre hozni.

III. Hipotézis

A választott kisegyházi esettanulmány nem volt elszigetelt történés a pártállami időszakban. „Az állami ösztönzésre történő centralizáció eredményeként a tagegyházakban egyes csoportok szembe kerültek egymással, és a hatalmi harc lehetővé tette a felekezetek és a SZET vezetése számára az állítólagos 'reakciósok' perifériára szorítását. Több esetben szakadás jött létre" (Rajki, Szigeti 2012). A SZET vezetése sérelmezte, hogy egyes állami szervek szimpátiával nézték a szakadármozgalmak egyházukat bomlasztó tevékenységét. Megalapozottnak látszik az a vélekedés, hogy az egyházakon belüli szakadások az „oszd meg és uralkodj" elv szerint provokált, sugallt vagy/és elnézett jelenségek voltak. „A H. N. Adventista Egyházbelső válságával kapcsolatosan megállapítja egy belső hivatali feljegyzés, hogy a 'szakadárok' bátorságához hozzájárulnak az állami és pártkapcsolataik, mert egyes helyeken az állami és belügyi szervek az egyházon belüli feszültség fenntartására törekedtek" (MOL XIX-A-21-b-46/1976.402.doboz. Rajki, Szigeti 2012). Köbel szerint ennek a megosztó politikának több módszere is volt: az egyházakkal kötött egyedi „egyezmények", egyházi személyek lejáratása, egyházi fegyelmezés és helyezések kikényszerítése, az ügynöki munka és a bomlasztás volt. A bomlasztás meghatározását a BM Rendőrtiszti Akadémia Politikai Tanszékének tanulmányából idézi, ami érthetővé teszi milyen mértékben volt a rendszer érdekelt a szakadások kiprovokálásában: „Bomlasztás alatt ... olyan operatív folyamatot értünk, amelynek során ... felderítjük, felkutatjuk a kategórián belüli ellentéteket (elvi, személyi, anyagi pozíciókat stb.) vagy ilyeneket mesterséges úton teremtünk annak érdekében, hogy a kategória erejét lekössük és gyengítsük belső harccal és viszállyal, hogy az ellentétes csoportok felszínre kerüljenek és leleplezőjenek, a reakciós elemek pozícióikból kiszoruljanak, a haladó erők előtérbe kerüljenek és végül ... a hívek kiábránduljanak" (Köbel,2005).

Összegzésként elmondható, hogy a kommunizmus egyházellenes tevékenysége alapozta meg az elégedetlenséget, illetve módszereinek változása teremtette meg a tiltakozás lehetőségét, az „oszd meg és uralkodj" elv alapján. Mindezekből adódik az a hipotézis, hogy a pártállam időszakában bekövetkezett egyházszakadások primer oka a politikai rendszer volt.

IV. Három szakadás mintázata egy kisegyház életében

A fenti hipotézis igazolására vizsgáltuk meg a HNA életében bekövetkező három szakadás mintázatát, Rajki kutatásait felhasználva (Rajki, 2003): 1953-1956 „Buday féle" mozgalom, 1965-1966 „Négyesi féle" szakadás, 1975-1976 „Egervári-szakadás". A mintázatban olyan jellemzők szerepelnek, amelyek a háromból legalább két esetben megfigyelhetők.

IV.1. Külső okok

Mindhárom esetben egyértelműen kimutatható a kommunista diktatúra egyházellenessége, ami korlátozta az egyház szabad működését és a tagság többsége által nem kívánatos „együttműködést" kényszerített rá.

IV.2. Hatalmi harc

Mindhárom esetben az országos vezetőválasztás összefüggésében jelentkezett a protestálás, személyi ellentétek hátterén. Az első két esteben az elmaradt, meg nem tartott választások okoztak elégedetlenséget. Budainál 1952-ben, Négyesinél 1962-ben lett volna esedékes a tisztújítás. Ennek elmaradása elvette azt a reményt, hogy vezetőcsere megoldja a gondokat. Egervériék estében néhány hónappal a választások előtt robbant ki a protestálás. Mindhárom

esetben követelték a regnáló országos elnök lemondását, amit személyeskedő, etikai kérdésekkel indokoltak (életmód, családtagok előnyhöz juttatása, erkölcsi normák megsértése, viselkedés). Az első és a harmadik esetben megfigyelhető az egyházterületi elnök (regionális vezető) belső „ellenzéki" szerepvállalása.

IV.3. Belső elégedetlenség.

A vezetők személye ellen megfogalmazott vádak valójában csak jelképezték a felszín alatti mélyebb elégedetlenséget. A háttérben kimutatható a konzervatív-liberális kegyességi irányzatok közötti ellentét. Belső reformáció iránti igény kifejezése tette elfogadhatóvá a fellépést, ami minden esetben megadta a szükséges lelki hátteret. Budai esetében a lazaság, világiasság, misszió beszűkülése került a fókuszpontba, a bűnbak szerepét a vezetők mellett a teljes lelkészkar jelentette, mint akik méltatlanok lettek a szolgálatra. A protestálók a hűséges maradék megtestesítőjeként értelmezték önmagukat. Négyesinél a centralizáció volt a gyújtópont. Az egyházterületek megszűntek, a regionális helyett országos vezetésű lett az egyház, laikusok kiszorultak a vezető testületekből; alkalmazotti leépítések, ingatlanok elvesztése, pénzügyi és erkölcsi visszaélések jelentették a könnyen megjeleníthető célpontokat. Miközben a vezetői hatáskörök bővültek, a gyülekezeti autonómia beszűkült. Egervárinál a vezetők hibái mellett, az egyház ökumenikus kapcsolatai, az állam kiszolgálása került az elégedetlenség célkeresztjében. Lelkiségi kérdésekkel is találkozunk, amelyekben úgy jelent meg az új alternatíva, mint az eredeti adventista tanítások letéteményese. Mindhárom esetben csak egy markáns téma került a zászlóra: Budainál a reformáció, Négyesinél az új választások, Egervárinál az ökumené. A belső okok mindhárom esetben látható közös nevezője: a tagság általános elégedetlensége, a belső feszültségek, a kegyességi hiányosságok, a vezetői visszaélések.

IV.4. A tiltakozások kirobbanása

A tiltakozások kirobbanása is mintázatot követ. A folyamatnak mindig volt lelki előzménye is. Az első és harmadik esetben kimutatható a későbbi protestálók által szervezett imaórák tiltakozásban betöltött szerepe. Mindhárom esetben volt egy hangadó, aki felvállalta a tiltakozás képviseletét és konkrét lépéseket tett. Formálisan az első esetben személyes delegáció indította el a folyamatot, míg a másik kettőben levél, írásos beadvány. Az első esetnél egy sértett lelkész, a harmadik történetben egy unióelnökségre esélyes lelkész a szerző. Később összefoglaló dokumentum született, Négyesiéknél „Panaszaink", Egervárinál „Kéréseink" címmel. Az egyházvezetés fogadta a delegációt, az utóbbi két esetben húzta az időt, végül elutasította a kéréseket. Mindhárom esetben a vezetés szankciókat alkalmazott: helyezések, elbocsátások, hűségnyilatkozat aláírattatása által. A következő lépés volt mindhárom esetben a tiltakozások kiterjesztése gyülekezetek szintjére, szervezett kampány formájában, az elégedetlen tagság összefogása. A lázadó gyülekezetekben mindhárom esetben túlkapások formájában jelentkezett az ellenállás. Budaiéknál reformációs bizottságok alakultak, mint árnyékszervezetek, az általuk liberálisnak minősített tagok kizárásával; Négyesiéknél nem engedték szószékre azokat a lelkészeket, akik ÁEH-tól kapott lelkészi igazolvánnyal rendelkeztek, országos presbiteri értekezletet hívtak össze, amelyen a hatóságoknak kellett közbe lépni az eseményre érkező, túszul ejtett egyházvezetés kiszabadítására; Egerváriéknál gyülekezeti rendbontások, istentiszteletek megzavarása, lelkészi vezetés nélküli testvéri órák (közgyűlés) összehívása, teremfoglalás volt jellemző. A gyülekezetek protestáló leveleket küldtek, amelyek az utóbbi két esetben azonos szerzőre valló megfogalmazásúak. A lázadó gyülekezetekkel szemben is fellépett az egyházvezetés. Mindhárom esetben legkevesebb két gyülekezetet feloszlatott, amelyekből kettő kétszer is szerepelt a három szakadási történetben (Sashalom és Budapest

Terézváros). Az újjászervezett gyülekezetbe a feloszlatással kizárt tagokat nem engedték be, Négyesiéknél zárcserével, 1975-ös eseményeknél pedig levél általi felszólítással és kapuőrrel.

IV.5. Külső segítség

A vezetőket személyes kapcsolatok is kötötték a hatóságokhoz. Első esetben a vezetésnek jó kapcsolata volt az ÁEH-al, második esetben a rendőrséggel, harmadik esetben a Belügyminisztériummal bővül a kör. Két esetben az egyházvetés kezdeményezte a hatóságok beavatkozását. Az ÁEH mindhárom esetben támogatta a tiltakozókat, de közvetlenül nem avatkozott be. A SZET két utóbbi esetben szintén támogatta háttérből a tiltakozó vezetőket, de nyíltan később a hivatalos egyház vezetése mellé állt. A hatóság a második esetben rendőri fellépéssel, a harmadikban hatósági zaklatások formájában avatkozott be. Mindhárom esetben reakciósnak vagy rendszer ellenesnek tartották a tiltakozást. Mindhárom esetben a tiltakozók is kérték a világi szervek közbelépését. Első esetben a minisztériumnál panaszolták be a vezetést a gyülekezetek feloszlatása miatt, második esetben az ÁEH-nál kérték az ET feloszlatását és a választások kiírását, harmadik esetben a budapesti egyházügyi titkárnál tettek panaszt a gyülekezetek feloszlatása miatt, kérték az ÁEH-t hogy vegye tudomásul a különállásukat, később Kádár Jánoshoz fordultak a hatósági eljárások miatt (az engedély nélküli építkezések szankcionálásánál, amit hatósági zaklatásként értelmeztek). Két utóbbi esetben a protestálók kérték különállásuk legalizálását.

IV.6. Világszéles egyházvezetés szerepe

A háromból két esetben a divízió (a világszéles egyházszervezet vezetésének európai fiókszervezete) kezdetben támogatta a tiltakozókat, nem bíztak a megválasztott vezetőkben, külön tárgyaltak az elbocsátott lelkészekkel. A Generál Konferencia (az egyház világszervezetének vezető testülete) az elsőnél nem avatkozott bele az események alakulásába, a másik két esetben vizsgálódás után elhatárolódott a tiltakozóktól.

IV.7. Következmények

Mindhárom esetben jelentős számú tagot veszített az egyház (400, 100, 1200), a tagság összlétszáma a szakadások előtti 6810 felnőtt taghoz képest jelentősen csökkent (1956:6640 fő; 1972:5485 fő; 1986: 3573 fő); lelkészeket bocsátottak el, mások önként kiléptek. A mérsékelt ellenzék az első eset után az egyházban maradt, a második után csendes tiltakozásba kezdett, a harmadik után folytatta a hatalmi harcot. Az elszakadtak az első esetben kettévátak, majd felmorzsolódtak, a második esetben visszatértek, majd a következő tiltakozásnál ismét kiléptek, a harmadik, hosszabb idő után belső szakadások fázisába lépett. Az egyháztagságot és a vezetést mindhárom esetben konkrét intézkedésekre motiválta a szakadás. Első esetben reformációs lépésekről döntöttek, második esetben megszervezték az egyházterületeket és az ellenzéki laikusokat bevették a testületekbe, a harmadik után, tizenöt évvel, kilépett a SZET-ből, rendezte kapcsolatát a világszéles vezetéssel, megszervezte a missziós intézményeit.

A mintázat alapos vizsgálatából ez derül ki, hogy a külső körülmények, a politikai rendszer nem az egyetlen faktor a szakadás létrejöttében. Ugyanakkor, az is logikus következtetésnek tűnhet, hogy minden egyéb ok az elsőből fakad. A hatalmi harcot kívülről gerjesztették, különösen azzal, hogy beavatkoztak az egyház belügyeibe, meghatározva a választható személyek listáját. A belső, tagsági elégedetlenség oka szintén kívül keresendő, mivel olyan személyeket segített vezető pozícióba a hatalom, akik lojálisak voltak a politikai rendszerhez és kevésbé foglalkoztak a lelki vezetéssel. A protestálók fegyelmezését az egyházi vezetés a

hatóságok segítségével hajtotta végre, ami szintén erősíti a hipotézist, mely szerint a kisegyházi szakadások okainak forrása egyértelműen a politikai rendszer volt. A HNA három szakadási történetének mintázata erre enged következtetni.

V. Nemzetközi szintéren vizsgált szakadási mintázatok

Érdemes újra feltenni a kérdést, hogy a fentiekben azonosított mintázat a felekezetre és a magyar politikai környezetre jellemző, vagy követi a szakadások szociológiai és lélektani törvényszerűségeit? Valószínűleg kevés olyan egyház van, amelyik ne tapasztalt volna meg valamilyen szintű szakadást. Egy mindent átfogó összegzés messze túlmutatna a jelen tanulmány keretein, de szúrópróba módszerrel két másik összegző elemzéssel hasonlítjuk össze a fentiekben talált mintázatot. Az elsőt a nemzetközi, a másodikat a magyar szakirodalomból vesszük. Lewis (Lewis, Lewis *szerk.* 2009) a nemzetközi szintéren ismert nagyobb egyházaknál (iszlám, buddhista, japán kiszakadt mozgalmak, valamint nyugati evangélium keresztény egyházak) tapasztalt szakadások mintázataiból, Szász az egyik magyar történelmi egyházban bekövetkezett két szakadás tanulságaiból von le következtetéseket.

Finke és Scheitle (Lewis, Lewis *szerk.* 2009) tovább viszi Niebuhr következtetéseit, aki elsőként (1929) foglalkozott szakadás-elmélettel (Niebuhr, 2005). Niebuhr szerint a szekták mindig a „tömegek" vallásos igényeinek kielégítése miatt szakadnak ki a gazda szervezetből. Egyfajta osztályharcként látja a jelenséget. A szociológiai tényezőket nem lehet vitatni, de a következő évtizedek kutatásai számos más tényezőt is feltártak, amelyek a szakadások indítékai lehetnek. Házassági konfliktusoknál nem a kirobbanó veszekedés a válás oka, az csak a tünet. Az igazi okok nem látványosak, nincsenek szem előtt. Ugyanúgy a vallási válásoknál is vannak belső és külső láthatatlan okok, amelyek meghatározzák a vallási csoportok szakadásra való fogékonyságát. Finke, beépítve a későbbi kutatásokat, több tényezőt is beazonosít, túlmutatva Niebuhr elméletén, amelyeket az alábbiak szerint lehetne összegezni.

V.1. „Alacsony ár" – külső körülmények

Szakadások, kiválások akkor keletkeznek, amikor erre lehetőség van, adottak a körülmények, amikor a külső szankciók elviselhetők, a döntés „költségei" megfizethetők. Minél nagyobb árat kell fizetni érte, annál kisebb a kiválások esélye. Az állami szankciók mérete tehát befolyásolja a szakadás előfordulási gyakoriságát.

V.2. Megnyíló rés – belső irányzatok

Minden vallási közösségben van egy feszültség a tagsági rétegek különböző igényei között; általában van egy elfogadóbb és egy kizárólagosságot kérő irányzat. A ki nem elégített igények vallási réseket eredményeznek, amelyek utat készítenek egy sikeres kiválás számára.

V.3. Laza háló - hatalmi csomópontok dinamikája

Egyetlen vallási közösség sem egységes szervezeti tömb. Különböző heterogén egyének, csoportok és „belső felekezetek" összessége, amelyeket szociális kötelékek hálózata tart össze. Az egységes szervezet érzetét adó háló látható csomópontjain találjuk az egyes gyülekezeteket, a teológiai szemináriumot, a lelkészeket, tagokat és a központi vezetőket. Minden ilyen csomó a hálón erőforrás-csere pont a szereplők között (Pfeffer, Salancik 2003). Számos erőforrás megfogható, mint amilyen a pénz, ingatlanok, kegyességi anyagok, liturgikus kellékek. Egyéb erőforrás fajták láthatatlanok, de ugyanolyan fontosak, mint például a legitimáció, tekintély és

ehhez hasonlók. Egyes csomópontokon nem egyformán áramlik az erőforrás a felek között, hanem egyik fél jobban függ a másiktól, mint fordítva. Amikor a háló egyes szereplői függeni kezdenek a háló más szereplőitől, a hatalmi erőtér megbillen, és az utóbbiak kezdenek hatalmat gyakorolni az előbbiek felett (Emerson, 1962). Minél feszesebb a háló, annál dominánsabb a központi vezetés, magasan centralizált. Függés vagy kiszolgáltatottság alakul ki. Egy lazább hálón a gyülekezeteknek nagyobb az autonómiája, laikus tagoknak hangsúlyosabb a szerepe, szélesebb a támogató rendszer. Minél feszesebb a háló, annál több eszköz van a panaszok kezelésének késleltetésére, kevesebb szakadás lesz. Minél lazább a háló és minél inkább a gyülekezetek vagy a lelkészek kezében van a döntés, annál nagyobb a szakadás esélye.

V.4. Identitási deficit – a „páratlanság"

Minél inkább fenntartja a jogot egy közösség, hogy kizárólagos igazsággal, prófétával, történelmi hagyományokkal és egyházi hivatallal rendelkezik, annál kisebb a szakadás esélye. Ezek közül a legfontosabb a történelme és a tradíciói. Ebből a szempontból akkor történhet szakadás, ha a hangadók bemutatják, hogy az egyház eltávolodott a kezdeti tanításaitól és hűtlen lett történelmi örökségéhez. Mivel megváltoztatni nem tudják, ki kell válni, hogy ezt meg tudják élni. Minél nagyobb egy közösség páratlansága (egyedisége), annál kisebb a szakadás esélye, illetve minél inkább kimutatható, hogy a páratlansága elveszett, annál könnyebben kirobbantható a kiválás.

V.5. Karizmatikus vezetők

Szakadás mindig ott keletkezik, ahol van karizmatikus lelki vezető, akik képes biztosítani az erőforrásokat (legitimitás, tekintély, tanítások, ideológiai alap). A karizmatikus vezetők fellépése a kutatások szerint szorosan összefügg a teológiai szakértelmükkel. A professzionalitás megváltoztatja a lelkészek lojalitás mértékét (DiMaggio, Powell 1983). Minél inkább függ a képzése, állása az egyháztól, annál kevésbé érdekelt a kiválásban, inkább belső reformációra hív.

V.6. Szakadási mintázat egy protestáns történelmi egyházban

Szász a Trianoni döntés utáni helyzetet vizsgálja a Református Egyházban (Szász, 2020). A politikai határok változása feldarabolta az egyházat, aminek hatására korábbi lelki-szellemi törésvonalak kerültek felszínre, amelyek kisebb-nagyobb egyházszakadást eredményeztek. A szerző az amerikai magyar református egyház 1921-es és a Királyhágómelléki Református Egyházkerületben történt 1928-as szakadást mutatja be és keresi a két történés mintázatát. Az okok között kiemeli a legitimációs válságot a hatalmi vákuum miatt; karizmatikus vezetők jelenlétét, akik az adott keretek között nem tudták minden ambíciójukat kielégíteni; a hangadók személyes sérelme is kimutatható, mégis sikerült inkább teológiai köntösbe öltöztetniük a mozgalmat; háttérbe szorított teológiai felfogás jelentette a szakadás szellemi alapját; a helyi politikai vezetés szerepe hangsúlyos; végül a függetlenedési vágy feléledése is szerepet játszott, egyik esetben a helyi kultúra, a másik példánál a vezető személyes karizmája hatására.

VI. Következtetés

Ha összegezzük a három elemzést, amelyek időben és kultúrában eltérő szakadások mintázatát dolgozzák fel, az látszik, hogy a sarokpontok azonosak (lásd 1.sz. táblázat). A Hetednapi Adventista Egyházban történt három nagyobb szakadás nem tekinthető sem adventista, sem

specifikusan magyar, sem az önkényuralmi rendszer által kikényszerített jelenségnek. A szakadások szociológiai, társadalmi, lélektani és vezetéstechnikai törvényszerűségeket követnek, annak ellenére, hogy a szellemi vezetők mindig megtalálták a teológiai, lelki indokokat. Szakadás akkor következik be, amikor a felsorolt okok többsége összeáll és robbanó elegyet képez. Az egyház egységének őrzése vezetői feladat és annak feladása nem hárítható külső tényezőkre, amelyekkel szemben az egyházvezetés tehetetlen szemlélő csupán. Különös figyelmet érdemes szentelni az egyháztagság különböző rétegeinek eltérő lelkiségi igényeire, a különböző teológiai irányzatok jelenlétére. Az egység megteremtése vagy megőrzése nem érhető el hatalmi vagy fegyelmi eszközökkel, sem uniformizálással. A sokszínűség, az eltérő irányzatok párbeszéde kulcsfontosságú lehet az egyház belső identitásának megtartása mellett. A hatalmi erőtér változását a vezetésnek fel kell ismerni. A különböző szinteken lévő vezetők vagy aspiránsok személyes sérelmeinek kezelése viszont lelkigondozói feladat, amit nem érdemes megspórolni. A lelki ajándékok felismerése és az annak megfelelő feladatok kiosztása a potenciális vezetők gyakorló terepe lehet, ami kiszorítás helyett, integratív hatású, fékezve a kiválások előfordulását.

1.sz. táblázat: Szakadási mintázatok összehasonlítása

Jellemzők	Lewis	Szász	HNA szakadások
Külső ok	Külső körülmények	Külső politikai környezet	Politikai környezet
Belső ok: elégedetlenség, eltérő irányzatok	Belső rés (ki nem elégített szükségletek)	Különböző teológiai irányzatok	Belső elégedetlenség
Hatalom	Hatalmi erőtér megbillen	Legitimációs krízis	Hatalmi játszmák
Identitás	Identitási deficit	Függetlenedési vágy	Identitáskrízis (pl. ökumenikus kérdés)
Karizmatikus vezető	Karizmatikus vezető	Karizmatikus vezető(k)	Karizmatikus vezetők
Sérelmek		Vezetők személyes sérelmei	Vezetők személyes sérelmei

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Az intenzív osztályos ápolók ismerete a centrális vénás katéterrel összefüggő fertőzések megelőzéséről egy megyei kórházban

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Bevezetés: A centrális vénás katéter (CVC) szúrására, és gondozására vonatkozó infekciókontroll óvintézkedések betartása mellett a fertőzések jelentős része megelőzhető. Sajnos az ajánlások be nem tartása gyakori jelenség, ennek egyik oka lehet a nem megfelelő ismeret. A vizsgálat célja felmérni az intenzív osztályon dolgozó ápolók ismeretét a CVC okozta fertőzések megelőzéséről.

Vizsgálati anyag és módszer: Kvantitatív, keresztmetszeti vizsgálatot végeztünk 2019. június 3. és október 31. között célirányos nem véletlenszerű mintavételi módszerrel kiválasztott egy megyei kórház intenzív osztályain dolgozó ápolók körében (n=60). Az adatgyűjtés eszköze saját szerkesztésű többszörös választásos kérdőív. A kérdőív válaszai mellett munkahelyre jellemző adatokat gyűjtöttünk: intenzív osztályos gyakorlati év, ágyszám, heti munkaóra, munkarend, oktatás. A leíró statisztikai elemzés mellett χ^2-próbát, ANOVA-t, kétmintás t-próbát, lineáris regressziót alkalmaztunk (p<0,05) SPSS szoftver alkalmazásával.

Eredmények: A 11 kérdésre adott helyes válaszok átlaga 44,6% volt. A válaszadók közül csak kevesen (21,7%) tudták a CVC okozta véráramfertőzés kockázati tényezőit, a többség (81,7%) viszont helyesen választotta, hogy zsíroldatok adásakor 24 óránként kell cserélni az infúziós szereléket. A 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezők szignifikánsan többen tudták a helyes válaszokat a CVC okozta fertőzések prevenciós lehetőségeiről, mint az 5 vagy annál kevesebb éve dolgozó ápolók (p=0,037). Az oktatáson részt vettek szignifikánsan többen meg tudták határozni a helyes válaszokat, mint akik nem részesültek oktatásban (p=0,006). A módszertani levelet olvasó csoportnak szignifikánsan jobb a tudás szintjük, mint a módszertani levelet nem ismerő csoportnak (p<0,001).

Következtetés: Vizsgálatunk alapján, az intenzív osztályon dolgozó ápolók ismerete a CVC okozta fertőzések megelőzéséről nem megfelelő. Az ajánlások folyamatos oktatása az ápolók ismereteit bővítené.

Kulcsszavak: ápolók, centrális vénás katéter, ismeret, véráramfertőzés

I. Bevezetés

I.1 Problémafelvetés, témaválasztás indoklása

Az egészségügyi ellátás kedvezőtlen hatásai között az egészségügyi ellátással összefüggő fertőzések (EÖF) vezető helyet foglalnak el, a fertőzések következtében növekszik a morbiditás, a mortalitás, az antibiotikum felhasználás, a bentfekvési idő és nőnek a gyógyítás/ellátás költségei. Az egyik leggyakoribb egészségügyi ellátással összefüggő fertőzés a centrális vénás katéterrel összefüggő véráramfertőzés (CVC-VÁF). [1] Különös jelentősége van az érkatéter alkalmazásával összefüggő véráramfertőzéseknek, hiszen az érkatéterek szúrására és gondozására vonatkozó infekciókontroll óvintézkedések betartása mellett ezen fertőzések jelentős része megelőzhető. [2] A CVC-VÁF gyakori komplikáció az Intenzív Terápiás Osztályokon (ITO), melynek következtében növekszik a morbiditás, a mortalitás, az ápolási napok száma, és a kórházi költségek. [1][3] 2013. január és 2018. december között a Nemzetközi Nozokomiális Infekciókontroll Konzorcium (International Nosocomial Infection Control Consortium) Amerika, Európa, Délkelet-Ázsia fejlődő országaiban végzett surveillance-ot 664 ITO-on. A teljes vizsgálatban összesen 428.847 hospitalizált beteg szerepelt. A CVC-VÁF átlagos aránya 5,3 volt 1000 centrális vénás katéteres napra. [4] A többlet nyers halálozási arány, melyet az EÖF-k okoztak, 23,6% volt a CVC-VÁF esetén. [5] Az European Centre for Disease Prevention and Control (ECDC) adatai szerint évente több, mint 90000 beteg szenved véráramfertőzésben (VÁF). Az ITO-on a centrális vénás katéter (CVC) elhúzódó alkalmazása (>14 napon) évente több, mint 4500 halálesetet, 1,26 millió ápolási napot okoz. Az ECDC 2017-ben Európa 14 országában végezett surveillancot 1480 ITO-on. A CVC-VÁF átlagos aránya 3,7/1000 centrális vénás katéteres napra. [6] Magyarországon 2005-2013 között a CVC-VÁF átlagos incidenciája 1,3/100 kibocsátott beteg volt. Az incidencia trend jelentősen emelkedett, míg 2005-ben 0,8 volt addig 2013-ra 2,1-re emelkedett. A bejelentett VÁF vonatkozásában a beavatkozások aránya a CVC (88,9%) esetében volt a legmagasabb. [7] Magyarországon 2020-ban a Nemzeti Nosocomialis Surveillance Rendszerben (NNSR) a CVC-VÁF incidenciája 4,0/1000 eszközös napra vonatkoztatva. A bejelentett VÁF vonatkozásában a beavatkozások aránya a CVC-VÁF (51,2%) esetében volt a legmagasabb. [8] Minden évre jellemző, hogy a bejelentett véráramfertőzéses esetek jelentős része érkatéter alkalmazásával összefüggő véráramfertőzés. [2] A perifériás vénás katéterek alkalmazása során ritkábban alakul ki szövődmény, míg a centrális vénás katéterek alkalmazásával összefüggő véráramfertőzés gyakoribb. A véráramfertőzés az egyik legveszélyesebb egészségügyi ellátással összefüggő szövődmény, mely súlyosbítja a beteg állapotát, meghosszabbítja az ápolási időt, és növeli az ellátás költségét. [1] A CVC-VÁF megszüntetése közvetlenül csökkenti a kórházi költségeket, javítja az eszközök hasznosítását, és ami közvetlenül javítja a klinikai ellátást. [9] A kutatásunk témáját az infekciókontroll tárgyköréből választottuk, mert a CVC szúrására és gondozására vonatkozó infekciókontroll óvintézkedések betartása mellett a fertőzések jelentős része megelőzhető. Sajnos az ajánlások be nem tartása gyakori jelenség, ennek egyik oka lehet a nem megfelelő ismeret. Csak a megfelelő elméleti és gyakorlati ismeretekkel rendelkező egészségügyi dolgozóktól várható a higiénés rendszabályok magas szintű alkalmazása, maradéktalan betartása és a várt kezelési eredmények elérése. [2]

I. 2 Célkitűzések

Jelen vizsgálat célja, a Zala Megyei Szent Rafael Kórház intenzív osztályain dolgozó ápolók prevenciós ismereteit felmérni a centrális vénás katéter ápolásával kapcsolatban, illetve a napi alkalmazott gyakorlatot.

I.3 Hipotézisek

1. A szociodemográfiai jellemzők alapján különbözik a megkérdezett ápolók ismerete a centrális vénás katéterrel összefüggő infekciók megelőzéséről.

2. A munkahelyi tényezők alapján jelentősen különbözik a megkérdezett ápolók ismerete a centrális vénás katéterrel összefüggő véráramfertőzések prevenciós lehetőségeiről.

3. A 2019. évben az országos tisztifőorvos által kiadott „Az érkatéterrel összefüggő véráramfertőzések megelőzésére" című módszertani levélben foglaltakról oktatáson részt vettek, és a módszertani levelet olvasó ápolók tájékozottabbak a centrális vénás katéterrel összefüggő fertőzések megelőzéséről.

II. Anyag és mószer

Kvantitatív, prospektív, keresztmetszeti kutatást végeztük 2019. június és augusztus között. A nem véletlenszerű, célirányos mintavétel célcsoportját a Zala Megyei Szent Rafael Kórház három típusú intenzív osztályain (Csecsemő- és Gyermekgyógyászati Intenzív részleg, Aneszteziológiai és Intenzív Terápiás Osztály, Szívsebészeti Osztály, valamint a Szívsebészeti Intenzív Terápiás részleg) dolgozó centrális vénás katéter ápolásában részt vevő szakápolók alkották. Kizártuk a hibásan kitöltött kérdőíveket. Az adatgyűjtés eszköze saját szerkesztésű kérdőív a szocio-demográfiai-, a munkahelyre jellmező adatok és a CVC-VÁF-fal kapcsolatos ismeretek felmérésére irányul. A leíró statisztikai elemzés mellett χ^2-próbát, ANOVA-t, kétmintás t-próbát, lineáris regressziót végeztünk, SPSS software alkalmazásával (p<0,05). Az intézmény a kutatást 2019.05.26-án írásban engedélyezte.

III. Eredmények

A tervezett elemszám 67 fő volt, amelyből 89%-os válaszadásai aránnyal 60 értékelhető kérdőív eredményeit dolgoztuk fel.

Szociodemográfiai eredmények

I. táblázat A minta szociodemográfiai jellemzőinek a megoszlása (n=60)

Változó	attribútum	n	%
nem			
	férfi	3	5,0
	nő	57	95,0
	összesen	*60*	*100,0*
lakhely			
	megyeszékhely	21	35,0
	város	16	26,7
	falu/község	23	38,3
	összesen	*60*	*100,0*
egy háztartásban élők			
	egyedül élek	6	10,0
	házas/élettársammal élek	12	20,0
	házas/élettársammal és gyermeke(i)mmel élek	26	43,3
	házas/élettársammal és gyermeke(i)mmel valamint egyéb rokonokkal (szülő, nagyszülő) élek	6	10,0
	gyermeke(i)mmel élek	3	5,0
	egyéb rokonokkal	7	11,7
	összesen	*60*	*100,0*

Változó	attribútum	n	%
családi állapot			
	házas/élettársával él	44	73,3
	hajadon	4	6,7
	egyedülálló	5	8,3
	elvált	7	11,7
	özvegy	0	0,0
	összesen	*60*	*100,0*
legmagasabb iskolai végzettség			
	általános ápoló és általános asszisztens	2	3,3
	felnőtt szakápoló	7	11,7
	OKJ ápoló	30	50
	intenzív terápiás szakápoló	8	13,4
	diplomás ápoló	11	18,3
	egyetemi okleveles ápoló	2	3,3
	kiterjesztett hatáskörű ápoló	0	0,0
	összesen	*60*	*100,0*

A megkérdezett egészségügyi dolgozók 95,5%-a nő, 5,0%-uk pedig férfi. Állandó lakhelyként legtöbben a községet (38,3%) jelölték. Megyeszékhelyen lakik a minta 35,0%-a, városban 26,7%-a. Jellemzően egy háztartásban házas vagy élettársával és gyermeke(i)vel él együtt a válaszadók 43,3%-a. Családi állapotukat tekintve túlnyomó részük (73,3%) házas vagy élettársi kapcsolatban él. A minta 50,0%-a OKJ ápoló végzetséggel, 18,3%-a főiskolai diplomával, 13,4%-a intenzív terápiás szakápoló-, 11,7%-a felnőtt szakápoló-, 3,3%-a általános ápoló és általános asszisztens végzettséggel és a 3,3%-a egyetemi diplomával rendelkezik. *(I. táblázat)* Az átlag életkor 38,2±9,8 év, a legfiatalabb 23 éves, a legidősebb 58 éves. A csoportkategóriák alacsony elemszáma miatt az összefüggés elemzésekhez több változó esetében összevonásra kerültek. Az életkort három-, és két csoportba soroltuk: 30 év alattiak (31,7%), 31-40 éves (21,7%) és 41 év felettiek (46,7%) illetve a másik csoportosítás szerint 40 év alattiak (53,3%), 41 év felettiek (46,7%). Összevonásra kerültek a lakóhely kategóriák, illetve az egy háztartásban élők kategóriák két csoportba: városban él (61,7%), községben él (38,3%); egyedül él (10,0%) és a családban él (90,0%). Az iskolai végzettség esetében három, illetve két csoport került kialakításra: alapfokú iskolai végzettség (15,0%), a középfokú végzettség (50,0%) valamint a felsőfokú végzettség (35,0%) valamint a másik csoportosítás szerint intenzív szakápolói vagy főiskolai-, illetve egyetemi diploma képesítéssel rendelkezők (35,0%), nem rendelkezik intenzív szakápolói vagy főiskolai-, illetve egyetemi diploma képesítéssel (65,0%). Minden összevont csoporttal végeztünk statisztikai elemzéseket.

Munkahelyi jellemzők eredményei

II. táblázat A minta a munkahelyi jellemzőinek a megoszlása (n=60)

változó	attribútum	n	%
intenzív osztályos gyakorlati évek			
	1 évnél kevesebb	6	10,0
	1-5 év között	16	26,7
	6-10 év között	11	18,3
	10 év felett	27	45,0
	összesen	*60*	*100,0*
intenzív osztályon található betegágyak			
	10 vagy annál kevesebb ágy	32	53,3
	11 vagy annál több ágy	28	46,7
	összesen	*60*	*100,0*
heti munkaóra			
	20 óra	7	11,7
	30 óra	6	10
	40 óra	47	78,3
	összesen	*60*	*100,0*
munkarend			
	8 óra (egy műszak)	8	13,3
	12 óra (két műszak)	52	86,7
	összesen	60	100,0
módszertani levélben foglaltakról oktatásban részesült			
	igen	30	50,0
	nem	30	50,0
	összesen	60	100,0
„Az érkatéterrel összefüggő véráramfertőzések megelőzése" című módszertani levél olvasása			
	igen	29	48,3
	nem	31	51,7
	összesen	60	100,0

A válaszadók intenzív osztályos gyakorlattal >1évvel (10%), 1-5 évvel (26,7%), 6-10 évvel (18,3%), 10<évvel (45,0%) rendelkeznek. Jellemzően a megkérdezettek 53,3%-a 10 vagy annál kevesebb ágyszámmal rendelkező osztályon, 46,7%-a pedig 11 vagy annál kevesebb ágyszámmal rendelkező osztályon dolgozik. A heti munkaórák alapján az ápolók 40 órát (78,3%), 30 órát (10%), 20 órát (11,7%) dolgoznak. A műszakbeosztást illetően a legtöbben (86,7%) két műszakban dolgoznak, ezt követi az állandó délelőtt dolgozók (13,3%). A válaszadók fele arányban (50,0%) részesült oktatosban módszertani levélben foglaltakról, valamint a módszertani levelet a minta 48,3%-a olvasta el. *(II. táblázat)* A csoportkategóriák alacsony elemszáma miatt az összefüggés elemzésekhez az ITO-on eltöltött évek számát

tekintve három, illetve két csoport került kialakításra: >1év (10%), 1-10 év (45,0%) és 10<év (45,0%) illetve a másik csoportosítás szerint >5 év (36,7%), 6<év (63,3%). Összevonásra kerültek a heti munkaóra kategóriák >40 óra (21,7%), 40<óra (78,3%). Minden összevont csoporttal végeztünk statisztikai elemzéseket.

Ismeretszint a centrális vénás katéter okozta fertőzések megelőzéséről
A kérésekre adott helyes válaszokat kiemeléssel jelöltük *(III. táblázat).*

III. táblázat A kérdőív egyes kérdései, és a kérdésekre adott válaszok összegzése (n=60)

kérdések	attribútum	n	%
1. Centrális vénás katéterrel összefüggő véráramfertőzés kockázati faktorai (több lehetséges válasz)			
	1. **katéter helytelen ápolása (helytelen manipulációk)**	**52**	**13,4**
	2. **katéter-behelyezés mikroorganizmusokkal kontaminált helyen történik**	**45**	**11,6**
	3. **behelyezés bizonyos körülményei**	**44**	**11,3**
	4. **centrális katéter elhúzódó alkalmazása (>2 hét)**	**43**	**11,1**
	5. **neutropénia, gyengült védekezőképesség**	**30**	**7,7**
	6. **katéterezést megelőzően hosszú kórházi tartózkodás**	**29**	**7,5**
	7. diabetes mellitus	25	6,4
	8. **kedvezőtlen ápoló -beteg arány**	**24**	**6,2**
	9. **alkalmazott bőrfertőtlenítőszer típusa**	**23**	**5,9**
	10. **katéterszúrás helye**	**20**	**5,1**
	11. **katétert behelyező szakember tapasztalata, képzettsége**	**13**	**3,3**
	12. **katéter lumenek száma és katéter átmérő**	**12**	**3,1**
	13. **teljes parenterális táplálás**	**10**	**2,6**
	14. **koraszülöttség, alacsony születési súly**	**7**	**1,8**
	15. elhúzódó intubáció	4	1,0
	16. beteg mozgatás	3	0,8
	17. hypertonia	3	0,8
	18. genetikai tényezők	2	0,5
	19. decubitus	0	0,0
2. Centrális vénás katéter ajánlott rutinszerű cseréje			
	nem, csak akkor, ha klinikailag indokolt	**30**	**50,0**
	igen, minden 7. napon	17	28,3
	igen, minden 3. héten	12	20,0
	nem tudom	1	1,7
	összesen	*60*	*100,0*
3. Centrális vénás katéter cseréje a meglévő szúrtcsatornában vezetődróton áthúzva is elvégezhető			
	nem, csak akkor, ha klinikailag indokolt	**39**	**65,1**
	nem tudom	11	18,3
	igen, minden 7. napon	8	13,3

kérdések	attribútum	n	%
	igen, minden 3. napon	2	3,3
	összesen	*60*	*100,0*

4. Nyomásátalakító (transzducer), és az invazív nyomásmérő szerelék cseréje javasolt

	nem, csak akkor, ha klinikailag indokolt	28	46,7
	igen, minden 4. napon	**16**	**26,7**
	igen, minden 8. napon	8	13,3
	nem tudom	8	13,3
	összesen	*60*	*100,0*

5. Ha a centrális vénás katéter eredetű fertőzések aránya magas, antibiotikummal, vagy egyéb módon impregnált centrális vénás katéterek használata javasolt

	igen, de csak akkor, ha a centrális vénás katéter 5 napon túl is a betegben marad	**29**	**48,3**
	nem, mert az ilyen típusú kanülök használata nem csökkenti szignifikánsan a katéter eredetű fertőzéseket	21	35,0
	nem, mert ezek a centrális vénás katéterek nem költséghatékonyak	6	10,0
	nem tudom	4	6,7
	összesen	*60*	*100,0*

6. Centrális vénás kanül bemeneti fedőkötésének cseréje javasolt

	csak amikor indokolt (szennyezett, meglazult stb.), de minimum hetente	**30**	**50,0**
	naponta	28	46,7
	minden 3. napon	2	3,3
	nem tudom	0	0,0
	összesen	*60*	*100,0*

7. Centrális vénás kanül bemeneti fedőkötésére javasolt

	poliuretán alapú kötszer (op-site, szemipermeábilis kötés)	39	65,0
	mindkettő megfelelő, mert a kötszer típusa nem befolyásolja a katéter eredetű fertőzések kockázatát	**16**	**26,6**
	gézlapos kötszer	4	6,7
	nem tudom	1	1,7
	összesen	*60*	*100,0*

8. Centrális vénás kanül bemeneténél a bőr fertőtlenítésére ajánlott

	10%-os jódos oldat (povidone-iodine)	29	48,3
	2%-os klór-hexidin oldat	**25**	**41,7**
	0.5%-os klór-hexidin oldat	5	8,3
	nem tudom	1	1,7
	összesen	*60*	*100,0*

kérdések	attribútum	n	%
9. Centrális vénás kanülök bemeneténél antibiotikumos kenőcs használata javasolt			
	nem, mert nem csökkenti a katéter eredetű fertőzések kockázatát	37	61,7
	nem, mert antibiotikum-rezisztenciát okoz	**17**	**28,3**
	igen, mert csökkenti a katéter eredetű fertőzéseket	3	5,0
	nem tudom	3	5,0
	összesen	*60*	*100,0*
10. Teljes parenterális táplálás során a zsíroldatok alkalmazása esetén a centrális vénás infúziós szerelék cseréje ajánlott			
	minden 24. órában	**49**	**81,7**
	minden 72. órában	6	10,0
	nem tudom	4	6,7
	minden 96. órában	1	1,6
	összesen	*60*	*100,0*
11. Amikor sem zsíroldatot, sem vérterméket nem adunk a centrális vénás kanülön át, az infúziós szerelék cseréje ajánlott			
	minden 72.- 96. órában	**30**	**50,0**
	minden 24. órában	27	45,0
	minden 12. órában	3	5,0
	nem tudom	0	0,0
	összesen	*60*	*100,0*

A megkérdezett ápolók 78,3%-a nem ismeri a centrális vénás katéterrel összefüggő véráramfertőzés rizikófaktorait. A felsorolt kockázati faktorok közül több választ jelölhettek a válaszadók, melyek között vannak helyes és helytelen válaszok is. A III. táblázat 1. pontjában a helyes válaszok 1,2,3,4,5,6,8,9,11,13,14 számú kérdések, a helytelen válaszok a 7,15,16,17,18,19 számú kérdések. A helyes válaszok közül leggyakoribb fertőzés elősegítő tényezőt az ápolók 13,4%-a (52 fő) a katéter helytelen ápolását (helytelen manipulációk) tekintette kockázati tényezőnek. A helytelen válaszok közül leggyakrabban az ápolók 6,4%-a (25 fő) a diabetes mellitust gondolta kockázati tényezőnek. *(III. táblázat 1.pont)* A megfelelő ismeret pontozását, úgy alakítottuk, hogy a 13 helyes válaszból legalább 9-et kellett eltalálni. Az ápolók 21,7%-nak (13 fő) tudása megfelelő a CVC-VÁF rizikófaktorairól, valamint az ápolók 78,3%-nak (47 fő) a tudása nem megfelelő. A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy a CVC-VÁF kockázati tényezőiről az intenzív szakápolói vizsgával vagy főiskolai diplomával rendelkezők (χ^2=5,138 p=0,023), a 12 órás munkarendben dolgozók (χ^2=9,068 p=0,003), az oktatásban részesültek köre (χ^2=4,812 p=0,028), és a módszertani levelet olvasó csoport (χ^2=8,748 p=0,003) bizonyult szignifikánsan tájékozottabbnak. A nem (p=0,350), az életkor (p=0,967), az egy háztartásban élők (p=0,754), a családi állapot (p=0,741), az ITO gyakorlati év (p=0,251), a munkaórák (p=0,865), az ITO ágyszám (p=0,225) alapján nem találtunk szignifikáns különbséget. *(I. II. táblázat)*

A válaszadók fele (50,0%) ismerte, hogy a CVC-k rutinszerű cseréje nem ajánlott. *(III. táblázat 2. pont)* A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy válaszadók között a 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezők (χ^2=4,593 p=0,032), és a 12 órás munkarendben dolgozók (χ^2=5,192 p=0,023) szignifikánsan többen meg tudták határozni a helyes választ. A nem (p=0,076), az életkor (p=0,121), az egy háztartásban élők (p=0,389), a családi állapot (p=0,559), az iskolai végzettség (p=0,058), a munkaórák (p=0,129), az ITO ágyszám (p=0,301), az oktatás (p=0,100), a módszertani levél ismerete (p=0,438) esetében szignifikáns különbségek nem mutathatók ki. *(I. II. táblázat)*

A kérdőívet kitöltő ápolók 65,1%-a a CVC cseréjét vezető dróton át húzva csak akkor végezné el, ha klinikailag indokolt. *(III. táblázat 3. pont)* A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy a községben élők (χ^2= 7,904 p=0,005), a 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezők (χ^2=5,833 p=0,016), az oktatásban részesültek köre (χ^2=5,934 p=0,015), és a módszertani levelet olvasók köre (χ^2=7,781 p=0,005) szignifikánsan nagyobb arányban ismerék a helyes választ. A nem (p=0,192), az életkor (p=0,664), az egy háztartásban élők (p=0,417), a családi állapot (p=0,807), az iskolai végzettség (p=0,057), a munkaórák (p=0,264), a munkarend (p=0,524), az ITO ágyszám (p=0,515) alapján nem találtunk szignifikáns különbséget. *(I. II. táblázat)*

Az ápolók többsége (46,7%) a nyomásmérő szerelék cseréjét, akkor végezné el, ha klinikailag indokolt lenne. A megkérdezettek közül csak kevesen (26,7%) tudták, hogy a nyomásmérő szerelék cseréjét minden 4. napon javasolt elvégezni. *(III. táblázat 4. pont)* A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy a családi állapot tekintetében (χ^2=4,651 p=0,031) szignifikánsan jobb ismerettel rendelkeznek a kapcsolatban élők, mint az egyedül élők. A nem (p=0,789), az életkor (p=0,370), az egy háztartásban élők (p=0,559), az iskolai végzettség (p=0,392), az ITO gyakorlati év (p=0,258) a munkaórák (p=0,208), a munkarend (p=0,109), az ITO ágyszám (p=0,149), az oktatás (p=0,243), a módszertani levél ismerete (p=0,056) alapján nem volt ebben a kérdésben szignifikáns különbség. *(I. II. táblázat)*

A minta 48,3%-a használná az antibiotikummal impregnált kanült, ha CVC betegben 5 napon túl marad. *(III. táblázat 5. pont)* Nem volt szignifikáns különbség a nem (p=0,086), az életkor (p=0,448), az egy háztartásban élők (p=0,931), a családi állapot (0,876), az iskolai végzettség (p=0,645), az ITO gyakorlati év (p=0,734), a munkaórák (p=0,416), a munkarend (p=0,105), az ITO ágyszám (p=0,448), az oktatás (p=0,438), a módszertani levél ismerete (p=0,305) alapján. *(I. II. táblázat)*

A CVC fedőkötésének a cseréjét az ápolók 50,0%-a végezné el, amikor indokolt (szennyezett, meglazult stb.), de minimum hetente. *(III. táblázat 6. pont)* A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy a kisebb intenzív osztályokon dolgozók (ágy szám >10) (χ^2=4,286 p=0,038), az oktatásban részesültek köre (χ^2=4,267 p=0,039), és a módszertani levelet olvasók köre (χ^2=5,406 p=0,020) szignifikánsan többen tudták a helyes választ. A nem (p=0,554), az életkor (p=0,100), az egy háztartásban élők (p=0,100), a családi állapot (p=0,559), az iskolai végzettség (p=0,417), az ITO gyakorlati év (p=0,592), a munkaórák (p=0,188), a munkarend (p=0,448) alapján nincs szignifikáns különbség. *(I. II. táblázat)*

A kötszer típusára vonatkozóan a géz alapú kötszert a minta 6,7%-a, a poliuretán alapú kötszert 65,0%-a adta meg, és csak 26,6-a% tudta, hogy mind a poliuretán, mind a gézalapú fedőkötés használható. *(III. táblázat 7. pont)* Nem volt szignifikáns különbség a nem (p=0,789), az életkor (p=0,370), az egy háztartásban élők (p=0,173), a családi állapot (p=0,253), az iskolai végzettség (p=0,807), az ITO gyakorlati év (p=0,600), a munkaórák

(p=0,914), a munkarend (p=0,909), az ITO ágyszám (p=0,391), az oktatás (p=0,185), a módszertani levél ismerete (p=0,243) alapján. *(I. II. táblázat)*

A CVC bemenetelénél a bőr fertőtlenítésére az ápolók többség 48,3%-a; a jódos oldatot használna, pedig a 2%-os klór-hexidin oldat javasolt (41,7%). *(III. táblázat 8. pont)* A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy a 12 órás munkarendben dolgozók (χ^2=4,220 p=0,040), az oktatásban részesültek köre (χ^2=5,554 p=0,018), és a módszertani levelet olvasók köre (χ^2=9,613 p=0,002) bizonyult szignifikánsan tájékozottabbnak. Nem volt szignifikáns különbség a nem (p=0,764), az életkor (p=0,484), az egy háztartásban élők (p=0,190), a családi állapot (p=0,693), az iskolai végzettség (p=0,493), az ITO gyakorlati év (p=0,526), a munkaórák (p=0,286), az ITO ágyszám (p=0,484) alapján. *(I. II. táblázat)*

Az antibiotikumos kenőcs használatát a megkérdezettek 61,7%-a nem javasolta, de kevesen tudták (28,3%), hogy azért nem javasolt, mert növeli az antibiotikum-rezisztenciát. *(III. táblázat 9. pont)*

A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy az oktatásban részesültek köre (χ^2=6,648 p=0,010), és a módszertani levelet olvasók köre (χ^2=7,520 p=0,006) szignifikánsan többen meg tudták határozni a helyes választ. A nem (p=0,076), az életkor (p=0,121), az egy háztartásban élők (p=0,774), a családi állapot (p=0,559), az iskolai végzettség (p=0,058), a munkaórák (p=0,129), a munkarend (p=0,144), az ITO ágyszám (p=0,301), az oktatás (p=0,100), a módszertani levél ismerete (p=0,438) esetében szignifikáns különbségek nem mutathatók ki. *(I. II. táblázat)*

A teljes parenterális táplálás során zsíroldatok adásakor 24 óránként a szerelék cseréje javasolt, ezt a válaszadók többség (81,7%) jól jelölte be. *(III. táblázat 10. pont)* A kapott eredményt szociodemográfiai jellemzőkkel, és a munkahelyi változókkal χ^2- próbát végeztünk, ami azt mutatta, hogy válaszadók között a 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezők (χ^2=4,219 p=0,040), és a nagyobb intenzív osztályokon dolgozók (ágy szám <11) (χ^2=4,286 p=0,036) szignifikánsan nagyobb arányban ismerték a helyes választ. A nem (p=0,764), az életkor (p=0,484), az egy háztartásban élők (p=0,911), a családi állapot (p=0,421), az iskolai végzettség (p=0,552), a munkaórák (p=0,190), a munkarend (p=0,601) az oktatás (p=0,739), a módszertani levél ismerete (p=0,379) esetében szignifikáns különbségek nem mutathatók ki. *(I. II. táblázat)*

A kérdőívet kitöltő ápolók fele (50%) tudta, hogy a tiszta infúziós szereléket (amelyben sem zsír-, sem vér készítmény nem adtak) 72-96 óránként elegendő cserélni. *(III. táblázat 11. pont)* Nem volt szignifikáns különbség a nem (p=0,789), az életkor (p=0,121), az egy háztartásban élők (p=0,389), a családi állapot (p=0,559), az iskolai végzettség (p=0,787), az ITO gyakorlati év (p=0,592), a munkaórák (p=0,606), a munkarend (p=0,100), az ITO ágyszám (p=0,121), az oktatás (p=0,100), módszertani levél ismerete (p=0,796) alapján. *(I. II. táblázat)*

Ismeretszint centrális vénás katéter okozta fertőzések megelőzéséről

IV. táblázat Kérdésekre adott helyes választ adók megoszlása

kérdések	n	%
1. Teljes parenterális táplálás során a zsíroldatok alkalmazása esetén a centrális vénás infúziós szerelék cseréje ajánlott	49	81,7
2. Centrális vénás katéter cseréje a meglévő szúrtcsatornában vezetődróton áthúzva is elvégezhető	39	66,5
3. Centrális vénás katéter ajánlott rutinszerű cseréje	30	50,0
4. Centrális vénás kanül bemeneti fedőkötésének cseréje javasolt	30	50,0
5. Amikor sem zsíroldatot, sem vérterméket nem adunk a centrális vénás kanülön át, az infúziós szerelék cseréje ajánlott	30	50,0
6. Ha a centrális vénás katéter eredetű fertőzések aránya magas, antibiotikummal, vagy egyéb módon impregnált centrális vénás katéterek használata javasolt	29	48,3
7. Centrális vénás kanül bemeneténél a bőr fertőtlenítésére ajánlott	25	41,7
8. Centrális vénás kanülök bemeneténél antibiotikumos kenőcs használata javasolt	17	28,3
9. Nyomásátalakító (transzducer), és az invazív nyomásmérő szerelék cseréje javasolt	16	26,7
10. Centrális vénás kanül bemeneti fedőkötésére javasolt	16	26,7
11. Centrális vénás katéterrel összefüggő véráramfertőzés kockázati faktorai	13	21,7

A korábban bemutatott ismeretszint mérő kérdések válaszai alapján önkényesen egy összesített tudásszint indexet számoltunk. A megfelelő ismeret pontozást, úgy alakítottuk, hogy a 11 helyes válaszból 11-et kellett eltalálni. A válaszadók egy helyes válasz után 1 pontot kaptak. A helytelen válaszok száma nem befolyásolta negatívan a pontszámot. A kérdésekre adott helyes válaszok aránya átlagosan 44,60% volt. A minta átlag tudás pontszáma 4,90±2,14 (medián:4,0, minimum: 1, maximum:10) A további elemzések során megvizsgáltuk a tudásszint összefüggést a szociodemográfiai adatokkal és a munkahelyi változókkal. Az elemzés során kétmintás t-próbát végeztünk két csoport esetén, három vagy több csoport esetén ANOVA próbát (post-hoc teszt: Scheffe) alkalmaztunk. A V. táblázatban azoknak az attrtibútomok az átlag pontszámait, amelyek között szignifikáns különbség van kiemeléssel jelöltük. A folytonos változó estén regresszió elemzést is végeztünk.

V. táblázta A szociodemográfiai jellemzők, munkahelyi jellemzők és a tudás pontszám közötti különbség (n=60)

változók	attribútumok	n	átlag±szórás	p-érték
nem	*férfi*	3	4,67±0,5	0,849
	nő	57	4,91±2,1	
kor	*>30 év*	19	4,68±1,8	0,567
	31-40 év	13	4,54±2,5	
	41<év	28	5,21±2,1	
lakhely	*megyeszékhely*	21	4,48±1,9	0,403
	város	16	4,81±2,6	
	falu	23	5,35±1,8	
egy háztartásban élők	*egyedül él*	6	4,67±1,3	0,239
	családban él	54	4,93±2,2	
családi állapot	*egyedülálló/elvált*	16	4,75±1,7	0,308
	házastárs/élettárs	44	4,35±2,2	
iskolai végzettség	*intenzív szakápolói vagy főiskolai-, illetve egyetemi diploma*	21	4,49±1,74	0,073
	nincs intenzív szakápolói vagy főiskolai-, illetve egyetemi diploma	39	5,67±1,76	
intenzív osztályos gyakorlati évek	*>5 év*	22	**4,14±1,6**	**0,037**
	<6 év	38	**5,34±2,2**	
intenzív osztályon található betegágyak	*10 vagy annál kevesebb ágy*	32	5,00±2,2	0,777
	11 vagy annál több ágy	28	4,79±2,0	
heti munkaóra	*20 óra*	7	4,00±2,2	0,235
	30 óra	6	4,00±1,7	
	40 óra	47	5,15±2,1	
munkarend	*8 óra (egy műszak)*	8	6,8±2,7	0,127
	12 óra (egy műszak)	52	4,60±1,8	
oktatás	*igen*	30	**5,53±2,4**	**0,006**
	nem	30	**4,27±1,5**	
módszertani levél ismerete	*igen*	29	**5,83±2,4**	**0,000**
	nem	31	**4,03±1,3**	

A nem (p=0,849), az életkor (p=0,292), a lakhely (p=0,403), az egy háztartásban élők (p=0,289), a családi állapot (p=0,308), az iskolai végzettség (p=0,073), a munkaóra (p=0,235), a munkarend (p=0,127), az ITO ágyszám (0,777) esetén szignifikáns különbség nem mutatható ki a tudás pontszám alapján. A 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezőknek (5,34) szignifikánsan magasabb a tudás pontszámuk a fertőzések

megelőzéséről, mint az 5 vagy annál kevesebb éve dolgozóknak (4,14) (p=0,037). A módszertani levélben foglaltakról oktatásban részesültek (5,53) szignifikánsan többen meg tudták határozni a helyes válaszokat, mint akik nem vettek részt oktatáson (p=0,006). A módszertani levelet olvasó csoportnak (5,83) szignifikánsan jobb az ismeret szintjük, mint a módszartani levelet nem ismerő csoportnak (p<0,001). Az életkor folytonos változóként használva statisztikai összefüggés nem mutatható ki (r=0,108; r²=0,012; B=2,4 p=0,412).

IV. Összefoglalás

IV.1 Következtetés

Az alacsony sikeres válaszok száma alapján feltételezzük, hogy összességében a vizsgálatunkban részt vett intenzív osztályos ápolóknak a CVC okozta fertőzések megelőzésére vonatkozó ismerete nem megfelelő. A helyes válaszok összesített átlagos eredménye 44,6%-os volt. A minta összesített átlag tudás pontszáma 4,90±2,14 (medián:4,0, minimum: 1, maximum:10)

Eredményeink alapján megállapítható, hogy szignifikánsan tájékozottabbaknak bizonyultak a 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezők (p=0,037), a módszertani levélben foglaltakról oktatáson részt vettek (p=0,006) és a módszertani levelet olvasó ápolók (p<0,001).

Az első hipotézis szerint: *A szociodemográfiai jellemzők alapján különbözik a megkérdezett ápolók ismerete a centrális vénás katéterrel összefüggő infekciók megelőzéséről*

A hipotézis nem igazolódott, mert a nem (p=0,849), az életkor (p=0,567), lakhely (0,403), egy háztartásban élők (p=0,239), családi állapot (p=0,308), iskolai végzettség (p=0,073) alapján nem mutatott szignifikáns különbséget.

A második hipotézis szerint: *A munkahelyi tényezők alapján jelentősen különbözik a megkérdezett ápolók ismerete a centrális vénás katéterrel összefüggő véráramfertőzések prevenciós lehetőségeiről*

A 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezők (63,3%) szignifikánsan jobban tudták, hogy a CVC-k rutinszerű cseréje nem ajánlott (p=0,032), a CVC cseréjét vezető dróton át húzva csak akkor végezhető, ha klinikailag indokolt (p=0,016), a teljes parenterális táplálás során zsíroldatok adásakor 24 óránként a szerelék cseréje javasolt (p=0,040). Összeségében szintén a 6 évnél hosszabb intenzív osztályos gyakorlattal rendelkezők (5,34) szignifikánsan többen tudták a helyes válaszokat a CVC okozta fertőzések prevenciós lehetőségeiről, mint az 5 vagy annál kevesebb éve dolgozók (4,14) (p=0,037). A kisebb intenzív osztályokon (ágy szám >10) dolgozók (53,3%) szignifikánsan (p=0,038) jobb ismerettel rendelkeznek a CVC fedőkötésének a cseréjéről, mint a nagyobb intenzív osztályokon (ágy szám <11) dolgozó ápolók (46,7%). Viszont a nagyobb intenzív osztályokon dolgozók (46,7%) szignifikánsan (p=0,036) tájékozottabbak a zsíroldatok adásakor az infúziós szerelék cseréjéről, mint a kisebb intenzív osztályokon dolgozó ápolók (53,3%). A 12 órás munkarendben (két műszak) dolgozó ápolók (86,7%) szignifikánsan tájékozottabbak a CVC-VÁF kockázati tényezőiről (p=0,003), a CVC-k rutinszerű cseréjéről (p=0,023), az ajánlott bőr fertőtlenítőszerről (p=0,040), mint a 8 órás munkarendben (egy műszak) dolgozó ápolók (23,3%).

A hipotézis tehát részben igazolódott, mivel az intenzív osztályos gyakorlat a tudás mértékét jelentősen befolyásolta, ugyanakkor az ITO ágyszám, és a munkarend kismértékben befolyásolta az ismeretet.

A harmadik hipotézis szerint: *Az 2019. évben az országos tisztifőorvos által kiadott „Az érkatéterrel összefüggő véráramfertőzések megelőzésére” című módszertani levélben foglaltakról oktatáson részt vettek, és a módszertani levelet olvasó ápolók tájékozottabbak a centrális vénás katéterrel összefüggő fertőzések megelőzéséről*

Az oktatásban részesültek köre (50,0%), és a módszertani levelet olvasó csoport (48,3%) szignifikánsan jobb ismerettel rendelkeznek a CVC-VÁF kockázati tényezőiről (p=0,028), (p=0,003); a CVC cseréjéről (p=0,015), (p=0,005); a CVC fedőkötésének a cseréjéről (p=0,039), (p=0,020); a javasolt bőr fertőtlenítőszerről (p=0,018), (p=0,002); az antibiotikumos kenőcs használatáról (p=0,010), (p=0,006). Összeségében elmondható, hogy az oktatáson részt vettek (5,53), szignifikánsan többen tudták a helyes válaszokat, mint akik nem részesültek oktatásban (4,27) (p=0,006). A módszertani levelet olvasó csoportnak (5,83), szignifikánsan jobb a tudás szintjük, mint a módszertani levelet nem ismerő csoportnak (4,08) (p<0,001).

A hipotézis igazolódott, miszerint az oktatás és az írásos módszertani levél ismerete befolyásolta a tudás mértékét a centrális vénás katéterrel összefüggő fertőzések megelőzéséről.

IV.2 Megbeszélés

Azoknak az egészségügyi dolgozóknak, akik a gyógyszereket, infúziókat beadják, a centrális katéterek kezelésének körében, jártasnak kell lenniük - többek között - a katéter rögzítésében, kötéscseréjében, az infúziós szerelék kezelésében, a tű nélküli csatlakozók fertőtlenítésében, a beültetett portok állapotának megítélésében és a centrális érkatéter beöblítésében, feltöltésében. Csak a megfelelő elméleti és gyakorlati ismeretekkel rendelkező egészségügyi dolgozóktól várható a higiénés rendszabályok magas szintű alkalmazása, maradéktalan betartása, a várt kezelési eredmények elérése.[2] A Zala Megyei Szent Rafael Kórház három típusú intenzív osztályain (Csecsemő- és Gyermekgyógyászati Intenzív részleg, Aneszteziológiai és Intenzív Terápiás Osztály, Szívsebészeti Osztály, valamint a Szívsebészeti Intenzív Terápiás részleg) dolgozó ápolók körében felmérést végeztünk abból a célból, hogy felmérjük az ápolók ismeretét a CVC okozta fertőzések megelőzéséről a nemzetközi irányelvek, illetve a hazai ajánlások alapján.

Vizsgálatunk eredményei alapján, az intenzív osztályon dolgozó ápolók ismerete a CVC okozta fertőzések megelőzéséről nem megfelelő, mert a helyes válaszok összesített eredménye 44,6%-os volt. A CDC ajánlás alapján több országban is végeztek kutatást az ápolók ismeretére vonatkozóan. Labeau és munkatársai 22 európai országra kiterjesztett vizsgálata (n=3405) a saját kutatásunkhoz hasonlóan azonos eredményt adott, mert a helyes válaszok összesített aránya 44,4%-os volt. [10] Ullman és munkatársai Ausztráliában végzett kutatása (n=253) a saját eredményeinknél jobb eredményt mutatott, mert a CDC ajánlást a megkérdezettek 55,0%-a ismerte. [11] Csomós és munkatársai magyarországi tanulmánya (n=178) a saját eredményeinknél alacsonyabb értékről (27,0%) számoltak be. [12] Koutzavekiaris és munkatársai görögországi kutatása (n=246) a saját adatainknál rosszabb eredményt adott, az ápolók a kérdésekre adott helyes válaszai 27,0%-os volt. [13]

Az érkatéterrel összefüggő véráramfertőzés kialakulhat az ápolási folyamat során az egészségügyi dolgozók kezének közvetítésével, valamint helytelen katéter-kezelés során. Az ITO-on ápolt betegek a súlyos alapbetegségek, valamint számos invazív beavatkozás miatt magas kockázati csoportba tartoznak CVC-vel összefüggő véráramfertőzés kialakulása szempontjából. [1] Míg tanulmányunkban a megkérdezett ápolók 21,7%-a ismeri a centrális vénás katéterrel összefüggő véráramfertőzés kockázati tényezőit, addig más hazai vizsgálatban (n=163) ennél magasabb (45,0%) értékről számoltak be. [14]

A centrális vénás kanülök behelyezése és indikálása nem szakdolgozói, hanem orvosi feladat, ezért a CVC cseréjével kapcsolatos válaszok értékelése korlátozott. Ma már azonban több ajánlásban is szerepel, hogy a CVC rutinszerű cseréje nem szükséges (perifériás branülökkel elletétben, ahol 72 óránként csere indokolt). [12] További összehasonlítás bizonyítja, hogy nem sokkal marad el az általunk vizsgált ápolók ismerete CVC-k rutinszerű cseréjéről (50,0%), azon európai felmérés eredményeitől, ahol az ápolók 55,8%-a cserélne CVC-t, ha

klinikailag indokolt lenne. [10] Magyarországi kutatásban a saját eredményeinknél jóval alacsonyabb értékről (18,0%) számoltak be. [12] Bianco és munkatársai vizsgálatában viszont az ápolók 72,9%-a ismerte CVC cseréjére vonatkozó ajánlást. [15]

Az antibiotikummal impregnált kanülök használata Magyarországon nem elterjedt, ennek ellenére a válaszadók 48,3%-a jól ismerte az indikációját, (ha a CVC 5 napon túl is a betegben marad) szemben EVIDANCE-tanulmányban, ahol ez az arány 30,9% volt. [10] Egy hazai vizsgálatában viszont a megkérdezettek 66,3%-a ismerte CDC ajánlását. [12]

A katéter szúrása, -cseréje, kötéscseréje során fertőtleníteni kell bőrfertőtlenítő szerrel. A CVC bemeneténél a bőrfertőtlenítésre az ápolók 41,7%-a klór-hexidin oldatot használna. Egy korábbi európai és hazai kutatások eredményeivel történő összehasonlítás során megfigyelhető, hogy a saját eredményeinknél jelentősen elmaradnak (13,9% vs. 19,8%). [10][12] Olaszországi, és ausztrál vizsgálatban viszont a saját eredményeinknél magasabb értékeket írtak le (72,9,9% vs. 65,0%). [15][11] Igaz, a kutatásunkban résztvevők többsége (48,3%) a jódos oldatot használná, amit a módszertani levél is ajánl, de csak abban az esetben, ha betegnél kontraindikáció áll fenn.

A CVC-k fedőkötésére az ápolók nagy többsége (65,0%) poiluretán (op-site) alapú kötszert jelölte a kérdőívben, és csak kevesen (6,7%) választották a géz alapú kötszert. Ez az eredmény megegyezik egy hazai kutatás eredményeivel, ahol a megkérdezettek 6,7%-a használna géz alapú kötszert. [12] A minta 26,6%-a tudta jól, hogy a poliuretán, és a gézalapú fedőkötés használható. Azonos eredményt mutat 22 európai országra kiterjesztett vizsgálat adatai is (26,2%). [10] A nemzetközi ajánlás szerint a géz alapú kötszer akkor előnyös, ha vér szivárog a szúrtcsatornából, egyéb esetben a poliuretán kötszereket javasolják. A poliuretán kötszerek előnye, hogy biztonságosan rögzítik a katétert, folyamatosan ellenőrizhető a bemeneti nyílás és a kötés csere ritkábban szükséges. A géz alapú kötszer ugyan olyan jó, mint a poliuretán kötszer, mert nem befolyásolja a katéter eredetű fertőzések kockázatát. [16]

A CVC fedőkötésének a cseréjét a válaszadók 50,0%-a végezné el, amikor indokolt (szennyezett, meglazult stb.), de minimum hetente, szemben Labeau vizsgálatában (43,4%), Csomós kutatásában (15,2%), ahol a megkérdezettek kevesebb arányban ismerték az ajánlást a fedőkötés cseréjére vonatkozóan. [10][12] A vizsgálatunkban részt vettek 46,7%-a naponta végezné a kötés cseréjét, pedig a szennyezett, nedves, meglazult fedőkötést azonnal cserélni kell, de a tiszta, jól tapadó, sértetlen kötést 5-7 naponta cserélendő. [2]

Az antibiotikumos kenőcs használatát a megkérdezettek 61,7%-a nem javasolta, de kevesen tudták (28,3%), hogy azért nem javasolt, mert növeli az antibiotikum-rezisztenciát. Azonos arányban ilyen eredményt mutat egy Ausztráliában végzett vizsgálat, ahol az ápolók 95,0%-a (n=240) nem javasolná a kenőcs használatát, de kevesen (47,19%) tudták, hogy növeli az antibiotikum rezisztenciát, illetve elősegíthetik a gombafertőzések kialakulását. [11] Ugyancsak azonos arányú eredményt adott az EVIDANCE-tanulmány (47,0% vs. 29,6%), és egy hazai felmérés (44,9% vs. 13,6%) is. [10][12]

A felmérésünkben a kérdőívet kitöltő ápolók fele (50,0%) tudta, hogy a tiszta infúziós szereléket (amelyben sem zsír-, sem vér készítmény nem adtak) 72-96 óránként elegendő cserélni, addig más hazai vizsgálatban ennél jóval alacsonyabb (16,3%) értéktől számoltak be. [12] Európai kutatásban a saját eredményeinknél magasabb arányt (65,0%) mutatott. [10]

A teljes parenterális táplálás során zsíroldatok adásakor 24 óránként az infúziós szerelék cseréje javasolt, ezt a válaszadók többség (81,7%) megfelelően jelölte, szemben Bianco és munkatársai kutatásában, ahol az ápolók 43,0%-a tudta az infúziós szerelék cseréjére vonatkozó ajánlást. [15] Labeau és munkatársai 22 európai országra kiterjesztett vizsgálata, illetve Csomós és munkatársai felmérése a saját kutatásunkhoz közel azonos eredményt adott (90,0% vs. 85,4%). [10][12]

A korábban bemutatott ismeretszint mérő kérdések válaszai alapján önkényesen egy összesített tudásszint indexet számoltunk. A megfelelő ismeret pontozást, úgy alakítottuk,

hogy a 11 helyes válaszból 11-et kellett eltalálni. A válaszadók egy helyes válasz után 1 pontot kaptak. A minta átlag tudás pontszáma 4,90±2,1 (medián:4,0; minimum: 1, maximum:11) Ullman és munkatársai vizsgálatában a válaszadók tudás pontszáma: 5,5±1,4. [11]

Az ITO-on eltöltött évek száma általában összefügésben áll a tudással, ezt saját adataink is alátámasztják. A 6 év vagy annál hosszabb intenzív osztályos gyakorlattal rendelkezők (63,3%) a helyes válaszainak a száma több mint az 5 vagy annál kevesebb éve dolgozó ápolóknak (36,7%). A nemzetközi, illetve a hazai kutatásban is az ITO-on 10 év vagy annál több éve dolgozó ápolók több ismerettel rendelkezik, mint a kevesebb éve dolgozók. (38,1% vs. 36,0%) [10][12]

A CVC behelyezésével, fenntartásával és ápolásával kapcsolatos oktatási programok célja a biztonságos betegellátást támogató attitűdök, és magatartások erősítése. [2] „Az érkatéterrel összefüggő véráramfertőzések megelőzésére" című módszertani levélben foglaltakról az oktatáson részt vett ápolók (50,0%) magasabb tudás szinttel rendelkeznek. Szintén egy külföldi felmérésben is az oktatásban részesült ápolók 40,0%-a tájékozottabbnak bizonyult. [13]

A módszertani levelet olvasó egészségügyi dolgozók (50,0%) nagyobb arányban ismerték a helyes válaszokat. Ugyancsak egy olaszországi felmérésben, ahol elérhető CVC kezelésével kapcsolatos protokoll, ott a dolgozók (72,9%) jártasabbak a CVC ápolásával kapcsolatban. [15]

Az eredményeket a nemek (férfi: 5,0%, nő: 95,0%) alapján is elemeztünk, és nem találtunk összefüggést a nemek és az elért eredmény között. Koutzavekiaris és munkatársai vizsgálatában a nemek tekintetében a nők (67,2%) a CDC ajánlásairól tájékozottabbnak bizonyultak. [13] Az eredményeket az iskolai végzettség alapján is (intenzív szakápolói vagy főiskolai, illetve egyetemi diploma: 35,0%; nincs intenzív szakápolói vagy főiskolai, illetve egyetemi diploma: 65,0%) elemeztünk, és nem találtunk összefüggést a végzettség az ismeretszint között. Egy görögországi kutatásban viszont a magasabb végzetséggel rendelkezők (26,7%) a CDC ajánlásait nagyobb arányban ismerték. [13] Nem találtunk különbséget az intenzív osztályos ágyak száma és az elért eredmények között. Az EVIDANCE-tanulmányban a kisebb ágyszámú osztályok a jobb eredmény független jelzője volt. Feltételezhető, hogy a kisebb osztályokon általában meglévő „teamhangulat" elősegíti az ajánlások szélesebb körű alkalmazását. [10] Az eredményeket a heti munkaórák, és munkarend alapján is elemeztünk, és nem találtunk összefüggést a két független változó, és az elért eredmény között.

Vizsgálat korlátai, a kutatás folytatásának lehetséges iránya

A vizsgálat alanyait célirányos, nem véletlenszerű mintavételi módszerrel választottuk ki, így eredményeink csupán tájékoztató jellegűek. A saját szerkesztésű kérdőív kérdéseire adott válaszok az elvárásoknak való megfelelési kényszer, illetve elképzelhető, hogy azok az ápolók töltötték ki a kérdőívet, akiket érdekel az infekció megelőzése, így nem feltétlenül mértük megbízhatóan valós ismeretet. A megkérdezett szakképzett ápolók nem egyenlő arányban ápolnak CVC-t, mert három különböző típusú intenzív osztályon dolgoznak. A Csecsemő-és Gyermekgyógyászati Intenzív részlegen ritkán történik CVC expozíció, az Aneszteziológiai és Intenzív Terápiás Osztályon az orvosok gyakran helyeznek CVC-t, és a Szívsebészeti Osztályra, valamint a Szívsebészeti Intenzív Terápiás részlegre szinte minden esetben műtét céljából kerülnek a beteg az ITO-ra, ezért az orvosok minden betegnél CVC-t szúrnak. A vizsgálatunk nem saját bevalláson alapul, hanem ún. „tudástesztre" épül. Tisztában vagyunk azzal, hogy az ismeret megléte nem azonos az alkalmazással, de a tudás, a gyakorlati alkalmazás feltétele. [10] A kutatásunk lehetséges egyik iránya lehet a gyakorlati tudás felmérése. Az ápolók folyamatos visszajelzést kapnak az ápolási tevékenységükkel kapcsolatban, hogy melyik ápolási folyamaton kell még javítani, illetve ismét felmérni az

ismeretüket az infekciók megelőzéséről. Az ellenőrzési módok közé tartoznak az írásbeli tesztek, a csoportos megbeszélések és a tevékenység megfigyelése az ellátás során a gyakorlatban. [2]

IV.3 Javaslatok

Fontos, hogy az intézmény felsővezetése és az intézmény vezető szakemberei (orvosok, ápolók) elkötelezzék magukat az ellátási és ápolási folyamatok, valamint a kimenetel javítását célzó tervek végrehajtása mellett. Az intézményvezetés felhatalmazásával az Intézményi Infekciókontroll és Antibiotikum Bizottság tagjai, vagy külön erre a célra felállított multidiszciplináris csapatban részt vevő szakemberek fogalmazzák meg a célokat, határozzák meg a gyakorlati megvalósítás lépéseit, és rendszeres üléseken monitorozzák a folyamatokat. Fejlesztendő a biztonságos betegellátás intézményi kultúrája, amelybe beletartozik a csapatmunka, a technikai fejlesztések és az egészségügyi ellátással összefüggő fertőzések (pl. CVC-VÁF) elleni óvintézkedések oktatása, alkalmazásuk rendszeres monitorozása. Az egészségügyi ellátással összefüggő fertőzésekre (pl. CVC-VÁF) a kimenetelre vonatkozó adatokat rendszeresen meg kell osztani minden egyes osztállyal, egészségügyi dolgozóval. Alkalmazható indikátor pl. a havi esetszám, incidencia, incidenciasűrűség és az utolsó észlelt fertőzés óta eltelt napok száma. A trendek grafikus ábrázolása is javasolt. A fertőzések betegségterhét és költségvonzatait érzékelhetővé kell tenni minden egészségügyi dolgozó számára konkrét esetek megbeszélésén keresztül. A jó gyakorlatok alkalmazásában példát mutató szakemberek (orvosok, ápolók) szerepe is jelentős: az egészségügyi dolgozók továbbképzésében való részvétele növeli a siker esélyét azáltal, hogy az ellátói–ápolói oldal részéről motiválják társaikat, növelve ezzel az elköteleződést és a felelősségvállalást mindenki részéről. Emellett segíthetnek olyan stratégiák/protokollok kifejlesztésében, amelyek jól illeszkednek egy-egy adott osztály működési rendjéhez. A folyamatos kommunikáció, konzultáció elengedhetetlen ahhoz, hogy a felmerülő problémákra megoldást lehessen találni, és a javulás tartós legyen mind a surveillance eredmények, mind a betegbiztonság kultúrájának szempontjából. Az egyes fekvőbeteg-ellátó intézmények közötti szakmai együttműködés, tudásmegosztás is elősegítheti a bizonyítékokon alapuló ellátást.

Az ápolásvezetés számára fontos információkkal szolgálhatunk az egészségügyi dolgozók aktuális tudásáról és készségeiről az infekciók prevenciós lehetőségeivel kapcsolatban, amelynek legfontosabb eszköze lehet az elméleti-, és gyakorlati oktatás szervezése. A CVC behelyezésével, fenntartásával és ápolásával kapcsolatos oktatási programok célja a biztonságos betegellátást támogató attitűdök és magatartások erősítése. Oktatásban és gyakorlati képzésben mindenkinek ajánlott részt vennie, akinek feladatkörébe tartozik a CVC behelyezése és/vagy ápolása. Többféle oktatási módszer és stratégia (pl. kurzusok, a kis- és nagycsoportos megbeszélések, betegágy melletti szemléltetés) alkalmazható a CVC-VÁF-k megelőzésének támogatására. Az intézmény ellátási profiljának és az egyéni dolgozói készségeknek, képességeknek, illetve igényeknek megfelelően kell eldönteni, hogy az adott intézményben mely oktatási stratégiák és tartalmak a legcélravezetőbbek. Valamennyi oktatás során ki kell térni a CVC-VÁF megelőzésének fontosságára, illetve mind az extra-, mind az intraluminalis behatolási utakra. Az elméleti és gyakorlati tényanyag mellett az oktatás, képzés optimális esetben kitér a kritikai gondolkodásra, a biztonságos betegellátást veszélyeztető és támogató magatartásokra, attitűdökre és a lehetséges tévhitekre.

Az oktatást szervező csoportban többféle szakma képviselőinek kell jelen lennie, beleértve a betegellátásban közvetlenül résztvevő orvosokat, ápolókat, valamint az infekciókontroll szakembereket. Előnyben részesítendőek az interaktív, gyakorlati szemléletű oktatások, mivel az előadások önmagukban nem hatásosak a kívánt attitűdök és magatartások elérése szempontjából. Az oktatást támogató eszközöket az igények, lehetőségek és helyi kapacitások figyelembevételével kell kiválasztani (pl. nyomtatott vagy online tananyagok, audiovizuális

megjelenítések, gyakorlótermek). Az oktatási módokat az egyes problémákhoz lehet szabni és felváltva alkalmazni, mivel ez hatásosabb, mint a csupán egyféle oktatási mód alkalmazása. Javasolt egyéb támogató eszközök (pl. helyi eljárásrendek összefoglalója, zsebben hordható kártyák, e-mailek és képernyővédőként megjelenített üzenetek) alkalmazása, illetve emlékeztetők (pl. kisebb poszterek, nyomtatványok) kihelyezése a betegellátás helyein, ezzel is erősítve a biztonságos betegellátást és a fertőzések megelőzését.

A CVC behelyezés helyes technikájának biztos elsajátításához jól strukturált oktatási program szükséges, amelynek egyik központi eleme az, hogy az elméleti és gyakorlati tudás alapjait szimulációs gyakorlatok során szerzik meg a fiatal orvosok, ezt követően pedig tapasztalt kollegáik felügyelete alatt végezhetik a beavatkozást betegeken. Mielőtt önállóan végezhetnék a beavatkozásokat, minden egészségügyi dolgozónak dokumentáltan jártasságot kell szereznie a CVC szúrásában, ápolásában és a katéter fenntartásában. Ennek dokumentálására javasolt egy egységes, lehetőleg minél tárgyilagosabb kompetenciaértékelő listát készíteni, amellyel mérhető, illetve dokumentálható minden egyén jártassága a katéter szúrásában, illetve az ápolással és fenntartással kapcsolatos tevékenységekben (pl. kötéscsere). Amennyiben CVC szúráshoz új eszköz vagy technológia kerül bevezetésre az intézményben, ennek használatára vonatkozó képzés is szükséges. Amennyiben lehetőség van rá, az eszköz használatának betanításához gyártói segítséget is be lehet vonni. Az új eszköz vagy technológia bevezetése kapcsán monitorozni kell az alkalmazásának lehetséges hatásait a CVC-VÁF előfordulására.

Azoknak az egészségügyi dolgozóknak, akik a gyógyszereket, infúziókat beadják a centrális katéterekbe, dokumentáltan jártasnak kell lenniük minden beavatkozásban, többek között a katéter rögzítésében, kötéscseréjében, az infúziós szerelék kezelésében, a tű nélküli csatlakozók fertőtlenítésében, a beültetett portok állapotának megítélésében és a CVC beöblítésében, feltöltésében. Ez azt is jelenti, hogy be kell tudniuk mutatni ezeket a műveleteket tapasztalt klinikai szakember előtt vagy szimulációs gyakorlaton.

A képzési programok kiértékelésének a következőkre kell kiterjednie: elégedettség az oktatás minőségével és tartalmával, a tudás mérhető változása és a munkavégzés során tapasztalható változások. Az ellenőrzési módok közé tartoznak az írásbeli tesztek, a csoportos megbeszélések és a tevékenység megfigyelése az ellátás során a gyakorlatban vagy szimulációs laborban. [2]

Kutatásunk felhívja a figyelmet a folyamatos szakmai továbbképzés fontosságára nem csak orvosi, hanem szakdolgozói szinten is. [12] A megfelelő elméleti, és gyakorlati ismerettel rendelkező egészségügyi személyzet által csökkenthető az eszközhasználattal összefüggő fertőzések száma, amelynek a következménye lehet a rövidebb ápolási-, eszközös napok, és az alacsonyabb ellátási költségek. [1] [2]

A kutatásunk jelentősége abban ragadható meg, hogy az ápolók folyamatos oktatása kiemelten fontos a jobb a betegellátás érdekében, a fertőzések csökkentésével és a betegbiztonság növelésével pedig növelhető az ellátottak megfelelő gyógyulása, felépülése. Ezért is kiemelt fontosságú az egészségügyi dolgozók folyamatos oktatása, ismereteinek megerősítése.

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Investigation of the properties of polyketone under the influence of glass fiber reinforcement

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Abstract

Polyketone (PK), a new environment-friendly engineering plastic produced from carbon monoxide (CO), can be used for various applications including package, fibers and technical items in many areas. The introduction of other polymer materials, reinforcing fibers, micro- and/or nanofillers into PK matrix is powerful for obtaining PK based new materials with specific characteristics and satisfactory improvements of properties [1.]. The aliphatic polyketone is a very promising engineering plastic with very good chemical resistance and excellent wear frictions properties. In addition, it has exceptionally good mechanical properties and super low permeability also. The aliphatic polyketones are produced from olefin monomers and carbon monoxide. In order to reduce costs, polyketone has been mixed with glass fiber, calcium carbonate and silicon dioxide in recent years, which modify and also improve flexibility, stiffness and thermal stability. Glass fibers reinforced polymer composites are prime examples of strong and lightweight materials. In this study, I would like to present, based on our test results, the effect of changing the amount of filler on its properties. The basic matrix material POK 15% and 30% glass fiber filled samples were compared with non reinforced polyketone. We analyzed the samples by Shore D harness tester, impact stregtnh test and tensile strenght test also.

Keywords: Polyketone, glass fiber, high- performance polymer, reinforcement, mechanical properties

I. Introduction

I.1.Polyketone

Tha aliphatic polyketone (PK) is a high performance engineering plastic. Its development by Shell began already in the 1970s after Nozaki began preparing high MW polymers using newly developed palladium catalysts described above. Processing instabily, however, quickly surfaced as a primary developmental hurdle. [2.] Polyketone (PK), is an environmentally friendly engineering plastic produced from carbon monoxide (CO) and ethylene, can be used in a wide range of applications, including the food industry to the automotive industry. The introduction of other polymer materials, reinforcing fibers, micro- and/or nano-fillers into the POK matrix is effectively suitable for the production of new PK-based materials with specific properties, in addition, the mechanical properties can also be modified. Aliphatic polyketones are produced from olefin monomers and carbon monoxide. In recent years, to reduce costs, polyketone has been mixed with glass fiber, calcium carbonate, and silica, which modify and improve flexibility, stiffness, and thermal stability. [2.]

Nowadays, 49% of the produced quantity is used in the food industry, especially where the material comes into contact with water and 51% as a raw material for oil and gas pipes, where chemical and water resistance are important. It is very resistant to mechanical stress and exhibits excellent friction and wear behavior. The combination of outstanding flexibility and toughness makes it excellent for the production of functional components such as food conveyors, valves, gears and spring elements.[1.]
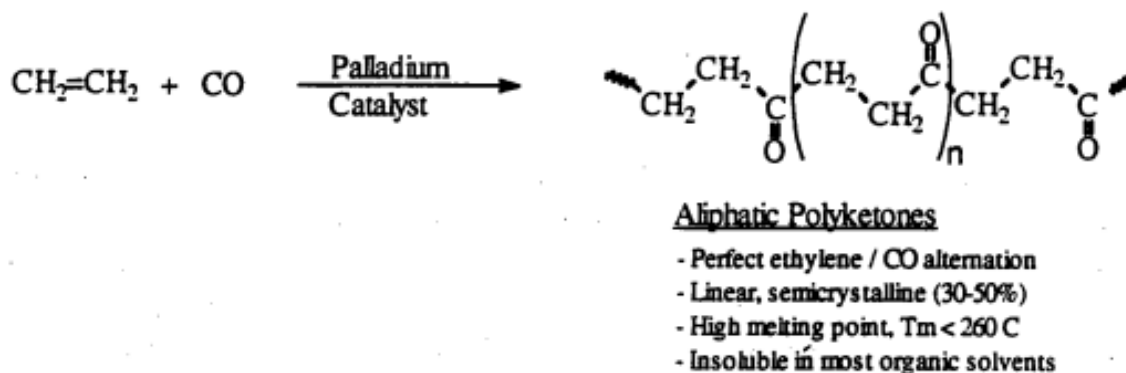
Figure 1. Synthesis of the ethylene/carbon monoxide copolymers.
[Source: J. Polimeric Mater., 1995. Vol. 30.pp.1-13 Alternating Olefin/Carbon Monoxide
Polymers: A new Family of Thermoplastics]

I.2. Aliphatic polyketon thermoplastic

In 1982, while conducting non-polymer related carbonylation research, Shell discovered a new class of efficient Pd(II) catalysist capable of copolymerizating carbon monoxide and ethylen into leinear , perfectly alternating polyketone polymers of high molecular weight. [3.]
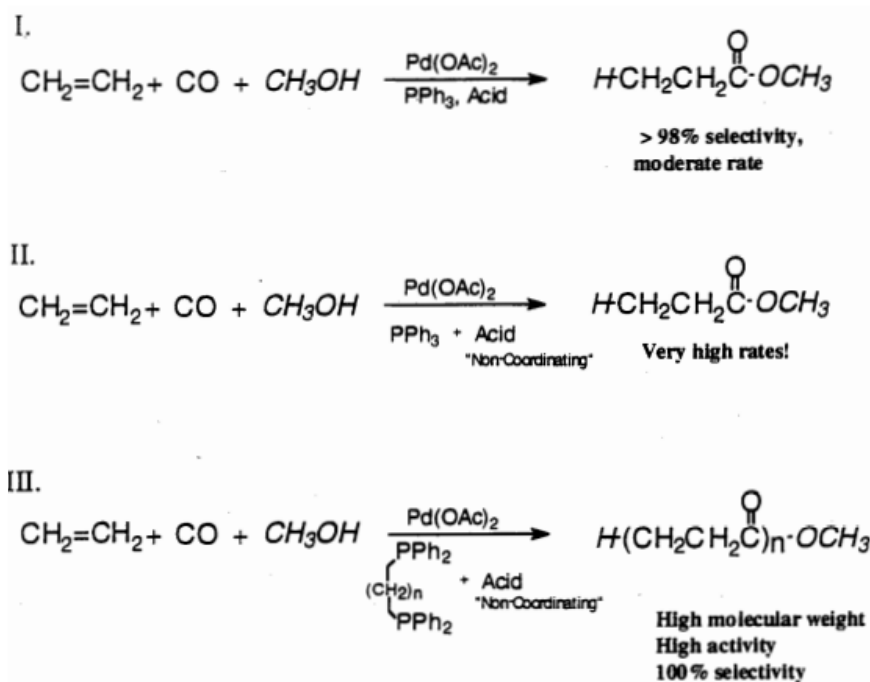
Figure 2. High activity Pd(II) catalyst invention for aliphatic polyketones.
[Source: J. Polimeric Mater., 1995. Vol. 30.pp.1-13 Alternating Olefin/Carbon Monoxide
Polymers: A new Family of Thermoplastics]

This descovery of efficient Pd catalysts for production high molecular weight , linear alternating olefin/carbon monoxide polymers for the first time made commericalproduction economically attractive. Aliphatic polyketone thremoplastic have been developed to be easly melt processable. They can be melt fabricated by variety of conventinoal methods, e.g,: injection molding, rotation molding, blow molding, extrusion. etc. Aliphatic polyketones also exhibit excellent tribological properties and we have to mention it the excellent wear resistence and chemical resistance also. [4.] [5.] Polyketone has many excellent properties, such as excellent impact strength and flexural modulus, which ensure advantageous use as a technical thermoplastic polymer.[9.] Aliphatic polyketones can be compounded with inorganic fillers, reinforcing agents, and lubricants. Since aliphatic polyketones already have good impact strength even at low temperatures and are highly resistant to automotive fuels, coolants, transmission fluids, oils and greases, it enables a variety of automotive applications such as fuel tanks, fuel system components, fuel pumps, fuel filters, injection rails, sensors, transmission sealing rings, bearing baskets and rubber reinforcement as raw materials. [10.] As a result of strong intermolecular interactions, they are much easier to stretch and retain their oriented structure much better than polyolefins. Combined with this, properties such as chemical resistance, hydrolytic stability, modulus and very high tensile strength, make polyketones attractive materials for fiber applications. [11.] [12.]

II. Materials and Methodes

II.1. Materials

In this study, I wanted to investigate the effect of glass fiber reinforcement. This required a standard, unfilled polyketone sample, which I compared with 15% and 30% glass fiber-reinforced polyketone.

1. Table: Property of the materials used during the experiment.

PK Polymers M630F	PK Polymer M33FG3A	PK Polymer M33AG6A
general propose	*15 percent short glass-fiber-reinforced*	*30 percent short glass-fiber-reinforced*
excellent balance of stiffness and toughness	*excellent balance of stiffness and toughness*	*very good processability, good impact resistance, high resilience and good creep performance*
high resiliend and good wear resistance	*very good processability, good impact resistance, high resilience and good creep performance*	*high resistance to hydrocarbons, solvents, salt solutions, weak acids and weak bases*
good creep and high resistence to hydrocarbons ,solvents, salt solutions, weak bases and acid.	*can also withstand short-term exposure to elevated temperatures*	*can also withstand short-term exposure to elevated temperatures.*

[Source: http://www.poketone.com/en/polyketone/datasheet.do]letöltés ideje: 2022.12.30.]

The fibers represent a new development of high-performance fibers due to their characteristics, including excellent adhesion, high mechanical strength, and chemical resistance similar to poly(ethylene terephthalate) (PET), nylon, and aramid [4.]

II.2. Methods

1) Tensile test
The tensile properties of polyketones are determined in accordance with the relevant sections of the standards ISO 527-1 / ASTM D638. Briefly this involves the elongation of a standardized injection molded test specimen at a constant displacement rate while recording the resulting force. All of the properties in the section were measured at 23°C and 50 percent RH. The following material parameters have been derived from these types of tests and can be found within this section. During the tests the force versus nominal strain was recorded.
2) Hardness test
Shore D Hardness is a standardized test consisting in measuring the depth of penetration of a specific indenter. Test methods used to measure Shore D Hardness are ASTM D2240 and ISO 868. The hardness value is determined by the penetration of the Durometer indenter's foot into the sample.
3) Impact test
Notched Izod impact tests were carried out using a Zwick pendulum according to ISO 180. Impact strength was calculated by dividing the absorbed energy by the initial cross-sectional area behind the notch (32 mm2). All measurements were carried out in ten-fold. The purpose of impact (impact bending) tests is to determine the resistance of materials to dynamic stress. This resistance is called toughness, while the work absorbed in the test specimen during the

experiment is called impact work. The energy of the body swinging from a height is dissipated as breaking energy in the test sample.

III. Results

III.1. Tensile test results

The results measured during the tensile strength measurement are presented in Figure 3. Based on the measured values, it can be said that the Tensile strength at yield increases by increasing the amount of glass fiber. Yield Strength is the stress a material can withstand without permanent deformation or a point at which it will no longer return to its original dimensions. Whereas, Tensile Strength is the maximum stress that a material can withstand while being stretched or pulled before failing or breaking. Based on the test results, it can be said that by increasing the amount of filler, the tensile strength at yield also increased. Compared to the unfilled polyketone sample, the 30% glass fiber reinforcement increased the value by 137%. (Fig.:3.)
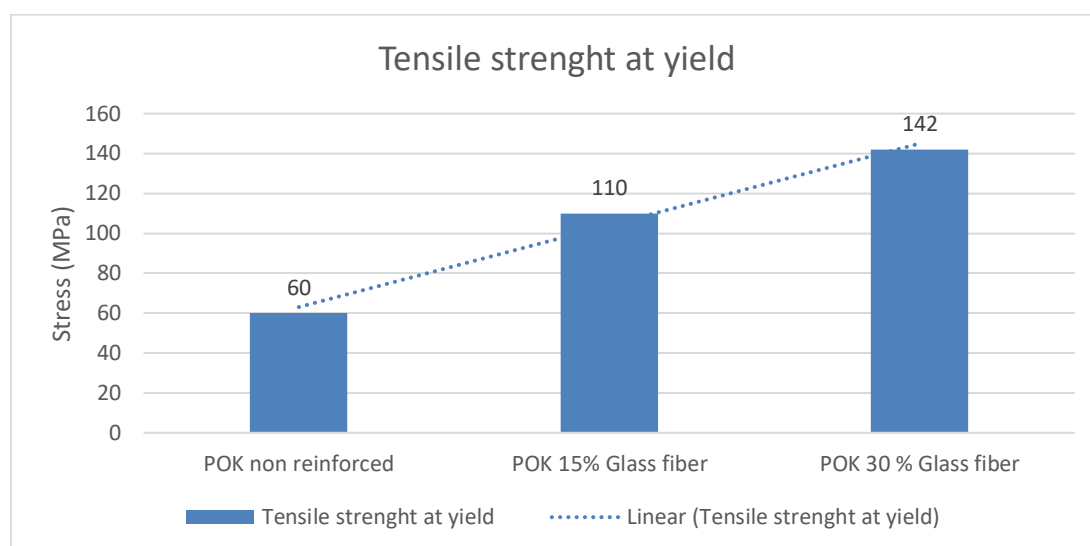
Figure 3. Tensile test results of the unreiforced polyketon with the reinforced polyketones.[Source: author's own illustration]

III.2. Hardness test results

From the point of view of hardness, it is important that the crystalline arrangement of macromolecules is never perfect; in addition to the crystalline regions, there are always amorphous regions as well. The latter can be depending on the current temperature. The measurement results presented in (Figure 4.) clearly show that by increasing the amount of glass fiber, the hardness also increases compared to the basic unfilled polyketone samples. The 30% filler increase resulted in 12% hardness based on test values.
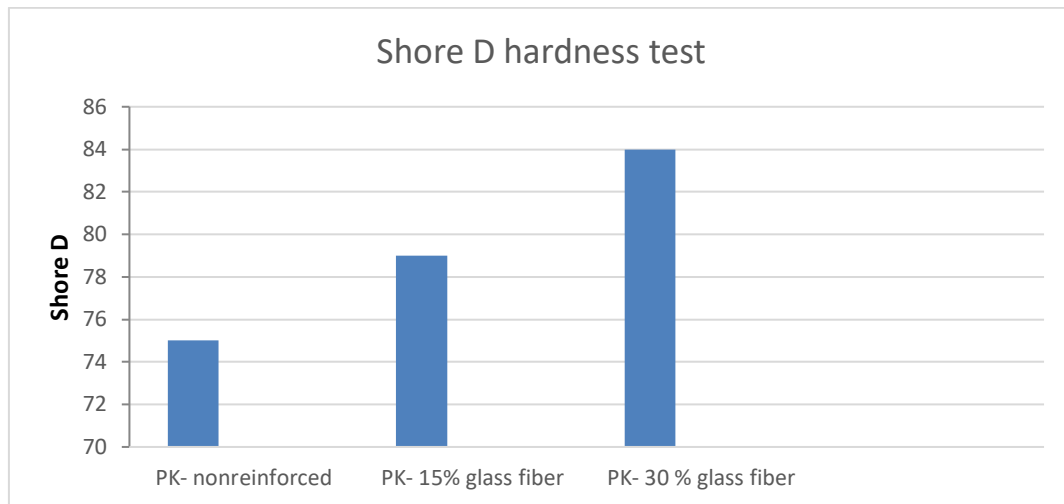
Figure 4. Hardness test results of the unreiforced polyketon with the reinforced polyketones. [Source: author's own illustration]

III.3. Impact test results

Notched Izod Impact is a single point test that measures a materials resistance to impact from a swinging pendulum. Izod impact is defined as the kinetic energy needed to initiate fracture and continue the fracture until the specimen is broken. A clear explanation of the measurement results is not easy, because the structure of the samples can be complex, so it can be explained that, based on the measurement results, it cannot be established that increasing the filler material proportionally increases the impact strength as you can see in the Fig.5.
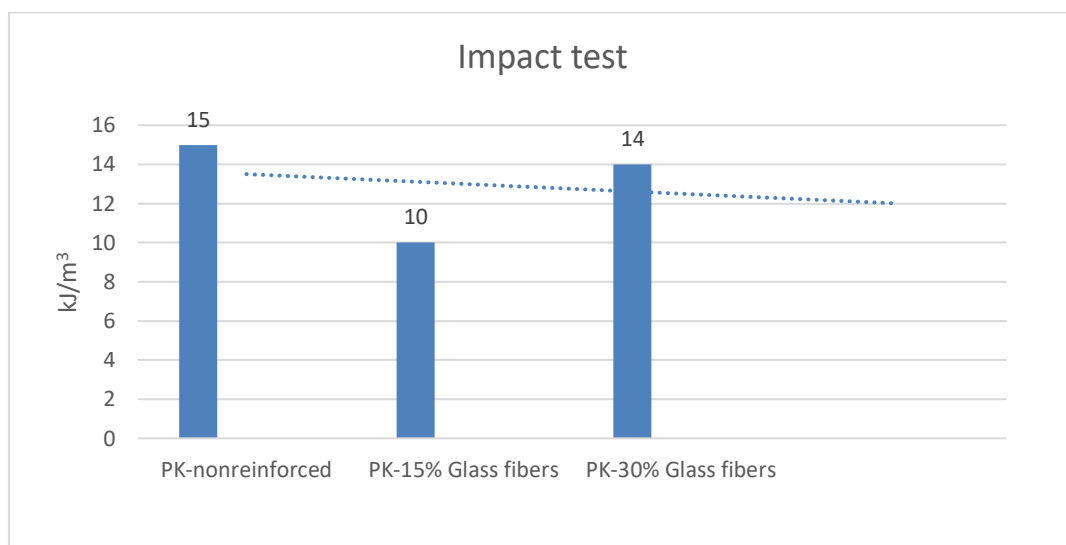
Figure 5. Impact test results of the unreiforced polyketon with the reinforced polyketones. [Source: author's own illustration]

IV. Conclusions

Based on the measurement data, it can be said overall that the samples reinforced with polyketone-based glass fibers achieve better results in terms of their mechanical properties. Their mechanical properties enable a wide range of applications. High flexibility and very good mechanical strength are one of the interesting properties. The yield elongation is more than 20% and the elongation at break is more than 300%, while its tensile strength is at the same level as conditioned PA66 and its impact strength is about twice that of PA66 or PBT.

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The Spanish anarchist guerrilla through the example of Francisco Sabaté ('El Quico')

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Abstract

The dictatorial rule of General Francisco Franco, who came to power in consequence of his victory in the Spanish Civil War, was met with widespread opposition from within Spain and in the exiled communities from the moment of its birth. Among the opponents of the regime, the anarchists were a dominant force, and their activities were very diverse. These included peaceful and non-violent, although mostly illegal activities from clandestine reorganization of the movement to prisoner aid and the distribution of propaganda publications. But we can also speak about various forms of active armed resistance that complemented and deepened the mentioned methods, ranging from expropriations to political assassinations and guerrilla activities in urban and rural areas.
Francisco Sabaté Llopart (a.k.a. 'El Quico') was probably the most notorious figure of the Spanish anarchist guerrillas, who, alone or with his comrades, carried out a number of courageous and successful actions against the institutions, representatives and supporters of the dictatorship. He remained a constant threat to Franco's Spain until his death in 1960, long after the guerrilla movement had been wiped out. Therefore his death can be seen as a symbolic end to the guerrilla war in Spain.

Results
My research examined the life of Francisco Sabaté and its turning points, examining the material circumstances and ideological driving forces behind his activities. Through an insight into his personality and actions, I have come closer to understanding both the armed anarchist resistance during the Franco era and the theoretical and tactical debates within the Spanish Libertarian Movement (MLE), both at homeland and in exile, which generated a number of tensions. In my view, Sabaté's activity is as well-suited to modelling guerrilla methods as it is for tracing the dictatorship's reactions to them, and thus even to comparing them with guerrilla movements in other regions of the period.

Conclusions
Francisco Sabaté played an important role in the anarchist resistance against Franco's regime, and can be considered the soul of the armed guerrilla struggle. Because of the length of time he was active and the number of actions he carried out, he is well-suited to be analysed as a prototype of the Spanish anarchist guerrilla and, through his actions, to provide a picture of the guerrilla movement as a whole. Sabaté is also relevant as an influence on armed guerrilla fighters in other countries.

I. Introduction

Francisco Sabaté (also known as 'El Quico') was one of the most notorious anarchist urban guerrillas in Spain, who fought between 1945 and 1960 in the underground resistance against the Franco dictatorship. He was well-known for his courage, cleverness and relentless against their enemies.[1] He carried out a series of incredible, cinematic clandestine actions that injured the regime's prestige and caused serious damages to its supporters. Unsurprisingly, for many years he was public enemy number one in his homeland.
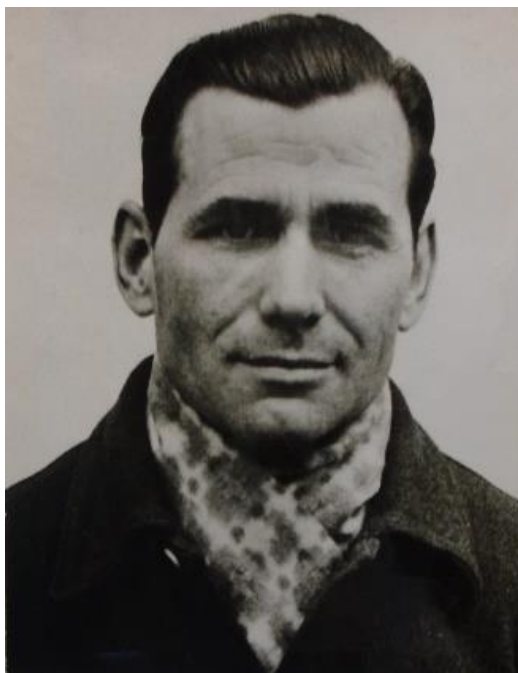
Figure 1. Francisco Sabaté Llopart ('El Quico') (1915–1960)
Source: COLL00128-162 (IISH)

In the official Spanish press of the Franco era, the guerrilla fighters were labelled with a variety of negative adjectives[2] or, on the contrary, their actions were shrouded in a cloak of silence, creating a rather distorted image of them. The media perception of the anti-francoist guerrilla movement in Spain was in harmony with the regime's official position, which was also sanctioned by the legal order: a decree-law of spring 1947 conceptually linked armed anti-systemic activity to the concepts of banditry and terrorism.[3] Although many of the *topoi* of Francoist discourse and historiography were revised after the democratic transition, the sacrifice and role of anarchist urban guerrillas was still not treated in the place it deserved.[4] The centenary

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[1] "He was an idealistic, self-sacrificing, courageous, but very impulsive man, and he did not usually take any advice to be cautious, (...) and this was the reason for his misfortune and death." Interview with Federica Montseny. In: Serra Fontelles (1988)

[2] At the time of Sabaté's death, for example, a Madrid weekly newspaper remembered him as "the last bandit" ("el último bandolero"). El Caso. Núm. 401. 9 de enero de 1960. A week later, a Spanish-Moroccan crime weekly called him a "robber and terrorist" ("atracador y terrorista") and a "terrible gunman" ("terrible pistolero"). Suspense. Crónica del Suceso Mundial. Núm. 82. 16 de enero de 1960. In the case of other anti-Francoist resisters, the regime's press worked similarly. Moreover, the feared figure of Sabaté also appeared in the everyday conversations of the era. For example, when the journalist and writer Pilar Eyre and her sisters were children, their parents warned them that "if you don't eat your snacks, the Sabaté will come and kidnap you". Eyre (2014), p. 11.

[3] Decreto-ley (rectificado) de 18 de abril de 1947 sobre represión de los delitos de bandidaje y terrorismo

[4] For example, Spanish historian Ricardo de la Cierva, who was a member of the Unión de Centro Democrático in the Cortes when his work on the history of Francoism was published, and was soon afterwards appointed Minister of Culture, devoted just one and a half pages to the anti-Franco guerrilla struggle in his book of over 500 pages.

anniversary of Sabaté's birth has revived interest in him, favouring the reassessment of his historical role.[5] My study, which is based on relevant literatures, memoirs and original documents, is intended to contribute to this work. The primary sources used in this research are largely originated from the archives of the International Institute of Social History in Amsterdam.

II. Topic discussion

II.1 Early years, first experiences
Francisco Sabaté was born in L'Hospitalet de Llobregat, in the Barcelona agglomeration. Three of the five Sabaté siblings later became resistance fighters.[6] The two elder brothers, José[7] and Francisco, died in a clash with the police forces, while the younger Manuel was sentenced to death by a military tribunal after being captured and executed shortly afterwards.[8]

He referred to Sabaté and other resistance fighters like him only in general terms, mentioning their "raids and adventures" ("sus correrías y sus aventuras"), and was generally cynical and dismissive of the resistance itself, saying that the Spanish-Argentine football match attracted more people at the time than opposition to the regime. Cierva (1979), pp. 47–48. However, the presentation of the subject is not necessarily better in the works originally published abroad and written by non-Spanish authors: the German Hartmut Heine's book, which is very thorough and in many respects stopgap, is – as its title suggests – rather policy- and organisation-centric, and in comparison, only deals with the activities of anarchist action groups in tangentially (Sabaté's figure appears only twice in the pages of his half a thousand page book – even there, only as a mention). Heine (1983), pp. 425., 456. The situation is even worse in the case of the British Marxist historian Eric Hobsbawm, who, in his often sarcastic writing, apart from giving an inaccurate year of Sabaté's birth, has painted a picture of a fanatic, messianistic and ascetic man, and in essence the same view of the whole anarchist movement. This attitude is not unfamiliar to the author: in his earlier work Primitive Rebels, he described (Andalusian) anarchism as a millenarian movement (an interpretation which has since been refuted by many). Hobsbawm (1974), pp. 116–140. Although he concludes that Sabaté was not a bandit by placing his portrait in his book Bandits, his characterisation of him drops allusions that allow the reader to conclude that the anarchist guerrillas are terrorists and bandits after all, even if they were highly ideologically motivated but hopeless amateurs (a kind of Don Quixotes) living in a particular, abstract world, whom the oppressed, ignorant and narrow-minded inhabitants of Barcelona saw as their hero, inevitably leads to self-contradictions and makes it difficult to understand the anarchist guerrilla figure. Hobsbawm (1981), pp. 113–126. For a positive counter-example to the historiographical analysis of the subject, in the first place, we must highlight the oeuvre of Antonio Téllez, whose most important work for our topic is undoubtedly his biography of Sabaté, written in 1972, which has subsequently been published in various editions and translated into several languages. Téllez Solá (1998)

[5] Without wishing to be exhaustive, among the historical works we can mention Ricard de Vargas Golarons' book, as well as the more novelistic interpretation of Pilar Eyre (although the latter is a republication of a book published earlier, deliberately timed to coincide with the centenary). Vargas Golarons (2016); Eyre (2014). Recent years have also favoured the cinematographic treatment of the subject, as Silvia Quer's feature film shows. Quer (2022)
[6] Téllez (1998), p. 13.
[7] Like Francisco, José Sabaté became member of the anarchist action group Los Novatos in the 1930s, and fought on the Aragon front during the Civil War, in the Los Aguiluchos Column and other units. He was imprisoned in Alicante and was only released on bail in 1948 (financial aid for the imprisoned played an important role in the underground anarchist movement of the era, and many were liberated in a similar way). After a few successful operations, he was ambushed in Barcelona in October 1949 by treachery. In the ensuing firefight, he was seriously wounded and taken captive, dying shortly afterwards in hospital. Téllez (1994), p. 26.; Téllez (1998), p. 18.
[8] As Manuel Sabaté was much younger than his two brothers, he did not take part in the battles of the Civil War and imagined a life quite different from the one he ended up sharing (he had originally planned to become a bullfighter). Aware of his brothers' anti-Francoist resistance activities, he went to France in 1946 and, against their strong wishes, became a guerrilla himself. He joined the group of Ramón Vila Capdevila ('Caraquemada') and took part in sabotage operations in Catalonia. Following a police raid, he was separated from his group and taken into captivity. Sentenced to death by a military tribunal rather for his surname than his real actions, he was then shot dead in the notorious Campo de la Bota in Barcelona on 24 February 1950. Téllez (1994), p. 24.; Hobsbawm (1981), 121.

Figures 2–4. The three Sabaté brothers: José (1910–1949), Francisco (1915–1960) and Manuel (1927–1949)
Sources: COLL00128-162, -166, -303 (IISH)

Traditionally Catalonia was a stronghold of the anarchist movement,[9] so it is hardly surprising that Francisco joined a trade union of the anarcho-syndicalist National Workers' Confederation (Confederación Nacional del Trabajo – CNT) at the age of 16, and shortly afterwards became a member of the more radical Iberian Anarchist Federation (Federación Anarquista Ibérica – FAI).[10] He remained faithful to his ideas until his death and maintained his organizational membership, although in the last years of his life he came into increasing conflict with the bureaucratic leadership which turned away from supporting the underground armed struggle.[11] After the proclamation of the Second Republic in 1931, the FAI adopted the strategy of revolutionary uprisings aimed at the immediate implementation of the libertarian communism.[12] Although it did not succeed, the action groups formed at this time played an important role later. Los Novatos was one of these groups, whose 11 founding members included the two elder Sabaté brothers. In terms of the origin of its members (6 Catalans, 2 Murcians, 1 Aragonese, 1 Castilian and 1 Valencian), Los Novatos was a rather mixed group, which indicates both how much the province of Barcelona was a melting pot at the time and how common class and ideological beliefs were more important group cohesion forces than regional affiliation. The age composition of the group was, on the other hand, very homogeneous: the oldest at the time of its foundation was the 22-year-old José Sabaté.[13] Young anarchists of the action group Los Novatos underwent armed training and baptism by fire in confrontations with the police forces, carried out various illegal activities, in other words, experienced the underground life.[14] The first armed expropriation of Los Novatos took place in 1935 against a small village bank branch in Gavà. The action was intended to raise funds for the Committee for the Assistance of Political Prisoners. The case is notable not only for the

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[9] According to the official statistics of the CNT, after the proclamation of the Second Spanish Republic, the national membership of the organisation was close to 550,000, with the largest proportion (around 300,000) living in Catalonia. Elorza (1973), pp. 470–474.

[10] Téllez (1998), pp. 14–15., 18.

[11] As Federica Monsteny, a leader of anarchists in exile in France and a critic of armed action, put it: "They did not receive help from the CNT because [its leaders – P.P.] knew in advance that their action was definitely doomed to failure... And the CNT did not want to take the responsibility of sending them to death." Interview with Federica Montseny. In: Serra Fontelles (1988)

[12] For more information on the tactics of the FAI, the events of the uprising and its controversial assessment, see: Gómez Casas (1986), pp. 135–138., 148–156.; Peirats (1988), pp. 65–72.; Christie (2008), pp. 123–144.

[13] ARCH02915-620 (IISH); Téllez (1998), p. 18.

[14] Téllez (1998), pp. 19–20.

expropriations in general, but also for the chosen target: years later, in 1949, Sabaté, already an experienced guerrilla, also attempted to rob the bank in Gavà, but was forced to call off the operation due to the unfavourable circumstances.[15] Another example of illegal activities committed by Los Novatos concerns an anarchist uprising in 1933, during which members of the action group cut off the electricity supply to L'Hospitalet de Llobregat, i.e. they carried out sabotage with revolutionary intent.[16] These experiences proved extremely important for anarchists like Sabaté, who later became guerrilla fighters.

The Los Novatos group also collected arms illegally, which played an essential role in the almost immediate suppression of the military rebellion in Catalonia that broke out in July 1936.[17] In the early days of the Civil War, many anarchists formed militias[18] and Sabaté was no exception: he went to fight on the Aragonese front with Los Aguiluchos Column, while other members of the Los Novatos joined to the Durruti Column.[19] It is important to point out that Francisco was not captivated by enthusiasm for the war, as he was a staunch anti-militarist who had openly refused to obey the military draft a year earlier.[20] He wanted to avert the threat of a far-right takeover, and he also saw in the conflict a revolutionary opportunity, which he wanted to promote through militant actions. From the beginning, anti-Francoist resistance and anarchist struggle went hand in hand. The importance and respect in which Sabaté was held within the anarchist circles is demonstrated by the fact that his organisation stood up for him even when he was threatened with the death penalty for the murder of a Stalinist commissar of the Republican Army. Thanks to the intervention of his comrades, he was able to avoid prosecution. This allowed him to fight for the Republican forces until the fall of Catalonia in February 1939, after which he went into exile.[21]

In France he was interned and then forced to work in fortifications and various productive activities. But his fighting spirit was not extinguished, and he soon became involved in the anti-Nazi underground resistance like many other Spanish anarchists. Initially, his activity mainly consisted of acts of sabotage, which were later supplemented by the assistance and navigation of political refugees from France to Spain.[22] As his wife Leonor expressed it in an interview after Sabaté's death, "Francisco said that fighting the Germans was like fighting Franco,"[23] and many other Spanish émigrés and anarchists at the time shared her view. His contacts and the dynamics of the struggle gradually turned him back towards Spain and the anti-Francoist resistance, whose conditions became more favourable than ever by the end of the Second World War.

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[15] Téllez (1998), pp. 22., 79–80.

[16] Hayes (2015), p. 72.

[17] Téllez (1998), pp. 22., 26. These stocks were, of course, insignificant compared to the weapons and munitions stored in the barracks and armouries (the San Andrés barracks alone had 30,000 rifles!). However, it would have been impossible to obtain them by means of a regular siege without establishing secret arms depots beforehand. Another aspect of the anarchists' success was their organisational network: the combination of defence committees with clearly defined tasks and the complementary operation of autonomous action groups, which were loosely linked to other anarchist organisations and had auxiliary tasks. Guillamón (2022), pp. 43–56., 63.

[18] The first militias were organised spontaneously, through grassroots initiatives. In this process, anarchist militants, and in particular the members of the Nosotros action group, played a pioneering role. "Durruti went to the front of the battle at the head of the first column bearing his name. Ricardo Sanz, in charge of organising the militias, stayed at the Pedralbes barracks; García Oliver was in charge of the 'Los Aguilchos' Column; Gregorio Jover was head of the Francisco Ascaso Column; Antonio Ortiz was the leader of the South Aragonese Column bearing his name; and Aurelio Fernández became head of the Investigation Department of the Central Committee of Anti-Fascist Militias of Catalonia." Sanz (1966), p. 271.

[19] Téllez (1998), pp. 26–27.

[20] Téllez (1998), p. 22.

[21] Téllez (1998), pp. 29–39.

[22] Téllez (1998), pp. 42–44.

[23] Noir et Blanc. Num. 776. 15 janvier 1960.

II.2 The guerrilla way

Already in this period, Sabaté made a conscious effort to map the frontier, which later proved indispensable for his illicit border crossings. In 1945 he practicably made the decision to dedicate his entire life to the anti-Francoist struggle. As proof of this, he moved to the northern side of the Pyrenees, close to the French-Spanish border, and turned his home into the headquarters of his subsequent actions.[24]
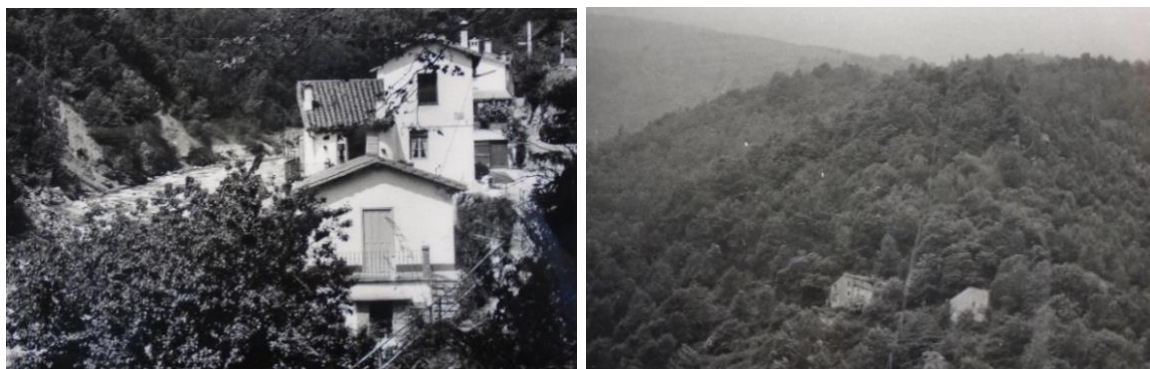
Figures 5–6. La Clapére and La Sorangera – Sabaté's house and his nearby base of operation (Eastern-Pyrenees, France)
Source: COLL00128-163 (IISH)

Sabaté's first mission took place in October 1945, when a delegation of Spanish libertarian movement[25] in France secretly travelled to Spain with the aim of improving communication between anarchist organisations in exile and inland. With other comrades Sabaté was responsible for escorting and providing armed protection for the group. The mission was successful and proved fruitful for Sabaté himself: it was the first step towards the establishment of a network in Spain on which he could rely for his subsequent actions (to gather information or to secure safe houses and weapons depots).[26]

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[24] Sabaté moved with his family to Perpignan in 1943, then to Comes and later to Eus. His gradual involvement in the anti-Francoist struggle led him to change residence again in 1946, after his first illegal incursion into Spain. The Sabaté family (already consisting of four people) moved first to Marquixanes and then to La Clapére, just a few kilometres from the French-Spanish border. Sabaté also rented a small country house up the hillside, in a thicket of trees, which, under the name La Sorangera, was to serve as his base of operations over the next decade and a half or so during his missions to Spain. Téllez (1998), pp. 43–44., 60–61.

[25] From October 1938, the anarcho-syndicalist CNT, the anarchist FAI and the FIJL/JJLL, which was the youth organisation of the FAI, were collectively known as the Libertarian Movement (Movimiento Libertario, ML), due to their similar ideological orientation in many respects, their considerable overlap of membership and the consultation and cooperation between them. Romanos (2014), p. 240. The name suggests a process of unification, but in reality there were serious frictions and divisions on the issue of the war defeat, the geographical fragmentation of the movement, the assessment of the Civil War involvement and the strategy to be followed. Moreover, the libertarian youth tended to be more action-oriented and in the later years often confronted the ageing, bureaucratising and increasingly moderate CNT leadership. On the organisational development and internal debates of the movement, which operated in parallel in Spain and in exile, see: Herrerín López (2004), pp. 13–234.; Paz (2001)

[26] Téllez (1998), p. 45.

Figures 7–8. Sabaté in the Pyrenees (1944, 1957)
Source: COLL00128-162 (IISH)

Although he undoubtedly loved his family, the comfort and peace of the private life never took priority over combat actions. It is hardly surprising that he was involved in a covert operation in Barcelona at the time of the birth of his youngest daughter (Alba). Leonor, respected Sabaté's decision and adapted the lifestyle that went with it. In return, her husband tried to keep her and their two children away from dangerous adventures: he allowed them to live separately in Toulouse, while ensuring that their daughters received a suitable education. Although Sabaté did not share the details of his actions with the family, they were always aware of the dangerous life of the husband and father they loved. In his last letter to them, written just before Christmas 1959, Sabaté said that "to be a man, one must know how to die", but had repeatedly told his daughters that "if anything should happen to me, take care of your mother. Give her what I could not."[27]

Figure 9. Sabaté with his two daughters, Francesca and Alba (1950s, Toulouse)
Source: COLL00128-162 (IISH)

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[27] Noir et Blanc. Num. 776. 15 janvier 1960.

II.3 Sabaté in action

Rather than listing all the actions linked to Sabaté between 1945 and 1960, I classify them thematically with a few observations that may have a more general relevance for the anti-Francoist anarchist guerrilla movement of the period.

One important type of violent guerrilla activities was expropriation.[28] In practice, these covered armed robberies against wealthier individuals or institutions (mainly financial institutions) linked to the regime which the Francoist press always liked to label as banditry. The expropriations caused constant fear among the guerrillas' opponents and inflicted them measurable material damage. They also aimed to create the essential financial base for the underground movement to finance the purchase of weapons, propaganda, informers, etc. Sabaté's most notorious expropriation operations took place in the mid-1950s: his action group looted 700,000 pesetas from a branch of the Banco de Vizcaya in May 1955 and a further 1 million pesetas from the Cubiertas y Tejados company just before Christmas 1956.[29] Given that the libertarian movement in Spain had been forced into underground, it was deprived of income from trade union membership fees and several other forms of legal means of earning money (such as fundraising campaigns). The exiled libertarian movement was in a slightly better position, but its financial situation was not bright either. Moreover, during the 1950s, the leadership of its affiliated organisations sought to restrict violent actions, including expropriations, which were illegal and discredited the movement, precisely in order to ensure legality. Unlike the Spanish Communist Party (PCE), which was financed to a large degree from Moscow, the libertarian movement had little real alternative in terms of funding. Consequently, expropriations were still taking place in the 1960s, albeit no longer at the initiative of Sabaté, but of young people of the next generation.[30] The moral justification for expropriation in the eyes of anarchists was based on two basic arguments: first, that the loot was not, or only in very limited measure, used for personal purposes, and second, that they considered the real robbers to be exactly those persons and institutions against whom their actions were directed. They did not hesitate to proclaim this openly over and over again: "We are not robbers, we are libertarian resistance fighters. What we have just taken will help in a small way to feed the orphaned and starving children of those anti-fascists who you and your

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[28] Armed expropriations are not without precedent in the history of the anarchist movement in Spain: for example, action groups that emerged in the post-World War I period also undertook bank robberies to increase financial resources for the movement. The most notorious of these was probably the bravura raid by the Los Solidarios group on the bank of Gijón in 1923, during which 650,000 pesetas were looted. Paz (2006), pp. 93–94. Broadening the perspective, we find that the practice of armed expropriation can be found everywhere from Argentina through Tsarist Russia to Japan, where at one time there was a significant anarchist movement, thus it can be seen as a universal practice. Bayer (2008), pp. 7–71.; Azarov (2022); Crump (1998). Moreover, this method was also applied by other (semi-)illegal groups and organisations: the most famous example was the Bolshevik faction of the RSDLP whose development was financed in a similar way by Stalin, who was also influenced to some extent by the Russian anarchists of the 19th century. Sebag Montefiore (2011), pp. 26–37., 98., 160–163., 169–173.

[29] Serra Fontelles (1988)

[30] The most notorious example of this is probably the case of Lucio Urtubia, a true 'anarchist Robin Hood', who in many respects can be seen as Sabaté's successor and heir. Born in the year of the proclamation of the Second Spanish Republic, he fled to France as a deserter in the mid-1950s. Here he met Sabaté, whom he hid in his apartment for a time. He became close to him, and the experienced militant introduced him to the secrets of underground life. Urtubia was above all interested in expropriations, which he carried out initially by force of arms, but later by means of various tricks and forgeries (his most famous operation was the so-called cheque forgery scandal). As he once put it: "People like Louise Michel, Sabaté, Durruti, all the expropriators taught me how to expropriate, but not for personal gain, but how to use those riches for change". Lucio Urtubia, egy „anarchista Robin Hood" története. In: Részeg Hajó. 11. szám. 2020. tavasz-nyár, pp. 31–41. Urtubia's adventurous life has been the subject of several (partly autobiographical) books and films. The most recent feature film, which debuted at the end of November 2022, includes several scenes dealing with Sabaté: although the portrayal of his person and his relationship with Urtubia can be considered authentic in many respects, unfortunately the film is not free of distortions and untrue statements about Sabaté. Ruiz Caldera (2022)

kind have shot. We are people who never and will never beg for what is ours. So long as we have the strenght to do so we shall fight for the freedom of the Spanish working class. As for you, Garriga,[31] altought you are a murderer and a thief, we have spared you, because we as libertarians appreciate the value of human life, something which you never have, nor are likely to, understand." [32]
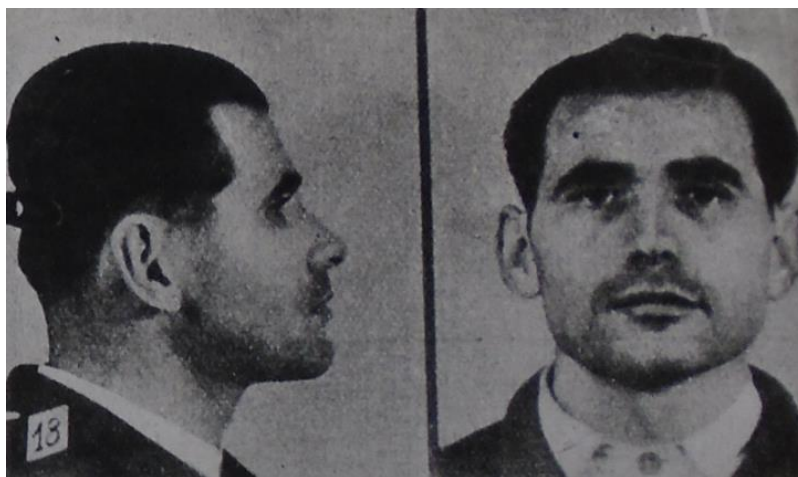
Figure 10. Sabaté's mugshot (1956)
Source: COLL00128-165 (IISH)

Another basic type of violent actions was sabotage. These were aimed at creating confusion, demonstrating the malfunction of the system and, of course, causing material damage. Typical targets were companies loyal to the system, electricity grid installations or radio towers. Although Francisco Sabaté, unlike his brother, was not implicated in such manoeuvres, he was involved in another specific type of sabotage: bomb attacks on consulates in Barcelona of states with diplomatic relations with the Franco regime. The anarchist guerrillas simultaneous attack on three targets took place on 15 May 1949, following the coordinated operation of several action groups: the Peruvian consulate on Muntaner Street and the Brazilian consulate on the Rambla de Cataluña attempted to blow up[33] by Sabaté, Francesc Martínez and another anarchist, while the Bolivian consulate on Gerona Street by another notorious urban guerrilla of the period, Josep Lluís Facerías ('Face'), as well as Pere Adrover Font ('El Yayo'), Juan Serrano and two other anarchists. The attack caused no human casualties, only material damage, and was aimed above all at raising awareness.[34] With this kind of action the guerrillas openly questioned the legitimacy of the regime and sought to draw international attention to its repressive and dictatorial nature.

Third and one of the most divisive categories was political assassinations, mainly against – often notoriously ruthless – police officers. In other cases, Falangist leaders have been targeted by the guerrilla groups. To give specific examples, several anarchist action groups were plotting simultaneously to eliminate Eduardo Quintela Bóveda, the hated leader of the Barcelona police organisation Brigada Político-Social. The fact that Sabaté and the Los Maños group came together at the planning stage by pure accident shows the lack of coordination between these organisations, but also their high degree of autonomy. Their concerted efforts led to a joint

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[31] Manuel Garriga Pugador, a wealthy businessman and department store owner from L'Hospitalet de Llobregat, was one of the first to be expropriated by Sabaté and his comrades towards the end of 1945.
[32] Téllez (1998), pp. 46–47.
[33] In the case of the Brazilian consulate, the explosion was ultimately thwarted by a detonator failure. ARCH02915-620 (IISH)
[34] Téllez (1998), p. 100.; Vargas Golarons (2020), p. 30.

assassination attempt in March 1949 which, contrary to their initial expectations, did not injure the notorious police officer but two Falangist functionaries, one of whom (Manuel Pinol Ballester, secretary of the Barcelona University Youth Front) was killed.[35] Plans to punish and liquidate traitors and informers,[36] and even to take the life of the head of state, Franco, were numerous during that time.[37] Sabaté himself, however, was not involved in such actions, although in principle he had no scruples about it. Naturally, there were also a number of policemen and gendarmes who were not victims of assassination attempts, but who lost their lives in a simple gunfight with the guerrilla warriors. For example, when Gendarme Lieutenant Francisco Fuentes was trying to capture Sabaté and his comrades on their last journey, he ended up paying with his life. [38]

Figures 11–12. Sabaté's last victim, Lieutenant Francisco Fuentes Fuentes, and the equipment that Sabaté took with him on his last journey (1960)
Sources: ARCH02915-616 (IISH), COLL00128-165 (IISH)

Guerrilla fighters like Sabaté saw the Franco regime as a barbaric and repressive dictatorship, the last bastion of fascism, therefore considered violence morally acceptable, and even necessary, in order to overthrow it.

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[35] Aguayo Morán (2014), pp. 14–19.

[36] The best-known example is the case of Eliseo Melis, the anarcho-syndicalist turned police informer, whose activities caused great damage to the underground movement, sending many anarchists to prison or to the afterlife. From 1945 onwards, several anarchist action groups attempted to liquidate Melis, but for various reasons (e.g. leaking information) their efforts failed. Téllez (1998), pp. 69–71. Its elimination was finally carried out on 12 July 1947 by the short-lived (6 July 1947 – 21 February 1948) Libertarian Resistance Movement (Movimiento Libertario de Resistencia – MLR) (namely Manuel Pareja, Antonio Gil, Pedro Adrover Font, Ramón González Sanmarti and an unknown anarchist), which also marked its first action. The MLR was set up for the purpose of armed struggle against Franco's regime, and was deliberately separated from the other activities of the libertarian movement. Romanos (2014), pp. 242–245.; Paz (2001), pp. 249–250.

[37] Without claiming to be exhaustive, I would like to mention only two such plans and attempts from the period, both of which were linked to the anarchists: on 23 October 1940, at a meeting between Hitler and Franco in Hendaye, two members of the Ponzán group devised a spontaneous plot to assassinate the two dictators. However, due to the increased military presence, they could not get close enough with the explosives. Floros (2014), pp. 132–133. On 12 September 1948, at the initiative of Laureano Cerrado Santos, a group of three men from France approached La Concha Bay near San Sebastián by airplane with the intention of dropping bombs on Franco, who was on board his boat to watch the annual regatta. Contrary to previous expectations, there were no other civilian planes over the bay to blend in with undetected, and Spanish fighting aircrafts also appeared, thus the mission was called off and the airplane returned to France. Téllez (2006), pp. 11–29.

[38] For details of Sabaté's last journey, see: Téllez (1998), pp. 192–202. For the specific reference to Francisco Fuentes, see page 197.

II.4 Propaganda distribution

Among the activities carried out by Sabaté, I would highlight the dissemination of anti-Francoist propaganda, which was also an illegal act, but is often dwarfed by violent actions in the media and the historical literature. Yet the distribution of leaflets, pamphlets and newspapers, in addition to the 'propaganda of the deed', shows that the urban guerrillas were not lone wonder warriors who wanted to overthrow the regime on their own. They considered it essential to win over the people, to raise their fighting spirit. It is not surprising that Sabaté and his comrades saw the closure of the illegal printing presses and the lack of propaganda as a terrible blow, and that they invested considerable effort in propaganda, as wide and varied as possible. "As far as propaganda is concerned, I regret to say that two months before the fall of 'SOLI'[39] (...) neither 'SOLI' nor CNT[40] appeared. The rare occasions when the Confederation[41] press appeared were so limited that many comrades ignored it, especially in the villages. (…) In the last months of April and the first months of May [1955 – P.P.]: no Confederal propaganda appeared in Barcelona or in the province of Catalonia, except for the propaganda spread by the Catalan Anarcho-Syndicalist Groups, which we can ensure that reached the people (…). This propaganda was received with both pleasure and surprise, and we had the opportunity to listen to people's comments, including: how long it has been since we have seen propaganda! (…) 'To save our print, we have to protect it'."[42]

Figures 13–14. Pieces of propaganda spread by Sabaté: Headline from an issue of El Combate newspaper and an anti-Francoist leaflet (1955). Text of the latter: "Anti-Francoist People – For too many years you have tolerated Franco and his henchmen. We are fed up with this corrupt system of misery and terror. Words are words. Action is needed. Down with tyranny! Long live the unity of the Spanish People! Spanish Liberation Movement – Relations Commission".
Source: ARCH02915-614 (IISH)

The titles of underground publications and the calls to action speak for themselves: 'To the People', 'Spaniards', 'Catalan People', 'Anti-Francoist People', 'Anti-Fascists', 'Workers', 'Women', 'Conscious Youth', etc. As regards the issues concerned, the emphasis was placed

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[39] Solidaridad Obrera, an anarchist press organ in Barcelona that was illegal at the time.
[40] Another illegal anarchist press product.
[41] Reference to the anarcho-syndicalist trade union *confederation* (CNT).
[42] Excerpt from the report of the Liaison Committee of the Association of Anarcho-Syndicalist Groups of Catalonia to the Intercontinental Secretariat in Exile of the CNT in Spain. 15 August 1955. ARCH02915-620 (IISH). In a similar spirit, but aimed specifically at a wider audience, was written an article in the newspaper of the Anarcho-Syndicalist Groups: La imprenta de 'Soli' y 'CNT' ha caído. In: El Combate. Núm. 2. Julio de 1955.

on the repressive measures of the dictatorship,[43] the situation of political prisoners,[44] the low standard of living, [45] the poor state of education,[46] etc. Sabaté distributed material partly from exiled and partly from inland anarchist organisations, and from 1955, increasing his autonomy, he set up his own organization called Grupos Anarco-Sindicalistas (Anarcho-Syndicalist Groups) and its fresh newspaper, El Combate (The Combat). As it reported, the most effective method of disseminating propaganda by means of aerial bombs with a mortar. This made it possible large quantities of material to be dispersed from a safe distance during mass events (for example, during Franco's visit to Barcelona on 8 September 1955). All in all, police have proved powerless against this kind of innovative propaganda.[47]

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[43] "Catalan People! Never before have you seen your rights trampled underfoot as you have today: your rights to freedom are being mocked. Enough of slavery! Let's stand up straight, Catalans. Together with the children of other Hispanic peoples, let's SPREAD THE REVOLT AGAINST FRANCO EVERYWHERE. Take action, Catalans! Liberation Movement". ARCH02915-614 (IISH). "For the welfare of your children – enough of this evil, this humiliation and slavery! It is time to stop inaction, fear and passivity. (…) Misdeeds and barbarism are the cornerstone that governs Spanish people, and the democratic world does not echo this great tragedy, even if the Spaniards in exile do not stop complaining (…) We will continue to fight against this cruel oppression, and we will bring the truth to the world in print (…). Death to Franco and his henchmen!" Al pueblo español. In: El Combate. Núm. 1. Mayo de 1955.

[44] "Spaniards! Spain is a huge prison. We are all prisoners of the ruling clerical-military-falangist system. Remember that there are thousands of prisoners in prisons and jails. People who have sacrificed themselves for you and your children's welfare. These prisoners are freedom-loving Spaniards. Do something for them! AMNESTY! FREEDOM FOR ALL POLITICAL AND SOCIAL PRISONERS! (…). Liberation Movement of Spain, Liaison Committee". ARCH02915-614 (IISH)

[45] "Nineteen years have passed, and the Franco-Falangist outrage continues its destructive and criminal work, destroying the entire Iberian people with misery and murder. And to top all the controversy and contempt, Spain, which calls itself 'great and free', is the auction house of dictators, sold to the highest bidder - yesterday Hitler and Mussolini, today (...) 'great democracy'." Al pueblo español. In: El Combate. Núm. 1. Mayo de 1955. "Awake from the deep lethargy into which misery, hunger and fatigue have plunged you! (…) Awaken from the lethargy of the countless hours of work you have to do without seeing your needs satisfied; YOU, who produce everything but have nothing, and cannot feed your children either financially or spiritually (…)." Trabajadores y antifascistas todos. In: El Combate. Núm. 3. Octubre de 1955.

[46] "Franco tries to develop and inculcate in young people some ideas and thoughts to defend himself, ignoring their culture, which he is not interested in. (…) The young man is subjected to Franco-Falangist slogans, and to keep him happy they are given summer camps, which the state implements by taking a small group of young workers out every year during the holidays to spend a happy vacation, where the young man is not free at will, is forced to get up to trumpet, do pre-military drills, and also go to bed to trumpet and shouts of 'Franco, Franco!' and 'Long live the Falange!'. As a consequence of what has been said, we are faced with a demoralised, stunted and degenerate youth in Spain, in Franco-Falangist style." España bajo obscurantismo cultural y moral de la juventud. In: El Combate. Núm. 2. Julio de 1955. "Teachers and professors are selected and promoted not on the basis of their pedagogical qualifications and cultural level, but on their greater or lesser adherence to the system and their enthusiasm in propaganda. In primary schools, the main, if not the only, foundation of education is the endless, monotonous and tiresome recitation of pseudo-patriotic prayers and hymns. In the institutes, it is easy to get a degree if one can 'recite by memory' four paragraphs in Latin and knows by heart the postulates of José Antonio Primo de Rivera's [the founder of the Falange – P.P.] work, the Falange Bible, a veritable pile of absurdities, idiocies and platitudes." El obscurantismo cultural y moral de la juventud en España. In: El Combate. Núm. 3. Octubre de 1955.

[47] Report of the Anarcho-Syndicalist Groups in Exile, 25 December 1955. ARCH02915-620 (IISH)

Figure 15. Sabaté disperses propaganda into the crowd with his mortar (1955, Barcelona)
Source: COLL00128-162 (IISH)

III. Results

Based on the above, we can briefly summarise the results of our research on the relevance of Francisco Sabaté's figure, perception and actions to the Spanish anarchist guerrilla movement during the Franco era.

The repressive nature of Franco's dictatorship left no room for legitimate advocacy of anti-regime individuals, groups and organisations. Moreover, the systematic and not only symbolic destruction of these forces was carried out openly and on a massive scale during and after the Civil War. For those who had already been compromised for their anti-systemic activities or simply for their critical views, there was virtually no possibility of social reintegration within the changed framework, and their freedom and, frequently, their lives were in constant danger. Under such circumstances, underground political activity and armed resistance could be seen as a rational option not only for the overthrow of a hated regime, but also for mere survival.

Guerrilla actions such as Sabaté's were ideologically and politically motivated and had an explicitly anti-regime, anti-fascist and revolutionary character, and therefore cannot be described as simple banditry or terrorism. Although these activities were largely illegal, they were not intended for personal gain and, in this context, they acquired moral legitimacy among guerrillas and their supporters precisely because they were committed for a higher purpose, against an oppressive and unjust regime and its representatives.

For guerrillas of Sabaté's generation, the years before and during the Civil War were crucial for the formation of their ideals and their first combat experiences. The ideological convictions and organisational affiliations of the anarchist guerrillas were already essentially *in situ* in the post-1939 period, and they had patterns of resistance that they could adapt more successfully against the Franco regime than political forces that lacked experiences inseparable from clandestinity (such as the social democrats).

Some of the illegal activities of the anarchist guerrillas should be understood not as goals in themselves, nor as the only method but as complementary means, partly determined by the specific conditions of repression and partly by previous experiences of the movement, which were relevant and coherent – even if ultimately insufficient – to the achievement of the final aim. In this way, it is not possible to single out and contrast one form of action with another, nor to draw a sharp line between violent and non-violent action. As can be seen in the chapter on propaganda, even Sabaté, who was regarded as a 'man of action', valued such non-violent activities and did his utmost to promote them.

IV. Conclusions

Sabaté permanently counterplotted the Spanish police forces, who hated him for it. It was no coincidence that when he finally fell in St. Celoni on 5 January 1960, after an adventurous escape from a police ambush, his pursuers, in their fury, disfigured his face and even his own sister had great difficulty to identify him.[48]

Figures 16–17. Sabaté's body immediately after he was shot (5 January 1960, St. Celoni), and a medal for one of his pursuers (6 February 1960, Gerona)
Sources: COLL00128-162 (IISH), ARCH02915-619 (IISH)

Although he was not the very last guerrilla warrior,[49] his death marks the symbolic end of the classic guerrilla warfare in Spain. This did not, however, indicate the end of anti-Francoist resistance, only the emergence of its other forms from the 1960s onwards (such as strikes).[50] The centre of gravity of the resistance gradually shifted towards mass actions, which were still illegal, but armed struggle did not disappear without a trace. Both directly and indirectly, Sabaté influenced a new generation of militants, mostly from the ranks of the Iberian Federation of Young Libertarians (Federación Ibérica de Juventudes Libertarias – FIJL/JJLL), who had been active in the 1960s and 1970s in various anarchist organisations (Defensa Interior, Grupo de Mayo 1°, Grupo Anarquista Revolucionaria Internacionalista, etc.) with an anti-Francoist and revolutionary aim. In a direct way, because many of these young people knew Sabaté personally, who was a role model with his charisma, courage, commitment to the cause and, presumably, practical advices. And indirectly, too, because they shared Sabaté's views and his practical activities served as a source of inspiration for the later action groups.[51]
Whilst the diversified actions of the anarchist guerrilla did not ultimately lead to the popular uprising that destroyed Franco's regime, the role of fighters like Sabaté in weakening the system and raising the spirit of rebellion should not be underestimated.

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[48] Serra Fontelles (1988)

[49] In Catalonia, the last anarchist guerrilla, Ramón Vila Capdevila ('Caraquemada'), was shot dead by the security forces in August 1963, and the armed anarchist resistance in Galicia ended with the death of José Castro Veiga ('El Piloto') in March 1965. The anarchist guerrilla movement in other provinces had been crushed earlier. Téllez (1996)

[50] Franco's rise to power was marked by the repression of independent trade unions and the banning of strikes. Although this did not change in principle, in the late 1940s and early 1950s, illegal mass strikes, often involving entire factories or even sectors, took place in the most industrialised parts of the country. Brendel – Simon (2004), pp. 58-61., 65-70. These initial sporadic attempts were followed from 1962 onwards by a gradual and constant intensification of the strike movement and its increasing politicisation, which reached a critical level by the last days of the regime. Luque Bálbona (2013), pp. 238–240., 251–253. The disappearance of the last guerrillas thus coincided with the upsurge of mass organisation of the working class, which no longer chose the path of armed struggle to articulate its opposition to the system.

[51] Romanos (2014), p. 247.; Andrés Edo (2004), pp. 9–10.

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Conflicts Between the Citizens of Pécs and the University Students of the Elizabeth University in the Interwar Period[1]

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The first aim of my article is to present the main problems and disagreements between the adult population of Pécs and the university youth which were emerged in the interwar period. The relevance of this topic is given by this historical investigation except for few works is completely missing from the Hungarian literature. Andor Ladányi examined the 1920s and the 1930s years' universities from the perspective of the realization and the goals of the higher education policy. András Rozs, András Szécsényi, Gábor Ujváry and Róbert Kerepeszki dealt with the ideology of youth organizations and their anti-Semitic and revisionist movements, so their articles put the focus on the politically motivated conflicts between the university youth and citizens. As a result of it, the analysis of the other types of disagreements has been pushed into the background. However, next to anti-Semitic activities various interactional relationships and several conflicts were created between students and city dwellers.

With my research, I want to connect to studies that have been of particular interest in the international university history research in recent years. The popularity of this field is indicated by the ever-expanding literature on the topic of 'town and gown'. For the Hungarian university history writing the application of this methodological and theoretical approach is less observable which rather pays attention to institutional history studies.

During my work I am going to demonstrate the students' political movements which are connected to anti-Semitism, revisionism, turning towards the solution of social issues and anti-Germanism. These kinds of activities frequently did not remain within the walls of the university of Pécs because during these occasions students often applied the street as political weapon. Furthermore, besides the damaging of public buildings as a consequence of university students' special life situation and the forms of their activities during their everyday life the youth got into an intensive relationship with city dwellers which could result in other types of conflicts. For instance, adult citizens may have resented the impolite and tactless behaviour of students during the common using of public places or as the consequence of their active night life.

Keywords: political movements, town and gowns, generation gap, youth associations, impolite behaviour

I.   Introduction

In the interwar period, in Hungary a conservative and Christian political stream was able to strengthen. The spread of conservatism and the National-Christian cultural concept could be traced back to general pessimism and the rejection of revolutions.[2] Cultural legislation in the era was imbued with the Christian-national idea because political leaders used it as a social and political tool to reach their aims through education, folk cultivation and leisure time.[3] The goals of culture policy were to provide the assurance of organic development and to guarantee the formation of stable values. Culture also played a key role in the preservation of traditional community institutions, Christian norms or morals and the institution of the family.[4]

In the eyes of the university council, professors and the adult citizens of Pécs, university students belonged to the intellectual class, who were expected to behave respectfully and decently. They should respect the rules of the university and the city and not get involved in unprovoked, violent fights because these kinds of actions were not worthy of the status of students, the prestige of the city and the university.[5] Academics emphasized as a result of appropriate national and Christian moral upbringing in the Horthy era, students avoided 'inferior' or 'foreign' forms of entertainment, such as going to pubs, playing card games in cafes or listening to jazz music, which were linked to the lower social groups.[6] Dr. Zoltán Pázmány, dean of the Faculty of Law of the Elizabeth University, also warned students against immoral and impolite behaviour during the opening speech of the 1930–31 academic year: 'Let your manners be choosy. Good manners and lovable conduct in life open up countless successes. Indecent, rude words stigmatize their perpetrators. (…) May envy and hatred be far away from you! Stick together brotherly! (...) Do not be ungrateful and do not give your parents a reason to worry. (...) Do not spend the money you bitterly took from your family on dice games, dungeons, and beer halls among dancers. I am also telling you that if you have little, do not be wasteful. Do not live in coffee houses. Do not duel; because this is contrary to divine and human laws.'[7] In contrast, several articles and archival sources reported on loud noises, street fights, break-ins and vandalism of the university youth. They were influenced by their political beliefs and ideology too and during these actions instead of taking the consequences, students carried out their activities in the way of 'hiding in the crowd and looking for the evening gloom'.[8]

The difference between the viewpoints of students and the adult population about the university youth' appropriate behaviour patterns caused several problems. Based on these, the first part of this study highlights the typical free time activities of students and which types of conflicts arose from generational differences between city residents and university citizens, including street fights, vandalism, street noise and political movements. The second part of the text presents the opinion of the university administration and city dwellers regarding the disrespectful attitude of students and what kind of sanctions were imposed against their inadequate actions.

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[2] Papp 2020: 120
[3] Vonyó 2012: 90–91; Ujváry 2009: 392
[4] Vámos 2022: 32–33
[5] From the documents of the 1930/31 academic year of the Royal Elizabeth University of Hungary, 43–53
[6] Vámos 2022: 36–37
[7] Quote from: The documents of the 1930/31 academic year of the Royal Elizabeth University of Hungary, 47–48
[8] Protesting university students smashed the windows of the *Pécsi Napló* editorial office and printing rooms. *Pécsi Napló*, 26 February 1931. 1.

II.   The entertainment habits of university students

Based on the 1940–41 curriculum of the Faculty of Law and the Faculty of Medicine of the Elizabeth University, students did not have much leisure time on weekdays. They generally had to attend lectures, seminars and exercises from eight a.m. to one p.m., Monday through Saturday. In many cases, the education continued during the afternoon from two until six, seven or eight in the evening. Of course, they had shorter and longer days, for example Friday or Saturday, but as a result of their strict timetable they had rest time mainly in the evening hours and on weekends.[9]

The entertainment patterns of the youth can be reconstructed with the help of the Szent Mór (Maurinum) dormitory's absence booklet because if students had a program after ten p.m. or after midnight, they had to ask permission from the director of the dormitory. According to the 1941–42 booklet, university citizens during the night hours took part in family meetings, went to the cinema or the theatre, joined dance or tea parties, banquets, balls and association meetings, attended concerts and went to cafes or the circus.[10] Although, the university council emphasised that pubs were visited only by the lower social classes and university students did not spend time in these establishments,[11] based on the documents of the Maurinum, going to pubs was a popular leisure activity among students. Therefore, they often left out, missed the evening deadline, and in some cases entered the institution in drunk state. When they did not get consent to leave after ten, they mapped out alternative escape routes, for example running away through the windows. There was also an example that after midnight, a great noise broke out in the corridors of the dormitory where the students, after drinking alcohol had fun, danced and played the violin, with which they disturbed their mates who wanted to rest.[12]

Due to the proximity of the dormitories (Szent Mór Dormitory: Vasvári Pál street 4., the first and second building of Nagy Lajos Dormitory Irányi Dániel square 18. and Pozsony street 3., today's Egyetem street 2. and Dohány street 1–3.) and the central building of the university with the Faculty of Law, the Faculty of Humanities and the certain part of the Faculty of Medicine (Rákóczi road 80.), the elite coffee houses were located close to the living spaces of students, so they regularly visited them. Between the two world wars, only five or seven coffee houses operated in Pécs.[13] Students mainly visited Korzó, Nádor, Royal or Pannónia, which

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[9] VIII. 101. b. 84. d. 792/1940–41. The 1940–41 curriculum of Elizabeth University. n. d.

[10] VIII. 108. f. 36/B. d. without catalog number. Booklet asking for absence. From 15 September 1941 to 28 June 1942.

[11] Based on Article IV of the 1921 law, pubs could not be opened in the immediate closeness of churches, schools, hospitals and public offices. With the transfer of the university to Pécs in 1923 and the handover of the various buildings of the city, all pubs that were closer than 200 river meters to the faculties of the higher education institution were relocated. The university council considered the arrangement of the surroundings of the central building as a particularly significant matter to ensure this area 'correspond to the dignity of the university'. Nonetheless, the university repeatedly extended the deadline for the relocation of the pubs and gave a reprieve until 1926, moreover in 1938 it also permitted to open a new pub that was closer than the specified distance. As an explanation of the decision, the university administration generally emphasized these places of entertainment were located on the other side of the highway (Rákóczi út 78) with higher traffic. The professors stated that over the years, they have not experienced any noise, disturbance of silence or scandals from the pubs, either day or night, which would have hindered the institute's work. However, the leaders of the X-ray Institute complained about the loud commotion of the guests (drivers, day labourers) which disturbed the teaching or scientific work and the tranquillity of patients. By keeping the complaints silent, the university management wanted to represent towards the outside world the disinterest of the students in visiting pubs. PTE EL VIII. 101. a. The first regular meeting of the University Council in the academic year 1923/1924. 16 September 1923., 16. point.; PTE EL VIII. 101. a. The second regular meeting of the University Council in the academic year 1926/1927. 27 October 1926., 16. point.; PTE EL VIII. 101. b. 14. d. 617/1925–26. The complaint of the X-ray Institute about the noise coming from the pub near the university's central building. 4 August 1924.

[12] VIII. 108. f. 39. d. without catalog number. Maurinum Diary. From 3 May 1945 to 6 December 1946.

[13] Vámos 2022: 100

could be found in the downtown of Pécs (Király street and Széchenyi square).[14] The popularity of coffee houses among young people was increased by the fact that, next to coffee, these institutions also provided music, hot food, games and newspapers. Moreover, during the Horthy era, the atmosphere of these entertainment facilities changed as well compared to the age of dualism. Fewer guests came as a result of reading or working quietly without disturbance because most of them wanted to spend a good time, play card games, billiards, do dancing and listen to gypsy and jazz music. As a result of the change in musical taste, modern dances were also popular in these institutions. Furthermore, taking time in the coffee houses also represented to university citizens the belonging to the middle class.[15]

Students also regularly visited the promenade which is in Hungarian 'korzózás'. The korzó usually marked the road in big cities where the public could take a walk for social interaction, which provided the opportunity to walk, have fun, talk and look at the same time. In Pécs, the korzó meant Sétatér in front of the Cathedral and the Király street during winter or evenings. In springs, Széchenyi square was also part of it. During the act of korzó, the participants had to demonstrate the expected behaviour, which was recorded by the etiquette laws of the era. In 1927, the Minister of the Interior issued a decree for the protection of public morals and ordered the regular inspection of streets and public spaces. Swearing, loud obscene speech, indecent gestures and movements that were capable of breaking good taste and morals were prohibited in public areas. Following the expected form of behaviour was also fundamental because this was what distinguished the educated person from the uneducated.[16]

During the Horthy era going to cinemas is widespread among broad social groups. After the Serbian occupation, Pécs had just one movie theatre, the Apollo. During this period, two more cinemas were also established. On the one hand, the Park cinema, located between Irányi Dániel square and Felsőmalom street, was completed by December 1921, and on the other hand, the Uránia movie theatre on the Szigeti road was handed over in 1936. The Apollo and Park cinemas were also located near the central building of the university and the dormitories, so during the interwar period, university students regularly visited these entertainment units as well.[17]

III.   Street noise, drinking, vandalism

The proportion of the total student population at the Elizabeth University showed a significant decrease between the 1923/24 and 1927/28 academic years. The initial 1282 people were reduced to 1005 for the 1926/27 academic year. From the 1927/28 academic year, the number of the university youth began to increase when 1132 students studied at the higher education institution in Pécs. For the 1933/34 academic year, this number reached 1555 people. However, from the following academic year (1934/35), the proportion of the university students started to drop again. In the 1936/37 academic year only 1400 young people attended the higher education institution.[18] The population of the city of Pécs grew continuously between 1842 (15 000 people) and 1910 (50 000 people). However, the number of the citizens began to decrease due to the First World War, the economic and political uncertainty and the Serbian occupation, so 2500 fewer people lived in Pécs in 1921 than before the war.[19] During the Horthy era the

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[14] VIII. 108. f. 36/B. d. without catalog number. Booklet asking for absence. From 15 September 1941 to 28 June 1942.

[15] Vámos 2022: 100–102

[16] Vámos 2022: 134–144

[17] Vámos 2022: 207–211

[18] Szabó 1940: 114–116, See Appendix 1 for the complete data set. The data refer to the second semester of each academic year.

[19] Kaposi 2014: 41–42

regeneration of Pécs took place quickly because the number of the residents began to grow rapidly from the beginning of the 1920s. As a result of it, in 1920 47 556, in 1925 55 107, in 1930 61 663 and in 1941 73 000 people lived in the settlement.[20] Comparing the rate of the university youth and the population of Pécs, in 1925 2 % of the citizens were university students, while in 1930 this rate was 2.1%.
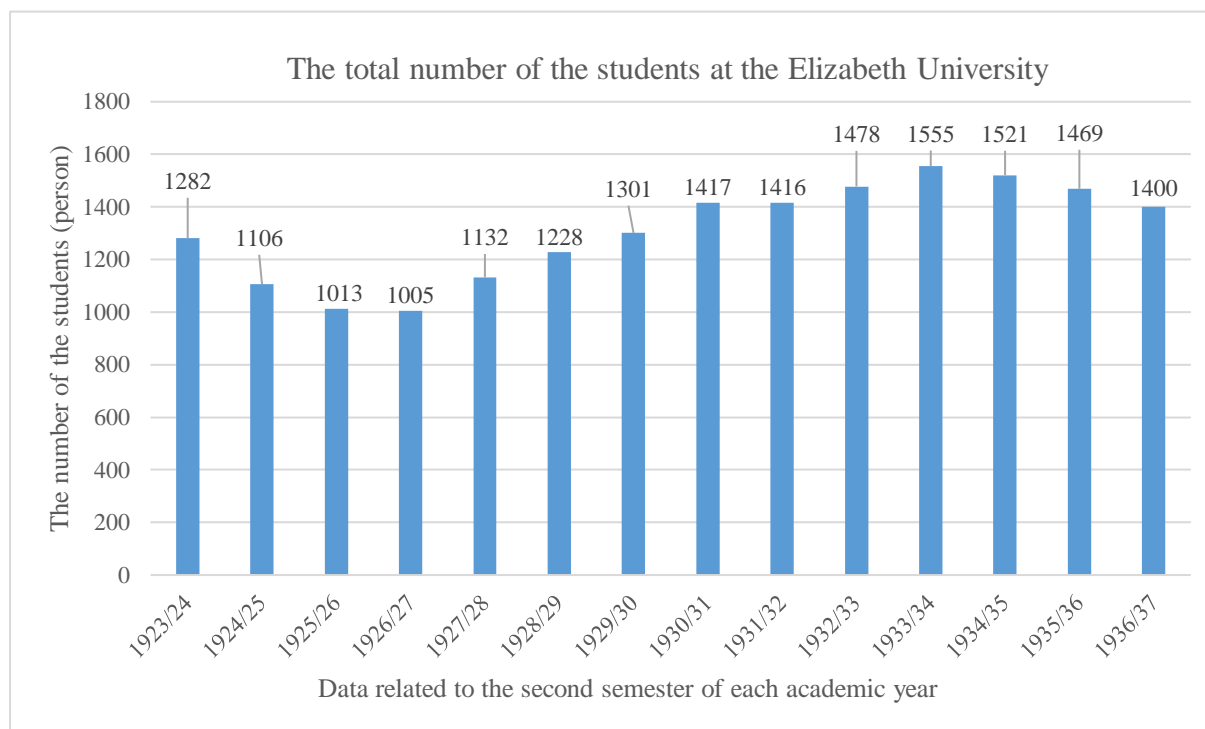
Fig. 1 The total number of the students at the Elizabeth University.
Source: Data from Szabó 1940: 114-116

The distribution of students according to the profession and social status of their parents cannot be ignored. Based on these, for the 1925/26 academic year, almost a third of the university youth grew up in poorer families (28%), while 70% of the fathers of the young people were official-intellectual, large entrepreneurs-trader and retailers-industrialist. The seven categories witch contain the highest number of students are intellectual civil servants and military officers, self-employed intellectual officials, self-employed and officials workers in connection with commerce, transportation and industry, priests, teachers or tutors and retired officials, which accounted for 74% of the university youth. The remaining ten categories made up only 24%.[21]

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[20] Vonyó – Vitári 2006: 147

[21] Szabó 1940: 123, See Appendix 2 for the complete data set. The data refer to the second semester of each academic year.
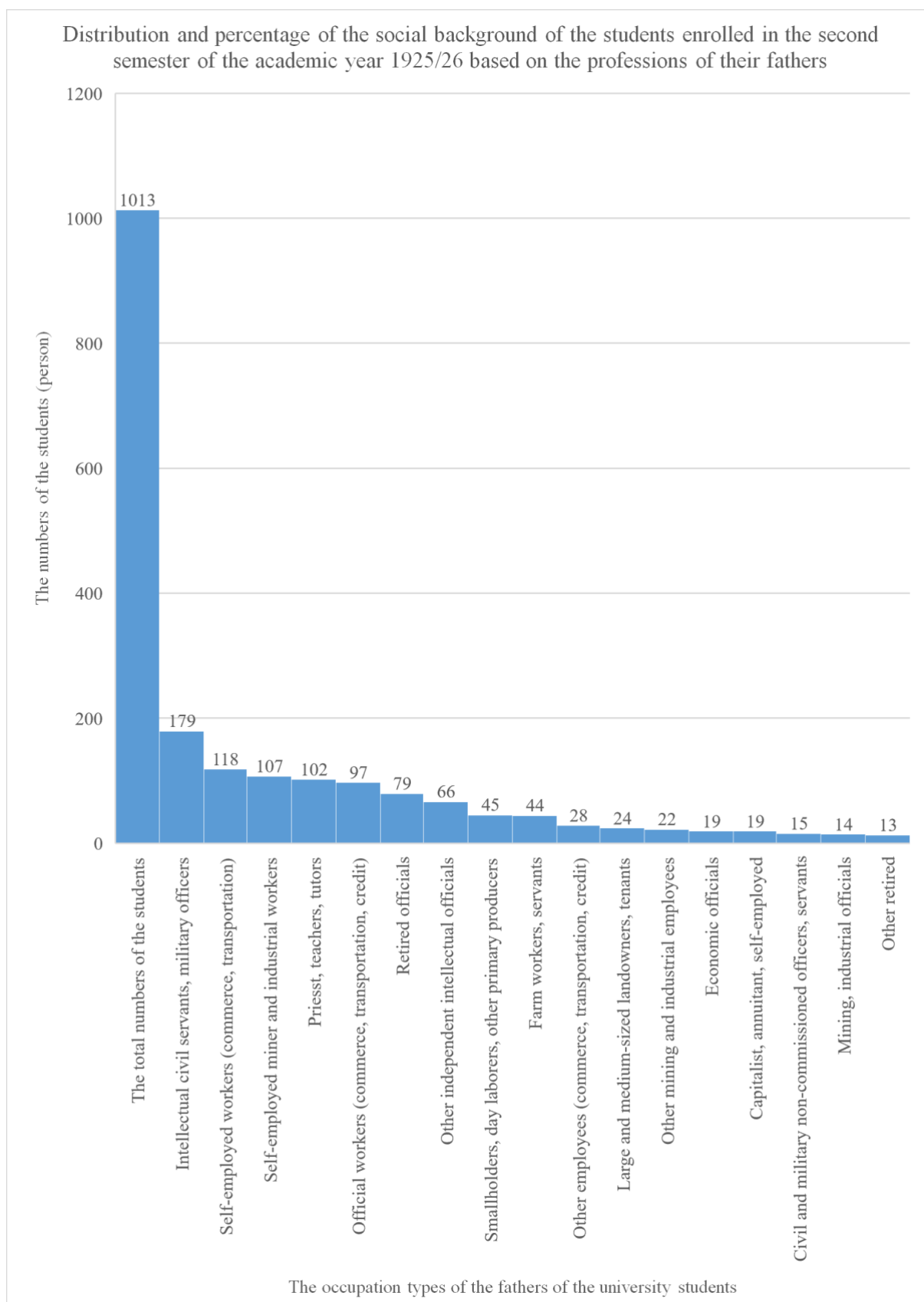
Fig. 2 Distribution and percentage of the social background of the students enrolled in the second semester of the academic year 1925/26 based on the professions of their fathers. Source: Data from Szabó 1940: 123

Compared to the relatively small number of university youth in Pécs, the local press and archival sources repeatedly highlighted the indecent, scandalous behaviour of university students after a night's revelry. Alcohol consumption and drunken behaviour were associated with the evening of a ball or carnival festivities, visiting pubs and spending time in coffee houses.[22]

During these entertainment occasions, the university youth frequently made a lot of noise and regularly shouted during the night, which disturbed the tranquillity of the city's community.[23] The use of obscene terms was quite common too. As a result of drinking alcohol, young people were willing to act recklessly at a higher rate. They removed the signs of restaurants or shops and left them at the gate of a neighbouring street.[24] It happened that they got involved with passers-by or behaved aggressively toward the police officers who checked them in, which resulted that the students were taken to the police station.[25]

Cinemas also became places of vandalism. During these occasions, university students usually broke down the photo frames, destroyed or stool the pictures inside of them and stole several amounts of money from the cash register.[26]

Furthermore, many complaints have been received regarding the fact that the audience has to put up with rude, tasteless and stupid comments during the movie theatre performances. These interjections often appeared during the most serious scenes of a film. With all this, they committed a breach of silence. This was the reason why the city population requested that in such cases loud young people be escorted out of theatres.[27]

IV.   Political movements

During the disturbances, university citizens were regularly guided by their ideological convictions. These movements in most cases were linked to the university youth associations.[28]

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[22] Traveling signboards. *Pécsi Napló*, 23 February 1935. 4.

[23] B. J.: Disturbances in the inner city streets. *Dunántúl*, 28 March 1943. 6. According to the decree on 'ensuring public peace and order' which entered into force in August 1931 in the city area (streets, squares, roads, residential buildings, public buildings) all actions (noise, singing) that could disturb the quiet were prohibited not only at night but also during the day. It was forbidden to turmoil the silence in the open or closed rooms of public canteens and entertainment venues, in the shared courtyards of buildings and in any other place were used by the community (railways, trams, coaches). Anyone who violates these provisions may be fined, or police proceedings may be initiated upon a resident's report. The city's regulation on 'ensuring public peace and order' will enter into force as soon as possible. *Pécsi Napló*, 1 August 1931. 2.

[24] A group of drunks vandalized the signboards. *Pécsi Napló*, 24 December 1926. 6.

[25] PTE EL VIII. 101. a. The third regular meeting of the University Council in the academic year 1930/1931. 26 November 1930., 20. point.

[26] Last night, a group of drunken people was rioting on the streets of Pécs. *Pécsi Napló*, 23 September 1933. 3.

[27] A complaint about the cinema audience. *Dunántúl*, 8 April 1937. 4.

[28] In the Horthy era the main university student movements were initiated by those youth organisations that were connected to a higher education institution, and whose members were under the disciplinary authority of a university. There were several student associations in Pécs. Some were organized based on religion such as the Catholic Emericana and the Szent István Association. Students from the separated areas such as from the southern region (Southern Region University and College Students' Association=DEFHE), Transylvania (Székely University and College Students' Association=SZEFHE), and the highlands (Highland University and College Students' Association=FEFHE) also gathered in organizations. In the context of Pécs the most active political activity was carried out by Turul, Emericana, DEFHE and Szent István Association. The first university youth organisation, the Szent István Association, was established in 1917, however as a consequence of its open legitimism it gathered the fewest students. The two most significant organisations were the far-right Turul and the Emericana. The former was founded in 1919, which was followed in 1921 by the Foederatio Emericana. Turul had several sub-organizations in Pécs. The first, Csaba Association of the Faculty of Medicine was founded in 1921. The Werbőczy Association was established in the fall of 1922 at the Faculty of Law. The last, the Árpád Association of the students of humanities began its activity in 1926. The first corporation of the Foederatio Emericana at the Elizabeth University was the Quinque-Ecclesiensis which was organized in 1923. Later, with the

In this regard, they organized demonstrations numerous times, used streets as a political arena, and damaged public and private property, shouted harsh statements and abused passers-by who just walked on the street.

IV.1 Anti-Semitism

The anti-Semitic movements of university students had several forms in the era, which not in all cases remained within the walls of the university because sometimes spilled out onto the street. One type of this was breaking the windows of Jewish shops or their residential houses and damaging or stealing their signboards.[29] Furthermore, in several ways university students tried to prevent Christian city-dwellers buying from Jewish merchants to improve the financial situations of Christians by distributing flyers and leaflets,[30] by standing in a queue in front of shop windows or by checking customers.[31]

Next to the campaign against Jewish merchants, Jewish university students could also become the victims of street fights. During the frequent beatings of Jews at the University of Pécs, the chosen students were often followed into the street when they tried to escape from physical abuse.[32] While university citizens spent their time in the coffee houses, fights between young people of different religions could also take place. *Egyenlőség*[33] complained about the tendency when Jewish youths entered the Korzó in groups of two or three, they were attacked because they were defenceless, while when they entered the coffee house in a group of ten, they were subjected to physical violence because the Christian youth interpreted this action as a grouping. This caused that, while Korzó was frequently visited by Christian youth, Jewish students started to spend less and less time in this coffee house.[34] Passers-by could also get involved in street fights, especially if they stood up for Jewish youth. At that time, the angry crowd insulted the adult passers-by not only verbally, but also physically.[35]

During the anti-Semitic movements, city institutions, buildings and private property were also damaged. One form of manifestation of the anti-Semitic demonstrations was the demand for the cessation of 'Jewish' films and the request for the introduction of censorship. In the period between the two world wars, cultural issues increasingly became the scene of political life and generated political debates. Confrontations over cultural issues led to the rise of anti-Semitism after the First World War, as Jews were blamed for the cultural decline. All of this generated anti-film riots. Movies judged to be 'Jewish' were interpreted as a kind of appeal calling on the youth to go out into the streets and demonstratively express their views against the rise of

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increase in the number of the members, the Ludovicana and the Barania were founded in 1925. In 1927, Alta Ripa and finally in 1935 Istropolitana were established. Last but not least, in Pécs the sub-organisation of DEFHE was founded in 1923. PTE EL VIII. 101. b. 96. d.1381-1942-43. Regulations of youth associations. 12 Maj 1943.; Szabó 1978: 136; Rozs 1989: 179–185; Rozs 1991: 204–205; Ujváry 2010: 430; Kerepeszki 2009: 351–352.

[29] Serial window and shop window break-ins in Pécs. *Pécsi Napló*, 7 April 1937. 5.; Shop window burglaries have started again in Pécs. *Pécsi Napló*, 6 Maj 1937. 4.; Vandalizing the signboards. *Pécsi Napló*, 24 Maj 1933. 5.

[30] Kiss 2012: 38. See more about the Turul boycott program: Action by the *Nemzetvédő* in the interest of Christian Hungarian merchants. *Nemzetvédő*, December 1933. 1.; Call in *Nemzetvédő*. *Nemzetvédő*, 4 February 1936. 2.; Choose! *Nemzetvédő*, December 1933. 13.

[31] The complaint of the traders of Pécs. *Pécsi Napló*, 6 April 1930. 8.

[32] A large demonstration was organized by the university youth at the Anatomy Institute due to the presentation of the Pécs-Baranyai Híradó. *Pécsi Napló*, 25 February 1931. 1–2.

[33] *Egyenlőség* was the weekly newspaper of the Hungarian Jewish neologist community, which was founded in 1882 and operated until 1938 under the editorship of Mór Bogdányi, then Miksa Szabolcsi, and from 1915 Lajos Szabolcsi. Veszprémy 2018: 130–131

[34] *Egyenlőség*, 28 June 1924. 4.

[35] PTE EL VIII. 101. a. The seventh regular meeting of the University Council in the academic year 1930/1931. 26 March 1931., 12. point.

Jews.[36] Protests against Jewish films took place twice in Pécs. First, in February 1931, when the Pécsi Projektográf RT. directed a commercial about the city and filmed some scenes of the Israelite canteen ball which was held in the main hall of the Pannónia Hotel. The film was screened at the Apolló cinema on 23rd February when Cristian students started protesting against the film immediately. After the incidents in the area of the Autopsy Institute, the movement radicalized and participants broke the huge mirror windows of the *Pécsi Napló*[37] editorial and the printing office.[38] The second case took place in 1937 in connection with István Székely's film '*Knightly Case*' ('*Lovagias Ügy*'), which caused a national protest. Rioting began in downtown Pécs when unknown persons smashed the windows of many Jewish shops with stones, and also damaged the homes of Christian citizens because based on their names the students thought they are Jews.[39]

In February 1937, the university students also used the doctoral inauguration as a demonstration. In the course of the incident, not only the three Jewish doctoral candidates who appeared were assaulted, but that day at six or seven o'clock in the evening about two hundred people demonstrated in Király street and in front of the Israelite office and church. During the next day, almost a hundred people smashed the windows of the Israelite church and the Israelite folk school.[40]

IV.2 Anti-Germanism

Anti-Germanism in youth organizations started to strengthen especially after Hitler came to power. German expansionist aspirations, the Pan-Germanic movement and the 'Eastern living space' theory increased the suspicion of nationalities. After the Treaty of Trianon, the largest minority left in the state, Germans, inherited the image of the enemy from the era of dualism. Germans and Jews became similarly dangerous elements within the society as a result of their possession of significant economic and intellectual positions, and their inability to assimilate.[41]

In Pécs the anti-Germanism became stronger as the result of actions and methods of the Confederation of Germans (Volksbund) when aggressive demonstrations took place against the members of the domestic German nationalism movement who were accused of disloyal behaviour. The tense situation escalated when Volksbund opened a German secondary school in Pécs in 1940 which was founded at the same time as the abolition of the Faculty of Humanities of the Elizabeth University. University students interpreted all of this as a weakening of Hungarian cultural life and as an advertisement of the city's German future. The university youth were hurt in their patriotic feelings by the deviant behaviour of German students who marched through the city from the student home to the gymnasium in closed rows, with hands on each other's shoulders and singing German songs which were interpreted as a clear provocation.[42]

The anti-Germanism of university students was manifested in vandalism, during which in the 1940s the director of the German gymnasium repeatedly filed a complaint against an unknown perpetrator for breaking the school's windows and writing anti-German inscriptions, which labelled the local Germans as traitors. Furthermore, the appearance of Anti-Germanism created

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[36] Szabó 2019: 5–10; 12–14; 19
[37] *Pécsi Napló* is the first political daily newspaper of the city of Pécs, which started in 1892.
[38] PTE EL VIII. 101. a. The fourth regular meeting of the University Council in the academic year 1930/1931. 25 February 1931., 1. point.; There was a demonstration at noon today at the Anatomy Institute of the University of Pécs. *Dunántúl*, 25 February 1931. 3–4.
[39] Szécsényi 2009: 136
[40] The university riots have been going on for the third day. *Pécsi Napló*, 25 February 1937. 4.
[41] Kerepeszki 2009: 360–362
[42] MNL BaML IV. 1401. a. 31/1942. Reports on clashes and fights between Hungarian and German students. 20 December 1941.

disagreements between the Hungarian and German students within the university associations as well. The Hungarian students watched their mates' participation in Swabian balls with a bad eye. Due to their behaviour, conflicts often arose between them, but these frictions usually stayed in the university areas.[43]

IV.3. Turning to social issues

From the 1930s, university students and youth associations gradually turned towards solving social issues. This appeared mainly by helping big families, establishing a fairer minimum and maximum subsistence level, settling the relationship between employers and employees, eliminating double jobs and rationalizing industry. In relation to Pécs, it caused a conflict between students and city leaders regarding the support of the miners' strikes. University citizens more times formulated several statements representing the interests of miners, supported their wage movements, protested against layoffs and wage cuts such as in 1936 and 1937. In support of the strikes, the associations organized demonstrations and collected donations.[44]

The management of the city and the Danube Steamship Company (DGT) continued the students' activities with great concern. Due to the annexations after the war, the coal deposits of the DGT increased in value, as the Mecsek coal mine remained the only domestic supplier of the domestic iron industry and other requiring coal-fired power sectors.[45] As the result of the prolongation of the strikes, they were able to significantly reduce production. Furthermore, the foreign, Austrian ownership of the Danube Steamship Company symbolized the exploitation of Hungarians in the university youth's interpretation.

IV.4 Anti-legitimism

The so-called king question arose from the fact that IV. Károly the King of Hungary in November 1918, withdrew from managing state affairs in the Eckartsau declaration, but he never officially resigned. However, many people in Hungarian political life (mainly the ecclesiastical circles and the aristocratic class) considered the Habsburg dynasty to be the rightful holders of the Hungarian crown. The dynasty was seen as a symbol of the territorially unified Hungarian state. However, most of the university student organizations (mainly the Turul Association) opposed the Habsburg restoration, thus rejecting the represented goals of legitimists. Only the Szent István Association supported the Habsburg restoration, which generated repeatedly conflicts with the other youth organisations. The university circles which condemning legitimism did not shy away from disrupting the legitimist assembly in Pécs, for example in 1935, when students tried to close the meeting with the help of tear gas bombs.[46]

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[43] MNL BaML IV. 1401. a. 31/1942. German students singing in the street and other phenomena. 18 December 1941.; MNL BaML IV. 1401. a. 31/1942. German students singing in the street. 18 December 1941.
[44] MNL BaML IV. 104. a. 46/1937. Turul and Szent István Association's collection for the striking miners. 20 March 1937.; MNL BaML IV. 1428. 301. Turul's protest poster. 4 March 1936.
[45] Kaposi 2014: 33–34
[46] Irresponsible elements tried to disrupt the legitimists' rally in Pécs with tear gas bombs. *Dunántúl*, 22 October 1935. 3.

V. The attitude of the city and the university council towards the deviant behaviour of young people

V.1 Local press

In every case, the local press opposed the scandalous behaviour and movements of young people, which were interpreted as events that shook the everyday life of Pécs. The newspapers expressed that these actions had very serious consequences for the victims and the entire Hungarian society, whose everyday peaceful life was devastated by 'irresponsible and immature young students'.[47] The articles stated that Pécs did not need quarrels, excitement and phrases, just 'hard-work and togetherness'.[48] Therefore, the local press highlighted the need for unity and peace in society to secure adequately the country's future. All those, who acted consciously against this, undermined the country's development, peace and authority and lowered the prestige of the city.[49]

The authors warned students against these actions because as long as they discussed stink bombs and physical violence, no one will take them seriously. These actions of the youth were also 'dangerous' because during these manifestations, university students demonstrated the decline of moral.[50] The behaviour of students not only led to the deterioration of the cultural standard of the city but also did not match the intellectual level of university citizens.[51] Students were criticized by the media for their attitude, as they did not take responsibility for their action because this behaviour was not worthy of the ideal of Hungarian chivalry.[52] The youth shouldn't forget that they will form the indispensable backbone of the future society. However, the behaviour of students only created a feeling of shame and indignation and with this habitat, they could not establish the future of the country and the nation.[53]

The papers petitioned that the state police has to take action against even the smallest crimes because the increase in the number of minor crimes resulted in a more troubled life and reduced property security.[54] Regarding this point, the authors of the articles noted that the education of the youth is not the task of the citizens of Pécs, but of the university. They warned the university council that they hope to put an end to student riots and vandalism as soon as possible and to wean them from inappropriate behaviour. Otherwise, the view will spread widely that it is not the university governs the university, but some extreme youth organizations do.[55] As a result of it, the university management was also demanded to take strict actions and introduce regulations.[56]

Press sources attributed the reasons for the deteriorating morale of university youth to the changed living conditions after the First World War, the lack of parental influence and the difficult financial conditions. The economic crisis, unemployment, poverty, and the fight for wages defined the daily lives of university students as well.[57] The authors mentioned the special

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[47] Street fights in Pécs. *Dunántúl*, 7 June 1922. 3.
[48] Street fights in Pécs. *Dunántúl*, 7 June 1922. 3.
[49] Street fights in Pécs. *Dunántúl*, 7 June 1922. 3.
[50] The future of the next generation. *Dunántúl*, 20 February 1919. 3.
[51] Street fights in Pécs. *Dunántúl*, 7 June 1922. 3.
[52] Protesting university students smashed the windows of the *Pécsi Napló* editorial office and printing rooms. *Pécsi Napló*, 26 February 1931. 1.
[53] The university riots have been going on for the third day. *Pécsi Napló*, 25 February 1937. 4.
[54] Swayed. *Dunántúl*, 30 August 1924. 1.
[55] Advertising demonstration. *Pécsi Napló*, 26 February 1931. 1.
[56] The university riots have been going on for the third day. *Pécsi Napló*, 25 February 1937. 4.
[57] Protesting university students smashed the windows of the *Pécsi Napló* editorial office and printing rooms. *Pécsi Napló*, 26 February 1931. 1.

spirit of the university youth as the reason for the atrocities occurring in the age, namely that it is very easy to incite young people to protest.[58] The harmful influence of cinema, modern music and dances[59] was highlighted as another factor in moral deterioration. The population of the city determined that smoking, alcohol consumption, the use of vulgar and indecent expressions, violence and early sexual life were widespread among students as the result of these effects.[60] Béla Ruzsinszky, a member of the legislative authority committee of Pécs expressed that 'Hungarian society has long seen the signs of degenerations that have unpredictably harmful and destructive effects on the behaviour patterns of the youth. The cultivation of jazz music and modern dances provokes the anger of the Hungarian society not just because these trends have devastating effects on the moral life of young people, but also because these are foreign, bad-sounding and hurt the self-esteem of Hungarians.[61] The citizens of Pécs saw the solution to this only in the strict Christian moral education of university citizens.[62]

V.2 University Council

Lecturers frequently complained about the disrespectful behaviour of students, especially towards ladies and professors such as young people did not greet them in the buildings and the corridors of the university. It even happened that students addressed lecturers with insulting statements and showed aggression toward them. Others refused to tell their names, and when one of the faculty members wanted to lead them to the office, they resisted and ran away. The attitude of university citizens was interpreted as a lack of discipline. Based on these, the university council drew the attention of students to the fact that failing the greeting is

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[58] PTE EL VIII. 101. a. The seventh regular meeting of the University Council in the academic year 1930/1931. 26 March 1931., 12. point.

[59] In the interwar period, the goal of the government was to transform the society along the lines of common cultural elements and characteristics, so the new modern musical trends were seen as the enemies of the Christian-national culture. Modern dances and music twisted the traditional, conservative concepts and transformed the citizens' relationship with their bodies because compared to the previous dances, the partners were much closer to each other. As a result of it, a certain part of the society believed the movements of modern dances (especially tango) were indecent and immoral. The situation was complicated by the fact that the rapidly spreading jazz music and dances caused unexpected and serious competition for gypsy musicians. Therefore, the national authorities took action and introduced several restrictions against the spread of modern dances, but they generally never forbade them completely. Local societies generally embraced the local gypsy bands because they saw in them the guarantee of the survival of Hungarian values. Consequently, the protection of gypsy music merged with the ideology of irredentism, so the local press often condemned the spread of modern music and supported gypsy musicians instead of jazz bands. In Pécs, in 1922 the daily newspapers dealt with modern music and dances for the first time when reported that the state police headquarters of Pécs banned the teaching of shimmy, tango, one-step, two-step and foxtrot. The petition was discussed by the Ministry of the Interior, which decided that dances could be taught without eroticism. In the city, the issue of banning modern dances was raised again in the second half of the 1920s. In 1927, the National Association of Hungarian Gypsy Musicians decided to launch a campaign against modern music, but this petition was ignored by the Minister of the Interior. Then in 1928, Béla Ruzsinszky joined the movement of the National Hungarian Song Association and requested the restriction of dance music. As a result of the petition, the city assembly wrote a letter to the Minister of the Interior, but this decree was also ignored. In 1929 the royal inspectorate and in the following year (1930) the gypsy musicians of Pécs again complained about modern dance music and jazz bands, but there is no indication that these trends would have ever been banned. Vámos 2022: 162–175; The forbidden dances. Shimmy, one-step, two-step, foxtrot and tango should not be taught in dance schools in Pécs. 14 March 1922. 2.; MNL BaML. IV.1406.g. E1952/1930. Resolution on the restriction of the cultivation of jazz-band music. 27 October 1928.; MNL BaML. IV.1406.g. E1952/1930. Restriction of jazz music. 16 June 1929.; MNL BaML. IV.1406.g. E1952/1930. Application of the National Association of Hungarian Gypsy Musicians. 30 January 1930.

[60] The future of the next generation. *Dunántúl*, 20 February 1919. 3.; Swayed. *Dunántúl*, 30 August 1924. 1.

[61] Quote from: MNL BaML. IV.1406.g. E1952/1930. Proposal by Béla Ruzsinszky, member of the legislative authority committee, to prevent the spread of jazz music. 15 September 1927.

[62] The future of the next generation. *Dunántúl*, 20 February 1919. 3.; Swayed. *Dunántúl*, 30 August 1924. 1.

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disrespectful and thus violates the disciplinary regulation.[63] Dr. Kálmán Molnár, the academic of the Elizabeth University found unbearable the prevailing conditions and the rude behaviour of the youth. In 1943, he expressed his opinion at a director's meeting of the Szent Mór dormitory: 'Gentlemen cannot allow such a voice. This is a very high degree of impudence, which cannot be tolerated here because in time these students will become the leading people of the society. The university does not only provide vocational training, but also educates intellectual members. It is impossible to imagine such a tone prevailing among the members of the middle class'.[64]

The university council also highlighted the harmful habits that were spreading among students during the interwar period. Due to the high rate of smoking, in December 1931 and January 1932, the university administration discussed the introduction of a smoking ban in the university's buildings and corridors for reasons of fire safety, hygiene and cleanliness aspects.[65] The teaching staff also perceived the early sexual life of the youth, however they did not consider it necessary to educate them about sexuality. Professors believed that certain knowledge would only encourage young people to have sex before marriage. Therefore, the appendix on effective protection against sexually transmitted diseases and avoiding pregnancy was omitted from the sexual preparation book written in 1941. Instead, academics exhorted university students to abstinence and expressed that only this way of life corresponded to the Christian morals, so they decided to write a Roman Catholic and Protestant pastoral counselling and omit the planned medical appendix.[66]

The first aim of the lecturers was to educate the students who came to the university from various secondary schools to observe official regulations and to respect university authorities with the help of Cristian-national educational principles.[67]

VI.   Disciplinary actions

Most political movements and street fights were usually ended by the police. With the appearance of authority forces, Christian students generally dispersed and tried to escape. In the majority of cases, the police were able to detain only just a few perpetrators of the activities and although against them disciplinary proceedings were initiated, in general no final judgement was made.[68] However it happened that the participants of the street disturbances were not found, so no proceedings were initiated against them.[69]

The university management found the immoral behaviour of students to be disrespectful, insulting and not worthy of the dignity of the university. The series of scandalous demonstrations and atrocities threatened the university's prestige or reputation and could appear as a source of conflict between the city administration and the higher education institution. As

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[63] PTE EL VIII. 101. a. The third regular meeting of the University Council in the academic year 1938/1939. 30 November 1938., 19. point.; PTE EL VIII. 101. a. The second regular meeting of the University Council in the academic year 1926/1927. 25 September 1926., 32. point.; PTE EL VIII. 101. a. The first regular meeting of the University Council in the academic year 1933/1934. 27 September 1933., 30. point.

[64] Quote from: VIII. 108. f. 36/B. d. 268/1943. The meeting of the director of Szent Mór dormitory. 11 December 1943.

[65] PTE EL VIII. 101. a. The eighth regular meeting of the University Council in the academic year 1931/1932. 27 April 1932., 20. point.

[66] PTE EL VIII. 101. a. The eighth regular meeting of the University Council in the academic year 1940/1941. 23 Maj 1941., 10. point.

[67] PTE EL VIII. 101. a. The eighth regular meeting of the University Council in the academic year 1931/1932. 27 April 1932., 20. point.

[68] Protesting university students smashed the windows of the *Pécsi Napló* editorial office and printing rooms. *Pécsi Napló*, 26 February 1931. 1.

[69] PTE EL VIII.101.b. 39. d. 1146–1930/31. The rector's statement about the disturbances in the Institute of Anatomy and Skeletal Sciences. 24 February 1931.; Ladányi 1995: 271–272, 277

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a consequence of it, the teaching staff acted against these actions and introduced disciplinary procedures against perpetrators. However, at the end of the cases, they decided next to the lighter judgements such as a reprimand in front of the university council or the rector.[70]

Behind the mild disciplinary judgements could be that neither the city authorities nor the university management considered university students as full-fledged adult citizens. They thought that the youth needs protection, so they were more patient with them. Therefore, young people were essentially seen as their 'children' who will play a decisive role in the management of the state and he society in the future. In addition, the possible harsher measures could have triggered a strong wave of solidarity among students, which could radicalize and kept movements alive.[71]

VII. Conclusion

Based on the attributes of students' age, they are characterized by hot-headedness and rashness, which is combined with a tendency to radicalize. As a result, the university youth appearing in Pécs during the Horthy era came into conflict countless times with the urban population, which could be divided into two groups. On the one hand, most of the negotiated problems unfolded individually and spontaneously without political intent. These include reckless acts committed after balls and dance parties, such as stealing signboards, damaging shop windows, aggressive and disrespectful behaviour towards the authorities, street fights and loud singing, shouting and swearing, which were often the result of excessive alcohol consumption. All of this arose from the special age characteristics of the 18- to 21-year-old age group and was not exclusively linked to university youth.

Another type of cases included political movements, which were usually organized and open. Furthermore, students always performed these activities in groups. These actions unfolded as a result of anti-Semitism, anti-Germanism, anti-legitimist and social questions. Most of the time these were pre-planned and determined actions where students wanted to assert their opinion, will and political vision by organizing themselves into smaller groups or even large crowds. This group included strike movements, demonstrations, boycotting a meeting, using the street as a political arena, organizing a parade, distributing leaflets, fights between the Christian and Israelite youths in the city's coffee houses and preventing shopping. These disturbances are specifically linked to university organizations and their membership, so these forms of conflicts between the youth and the urban population can be specifically connected to the move of the university to Pécs and the emergence of the university youth.

The city population did not tolerate the scandalous behaviour of students, because they were expected to raise the cultural prestige of the city. However, when the university council and the city authorities took action against the student riots, just lighter judgements were generally imposed, which can be explained by the understanding attitude of the adult city dwellers and the indispensable future role of the university youth.

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[70] PTE EL VIII. 101. a. The second regular meeting of the University Council in the academic year 1922/1923. 25 October 1922., 6. point.
[71] Dhondt – Kolbe 2018: 116–117, 119

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Effect of calcium spraying on fruit quality parameters and weight loss during storage of 4 Apple varieties

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The genotype of the cultivars is mostly responsible for determining the quality and storability of apples. Other factors could affect how peculiarly is expressed. Therefore Calcium (Ca) is perhaps the most important mineral determining the quality of fruit, particularly in apples and pears because these fruits are generally stored for long periods of time (Faust, 1989). Early research has demonstrated that fruits with low Ca concentrations are more susceptible to physiological disorders such as bitter pit and cork spot. The best way to increase the calcium content of fruit is to directly apply calcium during vegetation period. Study includes the result of four apple cultivars which were sprayed with Ca during the vegetation season. This study was carried out from June 2021 to April 2022 in the Experimental Farm of the Faculty of Horticultural Science of the MATE, in Soroksár, Hungary. The aim of this study was to examine the efficiency of calcium sprayed (All-season, Early, Mid and Late season spray) on different apple cultivars in order to achieve high quality and long storability. The importance of achieving adequate Ca supply for enhancing the quality of apple fruits has stimulated researchers of fruit growing regions of the world to increase fruit Ca concentration and thereby improve fruit quality and storability. The main purpose of this study was to examine using foliar pre-harvest application of calcium on physical parameters, apple yield, fruit firmness, total soluble solids, acidity, and weight loss on apple varieties 'Golden Reinders', 'Idared', 'Watson Jonathan' and 'Jonica'. Our results confirmed that calcium treatments have positive effect on the fruit quality and the storage life. We found that in the case of some apple cultivars - for example the observed 'Watson Jonathan' and 'Golden Reinders' – the preharvest calcium treatment (foliar application) is more effective than the noncalcium sprayings apple cultivars. It seems the applied calcium was built in the cell walls and decreased the water loss during the long-term cold storage of apple fruits.

Keywords: calcium; calcium content; cold storage; fruit firmness; soluble solids concentration; spray program, weight loss

I. Introduction

One of agriculture's success stories is the production of apples. They have been eaten and cultivated since the early days of civilization and are now grown and enjoyed around the world (Folta and Gardiner, 2009). In Europe, countries that mostly produce apples are such as France, Italy, Poland and Hungary (Dobrzañska 1995). Numerous factors, including growing circumstances, harvesting procedures, and storage environments, might shorten the fruit's shelf life. (Soliva-Fortuny et al, 2002).

Calcium helps to maintain membrane integrity and is a crucial component of the cell wall, it has the greatest impact on the storage capability and quality of apples nutritionally. Reduced fruit shelf life and marketability occur when the amount of Ca in the fruits is below normal. These conditions include internal disintegration, bitter pit, and lenticel blotch pit (Ferguson & Watkins, 1989; Hewett and Watkins, 1991). Additionally, calcium directly affects ripening characteristics including respiration, ethylene production, and flesh hardness (Beavers et al., 1994; Siddiqui & Bangerth, 1995; Gerasopoulos & Richardson, 1999; Fallahi et al., 2002). Calcium (Ca) is perhaps the most important mineral determining the quality of fruit, particularly in apples and pears because these fruits are generally stored for long periods of time (Faust, 1989). Early research has demonstrated that fruits with low Ca concentrations are more susceptible to physiological disorders such as bitter pit and cork spot (DeLong, 1936). Apple storability and quality in large extent is determined by the genotype of the cultivars and nutrient of apple, the role of balanced nutrition on fruit storability is well known (Terblanche et al., 1980; Dris et al., 1998). In "Jonathan" apples, increases in Ca concentration have been discovered in both the fruit's meat and skin (Kadir, 2004). In each case, the rise in concentration in the peel was significantly higher than in the pulp. Different management techniques and ecological factors affect the calcium buildup in apples (Tomala, 1999). Production of apples considered by a high Ca content is very vital for successful storage and handling. Calcium content and its ratio with some other nutrients (N, K, and Mg) are a great concern. Apple with Ca deficiency ripens earlier (Tomala, 1997) and loose more weight during storage (Saftner et al., 1998). The necessary Ca content may be different for various cultivars. Calcium concentration of 45-60 mg/kg of fresh fruit weight is generally considered to be adequate for fruit quality (Dris et al., 1998). In addition, the deficiency of certain elements such as Ca has been observed as a widespread problem in all the apple growing areas (Dev and Kapoor 1973, Sharma and Bhandari 1992). The aim of this study was to examine the effect of calcium sprayed on yield and quality of apple fruit cultivars during storage, using foliar applications calcium.

II. Material and Methods

II 1. Plant material

For this experiment were chosen four different apple cultivars 'Golden Reinders', 'Idared', 'Watson Jonathan' and 'Jonica'.

II 2. Experimental area

This study was carried out from June 2021 to April 2022 in the Experimental Farm of the Faculty of Horticultural Science of the MATE, in Soroksár, Hungary. Apples trees grafted on M.9 rootstock, planted in 2007 at a density 2341 trees/ha (spacing is 3.6 x 1.2 m), and trained to a central leader slender spindle with drip irrigation system and wire support. The orchard at the Soroksár research station has a light sand soil with a moderate quantity of organic material, according to soil analysis performed in the Central Laboratory of Buda Campus.

II 3. Calcium treatment

Treatments consisted of three-time sprayings of 0.5% FITOHORM Ca, adjusted to a volume of nearly 1200 L / ha. The 0.5 % concentration of calcium was established by considering earlier research on apple growth techniques. Spraying was uniformly distributed along the season, beginning 30 days after petal fall and finished one month before fruit harvest. The first, second and third treatments applied on the 6th of June, 3rd of July and 1st of August 2021 respectively. From each cultivar the same apple cultivars were used as a control.

II 4. Quality parameters of apple fruits

Fruits at maturity level were randomly picked per plot at the harvest time, and were divided up, organized according to the treatment, treated and control. First group of fruits were used for measurements of chemical, physical and quality attributes at harvest time. Fruits were analyzed and date were collocated for (ºBrix), titratable acidity, flesh firmness weight loss and other fruit size parameters of fruit before storage. The remaining fruits from each plot were stored until the upcoming data collection. Fruits were stored in an air cold storage at 1 to 4 ºC and 90-95% of relative humidity (RH) for six months prior to determination of fruit quality attributes. The quality parameters determined in this study were: fruit weight, weight loss, height, thickness, wideness, titratable acidity, and flesh fruit firmness. Size of the apple were measured by "Grant" type digital vernier caliper in 0,1mm-s. Fruit flesh firmness was performed in each replicate on ten fruits using a Penetrometer in kg/cm^2. The total acidity was calculated by titrating with 0.1 N NaOH, and results expressed as maleic-acid equivalent (gl-1). The method was based on MSZ EN Nr 12147:1998 Hungarian Standard. It was used "Jencons Digitrate Pro"type digital burette and phenolphthalein was used as indicator. The Brix% was measured in each combination by "Atago Palette PR-101" type digital refract meter (ºBrix). Determination of water-soluble dry matter content (refraction)

was carried out according to the regulation Codex Alimentarius 1995). Fruits were weighed by a 'BOSCH' type digital weight measurement.

II 5. Statistical analysis

The normality of the variables was checked with Kolmogorov-Smirnov (p>0.05). Homogeneity of variance was also accepted by Levene's Test of Equality (p>0.05). Finally pair wise comparisons were performed by Duncan Post hoc test. The statistical analysis of data was supported by the SPSS version 23 package program and the differences were at 5% significance levels.

III. Results and Discussion

A summary of the quality and physicochemical parameter of apple cultivars 'Jonica', 'Idared', 'Jonathan' and 'Golden Reinders' is shown in following results. Spraying the trees with 0.5% of calcium chloride solution had no effect on most of the physical parameter attributes of apple fruits, but it has positive effect on the quality of the fruits. In comparison to the control, all evaluated treatments show substantial and positive impacts on firmness during storage.

III 1. Effect of calcium treatments during vegetation period on Weight Loss of Apple Fruit after storage

Application of Ca to apple fruit throughout the vegetative phase had a very beneficial impact on weight reduction even if it did not have a statistically significant impact (P0.05).
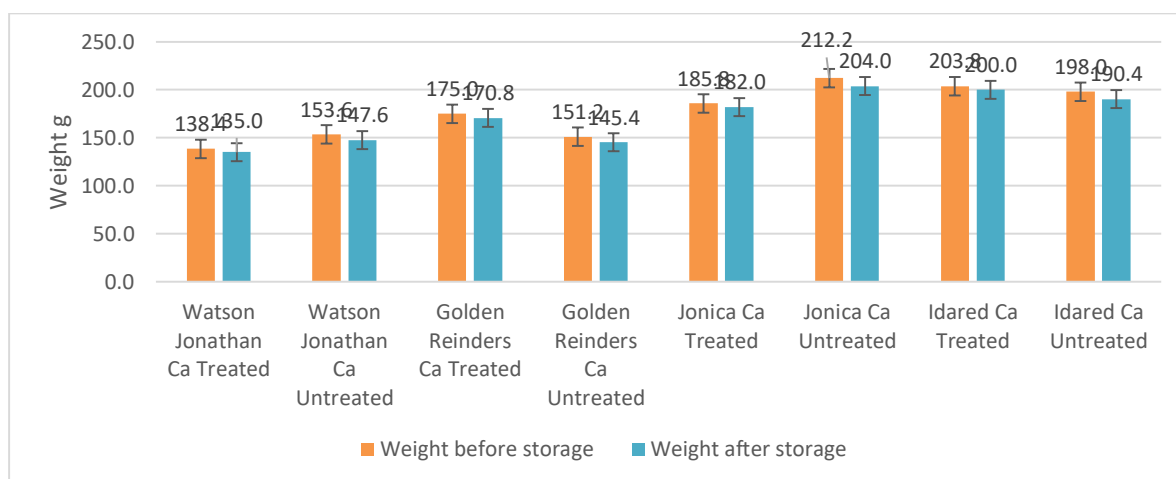
Figure 1 Fruit weight before and after Storage

As seen in the figure 2 apple cultivar that lost the highest weight is 'Jonica' Untreated 8.2 g compared to the same treated cultivar 3.8 g.

Figure 2 Weight loss during storage

The decreased weight loss seen in calcium-treated fruits may be due to calcium treatments' effectiveness in maintaining membrane functioning and integrity (Lester et al 1999). It is also in agreement with Naveena and Immanuel, who claimed that pear fruit treated with calcium was more effective at reducing weight loss when compared to untreated fruit (Naveena and Immanuel 2017).

III 2. Effect of calcium treatments during vegetation period on Titratable Acidity

The results of the analysis of variance revealed that the titratable acidity of the apple fruit was unaffected by the various Ca concentrations (P 0.05). When compared to the control, most Ca-treated fruits had much greater impacts on titratable acidity during storage.
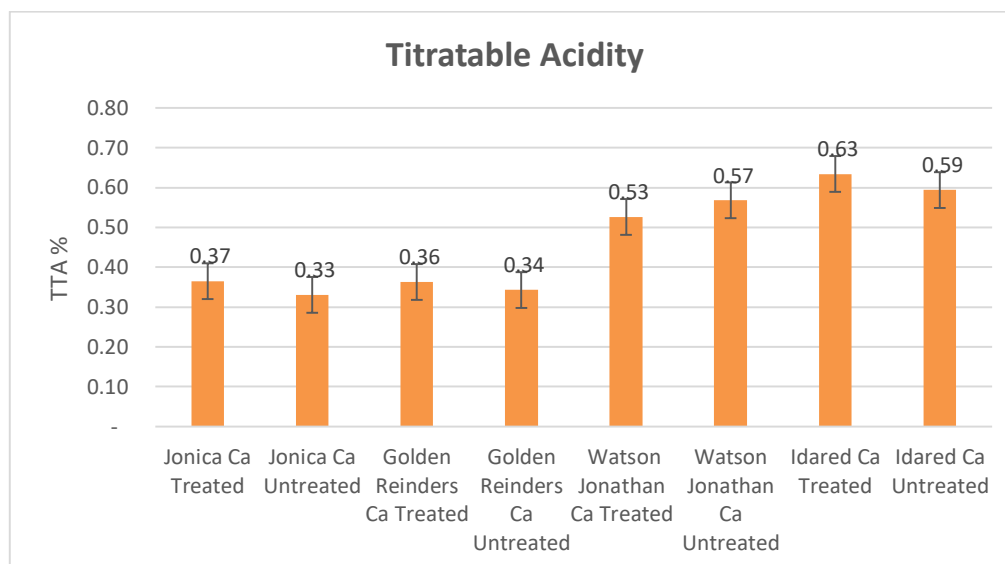
Figure 3 The effect of Calcium on Titratable Acidity

As seen in the figure 3 fruits that show highest titratable acidity is from the fruit of 'Idared' treated 0.63% and the lowest is 'Jonica' untreated with 0.33 %. The quantity of organic acids in the fruit, which is a crucial factor in preserving the fruit's quality, is closely correlated with titratable acidity.

The results of the current investigation are consistent with those of Rabiei et al. (2011), who reported that greater calcium concentrations were associated with the highest statistical values of TA.

III 3. Effect of calcium treatments during vegetation period on total soluble solid °Brix

The total soluble solid of the apple fruit is impacted by varied Ca concentrations, although this effect is not statistically significant (P 0.05), according to analysis of variance.
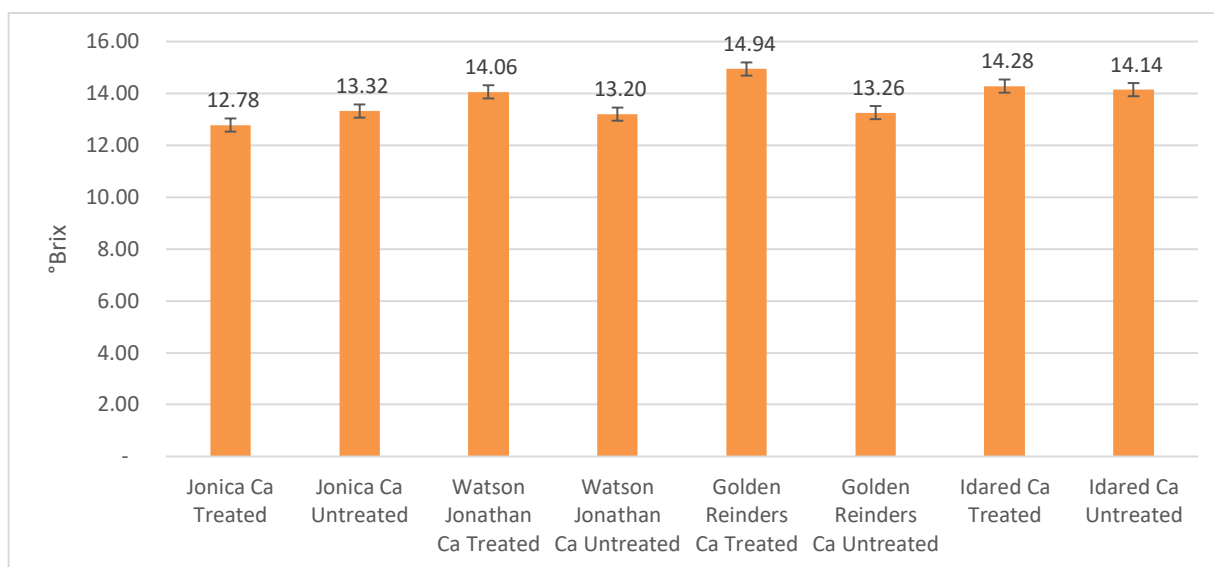
Figure 4 The effect of Ca on Brix

Maximum total soluble solid was measured in the case of the Ca treated 'Golden Reinders' apples, but it was not statistically different from the control. On the other hand, apple cultivar 'Jonica' treated with Ca from the control treatment had the lowest total soluble solid measurement handled as shown in table 4. The enzymatic breakdown of higher polysaccharides like starches and pectins into simple sugars during ripening is thought to be the cause of the rise in TSS (Hussain et al. 2008).

III 4. Effect of calcium treatments during vegetation period on Fruit firmness

Fruit firmness is considered one of the most important criteria concerning eating quality of apples and meeting demands in this respect represents a big challenge for the industry.
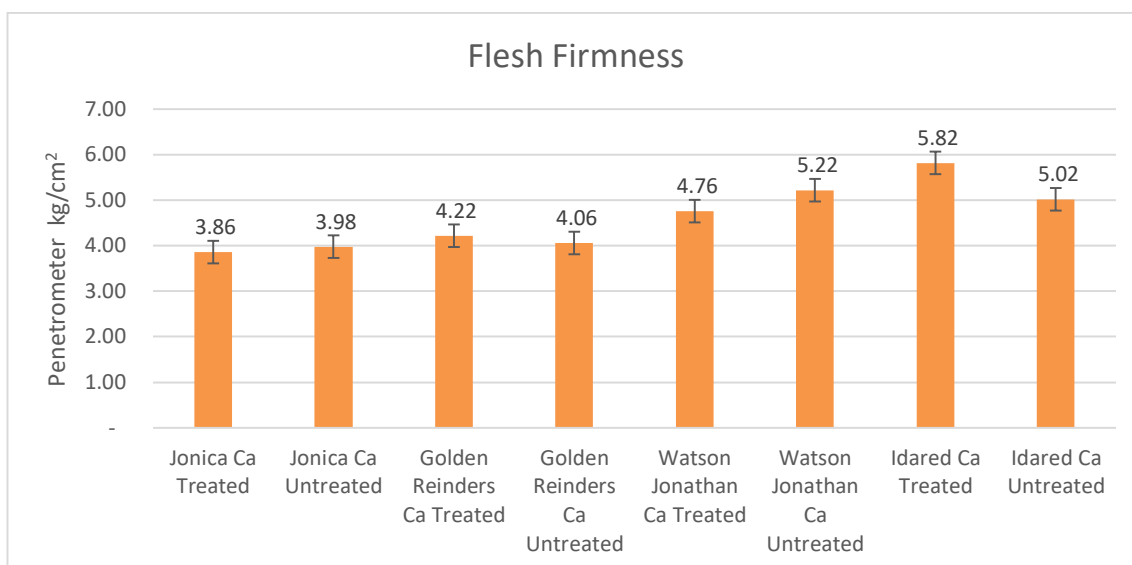
Figure 5 Effect of Calcium spraying in the orchard on the firmness of apple fruits (kg/cm2)

Analysis of variance results for the majority of apple cultivars revealed a very positive influence on apple fruit firmness, however it was not statistically significant (P 0.05). This effect was caused by calcium treatment during the vegetative stage. According to these results, calcium application contributes to lowering fruit respiration rate, which slows down fruit ripening and maintains fruit firmness. Similar results have been reported by (White and Broadley 2003). As seen form the figure 5 'Idared' calcium treated showed the highest flesh firmness but not significantly different from the control. The lowest flesh firmness is observed by 'Jonica' calcium treated. Calcium interacts with pectin acids to preserve cell wall integrity, which helps explain why calcified samples retain their stiffness (Conway et al. 1991).

VI. Conclusions

Our results confirmed that calcium treatments have positive effect on yield and fruit quality during storage. Lower respiration rates in calcium-treated samples during the vegetative season suggest that calcium treatment slowed metabolism. This study has unequivocally demonstrated that Ca concentrations have a positive impact on the majority of the examined parameters. In comparison to lower rates and control treatments, the treatment with Ca and the fruit's concentration of it resulted in the greatest firmness, TSS, TA, and weight reduction.

V. Recommendation

There is a chance of getting a higher record of the researched parameters because the majority of them exhibit a rising tendency in the flesh firmness, Brix, thus Ca should be researched further.

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Virtual pandemonium

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Inefficient, confused movement due to lack of control. A state where random effects occur without direction, order, or planning. Lots and rapid activity and movement - without benefit or result.
The meaning of pandemonium in the real world can be expressed this way. However, if we think of the meaning of pandemonium in the virtual world, the phrase could be the same, but moreover, it often leads to profit or to a result that is also criminal. I would like to draw attention to and illustrate these cases.

Keywords: Virtual, pandemonium, web, crime, anonymity

I. Introduction

Inefficient, confused movement due to lack of control. A state where random effects occur without any direction, order, or planning. Lots and rapid activity and movement - without benefit or result. The meaning of pandemonium in the real world can be expressed this way. However, if we think of the meaning of pandemonium in the virtual world, the phrase could be the same, but moreover, it often leads to profit or to a result that is also criminal. According to the latest figures, around 4.7 billion people around the world are active online, and the number of people on social networking sites alone has increased by 13% in the past year.[1] According to the expert, most of these new users have come to online platforms without any prior knowledge. This provides an excellent breeding ground for threats, as illustrated by the sudden surge in attacks. In many areas of IT-related crime - such as data phishing, hacking, cyberbullying, sharing photos and videos without consent, misuse of images and audio recordings, violation of privacy rights, sharing of private conversations, correspondence - violation of privacy of correspondence, - some perpetrators use their high level of technical expertise to commit crimes that are not primarily intrusive or not necessarily colloquially associated with hackers: coders, program and virus writers, etc., who ultimately appear in the criminal world more as IT offenders. The aim of the research is to present the development of the Internet and the resulting crimes, with a special focus on children and minors. In terms of the structure of the study, it is essential to analyse the development of the World Wide Web, which is the main place where crime is committed, and the relationship and attitudes of children and adolescents towards the internet.

I.1. Method

I focused on the main stages of the research activity when designing and conducting a case study, and the crucial stages are: defining, selecting the case or cases; searching and processing the relevant scientific literature; making a conclusion and the aim is to raise awareness as a preventative tool to the new light on criminal behaviour.

I.2. Technological progress

The historical perspective is essential for this study, as it is possible to draw broad conclusions about the nature and foundations of the World Wide Web. The world's first personal computer was launched on 12 August 1981. The personal computer was a stand-alone, small machine operated by a single person (known as the end-user) with its own keyboard, processor, RAM, and monitor (as opposed to being operated by a central computer terminal).[2] As a revolutionary electronic information processing machine, the computer took off, and the internet reached 300 million consumers in just four years. The internet, which now connects the whole world and billions of users, is the result of US military research. In 1958, in response to the launch of the Soviet satellite Sputnik-1, the Defence Advanced Research Projects Agency (DARPA) was created as a research arm of the US Department of Defence to strengthen and develop US military technology. In 1969, the agency's research activities led to the creation of the first mainframe network, ARPANET (Advanced Research Projects Agency

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1 https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/-S.Dixon-Number of global social network users 2017-2027[download date: 2022.10.26.]

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Network).[3] The network is joined by UCLA, Stanford Research Institute, the University of California Santa Barbara, and the University of Utah[4]. Joining the Pentagon was followed by other universities and research institutes around the world. Their joining was vital, as it was seen as a way of reforming education in universities and creating the potential for a revolutionary new way for research institutions to facilitate and simplify the research. In 1973, Europe joined the ranks of the network with the networking of a radar station in Norway and University College London. EUNET, the first European Internet service, was established in Britain, Denmark, and Sweden in 1982.[5] The internet has become a worldwide network connected to the World Wide Web (WWW) through technology.

II. A child's life is like a sheet of paper on which all who pass by leave their mark

II.1.Global network accessibility

Nowadays, more than five billion people are accessing the internet.[6] The advent of the global network has opened up new spaces for people to communicate with each other.[7] The society of the 21st century can access online social media, spaces, blogs, and social networking sites such as Facebook, Instagram, Twitter, Tumblr, Pinterest, YouTube, TikTok, etc., almost without any limits and very effortlessly. The internet is crucial for accessibility, and a great advantage of the internet is that it is affordable for society and even free of charge in various institutions and cafés. After just a few clicks, we have access to a vast, extensive global network where information can be transmitted easily, quickly, and permanently. According to Andrea Kraut, László Kőhalmi, Dávid Tóth study of the Digital Dangers of Smartphones, crimes committed on the internet or with the internet can be directed against anyone, but most of them - to obtain or manipulate data or for financial gain.[8] TikTok is a Chinese video-sharing social networking service founded in 2011 by Beijing-based ByteDance. The app was first launched in 2017 for iOS and Android platforms in markets outside China. ByteDance first launched Douyin, the predecessor of TikTok, in the Chinese market in September 2016. It became available in the US after merging with musical.ly on 2 August 2018. The app allows users to create short music and synchronization videos from 3 seconds up to 3 minutes. The app is popular in Asia, the US, and other parts of the world.[9]

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II.2.Contact with children and minors on the internet

The protection of minors is also a priority in the Hungarian legal system. The Constitution enshrined among the fundamental rights of children the right to the proper mental and physical protection of their protection and care necessary for their physical, mental, and moral development.[10]The Constitution clearly guarantees the fundamental rights of children, as follows in the Article XVI (1) „Every child shall have the right to the protection and care necessary for his or her proper physical, intellectual and moral development."[11]While the protection and welfare of children and juveniles contain the relevant legal provisions for the protection of children's rights and the protection of children's liberty, the protection of children is an active responsibility of the family and the State, which can be implemented through the internet. In accordance with the Impact of coronavirus pandemic crisis on technologies and cloud computing applications study, I have to strongly agree that the epidemiological situation has led to an increase in the popularity of online games and communication platforms, which can easily bring children into contact with people they did not know before. It is important for parents and children to be informed and critical about their online interactions. Parents and children should be informed about the exact mechanics of the algorithm and the extent to which it can influence the content that is made available to the user.

II.3. Younger Users Policy

As has already been mentioned in connection with the global network accessibility chapter, Tik Tok is the audio-, dancing-, video-based app where children and youths spend enormous of time on it.[12] Moreover, the use of digital tools has not only transformed the way individuals think, but has also had an impact on the entire legal system.[13] Using the platform contains several risks as:

- Addiction/overuse: on social media platforms infinite, personalized content with many users too much time. The actual addiction is depression, anxiety, guilt, insomnia and eating disorders can be accompanied by.[14]
- Oversharing: many people share overly private, intimate information about their lives, and among this information, much sensitive content.
- Age-inappropriate content: for children content harmful to children; dangerous challenges, vulgar lyrics, difficult to process sexual content or aggressive language or aggressive content.
- Body image distortion: particularly common in the younger generation (13-21), the "perfect" and highly anxiety, depression and anxiety caused by seeing heavily filtered images body image disturbance. Many people have unrealistic

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10 91 Decision AB 304/B/1995

11 Established by Article 3 of the Ninth Amendment of the Fundamental Law of Hungary, effective as of 23 December 2020.

12 https://wallaroomedia.com/blog/social-media/tiktok-statistics/ [download date: 2022.10.26.]

13 Tóth D., - Projics N. : The Digitalization of the Hungarian Justice system. GUBERNACULUM ET ADMINISTRATIO 25. : 1. pp. 229-248.

14 Galán A.: The development and prevalence of Internet addiction. A summary of national and international research findings Metszetek scientific journal. pp. 316-327

- expectations of themselves expectations of themselves, leading to a steady decline in self-esteem.
- Online challenges: distinguishing between innocent or dangerous challenges, but the latter can be physical or physical or psychological danger, such as laundry detergent or blackout (choking oneself in the blackout) challenge. In many cases, children are deterred from dropping out fear of missing out (FOMO). As parents, it is worth paying attention your child's mood, behaviour and safe emotional emotional environment and talk to them about the risks.
- Behavioural and participation risks: risks of other communities media platforms, online risks may also be present. As with other social networking sites, online harassment, cyberbullying, grooming, and unsolicited contact can also occur. The risk is particularly high for young people aged 9-10 children who post live videos and share content videos.

This raises a legitimate question for guardians and parents as to how safe this platform is for their child while using the app; in particular, to what extent does it complies with the legal rules in force? Through this risk approach, accordingly, I would like to highlight the Tik Tok application youngster user's policy. As follows to the Tik Tok company policy, the user must be at least 13 years old to use the platform. If anyone believes that there is a user who is below this minimum age, they need to contact them using the details set out in the "Contact Us" section. Certain features are unavailable to provide users younger than 18 with an age-appropriate experience. We could also read further details at the Help Centre in relevance. If the users are the guardian of a teen, our Guardian's Guide contains information and resources to help to understand the Platform and the tools and controls that a teen can use, including "Family Pairing" features. In my opinion, the scope of the directive is not very comprehensive in terms of the legal protection of children and minors.

II.3. Brief case study

Although the company includes guidelines for child protection, such as: "Family Pairing" features, the company offers caregivers a reasonable way to set limits with their children and teenagers on TikTok. Parents can use the Family Pairing features to link their TikTok account with their teen to allow different content and privacy settings. In fact, the company encourages caregivers to discuss the Family Pairing features with their teens and explain why they decided to turn them on. Without enabling Family Pairing, parents can also help teens enable the app's screen time offerings, including Daily Screen Time and Restricted Mode, which are protected by a password set by the parent or guardian. These settings may vary by region and app version. It is important to consider, however, that these features do not ensure that the algorithm only generates content within the application that contains child content. Moreover, while the company is supposed to strive to ensure the safety of the use of the app by children and minors, there are still cases where the life, health, and physical safety of children and minors are endangered, or death may occur. The following American case is representative of the nature, extent, harm and loss that algorithm-generated content can cause and generate in light of the need to develop appropriate prevention protocols and policies. On 28 June 2022, Christina Arlington Smith, individually and as successor-in-interest to Lalani Walton Deceased, and Heriberto Arroyo, individually and as successorin-interest to Arriani Jaileen Arroyo, Deceased, and Christal Arroyo, Individually Plaintiffs have led a claim by the Superior Court of California, Country of Los Angeles against the TikTok Inc. Bytedance Inc. and does 1-100, inclusive

defendants. The Complaint was for wrongful Death and Survival Action (Strict Liability, negligence and violation of the California consumer legal Remedies Act, Cal. CIV. 1750, et seq.) 22STCV21355 numbered case.[15]According to the case the deadliest "TikTok Challenge" being promoted by TikTok's algorithm is the "TikTok Blackout Challenge," which encourages users to choke themselves with belts, purse strings, or anything similar until passing out. Tragically, Lalani Walton and Arriani Jaileen Arroyo are just the latest in a growing list of children harmed in that case because of TikTok's algorithm and promotion of the harmful challenges to kids.

III. Summary

According to the Hungarian Criminal Code „A person who is given custody of a minor to maintain and care for the person in his charge - including the domestic partner of the parent or guardian exercising parental custody, as well as any parent who has been deprived of the right of parental custody, if living in the same household or in the same home with the minor - and who seriously violates the obligations arising from such duty and thereby endangers the physical, intellectual, moral or mental development of the minor, is guilty of a felony punishable by imprisonment between one to five years."[16]However, a person shall be liable for such behaviour only if his act is not does not constitute a more serious threatening offence. The legal definition of abuse of the child is not straightforward, despite the wide range of case law available in this area. The diversity of the offences and the need to consider whether an act is already endangering the child's development or not reaching a level that is not criminally assessable and socially acceptable, make it difficult to assess.[17] According to Ágnes Solt the safe development and protection of children and minors is in all our interests. That is why the law punishes behaviour that endangers minors.[18] Although, a special circumstance shall be considered to arise where the danger to a minor or child is committed on the internet. The detection more complex for the investigating authorities on the internet surfaces. The safety of children is a primary value to be protected. If someone witnesses any abuse, it should be reported it to the authorities immediately.[19] Whether it is physical injury, psychological terror or sexual abuse, or it had happened on the online environment, it is important to report it in time. There are several ways to do this. The most obvious is to report it to the police, which is the general investigative authority.[20] You can also contact child welfare services, where they will start a professional investigation and refer the case to the appropriate authorities. Their signalling system makes it easier to identify and follow up cases. The law identifies several members of the child protection signalling system, and citizens can also report cases, in addition to the authorities and educational and health institutions. So this shows the importance of recognising and reporting situations of danger, which is the responsibility of all of us.

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15 Case No. 22STCV21355 Complaint, Electronically filed by Superior Court of California, County of Los Angeles on 06/30/2022 09:23

16 Hungarian Criminal Code Abuse of a minor Act C of 2012 Article 208

17 Domokos A.: Child victim protection in the online world In: Homicskó- Á. O. (ed.) Social challenges of technological development and its impact on legal regulation. (Budapest, Hungary.: Károli Gáspár Reformed University Faculty of Law and Political Sciences (2022) Conference paper (Book excerpt) 208 p. pp. 71-88., 18 p.

18 Solt Á.: How do we put children at risk? Changes in final cases from 2015 to 2020. Prosecutors' Journal. 29: 1-2 pp. 87-95., 9 p.(2022)

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91 Decision AB 304/B/1995

Hungarian Constitution [Article 67(1)]

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Results of the research project focusing on the geospatial analysis and modelling of the settlement structure of Paks (Tolna county, Hungary) from Antiquity to the 20th century

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Results of the research project focusing on the geospatial analysis and modelling of the settlement structure of Paks (Tolna county, Hungary) from Antiquity to the 20th century. The project aims to utilize geospatial tools to present manmade changes at Paks and its close environment based on archaeological, archival, topograhic evidence and sources. The present article outlines preliminary results of the project concerning the Roman age.

Lussonium, situated at Paks-Dunakömlőd is one of the best researched Roman forts in Hungary. Excavations on the area began in 1969 and apart from a few breaks are still ongoing. The settlement encircling the fort, the vicus was thought to be much smaller, but proved to have encompassed the hillocks surrounding the fort. The cemetery of the settlement and the fort has long eluded researchers. In 2008, following a report from local citizens, several graves were identified on the hill located NW of the Roman fort. 118 graves were excavated so far, yet stray finds documented both south of and north of the site, indicate, that parts of the cemetery may yet be discovered. Almost all of the graves pertain to the Late Imperial era, alongside a few Late Bronze age and Early Iron age urn burials and an unrelated Neolithic dwelling. Burial rites vary greatly: approximately 80% were basic pit graves, but the rest were sepulchres of various types, reflecting the richness of Roman funerary customs. The first phase of the research focused on reconstructing the Roman cemetery on the level of archaeological features, by synthetising different archaeological and historical data and structuring it into a database, which enables purposeful queries of relevant attributes, such as periods, grave types, burial rites, building function, circumstances of excavation. This autumn we conducted a magnetometric survey on the area of the fort. Numerous archaeological features have been identified on the resulting raster image, although their purpose and dating is unclear, considering the extensive history of the site (newly discovered features could belong to a Bronze age ringwork, a Roman fort or a Kuruc palisade fort).

Keywords: Roman archeology, GIS, Roman settlements, limes, Lussonium

I. Introduction

The Bottyánsánc is a loess plateau located above present-day Dunakömlőd, near Paks in Tolna county, Hungary. It is merely two-hundred-and-twenty meters long and rather slender, now at places only thirty meters wide. This small surface is home to a Roman frontier fort (Lussonium) and the Kuruc palisade and ringworks, after which the hillock was named. Archaeological research on the area began over fifty years ago. Already in 1969, a truly sensational find was recovered from the civil settlement (or vicus) located near the Roman fort, a pair of military diplomas[1]. In the following years, excavations led by Zsolt Visy focused on the fort to determine the positions of walls and defensive ditches. From 1987 onwards, excavations were conducted under the aegis of the predecessor of the Archaeology Department at the University of Pécs joined by the Municipal Museum of Paks. Research yielded the discovery of the gates, walls and certain internal buildings of the limes fort[2]. Over the years, excavations became increasingly extensive, and relics from other eras were discovered alongside Roman layers, as ringworks were constructed on the loess plateau both in the Bronze age and during Rákóczi's War of Independence (in the early 18th century). Unfortunately, during the middle of the past century, a large chunk of land fell away from the eastern slope of the plateau into the Danube that runs along its foot, thus the full extent of neither the fort nor the ringworks is known.

II. History and goals of the research programme

The present research focuses on the settlement history of Paks and its environs from the Roman age up to the Modern townscape. Relying on archaeological, archival, topograhical and literary evidence and utilizing geospatial tools, the project aims to identify manmade changes in Paks and its immediate surroundings through the ages. Prof. Ernő Wallner was the first to thoroughly analyze the settlement plan of Paks in 1958. His study has been a cornerstone of Paks-related research ever since. It begins with a short historic overview, followed by detailed social and economical data concerning the municipality during the early years of state socialism, illustrated with thematic maps.
[3]. So far, the sole attempt at providing a written and topographic overview of the spatial changes in settlement structure was published by Gyula Rosner, a former director of the Municipal Museum of Paks, in 2000[4]. In this brief, merely three-page long article, he summarized settlement history and presented the results of the related monograph published in 1976. The article included the sketch of a hand drawn map by the author, displaying changes in the town center and settlement core from archaeological periods up to the 19–20th centuries. The monograph on Paks was edited by Imre Németh[5]. It is a detailed work and a rich repository of relevant data, that still serves as an indispensable manual for researchers concerned with the town and its history. However, this volume was published in 1976 and due to numerous preliminary archaeological excavations and field observations, we have a much more complete knowledge on the settlement structure of Paks in Roman, Medieval and Early Modern times. The present research project encompasses the settlement history of Paks from the Roman era until the modern townscape. Its goals are multifold: on the one hand, it will create a series of printed and digital (interactive) maps that present townscape changes thematically throughout history. On the other hand, relying on up-to-date archaeological, historical and topographical data, it will track human activities in the region, and present the means by which inhabitants shaped their environment.

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[1] Visy 1970
[2] Visy 2010
[3] Wallner 1958 p. 1-26.
[4] Rosner 2000 p. 103-106.
[5] Németh 1976

The first research phase is based on a joint analysis of archaeological and historical data, and aims to establish a reconstruction of the Roman settlement detailed enough to include archaeological features, together with a database enabling purposeful queries of different attributes (such as periods, grave types, burial rites, building functions, circumstances of excavation etc). Nowdays an archaeological park covers the area of the fort. The present-day village of Dunakömlőd, resettled during the 18th century overlaps the Roman vicus. Parts of the cemetery are periodically cultivated. In the past fifty plus years, excavations techniques and their technological background developed considerably, and as a result, the documentation of the site is quite varied, ranging from handwritten excavation logs and manual drawings on paper to high precision CAD files.

One may argue, that research on the rural settlement encircling the fort, the so-called vicus, has been somewhat neglected in favour of the fort itself. Nonetheless, in the middle of the 1990s the Municipal Museum of Paks began to investigate[6] it and by now we have more information on the settlement, which once housed the families of soldiers and staff providing services for them. Archaeological features were discovered north of the fort, including a dwelling (which was the findspot of the military diplomas in 1969), storage pits, kilns and traces of a stone edifice. Economic features were documented south and west of the fort, the latter on a low hill[7]. Following early excavations, the vicus was thought to be much smaller, yet research conducted on the westward hillock revealed, that it was much more extensive and covered all the hills encircling the fort. Such large settlements are not uncommon amongst Pannonian vici and it seems clear, that Lussonium also possessed an extensive vicus.

III. Results of the research conducted on the Roman cemetery and its geospatial analysis

Although research on the Roman fort Lussonium began as early as 1969, the related cemetery was discovered only forty years later. The cemetery of the settlement and fort has long eluded research, although Zsolt Visy and Zsuzsanna Váradyné Péterfi both sought for it at Dunakömlőd during the late 1980s and during the 1990s respectively. Finally in 2008, several graves were unearthed on the hill located northwest of the Roman fort. Following a series of metal detecting surveys, a series of excavations began in 2009. Two burial chambers were discovered in the early years of the excavation campaign, surrounded by numerous burials characteristic to the era, despite the fact, that we could only conduct excavations on a single, ten meter wide property lot. Later on, we expanded our research to neighbouring lots and other parts of the hillock. So far we know of one-hundred-and-eighteen graves on the area, although stray finds discovered during fieldwalks both south and north of the excavated site suggest, that the cemetery definitely more extensive. These parts of the cemetery have not been excavated so far.

Almost every grave we uncovered, pertained to the Late Roman Imperial period[8], although we discovered finds and features from other periods, including Late Bronze age or Early Iron age urn graves, an Iron Age burial and a Neolithic dwelling. Approximately eighty percent of excavated burials were simple pit graves, however, the rest was made up of so-called burial edifices, which reflect the variety of Roman funerary customs[9].

We summarized the results of the excavation conducted on the Roman cemetery and recorded data from one-hundred-and-eightteen graves in our database. It is now possible to query this data and generate thematic maps using arbitrary criteria. Grave goods were also recorded in the GIS

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[6] Beszédes 1998, 1999, 2000
[7] Szabó 2019a
[8] Szabó 2018
[9] Szabó 2019b

database, so it is possible to query finds too. The evaluation of the Roman vicus and fort are still in its early phase, this map displays the data we have processed so far. In 2011 a geodesic survey was conducted on the area of the fort, which has been great help in our endeavours. In 2019, the museum acquired a GNSS reciever and has been conducting surveys of its own. From the early 2010s up until recently, excavations focused on the cemetery and no major archaeological work was conducted on the fort. In 2021 and 2022 a new excavation campaign began on the fort, led by Ferenc Fazekas, an archaeologist at the Municipal Museom of Paks. This slide presents the current state of research on the fort and its surroundings, with excavations conducted in different periods distinguished by different colours. This is the first modern spatial summary on the Roman fort since a paper-based draft made by Zsolt Visy in 2011.The next research phase is scheduled to Spring 2023 and it will be focusing on recording the archaeological features of the Roman fort.

Figure 1: The location of the Roman auxiliary fort, vicus and cemetery of Lussonium at Paks-Dunakömlőd
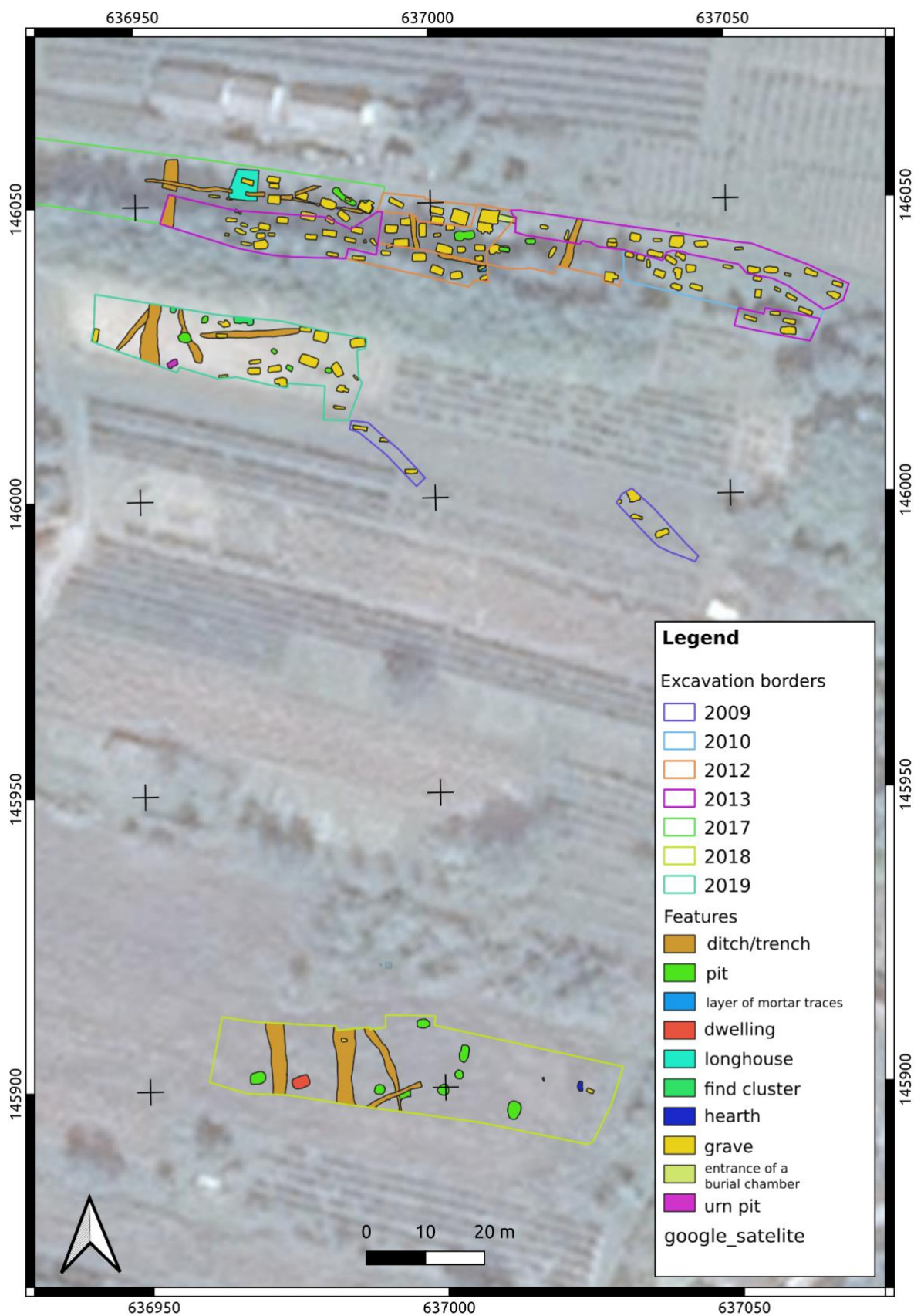
Figure 2: GIS mapped features of the Roman cemetery

IV. Geophysical survey conducted on the Roman fort Lussoniumin October 2022

We used a Gem Systems GSM 19 Overhauser magnetometer[10], two sensors and a base station. The distance between the sensors was seventy-five cm. We took measurements every half second in parallel profiles. In the resulting raster, the distance between lines was seventy-five cm and the distance between points was sixty to sixty-five cm. We used raw data to interpolate a 0.25 meters by 0.25 meters large raster to visualize our results.

We marked out three survey areas, trying to cover as much surface as possible, while keeping in mind the line of trees that run along the midline of the plateau. At survey area No. 1, we excluded three survey sections near the line of trees, and assigned null values to them during processing. These excluded sections appear as a homogenous grey strip located towards the middle of the intrepretative image. The surveyed surface was two-thousand-and-sixty square meters.

During evaluation, we measure the magnetic susceptibility of the surroundings of the sensor at different points of the survey raster. We use these measurements to identify traces of human activity in the vicinity of individual points, such as pits, walls, burnt surfaces or subsequent human interference etcetera. We applied to the raster image a color scale corresponding to magnetic susceptibility, to demonstrate the interpretability of raw data.

The evaluation of the raster image revealed three major types of anomalies, complemented with a few additional observations based on the survey image. Negative anomalies indicate a rocky environment, debris or human interference. Positive anomalies signify layers containing small pieces of metal or burnt substances (such as CBM or pottery). The close vicinity of such anomalies almost certainly indicates the presence of an archaeological feature.

Numerous archaeological features have been identified on the resulting raster image, although their purpose and dating is unclear, considering the extensive history of the site (newly discovered features could belong to a Bronze age ringwork, a Roman fort or a Kuruc palisade fort). We also observed a few more regular anomalies, with linear and perpendicular features, which could be interpreted as edifices pertaining to the Roman fort. A Ground-penetrating radar survey could effectively clarify our findings. However, our excavations revealed, that identifying the ruinuous traces of mined-out walls is truly an ardous task.

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[10] We hereby express our gratitued to Róbert Lóki (associate research fellow of the Archaeological GIS Laboratory at the Pázmány Péter Catholic University) and Teréz Viola Tőkés (student of archaeology).

Figure 3: Evaluation of the magnetometer survey conducted on the area of the Roman fort (Map by Róbert Lóki)

IV. Conclusion

This article presents the latest results concerning the Roman period of our research focusing on the settlement history of Paks. So far our work yielded two significant outcomes: on the one hand, we concluded the GIS mapping of the excavated features of the Roman cemetery and a related database. On the other hand, we conducted a magnetometer survey on the area of the fort. Presently, our database holds 174 archaeological features, including 118 graves. Records contain textual and typological description of these graves, such as grave type, orientation, disturbances etc. which may be queried. Through the QField application, the database is accessible during fieldwork, providing a substantial aid for future research.

The magnetometer survey revealed several archaeological features, yet their role and chronology is still unclear, due to the complex nature of the site.

Three features seem more orderly, than the rest. Their rectangular layout suggests, they were buildings, plausibly internal edifices of the Roman fort. A GPR survey and excavation would be in order, to confirm these findings. Although previous excavations revealed, that the walls of the fort were thoroughly mined in subsequent periods for stone, and are mostly exploited.

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A nyugdíjfolyósító elektronikus információs rendszerek kiberbiztonsági kihívásai

Szabó Zsolt Mihály, *Óbudai Egyetem Biztonságtudományi Doktori Iskola*

A gazdasági és társadalmi élet egyik legfontosabb értéke az információ. Az információ a szervezetek számára erőforrás, hatékony működés alapja, szervezet vagyona és gyakran termék, áru is. A kiberbiztonság ritkán merül fel bennünk, mint probléma, pedig valójában mindennapjainkat behálózza az információk védelmében tett tevékenységek sorozata. Vannak folyamatok, amelyek kritikus helyzetbe hozhatják a szervezetet működését probléma esetén, ha nem megfelelően szabályozzák a szervezet működését, és hatékonyan nem készül fel a szervezet egy esetleges katasztrófa elhárítására.

Komplex informatikai biztonsági rendszer tervezésének ma már elengedhetetlen feltétele a kockázat alapú korszerű tervezési módszerek ismerete és alkalmazása. Mint a tanulmányból kiderül, nagyon sok szempontot kell figyelembe venni, hogy ezt a típusú munkát siker koronázza. A tervezés minden esetben meglehetősen intézmény specifikus, az adott intézmény szerkezetét, adottságait messzemenően figyelembe kell venni.

E tanulmány az információbiztonsági irányítási rendszer elméleti tervezési folyamatának hátterét és gyakorlatát foglalja össze és egy esettanulmányon keresztül példát mutat egy lehetséges megvalósításra.

Kulcsszavak: kiberbiztonság, pedagógiai kiberbiztonsági keretrendszer, információbiztonság, irányítási rendszer (IBIR), GRC rendszerek, fenyegetettségek és kockázatok

I. BEVEZETÉS

A koronavírus-járvány óta háromszorosára növekedett a kibertámadások száma. A támadások automatizációja és a hibrid munkavégzés terjedése miatt egyre nagyobb a digitális vállalati szolgáltatások fenyegetettsége is. Világszerte egyre növekszik a kiberbűnözés által okozott kár, 2020-ban ez 5,5 milliárd dollárt volt az Európai Bizottság (European Commission , EC) szerint (EC, 2021), tavaly pedig már 6,9 milliárd dollárra nőtt az amerikai Szövetségi Nyomozó Iroda (Federal Bureau of Investigation , FBI) adatai szerint (FBI, 2021). Ez még a globális 85 ezer milliárd dolláros GDP-hez mérten is szabad szemmel látható összeg, a 9 ezer milliárd dolláros globális információtechnológia piachoz mérten pedig elgondolkodtató. A számszerűsíthető károk gyorsan emelkednek, 2015 és 2020 között megduplázódtak. A kiberbűnözés egyre növekszik az angol Nemzeti Csalások Felderítő Iroda (National Fraud Intelligence Bureau, NFIB) jelentése szerint az Egyesült Királyság mintegy 2,4 milliárd fontot veszített csalás és számítógépes bűnözés miatt 2021-ben (NFIB, 2020). A technológia folyamatosan fejlődő képességei, valamint a világjárvány, amely valószínűleg súlyosbította a meglévőket A rendszerek és folyamatok gyengeségei azt jelentik, hogy a kiberbiztonság minden vállalkozás és szervezet számára aggodalomra ad okot. A Carnegie Alapítvány által üzemeltetett „A pénzügyi intézményeket érintő kiberincidensek ütemezése" című honlap, melynek az idővonala 2007 óta mintegy 200 pénzügyi intézményeket célzó kiberincidenst rögzít, és szűrhető ország, régió, év, hozzárendelés, incidens típusa és szereplőtípus szerint. A pénzügyi rendszert fenyegető kiberbiztonsági kockázatok megnőttek az elmúlt években, részben azért, mert a kiberfenyegetettség helyzete romlik; különösen a pénzintézeteket célzó, államilag támogatott kibertámadások egyre gyakoribbak, kifinomultabbak és pusztítóbbak. 2017-ben a G20-ak arra figyelmeztettek, hogy a kibertámadások „aláhashatják a biztonságot és a bizalmat, és veszélyeztethetik a pénzügyi stabilitást". A veszélyhelyzet alakulásának nyomon követése érdekében a Carnegie Technológiai és Nemzetközi Ügyek Programja frissíti ezt az idővonalat a BAE Systems Cyber Threat Intelligence egységétől származó adatokkal. Az idővonalat nem úgy alakították ki, hogy minden egyes incidenst lefedjen, hanem inkább betekintést nyújtson a kulcsfontosságú trendekbe és a fenyegetettség időbeli alakulásába. A nyugdíjrendszerek természetüknél fogva nagy mennyiségű személyes adatot tárolnak a tagokról, és ez a kiberbűnözők közös célpontjává teszi őket. Ezeket az adatokat gyakran a rendszer nevében egy harmadik fél adminisztrátor tárolja, nem pedig a rendszer közvetlen ellenőrzése alatt. Ennek megfelelően a nyugdíjrendszer vagyonkezelőinek ébernek kell lenniük a kiberbiztonsági intézkedések szükségességére, és aktív lépéseket kell tenniük a rendszerüket és tagjait érintő kockázatok megelőzése és csökkentése érdekében. Az alábbiakban bemutatunk néhány kulcsfontosságú megfontolást és intézkedést a nyugdíjrendszer vagyonkezelői és pénzügyi folyósítói számára. Magyarországon az állami nyugdíjvagyont korábban a Országos Nyugdíjfolyósítási Főigazgatóság, jelenleg pedig az Magyar Államkincstár kezeli és üzemelteti a hozzá kapcsolódó folyósítási rendszereket.

II. A NYUGDÍJRENDSZEREK KIBERBIZTONSÁGI ALAPELVEI

Ahhoz, hogy megértsük, miért is fontos a kiberbiztonsággal foglalkozni a mindennapok során, szükséges tisztázni a kibertér jelentését. Maga a kibertér különböző informatikai hálózatok infrastruktúráját tartalmazza, amelyek egy virtuális térben kapcsolódnak össze és mindenki számára elérhetőek, hozzáférhetőek. Itt valósul meg az online adatforgalom, kommunikáció, valamint az elektronikus adatok is itt tárolódnak (Kovács, 2018). A kiberbiztonság a kibertér védelmével foglalkozik, célja egy átlátható és megbízható virtuális környezet kialakítása, valamint a kibertérben létező kockázatok csökkentése gazdasági, jogi, vagy technikai eszközöket alkalmazva.

II.1. A KIBERBIZTONSÁGI KERETRENDSZER

Jelen korunkban az informatika áthatja az életünket és az üzletet egyaránt. A modern informatikai, IoT (a dolgok internete) és mobil eszközök egyre inkább áthatják a mindennapjainkat a munkában és a magánéletben. Technológiai eszközökkel hatékonyabbá tehetők az üzleti folyamatok, amelyek során rengeteg adat keletkezik. Ezek felhasználása innovatív üzleti modellek alapja, de nem szabad megfeledkezni megfelelő védelmükről sem, hiszen különféle rendszereket alkalmazunk, és változatos szereplőknek adunk hozzáférést a rendszereink bizonyos részeihez. Így a kibervédelemmel foglalkozni manapság már nem csupán biztonsági megfontolás, sokkal inkább a vállalati szintű hatékonyságnövelés része.

1. táblázat: Sebezhetőségek a kibővített OSI-modell egyes rétegeiben

Réteg	Sebezhetősége
1. Fizikai	Vágja le a vezetéket; stressz-felszerelés; lehallgatás
2. Adatkapcsolat	Zaj vagy késleltetés hozzáadása (fenyegeti a rendelkezésre állást)
3. Hálózati	DNS és BGP támadások; hamis bizonyítványok
4. Szállítási	Man in the middle
5. Együttműködési	Session splicing (Firesheep); MS SMB
6. Megjelenítési	A titkosítás elleni támadások; ASN-1 elemző támadás
7. Alkalmazás	Malwarek, a sebezhetőségek kézi kihasználása; SQL injekció; puffer túlcsordulás
8. A szervezet:	A. Bennfentes támadások; rossz képzés vagy politika; B: Gyenge kiberbiztonsággal rendelkező alvállalkozók; információmegosztás hiánya; C: Gyenge műszaki vagy szervezeti színvonal.
9. A kormány:	A hatékony kiberbiztonságot tiltó törvények (például a titkosítás korlátozása); gyenge törvények az IoT vagy más biztonságra vonatkozóan; B: Rosszul megtervezett kiberbűnözési törvények (például a biztonsági kutatások tiltása); C: Túlzott kormányzati megfigyelés.
10. Nemzetközi	A: Nemzetállami kibertámadások; B: Nincsenek működőképes nemzetközi megállapodások a kibertámadások korlátozására; C: A kiberbiztonságot gyengítő nemzetek feletti jogi szabályok (például néhány Nemzetközi Távközlési Unió javaslata).

Forrás: Swire [2018], saját szerkesztés [2022]

A megfelelően felépített biztonsági architektúra jelentős mértékben hozzájárul az üzleti folyamatok eredményességéhez, növeli az ügyfelek és partnerek bizalmi szintjét, támogatja az átlátható és ezáltal könnyen kezelhető információs infrastruktúra működését és nem utolsó sorban egy kockázatokkal arányos biztonsági rendszer megvédi a vállalat értékteremtő folyamatait és eszközeit a kibertérben. A jól kialakított és végrehajtott kibervédelmi stratégia nem csak arra fókuszál, hogy megakadályozza a támadásokat, hanem biztosítja a megfelelő hozzáférést a partnerek számára, és hatékony reakciót definiál a bekövetkezett esetekre is.

A „pedagógiai kiberbiztonsági keretrendszer" (Pedagogic Cybersecurity Framework, PCF), amelynek koncepciója és célja segítséget nyújtani a kiberbiztonság nem csak programozási, üzemeltetési témaköreinek kategorizálásához és oktatásához (Swire, 2018). Mindehhez a hétrétegű eredeti OSI protokoll modellt újabb további 3 absztrakciós réteggel egészíti ki (szervezeti, kormányzati, nemzetközi) azonosítja a kapcsolódó főbb kockázatokat és sérülékenységeket (lásd 1. táblázat). A PCF segítségével sokkal részletesebben tudjuk értelmezni a kibertérből jövő támadásokat, és sokkal könnyebben tudunk felkészülni rájuk, és kockázatokkal arányos védelmet kialakítani.

II.2. SZABÁLYOZOTT KIBERBIZTONSÁG

A nyugdíjrendszerek nagy mennyiségű személyes adatot és vagyont tárolnak, ami csalók és bűnözők célpontjává teheti őket, ezért lépéseket kell tennie tagjai és vagyonának megfelelő védelme érdekében, beleértve a „kiberkockázat" elleni védelmet is. Ez egy olyan kihívás, amelyre minden megbízottnak, felelősnek és rendszerüzemeltetőnek figyelembe kell vennie, függetlenül a rendszerük méretétől vagy felépítésétől. A kiberkockázat tág értelemben úgy definiálható, mint a rendszer vagy annak tagjai elvesztésének, megszakításának vagy károsodásának kockázata az információtechnológiai rendszerei és folyamatai meghibásodása következtében (OH, 2016). Tartalmazza az információkkal (adatbiztonsággal) és az eszközökkel kapcsolatos kockázatokat, valamint mind a belső kockázatokat (pl. a személyzet részéről), mind a külső kockázatokat (pl. hackelés).

Az Információbiztonsági Irányítási Rendszer (IBIR) az átfogó irányítási rendszernek (vállalatirányítási rendszernek) az a része, amely egy, a működési kockázatokat figyelembe vevő megközelítésen alapulva kialakítja, bevezeti, működteti, figyeli, átvizsgálja, fenntartja és fejleszti az információvédelmet (Muha - Szádeczky, 2014). Az irányítási rendszer magában foglalja a szervezeti felépítést, a szabályzatot, a tervezési tevékenységeket, a felelősségi köröket, a gyakorlatot, az eljárásokat, a folyamatokat és az erőforrásokat. Napjainkban az információ biztonsága, a hivatalok, cégek és magánszemélyek adatainak védelme egyre inkább központi kérdéssé válik. Az adatok véletlen vagy szándékos kompromittálódása, sérülése, ellopása vagy rossz szándékú manipulálása komoly erkölcsi károkat okoz az érintett szereplőknek, elvesztik jó hírnevüket, megrendül a bizalom a szolgáltatásban. E mellett sokszor további, anyagi, kártérítési és büntetőjogi következményei is lehetnek az adatok helytelen kezelésének (pl. GDPR). Az információbiztonsági rendszer lehetséges előnyei:

- az információ mindig rendelkezésre fog állni,
- az adatok sértetlenek maradnak,
- védett lesz a külső és belső fenyegetések ellen,
- a vezetőség tisztában lesz a kockázatokkal, és felkészült lesz az esetleges veszélyekre,
- a munkatársak elkötelezetté válnak az információbiztonság iránt és másként tekintenek majd a rendszer szerepére.

A bevezetett intézkedéseket általában két nagy területre lehet bontani:

- Adatvédelem: a személyes adatok gyűjtésének, feldolgozásának és felhasználásának korlátozásával, az érintett személyek védelmével foglalkozik. Ennek eszközei lehetnek jogi szabályok, eljárások, de akár technológiai eszközök is.
- Adatbiztonság: Az informatikai/információs rendszerek adataihoz való illetéktelen hozzáférést meggátló szabályozások, folyamatok és megoldások.

Lépéseket kell tennie kiberellenállóságának növelése érdekében – képesnek kell lennünk felmérni és minimalizálni egy kiberincidens bekövetkezésének kockázatát, de azt is, hogy egy incidens bekövetkezésekor helyreálljon. Együtt kell működni az összes érintett féllel (beleértve a szervezeten belüli funkciókat, a harmadik fél szolgáltatókat és a munkáltatókat), hogy meghatározza a kockázatkezelési megközelítést. A belső ellenőrzések a rendszer adminisztrálására és kezelésére szolgáló rendszerek, intézkedések és eljárások, a rendszer adminisztrációjának és irányításának nyomon követésére, valamint a rendszer eszközeinek biztonságos őrzésének és biztonságának biztosítására szolgáló rendszerek és intézkedések.

MUNKAPROGRAM SZAKASZOK	HÓNAPOK											
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Politika meghatározása	▓											
2. Az információbiztonság irányítás területének és tárgyának meghatározása		▓										
3. Kockázat felmérés			▓									
4. Kockázat elemzés				▓								
5. Kockázatok kezelése						▓						
6. A szabályozási célok rögzítése és szabályozási dokumentumok (IBSZ) elkészítése és bevezetése							▓	▓	▓			
7. Képzések és oktatások	▓										▓	
8. Rendszer próbaműködés										▓	▓	
9. Audit, tanúsítás												→

1. ábra: IBIR kiépítésének lépései Forrás: KIB25 [2008]

Az 1. ábra az Információbiztonsági Irányítási Rendszer (IBIR) kiépítésének a ptojekt szakaszait és lépéseit mutatja. A projekt során meg kell különböztetni bevezetési és fenntartási költségeket, mivel Információbiztonsági Irányítási Rendszer (IBIR) bevezetése után évenkénti felülvizsgálati tanúsítást kell kötelező jelleggel végeznie a szervezetnek, hasonlóan a bevezetés során, melyek további ráfordítással jár. Jó esetben a bevezetési költségeknek csak töredéke a felülvizsgálati tanúsítások költségei, de mindenképpen tervezni szükséges velük.

A projekt mindig egyensúlyozás a projektháromszög csúcsai között. A három tényező az idő a költség és hatókör általában egymás ellen szoktak hatni. Minden projekt az idő, a pénz és a hatókör háromszögét igyekszik egyensúlyban tartani – nem lehet módosítani az egyiket anélkül, hogy legalább az egyiket ne kellene módosítani a másik kettő közül.

A vagyonkezelőknek és a rendszergazdáknak a törvény szerint megfelelő belső ellenőrzéseket kell létrehozniuk és működtetniük annak biztosítására, hogy rendszerük a rendszerszabályokkal és a törvényekkel összhangban működjön. A szabályozó beavatkozhat, ha a vagyonkezelők és a rendszerkezelők nem teljesítik feladataikat a megfelelő belső

ellenőrzések működtetésében. A belső kontrollok kulcsfontosságú része a kockázatok azonosítására, értékelésére és kezelésére szolgáló folyamatok bevezetése. A kiberellenállóság kiépítése egyszerűen csak egy példa a megfelelő belső ellenőrzések működtetésére.

Az Információbiztonsági Irányítási Rendszer (IBIR) tanúsítható rendszer. A tanúsítás alapján az ISO/IEC EN 27001:2013 (magyar fordításban: MSZ ISO/IEC 27001:2014) szabvány alkotja. Az információbiztonsági irányítási rendszer szabványa hasonlóan a minőségirányítási rendszer szabványához az ISO/IEC EN 9001:2015 (magyar fordításban: MSZ ISO/IEC 9001:2015) egy szervezet vezetésének munkáját segítő menedzsment eszköz, és kockázat-értékelésen alapuló szabvány (Szádeczky, 2014). Megoldást mind az adott szervezet, mind pedig partnereik szempontjából az információbiztonsággal kapcsolatos kockázatok és folyamatok hatékony menedzsmentje jelent. A cégek üzleti szempontból kritikus információi, informatikai rendszerei, valamint folyamatai biztonságának elősegítésére szolgál az ISO/IEC 27001 szabvány szerinti Információbiztonsági Irányítási Rendszer (IBIR) kiépítése és működtetése (Szádeczky, 2014). Az információbiztonsági irányítási rendszer alapja, hogy az információbiztonság szemszögéből a kockázatértékelésének módszerével felülvizsgálja a vállalat működési kockázatait, majd a számára túl nagy kockázatot jelentő területeken (megengedhető vagy elviselhető kockázati határ feletti) kockázatos esetén új biztonsági intézkedéseket vezet be. Végül mind a kockázatkezelés alkalmazását, mind a bevezetett védelmi intézkedéseket bevonja a vállalatirányítási rendszere működésébe, azaz menedzseli: működésüket megtervezi, ellenőrzötten működteti, folyamatosan figyeli eredményeiket és hatékonyságukat, majd dönt a javításról, fejlesztésről.

A kiindulási pont a vállalat tevékenységének, folyamatainak, kapcsolódó adatainak és adatbázisainak (információinak) átvilágítása során a védendő információk felmérése, majd azok alapján az ún. "információs vagyon" meghatározása. Az információs vagyon jelenti mind a védendő információkat, mind azokat az adathordozókat és eszközöket, ahol azok előfordulnak, illetve amelyeken keresztül azok hozzáférhetők. Ennek az információs vagyonnak a fenyegetettségeit méri fel a kockázatelemzés módszere, becsülve minden egyes lehetséges fenyegetettségre a bekövetkező kár nagyságát és annak bekövetkezési valószínűségét. Ily módon összevethető minden egyes fenyegetettség általi lehetséges káresemény információbiztonsági kockázata a vállalat működése számára. Ezek alapján - az elviselhető kockázati szint feletti kockázatok esetére - határoz meg a vállalat védelmi intézkedéseket. A kockázatkezelés alkalmazásának legfontosabb előnyei:

- A teljesség (minden "információs vagyontárgy") vizsgálata miatt nem maradhat ki gyengepont.
- Egyenszilárdságú védelem kialakítása.
- A védelmere fordított erőforrások leghatékonyabb felhasználása.

Az információbiztonsági irányítási rendszert kiépíteni szándékozó vállalatok nagy része nem rendelkezik a szükséges biztonsági elemekkel, illetve a meglévők nagyrészt alkalmatlanok a feladatuk ellátására. A kiépítendő rendszerelemek létrehozása - a rendszer összetettségénél fogva - egyszerre sok szakma ismeretét, tudását igényel(het)i (pl. őrzés védelem, személyi biztonság, informatikai védelem, folyamatok és eszközök védelme, katasztrófa-elhárítás, ...). Ezért is, valamint a kockázatelemzés szakszerű és érdemi lefolytatása miatt célszerű hozzáértő és (ezeken a területeken) tapasztalt tanácsadók segítségét igénybe venni. A rendszer kiépítésekor sokszor azok a tanácsadó vállalkozások tudnak érdemben és hatékonyan segíteni, amelyeknek az információbiztonság különböző területein már jelentős működtetési tapasztalataik vannak. Érdemes arra is odafigyelni, hogy - a minőségirányítási rendszerek felkészítésénél általánosan alkalmazott - "egy személy a felkészítő" modell itt általában nem hatékony, mert kevés az olyan tanácsadó, aki egyszemélyben mind az irányítási

rendszerekhez, mind a bevezetendő eljárások mindegyik kapcsolódó szakmai területén egyidejűleg szakértő lenne.

III. KIBERKOCKÁZAT-ÉRTÉKELÉSI CIKLUS

Minden szervezet legalapvetőbb üzleti folyamatai az adatokra és az információra épülnek. Olyan kulcsfontosságú adatokról beszélhetünk, mint az ügyfelek és partnerek bizalmas adatai, a különféle termékekkel, szolgáltatásokkal, megrendelésekkel és belső folyamatokkal, valamint számos egyéb, a cég know-how-jával összefüggő információk. Üzleti kockázatot jelent, ha bármilyen zavar keletkezik ezeknek az információknak a minőségével, mennyiségével, pontosságával vagy elérhetőségével kapcsolatban. A különböző fenyegetettségek származhatnak kívülről és a szervezeten belülről is, lehetnek véletlenszerűek vagy szándékosak. A védelmi rendszer hiányosságai révén az információ sérülhet, nyilvánosságra kerülhet, illetéktelenek férhetnek hozzá, vagy akár meg is semmisülhet. Mindezek alapján az adatok sértetlenségének, bizalmasságának és rendelkezésre állásának biztosítása, a sérülések és az adatvesztés elkerülése kritikus fontosságú feladat. Míg sokan ismerik az adatbiztonsággal kapcsolatos kötelezettségeket és a személyes adatok megsértése fogalmát az adatvédelmi törvényben, a kiberkockázat sokkal tágabb fogalom. A kiberkockázat a szervezet informatikai rendszereit és adatait összességében fenyegeti, függetlenül attól, hogy személyes adatokról van szó, vagy sem. A kiberkockázat jelentheti az adatok (beleértve a személyes adatokat) elvesztését vagy megsemmisülését vagy az azokhoz való jogosulatlan hozzáférést, vagy olyan támadást, amely veszélyezteti a rendszerhez való hozzáférést vagy annak használatát. Míg a szervezetek gyakran az előbbire összpontosítanak, egy kulcsfontosságú rendszer elleni támadás ugyanilyen káros lehet.

A nyugdíjrendszerek számára a kibertámadások gyakori típusai, amelyekre figyelni kell venni. A kibertámadások számos formát ölthetnek, többek között:

- Ransomware támadások – amikor a támadó a rendszereket vagy az adatokat titkosítja, hogy váltságdíjat kényszerítsen ki

- Adatlopás – amikor az adatokhoz jogosulatlan hozzáférés van kitéve, például a rendszerben lévő javítatlan sérülékenység kihasználásával és másolat készítésével

- Kiberlopás és csalás – ahol az adatokat személyazonosság-lopásra vagy csalásra használják fel

- Elosztott szolgáltatásmegtagadás – amikor egy rendszert vagy webhelyet tartós támadás éri, amely leállítja annak használatát.

A támadások több oldalról is származhatnak. Egy szervezet célpontja lehet egy harmadik fél vagy egy szélhámos alkalmazott, aki kárt vagy fennakadást akar okozni, vagy egy sérülékenységet kihasználni igyekvő opportunista „meghajtó" támadás formáját öltheti. A támadások kihasználhatják az ismert sebezhetőségeket (például egy ismert probléma javításának vagy frissítésének elmulasztása), lehetnek „nulladik napi" támadások (korábban ismeretlen biztonsági rést kihasználva), vagy bennfentes fenyegetést olyan személytől, aki legitim rendszer-hozzáférést használ. jogosulatlan célokra. A nyugdíjrendszer elleni kibertámadás messzemenő következményekkel járhat. Elkerülhetetlenül fennáll a hírnév kockázata (mind a rendszer, mind a szponzoráló munkáltatója számára), valamint az üzletmenet-folytonossági megfontolások – ha egy rendszer kibertámadást szenved, a megbízottak és a rendszergazdák azt tapasztalhatják, hogy a tagok adatai sérülnek. Ha a tagok adatai nem érhetők el, a rendszer nem tud működni, és a nyugdíjrendszer vagyonkezelői kártérítési követelésekkel szembesülhetnek az érintett tagoktól, és viselhetik a tisztítás

költségeit. A vagyonkezelőknek mérlegelniük kell a szabályozási kötelezettségek elmulasztásának következményeit is. Az adatvédelmi jogszabályok számos követelményt írnak elő mind az adatbiztonság, mind a harmadik fél adatfeldolgozók igénybevétele tekintetében. Ha ezek nem teljesülnek, a szabályozó hatóságok, például az információs biztosi hivatal intézkedhetnek, és jelentős pénzbírságot szabhatnak ki. Még abban az esetben is, ha a nyugdíjrendszer működtetésének napi feladatait delegálják vagy kiszervezik, a vagyonkezelők továbbra is a végső felelősséget viselik a szabályozási követelményeknek való megfelelésért, beleértve a rendszeradatok és eszközök kibertámadásokkal szembeni védelmét.

A megbízottaknak mindenekelőtt meg kell győződniük arról, hogy azonosították, megértették és elemezték azokat a kockázatokat, amelyekkel a rendszerük kiberbiztonsági szempontból szembesül. A kiberkockázatnak részét kell képeznie minden rendszeres kockázatértékelésnek vagy kockázati nyilvántartásnak, amelyet a rendszer adminisztrációja részeként végeznek. A rendszerek fontolóra vehetik egy vagyonkezelő kinevezését, aki vállalja az elsődleges felelősséget a kiberkockázatokkal kapcsolatos gondolkodásért. Ellenőrző intézkedéseket kell bevezetni a számítógépes támadások kockázatának és következményeinek mérséklésére, például naprakész vírusirtó szoftverek használata, a rendszerek rendszeres javításának és frissítésének biztosítása, az eszközök és az e-mail tartományok biztonsága, valamint az adatok biztonsági mentése. A megbízottaknak adatvédelmi incidens naplót is kell vezetniük, és gondoskodniuk kell annak rendszeres felülvizsgálatáról. Átfogó politikákat kell bevezetni minden olyan területen, amely hatással van a kiberbiztonságra, beleértve az adatvédelmet, a közösségi médiát és az otthoni munkát.

Erős irányítási struktúrákat kell kialakítani, és a megbízott tudását és megértését naprakészen kell tartani. A megbízottaknak ismerniük kell a kiberbiztonsággal kapcsolatos feladataikat, és rendelkezniük kell egy kiberincidens-elhárítási tervvel, amelyhez kibertámadás esetén fordulhatnak. Ennek meg kell határoznia egy incidensre reagáló csapatot, amely magában foglalja a szakmai tanácsadókat (jogi, igazságügyi informatikai és jó hírnév-kezelés) és a rendszer kulcsfontosságú szolgáltatóinak megfelelő képviselőit. A tervet incidens esetén gyorsan végre kell hajtani. A vagyonkezelőknek mérlegelniük és értékelniük kell a rendszerüzletággal kapcsolatos külső felekkel, például a rendszeradminisztrációs szolgáltatókkal, valamint az IT-rendszerek és egyéb szolgáltatások szolgáltatóival (például nyomtatással, teljesítéssel vagy fizetések kezelésével) fenntartott kapcsolatukat. Ez magában foglalja a megfelelő gondosságot a harmadik fél információbiztonsági intézkedéseinek és a kibertámadásokkal szembeni sebezhetőségének, valamint az ennek kezelésére szolgáló belső folyamatoknak a felmérésére, valamint arra, hogy egy ilyen esemény hogyan érintené a rendszert. A megbízottaknak felül kell vizsgálniuk a harmadik felekkel kötött szerződéseket, hogy azonosítsák a hiányosságokat, és szükség esetén tárgyaljanak a védelemről. A vagyonkezelőknek azt is biztosítaniuk kell, hogy az adatfeldolgozókkal kötött szerződéseik megfeleljenek az adatvédelmi jogszabályok követelményeinek, és hogy olyan eljárások álljanak rendelkezésre, amelyek biztosítják, hogy az adatfeldolgozó eleget tegyen kötelezettségeinek. Az üzletmenet-folytonossági és a kiberincidens-reagálási terveket rendszeresen tesztelni kell, hogy biztosítsák ezek hatékonyságát. A tanulságokat be kell építeni a tervek és eljárások frissítésébe. A vagyonkezelőknek azt is meg kell érteniük, hogy milyen biztosítási fedezettel rendelkeznek (beleértve a speciális kiberbiztosítást is), hogy fedezzék a számítógépes támadásokkal kapcsolatos költségeket.

IV. IRÁNYÍTÁSI, KOCKÁZATI ÉS MEGFELELŐSÉGI RENDSZEREK

A korábban ismertetett keretrendszert, szabványi megfelelést és kockázatkezelést tudják támogatni „GRC" rendszerek (irányítás, kockázat és megfelelés), melyek emberek, folyamatok és technológia kombinációja, és célja:

- Kockázati és megfelelőségi célkitűzések meghatározása, végrehajtása és kommunikálása az egész szervezeten belül;
- A kockázatok, ellenőrzések és kulcsfontosságú teljesítmények teljes és következetes azonosítása, mérséklése;
- A külső és a belső szabályzóknak való megfelelés ellenőrzésének összehangolása.

Az „irányítás" által biztosítani kell, hogy a szervezeti tevékenységek, mint például az IT-műveletek irányítása, összhangban legyenek a szervezet üzleti céljainak támogatásával. Ha létrehoztunk egy „vállalati biztonsági és megfelelőségi csoportot", amely kulcsfontosságú személyzetből áll, és akiknek az a feladata, hogy azonosítsák a biztonsági és megfelelőségi aggályokat a szervezeten belül, és az első védelmi vonalként működjenek a megfelelő biztonsági és megfelelőségi testtartás javításában. Ez a csapat a vezetőnek jelent A csapat olyan munkaerőből áll, aki jól ismeri a jogi keresztszabályozást, a szabályzatot, a termékeket és az IT-t, és érdekelt az öt bizalmi elv – a titoktartás, az integritás, a rendelkezésre állás, az adatvédelem és a biztonság – biztosításában, tekintettel a törvényes adatvédelemre. , megfelelőség és szabványok az egész szervezeten belül. A vezető az adat- és információvédelmi tisztviselőre ruházta a felelősséget és a jogkört az információbiztonság és a megfelelőség felügyeletére és fenntartására a szabványnak és az iparág legjobb gyakorlatainak megfelelően.

A „kockázatkezelés" által gondoskodunk arról, hogy a szervezeti tevékenységekkel kapcsolatos kockázatokat (vagy lehetőségeket) olyan módon azonosítsák és kezeljék, amely támogatja a szervezet üzleti céljait. IT-kontextusban ez egy átfogó informatikai kockázatkezelési folyamatot jelent, amely beépül a szervezet vállalati kockázatkezelési funkciójába. Erőteljes kockázatkezelési eljárást és folyamatot hoztunk létre és vezettünk be, és időszakos kockázatértékelést végzünk a szervezet számára az ISO 27001 szabvány keretrendszerén alapuló alapmódszert használva, kiegészítve egyéb szabványokkal, mint például az ISO 9001 vagy a PCI DSS legjobb gyakorlataira. Nem vagyunk hajlandók olyan kockázatot vállalni, amely sértheti az ügyfelek bizalmát. Ezen túlmenően minden olyan kockázat, amely azzal fenyeget, hogy nem felelünk meg az előírásoknak és szabványoknak. A kockázatkezelési terv magában foglalja a prioritások meghatározását, értékelését és megfelelő kontrollok végrehajtását a kockázatszámítás szerint.

A „megfelelés" biztosítása által gondoskodhatunk arról, hogy a szervezeti tevékenységek a rendszereket érintő jogszabályoknak és szabályozási követelményeknek megfelelő módon működjenek. IT-kontextusban ez azt jelenti, hogy gondoskodni kell arról, hogy az informatikai rendszer és az adatok ezekben a rendszerekben találhatók, megfelelően használják és biztosítják. Létrehozunk egy formális megfelelési szabályzatot és eljárást, amely a megfelelés azon szempontjait tárgyalja, amelyeket be kell tartani és teljesíteni kell az információbiztonsági irányelveink tekintetében. Ez a szabályzat foglalkozik a vonatkozó törvényi jogszabályokkal és szerződésekkel kapcsolatos jogi és megfelelőségi követelményekkel is és jogszabályi kötelezettségeinket, amelyeket be kell tartanunk annak érdekében, hogy megvédjük dokumentumait, nyilvántartásait és eszközeit, megakadályozva ezzel az információfeldolgozó eszközökkel való visszaélést. Az ilyen erőfeszítések segítenének a kívánt információbiztonsági és adatvédelmi pozíció kialakításában, fenntartásában és fenntartásában, összhangban a stratégiai üzleti tervünkkel, a legjobb gyakorlatok, szabványok és elvek alapján. Elkötelezettek vagyunk amellett, hogy üzleti tevékenységét jogszerűen és a megfelelési kötelezettségeivel összhangban végezzük. A szerződéses és a szervezet működési követelményeihez kapcsolódó összes vonatkozó szabályozási és jogszabályi követelményt azonosítottunk, és azokat rendszeresen meghatároztuk, dokumentáltuk és frissítettük. Az törvényes/jogi/szabályozó hatóságok által

előírt vagy külföldi eredetű nyilvántartásokat, amelyek megfeleléséért felelősek vagyunk, védeni kell a természetes okok által okozott szándékos vagy nem szándékos károsodástól.

Mindig arra kell törekednünk, hogy megvédjük ügyfeleink, alkalmazottaink és harmadik felek személyes adatainak védelmét. Az üzleti titkok nyilvánosságra hozatala csak a törvényi/szerződéses/szabályozási/jogi követelményeknek megfelelően történhet. Az ilyen információkkal szemben mindig védeni kell, mivel kiszivárogtatnak, vagy bármely érdekelt féllel szándékosan vagy tudatlanul kereskednek. Ha a naplókat a szerződéses/szabályozási/törvényi/jogszabályi előírás szerint kell vezetni, ezeket meghatározott ideig fenn kell tartani. Az üzleti, jogi és/vagy szabályozási célból már nem szükséges adatokat vagy nyilvántartásokat biztonságosan kell megsemmisíteni. A szellemi tulajdonjogokkal (például szerzői jog, szoftverlicenc, védjegyek, formatervezési jogok és egyebek) fennálló eszközök használatára vonatkozó jogi korlátozásokat be kell tartani. A felhasználóink, tanácsadóink és vállalkozóink által a szervezet javára generált vagy biztosított szoftverprogramok, dokumentációk és egyéb információk szellemi tulajdonjogai a szervezet tulajdonát képezik.

Egy GRC rendszer kiválasztása, bevezetése és üzemeltetése egy szervezet számára sok előnnyel és nehézséggel is járhat. Az első olyan terület kiválasztása, amelyre összpontosítani kell, azt jelentheti, hogy a szervezeti vagy a vállalati GRC átfogó képétől az azt lehetővé tevő informatikai keretrendszerig, majd a keretrendszer néhány kezelhető aspektusáig kell elmélyedni. Példa erre a kapcsolódó informatikai keretalkalmazások hozzáférési, biztonsági és egyéb ellenőrzések bevezetése a szervezeti vagy az üzletpolitikák támogatására. Mivel a hozzáférés és a biztonság elválaszthatatlanul kapcsolódik az identitáshoz, az identitáskezeléssel automatizálható vezérlők jó kiindulópontot jelentenek.

V. ÖSSZEFOGLALÁS

Napjainkban az állami szervezeteknek mindennapi ügymenetük biztosítása mellett kiemelten kell foglalkozniuk az információbiztonság megteremtésével, mivel a bizalmas információk megőrzése, sértetlenségének és rendelkezésre állásának biztosítása alapvető fontosságú. Az információbiztonságra ma már nem csupán prevencióként kell tekintetni, hanem sokkal inkább átfogó stratégiai kérdésként. A vállalatok az információbiztonsági feladatokat sokszor az informatikai biztonság megteremtésével próbálják lefedni, ám ez nem egytényezős feladat, hanem egy komplex, sokszereplős folyamat eredménye. Az IT-biztonság tehát egyre erősebben üzletmenet folytonossági kérdéssé válik, mind a vállalatok, mind az állami szolgáltatások esetében. Emiatt a megfelelő IT-biztonsági hozzáállás egyre inkább a proaktív megközelítés: a védelmi lehetőségek és a kockázatok gondos felmérése, a felhasználók megfelelő szintű felhatalmazása és a folyamatos képzés, néhány a legfontosabb intézkedés közül, amit meg kell tenni a hatékony IT-biztonság érdekében.

A vagyonkezelő szervezet vezetői és rendszerüzemeltetői felelősséggel tartoznak a rendszer információinak és eszközeinek biztonságáért. A szerepeket és felelősségeket egyértelműen meg kell határozni, ki kell osztani és meg kell érteni. Hozzá kell férnie a szükséges készségekhez és szakértelemhez ahhoz, hogy megértse és kezelje a rendszerében a kiberkockázatot. Biztosítania kell a kiberkockázat megfelelő megértését: a rendszer kulcsfontosságú funkcióit, rendszereit és eszközeit, „kiberlábnyomát", sebezhetőségét és hatását. A kiberkockázatnak szerepelnie kell kockázati nyilvántartásában, és rendszeresen felül kell vizsgálnia. Gondoskodnia kell arról, hogy elegendő ellenőrzés álljon rendelkezésre a rendszerek, folyamatok és emberek körüli kiberincidensek kockázatának minimalizálása érdekében. Meg kell győződni arról, hogy minden harmadik fél beszállító megfelelő ellenőrzéseket vezetett be. Bizonyos szabványok és akkreditációk segíthetnek a

vagyonkezelőnek és beszállítóinak bizonyítani a kiberellenállást. Rendelkezésre kell állnia egy incidens-reagálási tervnek az incidensek kezelésére, és lehetővé teszi a rendszer működésének gyors és biztonságos újraindítását. Gondoskodnia kell arról, hogy megértse harmadik fél beszállítóinak incidensre adott válaszfolyamatait. Tisztában kell lennie azzal, hogy az eseményeket hogyan és mikor kell jelenteni A vagyonkezelőnek és másoknak, beleértve a szabályozó hatóságokat is. A kiberkockázat összetett és folyamatosan változó, és dinamikus választ igényel. Ellenőrzéseit, folyamatait és választervét rendszeresen tesztelni és felül kell vizsgálni. Rendszeresen értesülnie kell a számítógépes kockázatokról, incidensekről és ellenőrzésekről, és megfelelő információkat és útmutatást kell kérnie a fenyegetésekről.

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A kognitív térérzékelés felmérésének előnyei a középiskolai földrajzoktatásban (A hátrányos helyzet mentális térképei magyar középiskolások körében)

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Jelen vizsgálat célja annak felmérése, hogy a középiskolai oktatás a 21. században mekkora hangsúlyt fektet a leszakadó térségek gazdasági, társadalmi és területi jellegzetességeinek megismertetésére. A vizsgálat kérdőív segítségével egy megyeszékhely és egy kisváros 160 középiskolásának általános konceptuális és topográfiai ismereteit tárja fel Magyarország hátrányos helyzetű térségeivel kapcsolatban. A vizsgálat célja a földrajztanításban alkalmazható oktatásmódszertani javaslat megfogalmazása a kapcsolódó kerettantervi és érettségi követelményi célok hatékonyabb érvényesülése érdekében. Bebizonyosodott, hogy a tárgyalt témakör oktatása sem az alap-, sem a középfokú képzés során nem kap elég hangsúlyos szerepet. A fogalmi, illetve a topográfiai hiányosságok enyhítésének egyik lehetséges módszere a hátrányos helyzetű térségeknek a földrajzi tananyagban külön fejezetként való kezelése, illetve a követelményrendszerben hangsúlyosabb megjelenítése. A tanítási szünetekben szakmai jellegű kirándulások, terepbejárások, illetve hátrányos helyzetű térségek látogatása révén további lehetőség nyílna arra, hogy a tanulók betekintést nyerjenek a társadalmi-gazdasági egyenlőtlenségek területi jellegzetességeibe.

Kulcsszavak: kognitív térkép, hátrányos helyzetű térség, földrajzoktatás

I. Bevezetés

Az 1960-as évektől – a behaviorista geográfia megjelenésétől – a társadalomtudományi szakirodalomban a figyelem a szubjektív térérzékelés irányába terelődött: egyre több írásmű jelent meg a kognitív térképezés témakörében. Az ezzel foglalkozó szakirodalmak értékelő elemzése során nyilvánvalóvá vált, hogy a jelen írásban vizsgált korosztály (14–16 év) kognitív térérzékelésével kapcsolatban számos probléma fellelhető: a diákok tudása mögött kevés földrajzi tartalom áll, és inkább tükrözi a sztereotípiákat, ezen felül a földrajz tananyag nem járul hozzá kellő mértékben a diákok térképzetének kialakulásához (Lapon et al., 2019; Bajmócy & Csíkos, 1997; Csapó & Cs. Czachesz, 1993; Makádi, 2012; Alpek & Tésits, 2017; Kiss & Bajmócy, 1996).

Magyarországon az első, jelen kutatási témával foglalkozó kezdeményezés Cséfalvay Zoltán nevéhez köthető, viszont maga a kognitív térképezés, mint fogalom egy amerikai pszichológushoz, Tolmanhoz fűződik (Lakotár, 2004), aki állatkísérletek segítségével a mentális folyamatok megértését tűzte ki célul (Tolman, 1948). Az egyén kognitív térképe az idő folyamán folyamatosan alakul, hiszen új tapasztalatokkal, ismeretekkel bővül, a világhoz való viszonyulása szüntelenül változik (Lakotár, 2012). Az iskolákban a földrajz az a tantárgy, amely magával az objektív térrel foglalkozik. Ezeken az órákon nyílik lehetőség arra, hogy a diákok térbeli intelligenciáját fejlesszék, és ezeket a folyamatosan változó térképeket földrajzi tartalommal gazdagítsák.

A jelen tanulmány Magyarország hátrányos helyzetű térségeire fókuszál, azt vizsgálva, hogy a középiskolai oktatás a 21. században mekkora hangsúlyt fektet a leszakadó térségek gazdasági, társadalmi, területi hatásaira. Ugyan a Nemzeti Alaptanterv (NAT) magában foglalja a kérdéskör iskolai oktatását, viszont mindezt csak felületesen tartalmazza: *„A földrajz tanításának célja, hogy a tanuló: a térbeli-társadalmi egyenlőtlenségek által kiváltott folyamatok földrajzi okainak és lehetséges társadalmi-gazdasági következményeinek bemutatása révén empatikus, problémamegoldó gondolkodást, illetve az érvek ütköztetésére épülő vitakultúrát alakítson ki. A nevelési-oktatási szakasz végére a tanuló: bemutatja a területi fejlettségi különbségek okait és következményeit Magyarországon, megfogalmazza a felzárkózás lehetőségeit"*(Magyarország Kormánya, 2020).

Hazánkban a rendszerváltozást követően elkerülhetetlen a témával foglalkozni, mivel hosszútávon és markánsan kirajzolódnak a hátrányos helyzetű és a gazdaságilag fejlett térségek közötti egyenlőtlenségek. Ha e társadalmi, gazdasági és területi problémák súlyosságát nem tárgyaljuk meghatározott életkorban (legkésőbb a középiskolában), akkor a felnövekvő geográfus nemzedék tagjaiban nem tudatosul kellő mértékben annak társadalmi-gazdasági kohéziót lassító jellege. Ez által, a fent ismertetett egyenlőtlenségek a jövőben ahelyett, hogy mérséklődnének, még inkább kiéleződhetnek (Enyedi & Pál, 2021; Kapusi, 2021; Molnár, 2022; Schlachter & Teperics, 2022).

A jelen dolgozat általános célja, hogy feltárja a középiskolások körében a hátrányos helyzettel, illetve a válságtérségekkel kapcsolatos általános konceptuális és topográfiai ismereteket, annak érdekében, hogy a földrajztanításban alkalmazható oktatásmódszertani javaslatot fogalmazzon meg a kapcsolódó kerettantervi és érettségi követelményi célok hatékonyabb érvényesülésére. A jelen tanulmányban ez az általános cél az alábbi részcélokon keresztül valósul meg:

- ▪ A dolgozat feltárja a kognitív térképekkel kapcsolatos vizsgálati fókuszok változását a rendszerváltozástól egészen napjainkig annak érdekében, hogy láthatóvá váljon a jelen dolgozat céljainak illeszkedése a korábbi vizsgálatok logikai ívébe.

- A kutatás rávilágít arra, hogy melyek azok a tényezők, amelyek leginkább hozzájárulnak a diákok kognitív térképének alakulásához.
- Célja továbbá az írásműnek, hogy feltárja a hátrányos helyzetű térség fogalmi elemeinek megjelenését a középiskolások körében, illetve időbeli változását a képzés kezdetétől annak lezárásáig. Különös figyelmet fordítunk a személyes tapasztalatok, a preferenciák/diszpreferenciák meglétére, változására általánosan, majd tematizált szempontrendszer alapján.
- A vizsgálat részcélja továbbá, hogy betekintést nyújtson a középiskolások területfejlesztési szempontból kedvezményezett térségeivel, a válságtérségekkel kapcsolatos topográfiai ismereteibe.
- További részcél a szaktanári álláspontok megismerése, hogy ezekből is kiindulva megalapozott javaslatot fogalmazzunk meg a módszertani fejlesztések irányába.

II. Anyag és módszer

A vizsgálat primer, illetve szekunder forrásokra egyaránt épül. A szekunder források között említendő a szakirodalmi másodelemzés, valamint a dokumentumelemzés (tantervek, oktatáspolitikai stratégiák).A legnagyobb hangsúly azonban a primer forrásokra helyeződött, amelyeknek egyik részét egy kérdőíves felmérés, másik részét egy, a földrajzoktatásban érdekelt pedagógusokkal készített interjú adta.

A szekunder források legnagyobb hányadát a szakirodalmak feltérképezése jelentette, amelyek kiválasztásának fő szempontja volt a geográfia, illetve a földrajzoktatás hangsúlyos megjelenése a kognitív térképekkel foglalkozó kutatásokban. Szociológiai, illetve geográfiai szempontú kutatások egyaránt tárgyát képezték az értékelő elemzésnek, amelyek egyik célja a módszer elmélettörténetének feltárása, valamint gyakorlati alkalmazásának bemutatása. A szekunder források közül a dokumentumelemzés, elsősorban a Nemzeti alaptantervre (Magyarország Kormánya, 2020), az erre épülő kerettantervekre (Oktatási Hivatal, 2020), a földrajztankönyvekre, valamint a földrajzatlaszokra fókuszál, mivel a térképzet fejlesztésében a földrajz, mint tantárgy kiemelt szerepet játszik.

A 2019 szeptemberében, illetve 2020 áprilisában végzett felmérés célcsoportja a bonyhádi, valamint a pécsi középiskolákban tanuló 9. és 10. osztályos diákok voltak, többségük a felmérés időpontjában 14–16 éves volt. Azért erre a két településre esett a választásunk, mert a településhierarchiában elfoglalt helyet fontos differenciáló tényezőnek tartottuk. Eszerint egy megyeszékhely (Pécs), valamint egy kisváros (Bonyhád) került kiválasztásra, különböző iskolatípusok (szakközépiskola, gimnázium) bevonásával. A jelen korcsoport kijelölésében meghatározó volt, hogy a földrajzoktatás (mint az köztudott) a középiskola első két évfolyamán történik. Jelen pontnál fontosnak tartjuk kiemelni, hogy ezen évfolyamok nem ugyanazon osztályok voltak, tehát a vizsgálat nem kísérte végig egy adott korosztály fejlődését, hanem a kutatásban résztvevő iskolák egy elsős, illetve egy másodikos osztálya került bevonásra. A kilencedikes tanulók év elején, a tizedikesek a félév második felében töltötték ki a kérdőíveket, ugyanis arra voltunk kíváncsiak, hogy milyen tényezők járulnak hozzá a diákok kognitív térképének kialakulásához a két év elteltével: a diákok tudása a fenti szakirodalmak következtetéseihez hasonlóan a médiából, sztereotípiákból és saját tapasztalatból eredeztethető, vagy döntően objektív földrajzi tartalom áll válaszaik mögött. A vizsgálat iskolatípusokra – településenként egy-egy gimnáziumra, illetve egy-egy szakközépiskolára –bontva világít rá a földrajzoktatás, jelen dolgozat címében megjelölt elemének hatékonyságára.

A kérdőíveket a tanulók tehát négy középiskolában töltötték ki: a bonyhádi Petőfi Sándor Evangélikus Gimnáziumban, illetve a Perczel Mór Szakközépiskolában, valamint Pécsett a

PTE Babits Mihály Gyakorló Gimnáziumban és a Baranya Megyei SZC Pollack Mihály Technikum és Kollégiumban. A feladat végrehajtására az iskolák osztálytermében került sor, amelyre egy egész tanóra rendelkezésre állt. A kérdőívek kitöltése szaktanár felügyelete mellett történt, amelyet előzőleg az adott iskolák igazgatója engedélyezett.

A kitöltők kiválasztása az intézményekben véletlenszerűen történt. A pedagógusoknak előzetes egyeztetést követően kiosztottam 20-20 darab kérdőívet – ezáltal egy 160 fős minta készült –, amelyeket egy 45 perces tanóra keretein belül töltettek ki a 9. és 10. osztályos tanulókkal. A célcsoportok strukturális megoszlását az 1. táblázat tartalmazza.

1. táblázat: A kérdőíves felmérés íveinek megoszlása

Település	Iskolatípus	Évfolyam	Darabszám
Pécs	Gimnázium	9. osztály	20 db
		10. osztály	20 db
	Szakközépiskola	9. osztály	20 db
		10. osztály	20 db
Bonyhád	Gimnázium	9. osztály	20 db
		10. osztály	20 db
	Szakközépiskola	9. osztály	20 db
		10. osztály	20 db
		Összesen:	160 db

Forrás: saját felmérés

Az empíria alapját jelentő primer forrásokat a kontúrtérkép, illetve a kérdőív adta. Az előbbinél a tanulóknak egy, Magyarország kontúrját, járásainak határait jelölő lapon kellett megjelölniük az általuk hátrányos helyzetűnek vélttérségeket. Bár a kiadott kontúrtérképeken járási határok is szerepeltek, természetesen ezek csak a kiértékelést segítették. A diákok felé hangsúlyoztuk, hogy nem szükséges figyelembe venniük a kontúrokat, a járás topográfiai ismerete nem is lehet elvárás ezen a szinten. A hátrányosnak vélt térségek jelölése egymást metsző vonalakkal, illetve satírozással történt. A hazai hátrányos helyzetű területek objektív alapjaként a jogszabály által is meghatározott fejlesztendő, illetve komplex programmal fejlesztendő járásokra tekintettünk (1. ábra). A válaszok illusztrálására szolgáló kartogramok elkészítéséhez a CorelDraw 19 programot használtuk, amelyeknél a jelölési gyakoriságot kvartilisekbe soroltuk, a határértékek minden esetben egységesen kerültek kijelölésre.
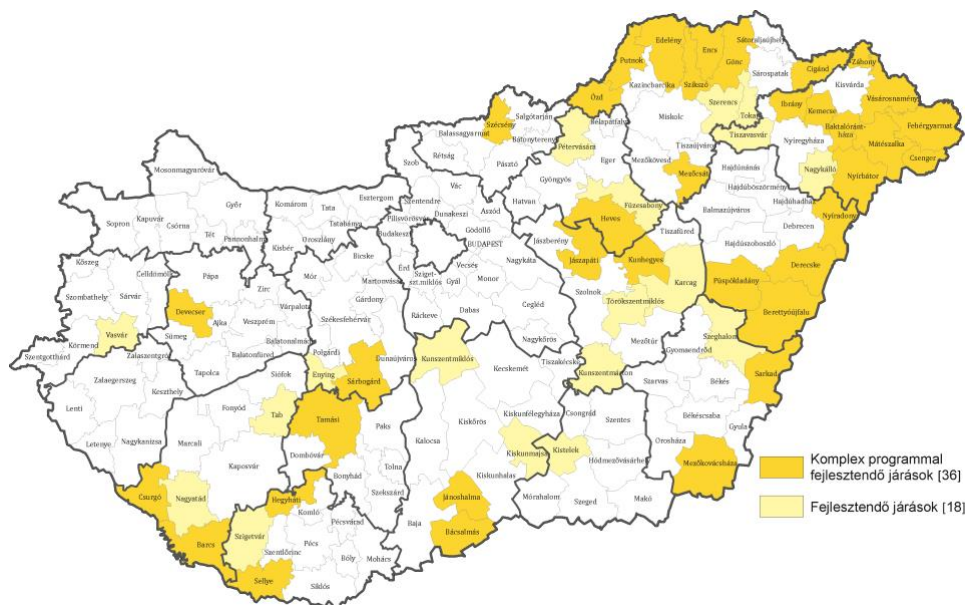
1. ábra: Kedvezményezett járások Magyarországon a 290/2014.(XI.26.) Kormányrendelet alapján. Adatok forrása: https://net.jogtar.hu/jogszabaly?docid=a1400290.kor

A kérdőív fő kérdéscsoportjai a következők voltak: az első a konceptuális elemekre fókuszál; feltárja, hogy a kitöltő találkozott-e már a hátrányos helyzetű térség fogalmával. A felmérés rákérdez arra is, hogy a diák járt-e már ilyen térségben, valamint, hogy mi jut eszébe a fogalom hallatán. Feltérképezi továbbá azt is, hogy milyen ismeretekkel rendelkezik a válságtérségekről. A következő kérdéskör a fentebb már említett kontúrtérképes feladat, amelynek célja a szubjektív térbeli érzékelés felmérése volt.

A másik primer forrás a már említett, földrajztanárokkal készített interjú, amelynek segítségével ok-okozati összefüggések feltárására kerülhetett sor. Az interjúkat egy pécsi, illetve egy bonyhádi középiskolai tanárral készítettük. Az interjúvázlat fő kérdéscsoportjai érintik a hátrányos helyzetű térség fogalmi hiányosságait, a fogalom tantervi helyét és oktatásának részleteit, valamint a problémakör hangsúlyosabb megjelenítés módszertani lehetőségeit. Az interjúk elkészítése egyenként 60–60 percet vett igénybe az adott középiskolák – PTE Babits Mihály Gyakorló Gimnázium, valamint a Tolna Megyei SZC Perczel Mór Szakképző Iskola – földrajzi szertáraiban, amelyeket diktafonnal rögzítettünk. Az elkészített interjúkat később, egy írásban megadott kérdéssorral egészítettük ki annak érdekében, hogy pontosabb képet kapjunk a kérdőív eredményeinek oktatásmódszertani összefüggéseiről.

III. Eredmények

III. 1. A hátrányos helyzetű térségek fogalmi kérdéseinek értelmezése a középiskolások körében

III. 1. 1. A formális oktatás hatása a fogalmi ismeretekre

A vizsgálatban résztvevők 69%-a találkozott már valamelyik képzés során (általános iskola/középiskola) a terminussal. Míg a pécsi középiskolákban észlelhető a 9. és 10. évfolyamok esetében az időbeli fejlődés, addig a bonyhádi intézményekben ennek ellenkezője rajzolódik ki. Mindkettő pécsi középiskolában nyomon követhető a felsőbb évfolyamok konceptuális készségének fejlődése, hiszen a kilencedikes tantervben még nem, viszont a tizedikesben már megjelenik a vizsgálat alá vont fogalom tárgyalása.

Mindkét bonyhádi középiskolában alacsonyabb számban válaszolták a tizedikes tanulók, hogy ismerik a fogalmat. Feltűnő, hogy Bonyhádon mindkét iskolatípus felsőbb évfolyamának diákjai kisebb arányban találkoztak a szóban forgó terminussal. Ennek hátterében állhat akár az évfolyamok közötti képességbeli különbség, hiszen a jelen vizsgálat nem longitudinális. Nem merülhet fel, hogy az osztályok eltérő szaktanári háttérrel rendelkeznek, amelyekből a különbségek adódhatnak. Amennyiben nyomonkövetéses módszert alkalmaztunk volna (végigkísértük volna egy korosztály időbeli fejlődését), akkor valószínűsíthetően nem ezt az eredményt kaptuk volna. Az iskolatípus, illetve a földrajzi dimenzió kevésbé meghatározó a fogalmi ismeretek tekintetében.

A válaszadók több mint kétharmada az általános iskolát jelölte meg azon intézményként, ahol hallott már a fogalomról. A jelen képzési szint magas említési aránya természetesen torzíthat, mert a kilencedikesek a középiskolai tanulmányuk elején jártak, így a középfokú intézményre eső válaszok aránya magától értetődően alacsonyabb. Mégis, a válaszok részletesebb vizsgálata rávilágított arra, hogy a tizedikesek nagyobb arányban jelölték az alapfokú képzési szintet, amelyből levonható az a következtetés, miszerint már az általános iskolai kerettantervekben is előkerül direkt és indirekt módon a fogalom.

A jelen pontnál lényegesnek véltük annak vizsgálatát, hogy az általános iskolai kerettanterv miként tartalmazza a szóban forgó tárgykör oktatását. A földrajz tantárgy oktatási célként tűzi ki, napjaink társadalmi-gazdasági és környezeti folyamatainak ismertetését. A kerettantervek vizsgálata arra enged következtetni, hogy a 7. évfolyamon tartalmazza a hátrányos helyzet térségének fogalmát a *Közvetlen lakókörnyezetünk földrajza*, illetve a *Magyarország földrajza* témakörök keretein belül. A tanulók az előbbi témakör nevelési-oktatási szakaszának végére bemutatja és értékeli lakókörnyezetének földrajzi jellemzőit, ismeri annak természeti és társadalmi erőforrásait; szűkebb és tágabb környezetében földrajzi eredetű problémákat azonosít, illetve magyarázza kialakulásuk okait. A *Magyarország földrajza témakör* oktatási célja, hogy a tanulók képesek legyenek rendszerezi, csoportosítani és értékelni hazánk és a Kárpát-medence térségének természeti és társadalmi-gazdasági erőforrásait. Ezen felül a jelen tananyagrész oktatása révén a diákok képesek legyenek bemutatni a természeti és társadalmi adottságok szerepének, jelentőségének időbeli változásait, a területi fejlettség különbségeit, valamint ehhez kapcsolódóan megoldási-fejlesztési javaslatok tudjanak megfogalmazni (Oktatási Hivatal, 2020).

Fontosnak tartottuk annak feltárását is, hogy a diákok melyik órán találkoztak a vizsgált fogalommal. Meglepő módon a legnagyobb arányban az osztályfőnöki óra (43%), ezt követően a földrajz (15%), a történelem (13%), a magyar nyelv és irodalom, majd az etika (9%) kapta a legtöbb említést. Az osztályfőnöki óra magas említési aránya valószínűsíthetően a vizsgált

intézmények földrajztanárainak nagyobb arányú osztályfőnöki beosztásával magyarázható. További lehetséges ok, hogy az osztályfőnöki órák alkalmasabbak a témakörrel való foglalkozásra a jelen kerettantervi követelmények és alacsony óraszám mellett. Az említések sorában, kisebb arányban ugyan, de megjelent még a hon- és népismeret, az idegen nyelv, a biológia, sőt még az informatika, a fizika, a matematika és a hittan is.

A fentiek kiegészítéseképpen megvizsgáltuk, hogy a NAT (Magyarország Kormánya, 2020), valamint az erre épülő kerettantervek (Oktatási Hivatal, 2020), hol és miként tartalmazzák a földrajz, a történelem, valamint az etika műveltségterületek kapcsán a hátrányos helyzetű térségek középiskolai tárgyalását.

Csökkenő sorrendben a második legtöbb említést a földrajz tantárgy kapta, amely műveltségterületen belül már a NAT is kiemelt feladatnak jelöli mega térbeli-társadalmi egyenlőtlenségek által kiváltott folyamatok földrajzi okainak és lehetséges következményeinek bemutatásait. Másrészt célul tűzi ki a diákok érdeklődésének felkeltését az aktuális társadalmi-gazdasági és környezeti folyamatok megismerésére, megértésére, illetve megvitatására. Kiemeli még, hogy törekedni kell napjaink társadalomföldrajzi folyamatainak bemutatása révén a toleráns, egymás tiszteletét szem előtt tartó magatartás kialakítására, hiszen a toleranciára való nevelés a társadalmi csoportok közötti egyenlőtlenségek miatt is fontos feladat (Magyarország Kormánya, 2020).

A fentiekre épülő 10. osztályos gimnáziumi kerettanterv ugyanakkor célul tűzi ki, hogy az *Átalakuló települések, eltérő demográfiai problémák a 21. században* tananyagrész tanulásának eredményeként, a diákok képesek legyenek csoportosítani és jellemezni az egyes településtípusokat, valamint bemutatni szerepkörük és szerkezetük változásait. További cél még, hogy a diákok értsék és kövessék a lakóhelyük környékén zajló település-és területfejlődési, valamint demográfiai folyamatokat. A fentieken túl a *Magyarország és Kárpát-medence a 21. században* témakör feldolgozásának eredményeként a tanulók képessé válnak a területi fejlettségi különbségek okainak és következményeinek bemutatására, valamint a felzárkózás lehetőségeinek megfogalmazására (Oktatási Hivatal, 2020).

A Nemzeti alaptantervre építő 10. osztályos földrajz szakközépiskolai kerettanterv megfogalmazza, hogy a *Társadalmi folyamatok a 21. század elején* tananyagrész eredményeként a tanulók képesek a települések csoportosítására különböző szempontok alapján, példák megnevezésével. További cél még a különböző településtípusokon élők életkörülményeinek, életmódjának összevetése, valamint a városodás és városiasodás fogalmának megismerése és kapcsoltuk megértése.

A *Magyarország társadalmi-gazdasági jellemzői, területi sajátosságainak vonásai, értékei és problémái* témakör eredményeként a tanulók képesek napjaink jellemző társadalmi és gazdasági folyamatainak megismerésére, a társadalmi-gazdasági fejlődésre gyakorolt hatásuk bemutatására példák alapján (Oktatási Hivatal, 2020). A fentiekből kitűnik, hogy a földrajzi képzés számos alkalommal képes kezelni direkt és indirekt módon a vizsgált fogalmat.

Alig marad el néhány százalékponttal (2%) a történelem műveltségi terület, amely a jelen tanulmányt végzőknek meglepetést okozott. Ennek magyarázata lehet, hogy a tanári szakpárok tekintetében a történelem–földrajz párosítás domináns a vizsgált intézményekben, emiatt sem meglepő a történelem magas említési aránya. A történelem műveltségi területen belül a NAT (Magyarország Kormánya, 2020) célként tűzi ki, hogy a tanuló képes legyen a múlt és a jelen társadalmi, gazdasági, politikai és kulturális folyamatairól és jelenségeiről árnyalt, megalapozott véleményt alkotni, illetve ezek alakításában cselekvően részt vállalni. Fentieken felül a diákok tudják értelmezni a társadalmi viszonyokat és folyamatokat.

A NAT *A világ a 21. században: az átalakuló világ; a globális világ* témakörön belül tartalmazza a hátrányos helyzetű térségek fogalmának tárgyalását a 9−12. évfolyamokon. A Nemzeti alaptantervre épülő gimnáziumi kerettanterv nevelési-oktatási eredményeként a

tanulók ismerik a többpólusú világ jellemzőit napjainkban, elhelyezik Magyarországot a globális világ folyamataiban (Oktatási Hivatal, 2020).

A fentiekhez képest ugyanakkor a szakközépiskolai kerettanterv célja, hogy a tanulók képesek legyenek a körülöttük lévő társadalmi-természeti környezet változásait érzékelni. További részcél, hogy a diákok ismerjék a társadalom és a gazdaság alapvető tulajdonságait, ismerjék fel a történelemben zajló változásokat és azt, hogy ezeknek az ismerete nélkülözhetetlen a napjainkban zajló társadalmi, gazdasági és politikai folyamatok megértéséhez (Oktatási Hivatal, 2020).

Az említések között csökkenő sorrendben a harmadik az etika műveltségi terület volt, amelyben a NAT célként tűzi ki, hogy a tanuló nyitott és segítőkész legyen a nehéz helyzetben lévő személyek iránt (Magyarország Kormánya, 2020). Az erre épülő 8. évfolyamos kerettanterv fejlesztési feladatai és ismeretei között szerepel a társadalmi-gazdasági egyenlőtlenségek okainak megismerése (Oktatási Hivatal, 2020).

III. 1. 2. A fogalom saját tapasztalatokra épülő ismerete

Fontosnak tartottuk annak vizsgálatát is, hogy a válaszadó járt-e már hátrányos helyzetű térségben, hiszen a személyes tapasztalatoknak jelentős hatása lehet a szubjektív térérzékelésre. A felméréshez egy ötfokozatú Likert-skálát alkalmaztunk, ahol a legmagasabb értéke rendszeres látogatást takarja. A jelölések átlaga a kettes értéket adja, vagyis a diákok bevallása szerint nem, vagy csak átutazóban találkoztak hátrányos helyzetű térséggel. Ugyanakkor, az átlagszámítás a Likert-skála értékelésénél nem ad megbízható eredményt, ezért elemzésünket módusz- és mediánszámítással is ellenőriztük. Mindkét módszer megerősítette a fenti állításunkat.

A földrajzi dimenzió, az intézménytípus, illetve az életkor tekintetében nem jelentkezett jelentős eltérés. Egyedül a bonyhádi szakközépiskola 10. osztályánál figyelhető meg negatív irányú elmozdulás, tehát (bevallásuk szerint) ők jártak legkisebb arányban hátrányos helyzetű térségben. Ennek ellentmondani látszik az a tény, miszerint a bonyhádi középiskolák tanulói élnek a legnagyobb számban községekben. Tovább árnyalja a képet, hogy a Völgység egyik kiemelt problémája a megye középső, aprófalvas térségéből adódó vidékies jellege. Ebből adódóan a Völgység kis lélekszámú települései (köztudottan) nem tartoznak a fejlett humán és fizikai infrastruktúrával jellemezhető települések kategóriájába. A bonyhádi középiskolában tanító földrajztanár is alátámasztotta, hogy a kitöltő osztályok jó néhány tagja napi szinten ingázik Bonyhád környéki hátrányos helyzetű falvakból.

A felmérés feltérképezi továbbá, hogy a tanulókban milyen gondolatok merülnek fel a hátrányos helyzetű térség fogalmának hallatán. Erre a kérdésre különféle választ adtak a diákok, mégis legrelevánsabbnak e kérdéskör tárgyalásánál a feleletek kedvező, illetve kedvezőtlen arányát gondoltuk. E tekintetben nagyobb arányban hangzottak el az utóbbi, mintsem kedvező attribútumok. A tanulók válaszainak sorában társadalmi („szegénység/anyagi nehézségek, nyomor, rossz életkörülmények, munkanélküliség, az etnikai kisebbségek nagy aránya, bűnözés, gettók jelenléte”), valamint gazdasági nehézségek egyaránt felmerültek. Ritkán ugyan, de megjelentek kevésbé kedvezőtlen vélemények is a hátrányos helyzetű térségekkel kapcsolatban: pl. „nagy és összetartó családok, csendes, nyugodt környezet” stb. Ez utóbbi, kedvezőbb kép csak a két gimnáziumban (bonyhádi, pécsi) jelent meg. Ennek hátterében valószínűsíthetően az áll, hogy kevesebb személyes tapasztalattal rendelkeznek az ott élők kedvezőtlen életkörülményeivel kapcsolatban. A többségében városlakó gimnazisták erősebben fókuszálnak a vidéki települések értékeire. A szakközépiskolai diákok szociodemográfiai háttere sokszínűbb, a vizsgálatba bevont tanulók szüleinek legmagasabb iskolai végzettsége a szakmunkástól az egyetemi fokozatig terjed. Kevesebben ugyan, de

voltak, akik a fogalom hallatán lakóhelyük egyes konkrét városrészeire asszociáltak. Példaként említhetők a szekszárdi szegénytelep, vagy a pécsi tanulók esetében Marótpuszta, Fehérhegy és Komló.

A kérdőív kitért továbbá arra is, hogy a kitöltőknek konkrét pozitív, illetve negatív jelzőkkel kellett ellátniuk a hátrányos helyzetű térségeket. Amikor kedvező tulajdonsággal kellett felruházni a válságtérségeket, akkor nagy arányban előfordultak kitöltetlen helyek a kérdőíveken. A leggyakoribb válaszok között előfordult „az összetartás, az alázatosság, a küzdés, az egészséges életmód, a hagyományőrzés, a tiszta levegő és természetközeliség, valamint az alacsony ingatlanárak". A fentiekkel ellentétben kedvezőtlenjelző szinte kivétel nélkül minden válaszadónál megjelent. A legtöbben a „szegénységet, a bűnözést, a rossz életkörülményeket, a nagyarányú munkanélküliséget, az éhezést, a fejletlen infrastruktúrát, az etnikai kisebbségek jelenlétét, a társadalmi diszkriminációt, a koszos és szemetes környezetet, a rossz állapotú épületeket, valamint az előítéleteket" írták. Mindez jól reprezentálja, hogy a diákok túlnyomórészt negatív benyomással rendelkeznek hátrányos helyzetű térségekkel kapcsolatban, valamint csekély számú személyes tapasztalat miatt nagy arányban fogalmaznak meg sztereotípiákat.

A diákok közel fele gondolja úgy, hogy a hátrányos helyzetű térségekben élők elégedetlenek, 39%-a, hogy beletörődtek a sorsukba, valamint csak alig több, mint egytizede, hogy elégedettek. A hátrányos helyzetű térségekben élő emberek öltözködéséről hasonló válaszokat adtak a tanulók: „szakadt, szegényes, olcsó, használt, öröklött" jelzők egyaránt előfordultak. A lakosok viselkedéséről kialakult kép sokszínű: nagyarányban negatív tulajdonságokkal ruházták fel az ott élőket. Az „erőszakos, agresszív, a társadalmi normáknak nem megfelelő" viselkedési formákra utalás gyakran megjelent a válaszokban, míg a diákok kevesebb, mint egyötöde használt pozitív jelzőket („jószívű, visszahúzódó, tisztelettudó, szerény, kedves"). Jelen válaszok is azt tükrözik, hogy a diákok nagy része fordul negatív előítélettel a hátrányos helyzetű térségekben élő emberek felé. A szakirodalmi háttérrel is alátámasztható, hogy az előítéletességet döntően két tényező befolyásolja: elsősorban az iskolai végzettség és a kulturális tőke, másodsorban az életkor. A fiataloknál a fentiek kiegészülnek az érzelmi beágyazódással, valamint a szülői háttér hatásával (Murányi, 1999).

A hátrányos helyzetű térségben élők jövedelemviszonyáról, illetve iskolai végzettségéről hasonló válaszokat kaptunk. Általános vélekedés az, hogy az ott élő emberek alacsony iskolai végzettséggel(nyolc általános iskolai vagy szakmunkás bizonyítvánnyal), illetve rosszul jövedelmező alkalmi munkából, segédmunkából, továbbá segélyekből élnek vagy munkanélküliek. A tanulók az ott élők közlekedési szokásairól háromféleképp vélekedtek. A legtöbb említést a gyalogos, majd a kerékpáros, harmadsorban a tömegközlekedés kapta. Pécsett a tanulók egytizede a régi, olcsó gépjárművekről is említést tett, Bonyhádon ez az érték jóval alacsonyabb volt.

A bonyhádi, illetve pécsi kitöltők véleménye eltért a hátrányos helyzetű térségekben élő lakosok családi hátteréről. Míg a kisvárosi iskolákba járók csupán 1%-a írt pozitív gondolatot („összetartás"), addig a pécsieknek 5%-a tudott kedvező értékelést adni („összetartás, mindent a családért, segítőkészség"). A negatív válaszok sorában a leggyakrabban a „szegénység, árvaság, rossz példamutatás, sok gyermek, alkoholizmus" jelentek meg.

A bonyhádi és a pécsi diákok közel egyharmada nem adott választ a hátrányos helyzetű térségekben élők társadalmi kapcsolatairól. Míg a pécsi diákok több mint egyharmada társított pozitív jelzőt („összetartás, jó kapcsolatok, társadalmilag aktívak, kevés, de összetartó, jóban vannak egymással, segítik egymást") a jelen kérdéshez, addig a bonyhádiaknak mindössze 8%-a tudott pozitív attitűdöt kapcsolni az ott élők társadalmi kapcsolataihoz („összetartás, egymás segítése, jó kapcsolatok"). A diákok fennmaradó hányada a „diszkriminációról, a kevés és rossz társadalmi kapcsolatról, zárkózottságról, valamint beszűkült kapcsolathálózatról" tettek említést.

A diákok nagy része a hátrányos helyzetű térségekben élők munkaviszonyának értékelésekor a munkanélküliség domináns jelenlétére asszociáltak. A fogalom említése magasabb arányban jelent meg a szakközépiskolában, amely kapcsolatba hozható a diákok szülői hátterével (alacsonyabb iskolai végzettség), illetve lakóhelyével (többen élnek községekben). A földrajzi dimenzió és az életkor nem releváns a jelen kérdés tekintetében. A bonyhádi diákok említést tettek még a gyári foglalkoztatottakról is. Ennek oka többek között a bonyhádi telephelyű zománcgyár is lehet, amelynek lakosságarányosan kiugró a foglalkoztatási szerepe ebben a végzettségi kategóriában.

A fogalmi kérdések tisztázására a fentieken túl Likert-skálát alkalmazunk. A hátrányos helyzetű térségekre vonatkozó, általunk megadott jellemzőket kellett értékelniük a diákoknak ötfokozatú skálán. A válaszok átlaga, módusza és mediánja (4) alapján, a diákok a válságtérségeket elsődlegesen az etnikai kisebbségek nagyarányú jelenlétével hozták összefüggésbe. Az összesített ábrákon felülreprezentált még a fiatalok, illetve az idősek aránya. Míg az előbbit a bonyhádi diákok jellemezték magasabb értékkel, addig a hátrányos helyzetű térségekben élő idősek magas aránya a pécsi kitöltők válaszaiban rajzolódott ki markánsabban (közöttük is inkább a gimnáziumi tanulóknál). Mindez összefüggésbe hozható a hazai kistelepülések szélsőségesen eltérő demográfiai adottságainak érzékelésével. A mezőgazdasági jelleg magasabb pontszáma szintén megfigyelhető mindkét település diákjainak értékelésében. Ez utóbbinál a gimnazisták magasabb értékeket adtak a szakközépiskolai diákokhoz képest. A pozitív jellemzők („barátságos lakosság, szép természeti környezet") hangsúlyosabban jelentek meg a gimnáziumi tanulók válaszaiban. Ez azzal is magyarázható, hogy a gimnazisták a szakközépiskolásokétól eltérő tapasztalatokkal rendelkeznek a hátrányos helyzetű térségekkel kapcsolatban: ők inkább a terület természeti adottságaira, rekreációs lehetőségeire koncentrálnak.

A hátrányos helyzetű térségek problémájának súlyosságát (a fentiekhez hasonlóan) szintén ötfokozatú Likert-skálán kellett értékelniük a diákoknak. A bonyhádi diákok a leromlott állapotú lakásokat, majd az alacsony jövedelmet, illetve a szolgáltatások hiányát és alacsony színvonalát tekintették a legsúlyosabb problémának. A fentiekkel ellentétben, a pécsiek értékelései alapján a hátrányos helyzetű térségekben a legsúlyosabb gond az alacsony jövedelem és iskolázottság, a leromlott állapotú lakások, majd a szolgáltatások hiánya és alacsony színvonala. E kiugró értékek a mintában 4-es átlaggal, 5-ös mediánnal és módusszal szerepeltek.

Összességében elmondható, hogy a fogalmi ismeretek tekintetében a fő differenciáló faktornak az intézménytípus, a tanulók családi háttere, lakóhelyének településtípusa bizonyult. A földrajzi dimenzió szerepe egyedül a hátrányos helyzetű térségekben élő emberek társadalmi kapcsolatainak, családi hátterének, illetve a térségek korszerkezetének vizsgálatakor volt jelentős. A fentiek alapján elmondható, hogy a tanulók tudása mögött kevés objektív földrajzi tartalom áll, és inkább tükrözi a személyes tapasztalatokat, valamint a sztereotípiákat.

III. 2. Területi elemek a szubjektív térérzékelésben

A jelen fejezet célja, hogy (az alacsonytól a magasabb területi szintig haladva, a lakóhely településétől a makrotérségi különbségekig) betekintést nyújtson a középiskolások hátrányos helyzetű térségekkel kapcsolatos topográfiai ismereteibe. A diákok kognitív térképén a lakóhelyük, illetve annak közvetlen környezete egyaránt felülreprezentált. A kisvárosi tanulók jelölései leginkább a térség déli határára estek (Szekszárd, Tolna), amely azért sem volt meglepő, mert a fogalmi kérdéseknél a szekszárdi szegénytelep hangsúlyosan megjelent az említések között.

A megyei szint értékelésekor szembetűnő, hogy a nagyvárosi diákok esetében Baranya megye nyugati, illetve délnyugati területének (jogszabály alapján kedvezményezett térség) hátrányos helyzete látható. Meglepő azonban, hogy jelöléseik alapján nem rajzolódik ki a megyén belül határozott fejlettségbeli különbség. A legtöbb osztály ábráján Pécs és Siklós környéke a leginkább hátrányos helyzetű. Ennek oka valószínűleg az, hogy a diákok a lakóhelyük mikroszegregátumait azonosítják a hátrányos helyzet fogalmával. A jelölések megoszlása továbbá arra is rámutat, hogy a kitöltők el tudják helyezni térben az Ormánságot, valamint tisztában vannak annak hátrányos helyzetével.

Az északkeleti országrész fejletlensége a jelölések gyakorisága alapján szintén megjelenik a tanulók ábráin, amely a legélesebben a gimnáziumok esetében rajzolódik ki. A 9. osztályos tanulók lapjain még feltűnik (ugyan alacsonyabb jelölési gyakorisággal) a nyugati országrész is, amelynek egyik magyarázata lehet, hogy az atlasz megyei szintű tematikus térképeit nehezen értelmezik a diákok, és kevéssé érzékelik a régión belüli nagy fejlettségbeli különbségeket. A 10. osztályos kitöltők ábráin azonban már kirajzolódik a kelet–nyugat dichotómia. Szabolcs-Szatmár-Bereg megye Borsodnál is hangsúlyosabban jelenik meg a diákok kognitív térképein. Ezeknek a megyéknek a jelölései összefüggésbe hozhatók a közösségi oldalakon gyakorta megjelenő mémekkel vagy videókkal, amelyek a leszakadó térségeknek egyfajta groteszk ábrázolásaiként is felfoghatók. Az Alföld belső perifériáinak hátrányos helyzete szintén megjelent a diákok kognitív térképén.

Az eredmények alapján lényegesnek tartottuk továbbá az ország középső részére (Pest megyére) eső jelölések gyakoriságának vizsgálata. Meglepő módon a főváros környéke főként a 9. osztályos diákok kognitív ábráin kapott jelölést. A tanulók elsősorban a megye déli határvidékét, mint belső perifériát ábrázolták válságtérségként, viszont ez akár összefüggésbe hozható a határos Bács-Kiskun megye északi részének alacsonyabb fejlettségével.

A topográfiai ismeret tekintetében érzékelhető a diákok évről évre megmutatkozó fejlődése (a földrajzoktatás kezdetétől annak végéig), amely alátámasztja, hogy a folyamat végére a személyes tapasztalatok mellett a formális keretek között zajló oktatás is hozzájárul a kognitív térképzet alakulásához. Az intézménytípus szerinti vizsgálat rávilágít, hogy (valószínűleg egyedi, a jelen vizsgálatra jellemző módon) a szakközépiskolások pontosabb topográfiai ismeretekkel rendelkeztek a hátrányos helyzetű térségekről, amelynek hátterében a szaktanár általi módszertani súlyozás is állhat (2–5. ábra).

A fentiek vizsgálatát kiegészítettük a tankönyvi, illetve a földrajzi atlasz tematikus térképeinek tanulmányozásával. A kutatásban résztvevő intézmények mindegyike az Oktatási Hivatal által kiadott taneszközöket használja. Az atlasz ábráinak elemzése rámutatott, hogy míg a népességföldrajzi adatokat szemléltető tematikus térképek járásszintűek, addig a gazdaságföldrajzi ábrák megyék szerinti területi beosztást használnak. Ezen felül összevetettük még a 2010-es (Balogh et al., 2010), illetve a 2021-es (Balassa et al., 2021) földrajzi atlaszokat is. Míg a régebbi, kistérségi határvonalakat jelöl, addig az újabb atlasz megyei térszerkezetet tartalmaz. Az atlasz szakmai szerkesztői a kistérségi szintű ábrák elkészítésére ugyan javaslatot tettek a kartográfusok irányába, viszont technikai okok miatt ez nem valósulhatott meg. Az atlasz ábráinál a legfőbb indikátorok a gazdasági fejlettség, a munkanélküliség, illetve az ipari termelés voltak a jelen kutatás szempontjából a leglényegesebbek. A mozaikosabb térszerkezetet bemutató régebbi ábrák jobban szolgálták a hátrányos helyzetű térségek diákok általi azonosítását.

A 10. osztályos földrajzi tankönyv tematikus térképei az atlaszhoz képest előremutatóak, mivel a legtöbb helyen járásszintűek. A fő indikátorok a jövedelem-eloszlás, a munkanélküliség, az ipari termelés értéke, valamint az egy főre jutó éves nettó jövedelem és GPD (Arady et al., 2018).

A fenti taneszközök vizsgálata rámutatott, hogy a diákok Balaton környékének hátrányos helyzetű térségként kezelése mögött feltételezhetően a tankönyvben megjelenő, a balatoni

idegenforgalom szezonalitására vonatkozó ismeretek felületes értékelése állhat. Továbbá, az atlasz megyei szintű tematikus térképeinek ábrázolása összemossa a megyén belüli jelentős területi egyenlőtlenségeket. Mindez utalhat a földrajzoktatásban a perifériák (külső, belső) és a hátrányos helyzetű térségek közötti összefüggések láttatásával. Ugyan az életkor, mint differenciáló faktor jelentős a nagyvárosi diákok kognitív térképének vizsgálatakor, viszont az intézménytípus (családi háttér, lakhely) a jelen ábrák tanulmányozásakor hangsúlyosabb szerepet kap.

Rávilágítottunk, hogy a diákok kognitív térképei között nem a földrajzi dimenzió (az iskola kisvárosi vagy nagyvárosi elhelyezkedése), hanem az intézménytípus, illetve az évfolyam a fő differenciáló faktor. Bebizonyosodott továbbá, hogy a kilencedik osztályos tanulók még nem rendelkeznek kellő topográfiai ismerettel a hátrányos helyzetű térségekről. Jelöléseik mögött feltételezhetően az állt, hogy nem akartak hibázni a bennük élő nagyobb teljesítménykényszer miatt. A topográfia, a fogalmi ismeretekhez képest determinisztikusabb tudást igényel, ezzel magyarázható a 10. osztályosok területileg jobban fókuszált kognitív térképe a hátrányos helyzetű térségeket illetően (2–5. ábra).
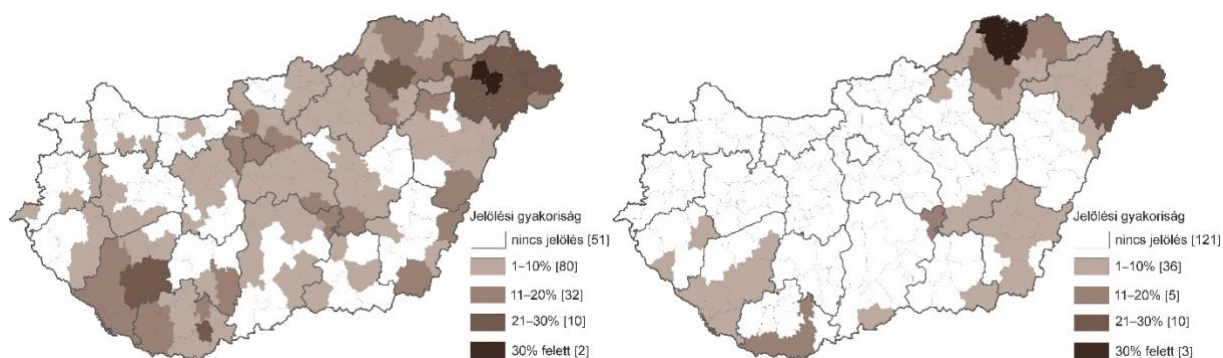
2. ábra: A hátrányos helyzetű térségek jelölési gyakorisága a bonyhádi szakközépiskola 9–10. osztályában. Forrás: saját felmérés
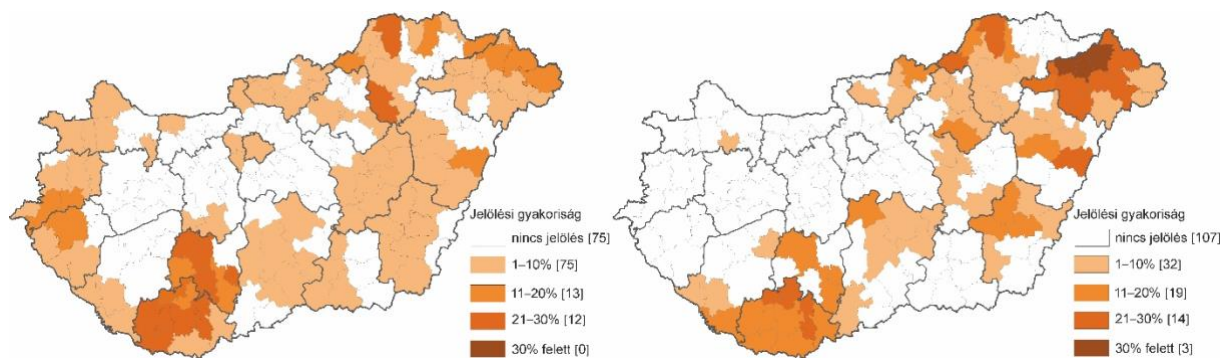
3. ábra: A hátrányos helyzetű térségek jelölési gyakorisága a bonyhádi gimnázium 9–10. osztályában. Forrás: saját felmérés
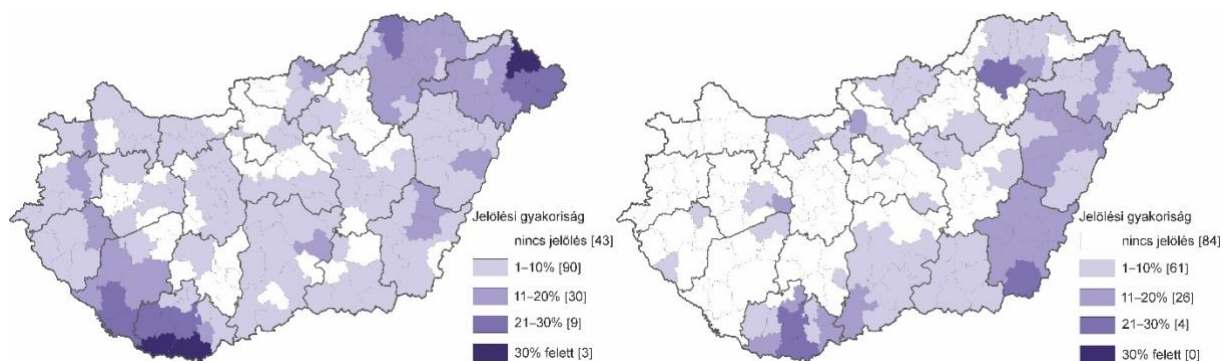
4. ábra: A hátrányos helyzetű térségek jelölési gyakorisága a pécsi szakközépiskola 9–10. osztályában. Forrás: saját felmérés
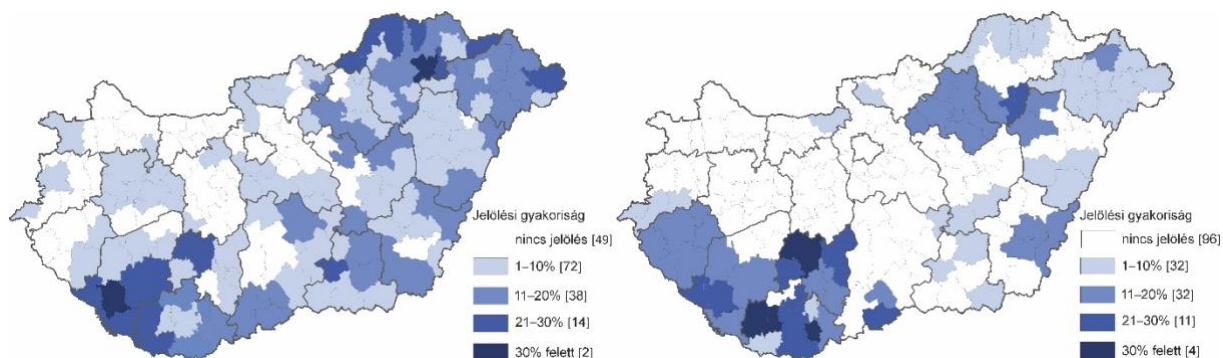
5 ábra: A hátrányos helyzetű térségek jelölési gyakorisága a pécsi gimnázium 9–10. osztályában. Forrás: saját felmérés

III. 3. A földrajztanítás szerepe a hátrányos helyzetű térségekkel kapcsolatos kognitív térkép alakításában

A szaktanárokkal készített interjú elsőként feltárta, hogy az adott iskolák tanterveiben hol szerepel a hátrányos helyzetű térségek tárgyalása. Megerősítést nyert, miszerint a hátrányos helyzetű térségek iskolai keretek közötti oktatása a középiskoláknak csak a 10. osztályos tananyagában szerepel, azon belül is a *Magyarország társadalomföldrajza*, illetve a (regionális földrajzon belül) a *Centrumok és perifériák* kapcsán. A megkérdezett földrajztanárok problémásnak tartják a rendelkezésükre álló szűk időkeretet a tárgykör említésére. Véleményük szerint nem csak a földrajztanárok feladata a hátrányos helyzet térbeli egyenlőtlenségeinek érzékeltetése. A megkérdezett kisvárosi, történelem−földrajz szakos pedagógus a történelem órák hangsúlyosabb szerepét említette, ahol az ipari forradalom, valamint a szegregációk kialakulásának, illetve a jelen kor társadalmi problémáinak tárgyalása során kerül elő a témakör. Abban a megkérdezett pedagógusok egyetértettek, hogy a hátrányos helyzetű térségek iskolai keretek közötti említésére az osztályfőnöki óra a legalkalmasabb.

Problémát jelent még az is (amely szintén magyarázata lehet a fogalomismeret hiányosságának), hogy a szakképzésben a földrajzot alacsonyabb óraszámban tanulják a

diákok. Csak azon tanulók tantervében szerepel a tantárgy, akiknek a „komplex természettudományi" képzés után a szakmájához specifikusan hozzátartozik a földrajz(pl. gazdasági ügyintézők, turizmus). Viszont, ahol megjelenik a földrajzoktatás, ott is csak felületesen tartalmazza az általunk vizsgált témakört. Ezáltal a formális oktatás helyett előtérbe kerül a személyes élmények, illetve a szakképzésben a heterogénebb szociális háttér szerepe.

A szaktanári álláspont szerint a diákok a személyes példákon keresztül jobban képesek érzékelni a hátrányos helyzetű térségek problémáinak jelentőségét. Ugyanakkor a tanterv is hozzájárul ahhoz, hogy nem kap kellő figyelmet a jelen témakör. A szaktanárok is megerősítik, hogy a gyermekek gazdasági-területi egyenlőtlenségek iránti „érzéketlenségét" is tovább súlyosbítja a jelen témakör tantervi hiányossága. A kisvárosi diákok elsősorban a városi „mikroszegregátumokban" érzékelik a területi különbségeket. A gazdaságilag fejlett város és a környező elmaradottabb községek közötti különbségeket a tanulók is érzékelhetik ingázásuk, illetve az iskola által szervezett túrák alkalmával. A fentiek alapján elmondható, hogy a diákok nem az oktatásban, hanem a mindennapokban érzékelik legintenzívebben (pl. a Hegyhát szegényebb, mint a Völgység) a területi különbségeket. A fogalmi ismeretek fejlesztésének egyik lehetséges módszere, hogy a vizsgált témakört a tananyagban külön fejezetként, több tanórán keresztültárgyalják. A követelményrendszerben ugyanakkor nagyobb hangsúlyt kellene fektetni a tárgykör jelentőségére.

A diákok között nagy különbségek vannak a témakör fogalmának és folyamatainak megértése szintjén. Azok a tanulók, akik hátrányos helyzetű térségből ingáznak, azok pontosabb képpel rendelkeznek az elmaradott területekről. A területi különbségek topográfiai szintű (diákok általi) megjelenéséhez, a tanulók fejében kialakuló mentális térképek nagyobb mértékben járulnak hozzá, amelyeket a közösségi médiában látható tartalmak is alakítanak. A diákok a szűk környezetüket (maximum megyeszinten) ismerik és az ország távolabbi területeiről viszonylag kevés tapasztalattal rendelkeznek. A pedagógusok a fejlesztési lehetőséget a formális képzésen kívüli lehetőségekben, gyakorlatban látják.

A fogalmi, illetve a topográfiai ismeretek fejlesztése az oktatási program keretein belül megjelenő közösségi szolgálattal egyaránt elősegíthető. A bonyhádi szakközépiskola civil szervezetekkel (Máltai Szeretetszolgálat, Magyar Élelmiszerbank stb.) együttműködve bevonja a diákokat a jótékonykodásba, akik ezáltal is megtapasztalhatják a társadalmi-gazdasági különbségeket. Tanítási szünetekben, illetve nyáron szakmai jellegű kirándulásokkal, terepbejárással, hátrányos helyzetű térségek látogatásával szintén lehetőség nyílna arra, hogy a tanulók betekintést nyerjenek a területi egyenlőtlenségek okozta problémákba. A jelen témakör iskolai feldolgozására talán a vita a legalkalmasabb módszer, amely során egy valós, vagy annak tűnő helyzetre kell megoldási javaslatokat készíteni, majd ezeket térképen ábrázolt tervvel bemutatni.

IV. Összefoglalás

A hátrányos helyzetű térséggel kapcsolatos szubjektív térérzékelést három dimenzió mentén vizsgáltuk. Ezek a településtípus (nagyváros, kisváros), az oktatási intézménytípus (szakközépiskola/gimnázium) és az életkor (9. és 10. osztály) voltak. A fogalmi ismeretek tekintetében a fő differenciálónak az intézménytípus bizonyult. A földrajzi dimenziónak egyedül a hátrányos helyzetű térségekben élő emberek társadalmi kapcsolatainak és családi hátterének, illetve a térségek korszerkezetének vizsgálatakor volt jelentősége. Bebizonyosodott, hogy a tanulók térérzékelése mögött kevés formális oktatási keretek között megszerezhető objektív földrajzi tartalom áll, és inkább tükrözi a személyes tapasztalatokat, valamint a sztereotípiákat.

A kutatás rámutatott, hogy a diákok kognitív térképei között nem a földrajzi dimenzió (iskola telephelyének településhierarchiában elfoglalt helye), hanem az intézménytípus, illetve az életkor a fő differenciáló faktor. Utóbbinak az is oka, hogy a kilencedik osztályos tanulók még nem rendelkezhetnek kellő topográfiai ismerettel a hátrányos helyzetű térségekről, amely alkalmas a válságtérségek precíz beazonosítására. A diákok kognitív térképein megjelentek a Magyarországgal kapcsolatos főbb térszerkezeti összefüggések (kelet–nyugat dichotómia, belső-külső periféria, aprófalvas településhálózattal jellemezhető települések) megjelennek már a térképzetben ellenben a településhierarchiában elfoglalt helyzettel, mozaikos differenciákkal.

Összességében azonban elmondható, hogy a 14–16 éves korosztály hátrányos helyzetű térségekkel kapcsolatos szubjektív térérzékelésének alakításában a személyes tapasztalatoknak és véleményeknek, illetve a közösségi oldalaknak és a médiából származó információknak nagyobb szerepe van, mint a földrajzoktatásnak. Ennek ellenére, vagy éppen ezért érdemes foglalkoznunk a jelenség tantervi kérdéseivel. A vizsgálat során fény derült számos tantervi hiányosságra: a vizsgált témakört csak a középiskolák 10. évfolyamán tárgyalják, azon belül is csak két tananyagrész tartalmazza, továbbá a követelményrendszer sem fektet kellő hangsúlyt a tárgykör jelentőségére. Problémát jelent még az is, hogy a szakképzésben a földrajzot alacsonyabb óraszámban tanulják a tanulók. A fent említett problémákra megoldást jelenthetne a témakör külön fejezetként kezelése a tananyagban, illetve a követelményrendszerben történő hangsúlyosabb megjelenítése. Ugyanakkor iskolán kívüli terepgyakorlatokkal, kirándulásokkal, hátrányos helyzetű térségek látogatásával, közösségi szolgálattal szintén lehetőség nyílna arra, hogy a tanulók betekintést nyerjenek a területi egyenlőtlenségek okozta problémákba.

A kognitív térképezés segítségével feltártuk a középiskolai földrajztanításban e témakörrel kapcsolatos hiányosságokat és javaslatot fogalmaztunk meg a megoldási lehetőségekre. Tettük ezt annak érdekében, hogy az érettségire készülő diákok a jövőben jobban eligazodjanak az őket körülvevő tér társadalmi-gazdasági folyamataiban. A vizsgált fogalomkör mélyebb ismerete már közvetlen környezetükben is segítheti a jövőben a társadalmi kohéziót és a befogadást akkor, ha a fiatalok hangsúlyosabban érzékelik a területi hátrányok jellegét, megnyilvánulási formáit, okait és látják azok enyhítésének lehetőségeit.

Irodalomjegyzék

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Explore The Planning Path and Case Practice of Transforming from An Industrial Estate to An Industrial Community in The Context of Urban Renewal ——from the Perspective of Eco-Museum

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Abstract: In the perspective of Eco-museum, The research combines the practice of urban design of the old industrial city and the central block of Jingzhou Development Zone, in line with the concept of "people-city-industry" highly integrated development, in order to coordinate the relationship between residence, employment and service. The four basic elements of eco-museum are reflected in the study from an old industrial estate to a new industrial community, that is, the regionality of life, dynamic development concept, the establishment of cultural environment, and the residents related to the region. The topic aims to seek for utilization and planning path of the stock space of industrial estates in the process of urban renewal in China and to cater to the changing production and lifestyle of the people in the community.

Keywords: Urban renewal; Chinese city; Urban design; Industrial community; Eco-Museum

I. Introduction

I.1. Project's background

The project as I mentioning through in whole passage is a commercial program investing by government of development area and real estate investment company. With the change of national policies and the needs of urban economic development, Jingzhou City has changed the focus of land planning from "increment" to "stock", and is committed to activating the original stock land and increasing the economic benefits of land. At the level of land space protection, development and utilization, strict control of increment, revitalization of stock, and increase of flow have become the new orientation, and the importance of urban renewal has been highlighted. This project is a practice of new utilization of stock land.

In this plot, the transformation from the old industrial estate to the industrial community can not only achieve immediate results on the material level, but also actively promote the industrial upgrading of the area, stimulate the employment population, and provide a steady stream of development momentum for the city. Therefore, the author believes that this project can be used as an exploratory practice of urban organic renewal and provide a design basis for the subsequent construction of new cities.

I.2. Rationale: Eco-Museum

Wikipedia's interpretation of the term "eco-museum" is: a museum that aims to improve the well- being and development of local communities and focuses on cultivating a sense of regional identity   under the premise of extensive participation of local residents. Etymologically, the eco-museum is the two Greek words "iokos" ("eco" in English) and "museion" ("museum"' in English). The original meaning of "iokos" refers to "place of residence" as people in terms of culture and history, it adapts to the entire content of natural conditions and social environment, and "museion" is intended to be a collection of items with scientific or cultural significance. It can be seen that the use of the English prefix "eco" for eco-museum does not refer to economy or ecology in general. Its original meaning refers to the equilibrium system of social ecological environment: community or society, people are the core part of existence, human activities and processes.

Since the emergence of the concept of Eco-museum, various countries have made different interpretations and definitions based on their actual needs. There is no unified model and unified definition for the debate issues in museology. Generally speaking, the eco-museum is mainly composed of the following elements, namely, tangible cultural heritage, intangible heritage, information center, interaction and activities between residents and visitors, and complete community protection and development planning.

The so-called "ecology" covers two aspects of natural ecology and human ecology, The concept insists on protecting and preserving the cultural heritage in its original state, dynamically, and in its own environment. It can be said that the eco-museum covers all the heritage environment. For my research, as an industrial heritage area, the four basic elements of eco-museum are reflected in the study and practice from an old industrial estate to a new industrial community, that is, the regionality of life, dynamic development concept, the establishment of cultural environment, and the residents related to the region.

I.3. Identity of Industrial Heritage Communities

In this project, the identification of industrial heritage communities should start from the spatial and temporal evolution of the region and the internal structure correlation. From the time dimension. The industrial heritage in China's cities and towns is mainly modern and contemporary. Based on the international standards for the identification of industrial heritage, industrial heritage communities are identified based on the time limit established before 1980. Likewise, Analysis of the spatial distribution of production areas and living areas from the perspective of the current situation, and the status quo of buildings and structures, the industrial heritage community should meet the contiguous, large enough area, and still have economic, social and living functions as the criterion.

The predecessor of the project base can be traced back to the Yuqiao Industrial Estate in the early stage of China's reform and opening up. The factory mainly manufactures parts for automobiles and small electrical appliances. It is the earliest and most concentrated representative area of industrial development in Jingzhou City and even central China. The Lianxin community in the north of the planning area is the initial fulcrum of the development of the industrial zone. Although it has undergone several reconstructions, it has basically followed the modern spatial distribution pattern and still retains some modern industrial relics.

In the process of regional development, with the construction of new cities and the eastward movement of urban functions, the production area and the living area have been separated. Due to the land use value and the urban villages formed by self-built houses caused certain chaos and disorder, real estate development companies demolished certain factories and communities to develop commercial housing, and more old buildings were subsequently demolished for real estate development.

II. Specific problems faced by urban renewal

The planning site of project located in Jingzhou City, a prestigious industrial city where is settled in south central of Hubei province in China. Today, this place is an important fulcrum for the eastward development of Jingzhou City for transformation from traditional heavy industry to high-technology industry, also as an essential part for Economic Development Zone.

The project planning area is about 5.99 square kilometers, which is divided into two parts, one is the area where production and living activities are still being carried out, and the other is the abandoned industrial site area. According to statistics, there are about 3,903 enterprise employees and 5,537 residents in the area. The age group is mainly young and middle-aged people aged 25-45, mostly migrant workers; the population over 65 years old is relatively large, accounting for 9.81%, exceeding the threshold of 7% of the United Nations, and there is an aging population. As the origin of traditional industry development in Jingzhou, problems such as disorderly distribution of functions, inefficient land use, fragmented transportation links, and broken green patch are prominent.

Figure 1. exsiting floor plan of the site Source self-made [2022]

II.1. Public supporting facilities are backward

Behind the vigorous development of the land economy is the serious backwardness of the construction of public supporting facilities. Due to the rapid growth of the resident population in Jingzhou Development Zone, the per capita area of green space and squares, the area of roads and transportation facilities per capita, and the area of public management and public service facilities per capita are far from the standard. There are relatively few public places for residents around the plot. Public service facilities in the area were not satisfied the people, and not enough to meet needs of residents.

Optimize the physical space layout and form of the industrial heritage area. To protect the spatial pattern of industrial relics in the project area, through the overall vision of both production and living space, and according to the relationship characteristics of the systematized elements of industrial heritage, industrial communities are included in the protection and utilization planning, and they are used as representative local memories to shape The iconic industrial relics with a sense of place define the boundaries of space and establish the scope and content of protection.

From the perspectives of regions, blocks, nodes, landmarks, boundaries, network connections, etc., enhance the overall landscape value, maintain the original spatial scale, street texture and spatial form as much as possible, and determine the regional space according to the traditional pattern, building type and style of the community Network, overall characteristics and traditions take precedence over materials and patterns, highlighting the maintenance of traditional styles, setting the volume and style of nearby buildings, and adopting unit transformation to achieve an organic combination of points and surfaces

II.2. Industrial Format Upgrading

According to the development plan of Jingzhou Economic and Technological Development Zone, industrial development needs to be combined with the Internet, artificial intelligence, and big data to realize the leading and driving effect of high-tech on the real economy. After on-site visits and research, I saw the area where the project is located is dominated by leasing and business services, wholesale and retail, and manufacturing, accounting for 69.2% of the area;

scientific research, technical services, information transmission, software and information The service industry accounted for only 20.1%; other industries accounted for 10.7%.

II.3. Traffic optimization

In the site, the railway and urban expressway to the north of the estate have severed the connection between the base and the central area of the city. The external traffic mainly depends on a main urban road named Fuxing Avenue, and the traffic pressure is too tense. The road bottleneck between the project base and the central urban area is prominent. The traffic flow from the base to the central urban area is very large. The driving lane is two-way six-lane, while the lane from the old city to the planning area is two-way two-lane, resulting in all-day traffic tense situation.

II.4. Building facade renovation

Due to the different levels of construction at different stages of urban development, the building facades around the base have been seriously behind the times. The factory buildings with historical value left over in the site have been corroded and dilapidated for a long time, and some heritage buildings have even been demolished by the developer. At the same time, due to the lack of strict style control during the period of rapid urbanization, the urban style formed by the "collage" of various styles of facades urgently needs the leadership and integration of the visual center to form a primary and secondary relationship in space.

III. Industrial Community Planning Based on the Perspective of Ecomuseology

III.1. The regionality of life

The industrial area in the project base covers production sites and living areas. The factory area and the surrounding self-built residential areas have unique social structures and historical cultures. In the context of transformation and development, the protection of industrial heritage should not only focus on material entities, but also on "people". After conducting field research on the status quo of the project factory area, it was found that the living area around the factory area has obvious characteristics of decline, and the buildings are low and old, which is in sharp contrast to the modern urban area full of high-rise buildings.

From the perspectives of regions, blocks, nodes, landmarks, boundaries, network connections, etc., enhance the overall landscape value, maintain the original spatial scale, street texture and spatial form as much as possible, and delimit the regional space network according to the traditional pattern, building type and style of the community. The overall characteristics and traditions take precedence over materials and patterns, highlighting the maintenance of traditional features, setting building volume and features, and adopting unit transformation to realize the organic combination of points and surfaces.

III.2. Dynamic development concept

As the scale of the city gradually expands and the city develops eastward, the project area is already in the interweaving zone of the economic development zone and the old factory area in the central city, with mixed spaces and increasingly obvious negative contradictions. In the

process of construction and expansion of the economic development zone, the state of scattered and homogeneous competition among enterprises has seriously hindered the further upgrading and improvement of the industrial chain; although the current economic aggregate of the park is relatively high, the average output value and technical strength of the area is still a big gap between it and the advanced industrial estate at home and abroad.

Due to the "emphasis on production while neglecting the city", many service facilities in the economic development zone lag behind. In the current situation survey, about half of the interviewed employees reflected the lack of public service facilities. Due to the expansion of the scale of the park and the increase in commuting needs, the phenomenon of mixed passengers and goods has become a problem. At the same time, due to insufficient attention to urban public transportation, the accessibility of the park to the urban area is very weak, which further reduces the attractiveness of the population.

Starting from the perspective of urban renewal and aiming at community development, we plan to conform to the development trend of innovation-driven and transformation and upgrading in Jingzhou City, starting from the four aspects of demand, development, system and mechanism, to build a "1+3+X" industrial system in the park , to cultivate productivity innovation centers, so that the project area and the central urban area can form complementary functions and coordinate development. At the same time, focus on the five leading industries in the park, actively cooperate with universities and research institutes in Wuhan, build innovative research and development platforms, new intellectual support and industrial incubation platforms, promote the upgrading of enterprises, and attract talents to gather.

In addition, linking up the ecological system of Tongjiang Dahu Lake in the upper-level plan, while improving the flood control and waterlogging capabilities of Xigan Canal and Chihu Canal, it introduces the Changhu water system and integrates the concept of park city to build a multi-level open space system and create an ecological environment of blue and green.
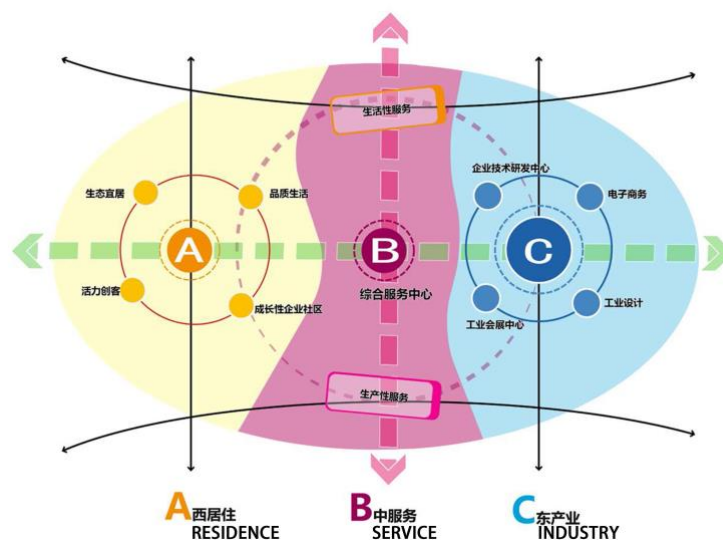
Figure 2. General space allocation Source self-made [2022]

III.3. The establishment of cultural environment

Integrate the cultural demands and new lifestyles of multiple subjects. Through the adaptive reuse of heritage, a new "living-work balance body" will be constructed, and new functions such as cultural museum display and heritage preservation will be implanted with the core of maintaining cultural characteristics, so as to convey historical information and strengthen the sense of place. On this basis, through the integration of diversified new lifestyles, combining industrial history with diversified contemporary needs such as economy, technology, art, tourism, etc., to build a mixed-use community, it is necessary to make community residents feel nostalgic through new jobs. The life of the emotional area can be continued, and the diverse lifestyles that meet the needs of modern people must be integrated, so that cultural characteristics can be formed during the process of space regeneration, enriching urban life forms, and building a dynamic community.

Figure 3. Different type and theme of parks Source self-made [2022]

III.4. The residents related to the region

To adjust the spatial structure of the reuse of the old industrial area, it is necessary to pay more attention to the "people" in the area. Including the perception and identification of the "insiders" represented by the community residents in the industrial site area, so that the industrial heritage can adapt to the social and spiritual needs of people under the changing urban living conditions, and the community residents are regarded as an organic component of the industrial heritage To arouse their "nostalgia", the reuse of heritage should improve their quality of life. Highlight the historical value of "Lianxin Community" as a protection object, so that "the same people live in the same place" among enterprise employees, continue the characteristics of specific groups of people and classes, and reverse the process of regional transformation and heritage reuse. Indigenous residents of long-established businesses lose their jobs and the legacy of a familiar way of life repurposing reality.

The author and the team used questionnaires to sort out residents' development demands, and listed residents' opinions mainly divided into three aspects: supporting facilities, ecological environment, and road traffic. Through the analysis of different problems, 32.8% of the people

think that the current area is ordinary and lacks characteristics; 52.3% of the people think that the road connection between the site and the surrounding area needs to be strengthened, and the parking facilities in the site are insufficient and the parking order is chaotic; 45.6% of the residents Consider the current lack of public spaces and recreational environments for events. In addition, most residents still put forward their own needs for the improvement of the ecological environment and the increase of public facilities.

Considering the original residents and the newly introduced talents after the industrial transformation in the future, the author and the team envisage the establishment of an all-age-friendly open community, and configure public service facilities according to three levels, according to the service population and service radius of each facility According to the situation, the facilities are subdivided into three types of accessibility: 15 minutes, 10 minutes, and 5 minutes. Provide multi-time and diverse activity spaces for people of all ages, and people-to-people inter actions break the boundaries of time and space. Sharing vehicles, sharing offices, sharing hotels, sharing parking lot, etc. Develop a shared application service platform to create a low-carbon and efficient smart new community.
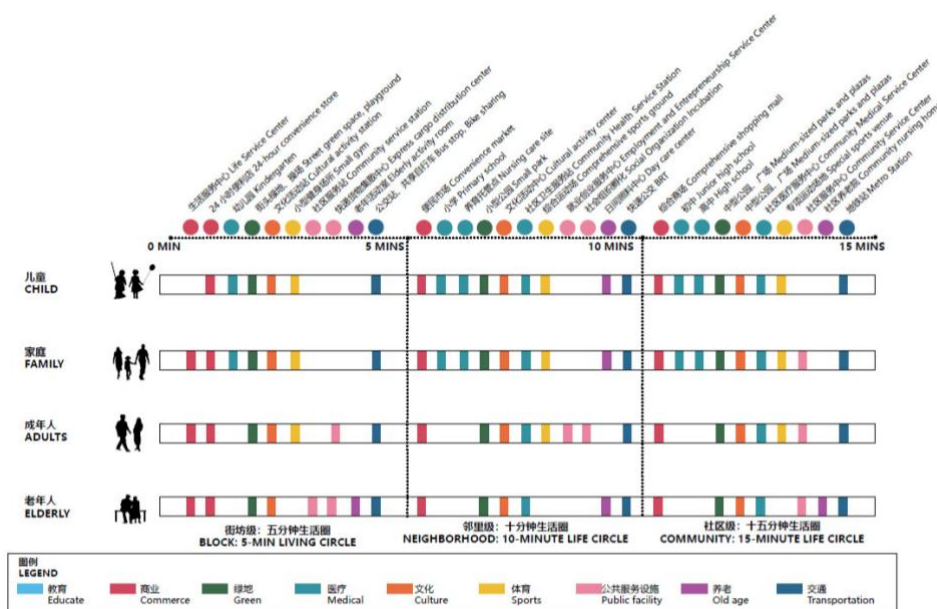
Figure 4. Multi-time and diverse activity Source self-made [2022]

IV. Conclusion

For urban renewal, the construction of industrial parks and the transformation and upgrading of communities play an important role in optimizing the structure and layout of construction land, promoting the integrated development of people, city, industry and transportation. likewise, It is essential for promoting the integration of industry and city, and the balance between employment and housing.

In this process, the use of ecomuseology can better pay attention to the relationship between people and regional development, help me to realize it is necessary to rationally transform and utilize industrial relics, pay attention to the perception and identity of the original community residents, and avoid the situation where economic development is prioritized over social benefits and the sense of place and identity is reduced. By integrating the new lifestyle and the

cultural demands of multiple subjects, the urban industrial community can form a new form of urban life while continuing the local context, so as to solve the reality of sustainable development that is generally faced after the implementation of the renovation project.

Urban renewal should be based on the urban development stage and goals, land use potential and spatial layout characteristics to clarify the specific methods of urban organic renewal. This article only takes the Jingzhou Industrial Estate project as an example to discuss the industrial community planning under the background of urban renewal, focusing on the conceptual planning level. In the process of urban practice in the future, it is necessary to continuously summarize experience and form a new model of urban renewal.

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Political correctness, inclusiveness, tokenism - the emergence of 21st century social processes in modern video games

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Abstract

Introduction: In recent years, the terms political correctness, inclusivity, and social justice can be heard more and more in Western countries. Broad social movements have emerged behind these expressions, that are now able to bring about changes in all areas of life. This includes politics, education or even pop culture, such as movies, TV shows or video games.

Aim: In our research, we investigated how these social processes could be manifested in and affect modern video games. To this end, we looked for signs of this in recently popular video games, changes in their content, which can be connected to the effects of the above-mentioned social processes. These include visual content, appearances, and changes in the story/lore of the given games, or even other content implementations

Results: Our results show that the examined video games strongly reflected the mentioned processes, the developers tried to adapt to them and change the content elements of the games accordingly. It is important to emphasize, however, that in the case of different video games developers and publishers may do this in different ways and with different underlying motivations.

Conclusion: In our paper, we examine how the video game industry – like many other pop cultural media – provides another platform for the delivery of non-game (even ideological) messages to a wider audience.

Keywords: political correctness, inclusiveness, tokenism, video games

I. Introduction

During the previous couple of decades with the era of information technology new platforms emerged to spread and share ideas. Besides traditional media (e.g. newspaper, television) a number of social media platforms kickstarted their operation after the introduction of Web 2.0, which allowed users to create, share and access a wide range of content and to make contact with each other. Facebook, Twitter and other social media sites created a space for like-minded people to find each other, create groups and share their ideas.

These websites also created a great opportunity for socially marginalized groups, like ethnic, sexual or religious minorities to virtually make contact with other people from their community.

Social justice movements are successful in harnessing the possibilities of these new platforms by effectively raising awareness of their situation, spreading their ideas and sharing their views with people inside and outside of their group. Our previous research shows they are able to raise their own problems to the level of public discourse and to thematise it.[1]

This online success contributed to the on-going social changes in Western countries where political correctness, inclusivity and equality are the main social topics in these countries for years now. Moreover, these social processes already have their impact on other aspects of our lives besides public discourse. Heated political debates and sometimes controversial decisions are happening on a near-weekly basis, but pop culture is also changing with this progress. As the importance and demand of representation and inclusivity in pop cultural contents are increasing, TV shows, music, fashion – just to name a few – are trying to reflect the abovementioned cornerstones of social changes.

For decades playing video games were considered as a sub-culture but nowadays it seems that as wider range of people engage with them video games are trying to adapt to the needs of a bigger audience and thereby became more vulnerable to the social processes.

II. Literature review

Scholars began to conduct research in the 2010s on how video games can play the role of a media, whether from political or cultural perspective, in spreading ideas and influencing the way consumers think about their social relations and the world around them. These kinds of political, social, or cultural aspects of video games as a media platform often include divisive topics connected to gender, race, religion, or sexual orientation which have been frequently at the center of social debates recently.

Leandro Lima examined the role that video games are able play in changing the socio-political consensus on genders and gender roles.[2] In his research, he explored gender representation through interviews and found that the gamers he interviewed perceived the matter of in-game representation as a political issue.[3] Furthermore, he found that videogames could become important tools for diversity politics and thus catalysts for change at the societal level by portraying desexualized, strong female character, for example.[4]

In 2022, Tompkins and Martins analysed their interviews to find out what factors are behind the design of characters in video games. Their research revealed that, given the available technological background, developers in the video game industry have shaped their own

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[1] Tislér, Á. (2021) Political Discourse Analysis on LGBTQ+ Rights in Poland and Hungary [*Unpublished manuscript*]

[2] Lima, L. A. B. (2017) p. 3

[3] Lima, L. A. B. (2017) p. 11

[4] Lima, L. A. B. (2017) p. 12

identities by creating character-design standards for a predominantly heteronormative and masculine male audience. Deviations from these norms only occur when there are individuals among the developers who are diversity-conscious.[5]

Lucas Goulart and his co-researchers conducted research on Massive Multiplayer Online Role-Playing Games (MMORPGs) – in which large number of players can interact with each other in a larger virtual world – found that these games are able to provide platform for political activism. They examined the activity of 'Proudmoore Pride' an in-game LGBTQ+ community in *World of Warcraft*. Although the researchers found the game itself to be a heteronormative masculine fantasy game, this community managed to find opportunity to express their political opinion by organizing Pride parade in the game.[6]

III. Background

III. 1. Video gaming industry

As previous research highlighted, video games and gaming as a leisure activity went through significant changes during the last couple of decades and break out from its former sub-cultural existence and became a globally wide-spread hobby – or in a lot of cases more than that. Video game consoles, personal computers (PC) and tablets are among the best-selling electronic devices worldwide, not to mention smart phones which are absolutely dominating the sales.[7] [8] The trends show us that the global consumer demand for these products will continue to grow.[9] These devices in addition to their traditional use are also suitable for gaming which means that the video game industry has a potential to reach and exploit an ever-growing number of consumers.

In addition, survey results show that during the COVID-19 lockdown the number of people who got involved in video gaming significantly increased. From these facts we can see that the video gaming industry is continuously growing and has become a multibillion-dollar industry. This is supported by statistical data that shows us that the video game industry will continue to grow during this decade.[10]

And video game companies definitely do not want to lose this potential audience. However, they need to adapt to demands from their consumers in order to reach and attract the widest possible spectrum of players. And one of their consumer demands is representation of gender, race and even sexual orientation in games, which is something most of the games lack of. [11]

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[5] Tompkins, J. E., & Martins, N. (2022) p. 9

[6] Goulart, L. A., Hennigen, I. I., & Nardi, H. C. (2015) p 7.

[7] Kemp, S (2022) Digital 2022: October Global Statshot Report *DATAREPORTAL* https://datareportal.com/reports/digital-2022-october-global-statshot

[8] Laricchia, F (2022) Consumer electronics - Statistics & Facts *statista* https://www.statista.com/topics/4408/consumer-electronics/#topicHeader__wrapper

[9] Consumer Electronics Market Size… *Fortune Business Insights* https://www.fortunebusinessinsights.com/consumer-electronics-market-104693

[10] Insider Intelligence (2022) US Video Gaming Industry in 2022: Gaming Devices & Video Game Content Viewership Trends https://www.insiderintelligence.com/insights/us-gaming-industry-ecosystem/

[11] Dornieden, N. (2020) Leveling Up Representation: Depictions of People of Color in Video Games *PBS/Independent Lens* https://www.pbs.org/independentlens/blog/leveling-up-representation-depictions-of-people-of-color-in-video-games/

III: 2. Representation in video games

Gaming is assumed as a masculine hobby, although it's changing according to survey results which show us that nowadays 40-45% of gamers are women, still the main protagonists or characters in video games are predominantly males (~80%). Racial representation in video games also does not reflect the ethnic composition of their player base as more than 55% of these main characters are white. Furthermore, members of LGBTQ+ community can feel themselves underrepresented in video games due to the domination of hypermasculine and heteronormative narratives.[12]

These numbers can be traced back to the fact that software developer and game-publishing companies employ white men predominantly. A study conducted by Mark Taylor at The University of Sheffield in 2020 shows that only 10% of people working in video game industry are people with ethnic minority backgrounds in the United Kingdom and these number are even lower in higher positions. Most of the workers are male (70%) and the ratio of workers who identifies themselves as non-binary is 2%. On the other hand, LGBTQ+ community has a relatively high representation as more than 20% of the workers identified themselves as sexual minorities. [13]

It is easier to understand the masculine and heteronormative history of gaming seeing these numbers and also why there is a huge demand for change by gamer communities as there is a visible disproportionality in representation which can alienate players.[14]

IV. Methodology

In our research, we focused on three computer games that are 'games as a service', i.e. games that run continuously over a long period of time and are kept up-to-date in terms of content. We considered it important to focus on these kinds of games because it is easier to find signs of how developers are able to respond to different socio-consumer needs and how they try to adapt their games to these demands. The games we have analysed come mainly from 2 publishers/game development studios, so they were made with very different backgrounds and in very different working environments. One of these large studios is Activision-Blizzard and the other is Electronic Arts/Respawn Entertainment. In addition to the development and publishing companies behind them, the games we examined also differ in terms of their genre, but we thought it must be important that they show some similarities in certain elements. One such similarity is that in each of the games we looked at, the player controls a character that they either created themselves or at least had the opportunity to customize within certain parameters. This is considered important because the players' character or avatar is a virtual personification of the player, and in many cases provides the player with the opportunity to identify with the player during the game. Giving the player more freedom to create their own avatar or to personalize their character can increase identification and thus the gaming experience.[15]

In terms of the methodology of our research, we tried to map the elements in the video games we examined that can be traced back to the processes taking place in Western societies and the consumer needs related to them.

For this purpose, we looked for signs of these in recently popular video games, changes in their content, which can be paralleled with the effects of the above-mentioned social

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[12] Davies, R. & Webb, J. (2022): Diversity in video games: the best (and worst) examples of representation *Evening Standard* https://www.standard.co.uk/tech/gaming/video-game-diversity-representation-a4461266.html

[13] Taylor, M. (2020): UK Games Industry Census 2020 *ukie* https://ukie.org.uk/UK-games-industry-census-2020

[14] Shaw, A. (2010) p. 87

[15] Turkay, S. & Kinzer, C.K. (2015) p. 22

processes. This included visual content, the appearances and changes in the 'lore' of the games, or even other content realisations, such as the diversity in race, gender and sexual orientation of characters appeared in the games, and how these attributes of the characters became a more significant aspect over time. Moreover, we examined how the background of these characters were filled with elements relevant to our research 'lore-wise'. Furthermore, we analysed non-character related contents such as in-game visual elements (e.g., painting, badges, cosmetic items), quests, and their description, as well as the companies' real-life activities which can be linked to these social processes.

Following data collection, we processed and analysed these contents, identifying elements that meet our criteria. We were able to sort them chronologically to demonstrate how they reflect the social processes that have affected the creation and implementation of such contents. By analysing these contents and their changes, we tried to answer what reasons and motivations could be behind the decisions made by companies, which are made for the purpose of political correctness, inclusivity, and representation of minorities.

V. Analysis and results

We analysed the following games:

World of Warcraft: this game was released by Activision-Blizzard back in 2004 as a sequel of the Warcraft strategy game trilogy. It is a Massively Multiplayer Online Role-playing Game (MMO-RPG) which means that a huge number of players can be present in the game simultaneously interacting with each other in various ways in the game's fantasy world. The game has over 100 million active subscribers worldwide, of which around 2 million are active daily. Players have a huge independence creating their characters when it comes to gender, race, and their character's look is customizable as well.

Overwatch (2): it was originally released in 2016 by Activision-Blizzard and then re-released in the second half of 2022. It is a hero shooter game which can be described as a First-person shooter (FPS) game in which players are able to choose a wide range of characters to work together as a team for an objective against the enemy team of players. These characters were pre-created by the developers but can be customized by the players using different cosmetic rewards. In November 2022 Overwatch 2 had around 20 million total player base with 2 million players who are active daily.

Apex Legends: this game has been released in 2019 by Electronic Arts and was developed by Respawn Entertainment. this game similarly to Overwatch is a hero shooter FPS game, however it differs in the setup as it is a battle royale type of game, which means that 20 squads of 3 players are fighting against each other for the ultimate victory. These characters were also pre-created by the game developers, but players are able to customize them using different rewards such as character appearance, badges, charms etc. Apex Legends has around 10 million total player base with 1 million players who are active daily and around 500-600 thousand players are playing the game at the same time.

In the case of Activision-Blizzard we need to emphasize some of the circumstances which are of key relevance in our research. There are several closed and on-going lawsuits and other accusations started against the company due to the toxic working environment. These charges and accusations include discrimination based on gender, race, sexual orientation, sexual harassments, and the inaction of the leadership who had been aware of what was happening at their company for more than a decade. Most of the allegations also mentioned the so-called 'frat-boy culture' of the male workers who often got drunk during office hours and went around

the desks to harass and abuse their colleagues.[16] In addition to the inaction of the leadership, some of the accused employees were actually former top designers and leading developers, e.g., Alex Afrasiabi the former Senior Creative Director for World of Warcraft or Jesse McCree former lead game designer at Blizzard Entertainment.[17]

In addition to the accusations and legal battles of the company, there has been a more than a decade-long demand and pressure from the player base to improve their games in terms of representation and inclusivity.[18] In response to these demands and somewhat quickly reacting to the allegations Activision-Blizzard implemented several significant and some minor changes since 2020.

About a year before the lawsuit Blizzard already started to deliver changes to the game in order to resolve the issue connected to the racial representation in World of Warcraft. One of the most remarkable changes was the introduction of darker skin tones to playable character races, even when canonically it would not make much sense like in the case of 'blood elves' who are known for their pale skin and light/blonde-hair.

Other changes implemented in *Shadowlands* expansion of the game (before the lawsuit) included the introduction of characters in the lore who are openly LGBTQ+. This expansion of the game played in World of Warcraft's afterlife/afterlives where players meet with the spirit of a gay couple, moreover one of the central characters of the story, Pelagos, who is a young male adult spirit in appearance turned out to be woman in life. In addition, the also made character 'gender' change – which was previously a paid service – free for all players.[19] For these changes of inclusiveness and diversity the expansion was nominated for GLAAD (Gay & Lesbian Alliance Against Defamation) Media Award in early 2021.[20] However, all of these happened before the allegations and other changes were made in 2021 quickly after the sexual harassment lawsuit.

First and foremost, after getting rid of the accused employees, the developers deleted or changed every content in World of Warcraft which can interpreted as a reference to the lead designers mentioned in the lawsuit (continent and character names, quests, items etc.). They also removed several in-game flirts, joke voice lines and emotes which were way too suggestive sexually. They also desexualized in-game portraits and paintings of women.

They also tried to show more diversity in the videos and interviews that the company released. Interviews of new expansions and content updates have increasingly featured female employees and members of ethnic and sexual minorities. In addition, in spring 2022, the company launched a new merchandise collection called the Pride Collection to assure LGBTQ+ members of its audience of their support.[21]

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[16] Betancourt, S. (2021) Video game company Activision Blizzard sued over 'frat boy culture' allegations, *The Guardian* https://www.theguardian.com/us-news/2021/jul/22/activision-blizzard-sued-frat-boy-culture-allegations

[17] Hyde, S. (2021) Blizzard: Making Sexism and Racism Acceptable in Gaming *The Current* https://thecurrentmsu.com/2021/10/11/racism-and-sexism-run-rampant-within-one-of-the-largest-faces-of-gaming-activision-blizzard-activision-blizzard-is-the-parent-company-of-blizzard-entertainment-and-activision-publishing-with/?fbclid=IwAR2zj7PWPtpgGPGaxcHovrnMD6MIXKcHDxI24peLFNfBTjboawVMO_9Hauw

[18] Pulos, A. (2013) p. 15

[19] Lyles, T. (2020) World of Warcraft will stop charging $15 to change gender, and you don't even need to buy the expansion *The Verge* https://www.theverge.com/2020/7/16/21326474/world-of-warcraft-wow-gender-change-charge-removed-shadowlands-expansion

[20] GLAAD Outstanding Video Game nominees for the 32nd Annual GLAAD Media Awards, 2021 https://www.glaad.org/blog/glaad-celebrates-outstanding-video-game-nominees-32nd-annual-glaad-media-awards

[21] Blizzard Entertainment: Blizzard Employee LGBTQ+ Network Launches Pride Collection and New Partnership With LGBTQ Center Oc https://news.blizzard.com/en-us/blizzard/23812151/blizzard-employee-lgbtq-network-launches-pride-collection-and-new-partnership-with-lgbtq-center-oc

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However, the community feedback was mixed, especially after the sexual harassment scandal. Players and World of Warcraft content-creators (YouTubers, streamers, etc.) accused Activision-Blizzard of insincerity and hypocrisy. Some of the feedback highlighted the unnecessity of these changes that developers made, calling them forced changes without any purpose.

Since then, a new expansion came out with very similar mind-set further emphasizing the inclusiveness of the game, by changing 'gender' option on character creation menu to 'body type'[22], introducing other LGBTQ+ characters in the lore.[23]

Despite the fact that from the very beginning Overwatch has been designed with inclusivity and representation in mind,[24] Activision-Blizzard also tried to implement changes of further inclusiveness and political correctness in their other game, Overwatch (2). Apparently, after the sexual harassment scandal they deleted every reference of the accused people from this game as well. They also introduced new characters representing minority groups and retroactively changed/filled character backgrounds with a wider spectrum of diversity in representation.

However, when we talk about representation and inclusivity, the developers took a different approach in this case. They developed a special virtual tool in order to create more diverse characters, but it backfired when the so-called King's Diversity Space Tool was revealed in May 2022 the gaming community as a whole found it outrageous. The tool works by quantifying all attributes of the characters, e.g. gender identity, sexual orientation, physical/cognitive ability, culture etc.

The main problem with quantifying these characteristics is interpretation of certain values of the scale. What does '0' means on the gender scale and what '10' in the case of (dis)ability. Later, the publisher expressed regret and apologized for the possible offense and removed the pictures of the tool from its website. They also promised that they won't use the tool for active character creation, although by then they had already lost the trust of the community.[25]

The other video game developer company, Respawn Entertainment previously disappointed gamers looking for representation when they decided to target a white, male protagonist in their Star Wars Jedi: Fallen Order game. However, in their subsequently released game Apex Legends, they made a special effort to make the game as diverse as possible for consumers in terms of ethnicity, gender and sexual orientation at launch. One of the ways in which they have done this is by trying to give the characters as diverse a background as possible, with

These include 11 of the 23 characters currently in the game being female, 10 male, 1 non-binary and 1 transgender, and 10 of the characters being white, with the rest representing other ethnic groups. In addition, there are only 8 characters who are openly heterosexual, the rest are from other sexual minorities.[26]

Moreover, the developers organize actualized events and raise awareness (Black History Month, Pride Month, drew attention to anti-Asian hate crimes during COVID) and also built-

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[22] Rossi, M. (2022) Blizzard says gender is a construct with new Body Type options in WoW: Dragonflight *Blizzard Watch* https://blizzardwatch.com/2022/07/14/dragonflight-alpha-body-type-changes/

[23] Law, E. (2022) World of Warcraft Devs Emphasize the Importance of Diversity, Representation in Dragonflight and Beyond *Gamerant* https://gamerant.com/world-of-warcraft-dragonflight-interview-steve-danuser-maria-hamilton-diversity-representation/

[24] Beck, K. (2017) 'Overwatch' director on the game's diversity: 'normal things are normal' *Mashable* https://mashable.com/article/overwatch-diversity

[25] Hernandez, P. (2022) Activision Blizzard's New Diversity Game Tool Comes Across Terribly *Kotaku* https://kotaku.com/activision-blizzard-diversity-tool-overwatch-2-call-of-1848924832

[26] Craven, J. (2022) Which Apex Legends characters are LGBTQIA+? *Dexerto* https://www.dexerto.com/apex-legends/which-characters-are-lgbtqia-in-apex-legends-1569544/

in some small nuances (e.g. badges and weapon charms) to increase the inclusiveness of the game.

The community welcomes these kinds of changes and finds them original, organic parts of the game. Despite, gamers have more than once expressed their displeasure with the publisher of Apex Legends, Electronic Arts for not standing up for the rights of minorities, the developers of the game at Respawn Entertainment went the opposite direction and assured their player base of their support for sexual minority rights and inclusiveness.[27] Players appreciate the developers standing up for the causes especially when it's in contrast to the publisher's opinion.[28]

VI. Conclusion

The abovementioned changes have no direct impact on the players' performance or on the gameplay itself. These changes usually are meant to give extra "flavour" to the game, extra choice of in-game identification for the players to make the game more inclusive for the widest possible range of players. Developers found it important to implement these changes into their games.

However, we can see that developers' driving motivations can differ for every inclusivity or political correctness change in their game.

It can be genuine inclusiveness in order to increase their players' feel of representation and standing up for a good cause by raising awareness of social problems and trying to be the pioneer in making a change in the industry.

However, as we have seen from the examples above, what may appear to be sincere support may not be. It is important to know the circumstances so that we can get closer to the real reason behind the changes. As we have seen from the Blizzard example, fear of cancellation can often be behind such changes. After the sexual harassment scandal, many content creators and gamers spoke out against the company and called for a general boycott of their games. It was one of the main reasons (besides the so-called content draught) why the company's player base started to decline, so they clearly had to implement changes. As feedback showed, players had mixed feelings about those changes as they perceived the company's insincerity.

In addition, we could see examples for tokenism too in Activision-Blizzard's interview videos as they started to feature an increased number of women and minority people, making only a perfunctory or symbolic effort to appear more inclusive.

Moreover, we can never be fully confident that those changes and reforms the companies make are not just simply rainbow-washing. This term is used when companies are using LGBTQ+ symbols and rainbows on their products in order to attract a higher number of consumers, primarily from the LGBTQ+ community.

However, regardless of the companies' real intentions, in the end the players are the ones who make the decision and by this deliver the verdict.

Which is more important for us is that apparently, ongoing social changes in Western countries completely transformed the needs and preferences of video game consumers during the last decade similarly to other pop cultural products and by this transforming video game industry, which was previously assumed to be a sub-culture and be rigid changes, creating a new platform for social processes.

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[27] Lewis, C. (2022) Respawn Speaks Up In Support Of Trans Rights *Gamespot*
https://www.gamespot.com/articles/respawn-speaks-up-in-support-of-trans-rights/1100-6504034/
[28] Bergin, L. (2021) How Apex Legends is doing diversity right *Dexerto* https://www.dexerto.com/apex-legends/how-apex-legends-is-doing-diversity-right-1595282/

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Az újjáépítés női harcosai: A Magyar Nők Demokratikus Szövetségének tevékenysége 1944–1948 között

Tóth Nikolett, *Eötvös Loránd Tudományegyetem Bölcsészettudományi Kar*

1944. november 5-én Szegeden megalakult az Antifasiszta Dolgozó Nők Szövetsége, ami még ebben a hónapban Magyar Nők Demokratikus Szövetségére (MNDSZ) változtatta a nevét. Fennállásának első éveiben a nőszervezet sokszínű munkát végzett, melynek fontos részét képezte a II. világháború utáni újjáépítésben való szerepvállalás. Előadásomban ennek részletes elemzésére és ismertetésére teszek kísérletet.

Célom megvizsgálni, hogy a nőszövetség milyen módon és módszerrel járult hozzá az ország feltámasztásához, aminek keretén belül bemutatom a legkülönfélébb munkaköreiket. Továbbá szeretném feltárni a nőegyesület és a Magyar Kommunista Párt közötti kapcsolatot, ugyanis hiába hirdette az MNDSZ a két intézmény különállását és pártoktól való függetlenségét, mégis volt köztük egy szoros összeköttetés. A felvetett kérdések megválaszolása érdekében – a vonatkozó szakirodalom feldolgozása mellett – elsősorban a levéltári iratok kerülnek feldolgozásra.

Megállapítható, hogy a nőszervezet sokrétű munkát végzett az ország felélesztésében. Alapvetően azok a tevékenységek, melyeket a nők az újjáépítés során végeztek, a jótékonyság pillérjein nyugodtak. Elsősorban a betegek, a gyermekek, az édesanyák és a rászorulók megsegítésére koncentráltak. Az előbbi egy kis szeletét képezte például a kórházak, az iskolák és a szülőotthonok alapítása vagy helyreállítása. Ahhoz, hogy tevékenységüket fedezni tudják többféle akciót – leghíresebbek a karácsonyi- és hadifogoly- akciók voltak – és számos gyűjtést – például a sokgyermekes anyáknak– szerveztek. Elvitathatatlan tény, hogy a szövetségnek kimagasló szerepe volt a háború utáni újjáépítésben, viszont ennek hátterében a kommunista párt támogatottsága is állt, amelyet jól mutatnak már a korai években előirányzott útmutatások és tanácsadások, valamint a nőegylet anyagi támogatása a párt részéről. Végül 1948. áprilisában az MNDSZ II. kongresszusán kihirdetésre került a „női egység" megszületése, amikor minden más nőszervezet vagy beolvadt az egyesületbe, vagy feloszlott. Ezt a folyamatot tovább erősítette a júniusban Magyar Dolgozók Pártjának létrejötte, ettől a pillanattól kezdve nem kellett titkolni a két intézmény összefonódását. Már ekkor érezhetővé vált az új irányvonal, amely előrevetítette az MNDSZ munkásságának elszíntelenedését és egyben új feladatkörét a párt szolgálatát.

Kulcsszavak: jótékonyság, MKP, MNDSZ, sokszínűség, újjáépítés

I. Bevezetés

A második világháború és annak szörnyű pusztítása, valamint az azt követő újjáépítési folyamat a magyar történelem egyik legismertebb és legfeldogozottabb része közé sorolható.[1] Azonban kevésbé köztudott, hogyan reagált erre a háború utolsó hónapjaiban megalapított új nőegyesület, a Magyar Nők Demokratikus Szövetsége (MNDSZ).[2] *„Nézzétek az országot: feldúlt városok, falvak mindenfelé. Fölszaggatott vasúti sínek, átvágott talpfák, fölrobbantott hidak. A tavalyi termés betakarítatlanul rohad, a kukorica töretlen maradt. Ugaron a föld, üresek a csűrök, az istállók és az ólok. Éhínség, járvány, betegség fenyegeti sorvadó gyermekeinket. Mohács óta nem szakadt ilyen pusztulás hazánkra.”[3]* – adott szuggesztív képet az MNDSZ egyik kiadványa az ország állapotáról. Jól látta, hogy hatalmas régi és új típusú feladatok várnak rá és megannyi problémára kell majd megoldást nyújtania. Mindezt egy újonnan alakuló demokráciában kellett elvégeznie, amely hangsúlyos szerepet – a szervezet álláspontja ezzel megegyezett – szánt a nők becsatornázására a politikai és társadalmi életbe.[4]

Tanulmányomban az MNDSZ első ciklusának részletes elemzésére teszek kísérletet. Célom megmutatni, hogy a vizsgált nőszervezet milyen formákban és módszerekkel vett részt Magyarország újjáépítésében, ennek keretében megvizsgálom a tevékenységi köreit. Mindeközben pedig kibontom a nőegyesület és a Magyar Kommunista Párt (MKP) közötti kapcsolatrendszert, ugyanis hiába hirdette az MNDSZ a pártoktól való függetlenségét és a két intézmény különállását, mégis megállapítható köztük egy szorosabb viszony, már az alapításának körülményeitől kezdve.

A címben megjelölt időkeret, egyfajta határvonalat képez az MNDSZ életében. Az MNDSZ munkaköre fennállásának során két szakaszra osztható, az elsőben (1944–1948) központi szerepet játszott az újjáépítésben való lehető legszélesebb körű és minél sokoldalúbb szerepvállalás. Ez jellemezte őt az alapítás utáni első években. Majd a második periódusban (1948–1956) a sokrétű tevékenységi köre átalakult, köszönhetően a nagy politikában és saját működésében történt változásoknak, – 1948 áprilisában megtartott MNDSZ találkozó, majd nyáron a Magyar Dolgozók Pártjának (MDP) megalakulása – melynek következtében szervezeti önállósága megszűnt és már teljes mértékben az állampárti hatalom utasításainak kellett megfelelnie. Ennek következtében munkássága szép lassan elszürkült, és betagozódott az államszocialista rendszer politikai és társadalmi rendszerébe.

A kutatás elvégzésében segítségemre volt Sipos Levente történész az 1990-es és 2010-es években elvégzett alapkutatásai. Műveiben egyfajta csoportosítást, tematikus egységeket hozott létre az MNDSZ munkásságára vonatkozóan. Jelen írásomban ezt kívánom részben átvenni és kibővíteni. Sipos négy kategóriát állít fel a szervezet tevékenységi köreinek megkülönböztetésére: 1. a politikai, 2. az agitációs és propaganda, illetve nevelőmunka, 3. az

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[1] Az ehhez kapcsolódó legújabb nőtörténeti kutatásokból kiemelendő: Géra, E. (szerk.): Budai úrinők romlakásban. Levelek a Fény utcából 1944–1947. BFL. ELTE BTK. Budapest, 2020.; Virányi, P. (szerk.): Nők a hátországban. Női sorsok és szerepek a második világháború alatt. Kronosz Könyvkiadó Kft. 2022. Illetve egy tömör leírása az újjáépítés folyamatára lásd: Ignácz, K.: A katasztrófa és újrakezdés időszaka – Budapest 1945-ben. Levéltári Közlemények. 2015. Vol. 86. pp. 33-52.

[2] Alapkutatások már szerencsére történtek ebben az irányban is, megemlítendők a következő publikációk: Bassa, E.: Mit kell tudni a nőmozgalmakról? Magyar Nők Országos Tanácsa. Kossuth Könyvkiadó. Budapest, 1982.; Orosz, J.: A Magyar Nők Demokratikus Szövetségének szerepe Magyarország újjáépítésében a második világháború után (1945–1946). Debreceni Szemle. 2014. no. 4. pp. 302-310.; Sipos, L.: A magyar nőmozgalom történetéről (1944–1956). In: Izsák L. - Stemler Gy. (szerk.): Vissza a történelemhez… Emlékkönyv Balogh Sándor 70. születésnapjára. Napvilág Kiadó. Budapest, 1996. pp. 321-330.; Sipos, L. (Válogatta és a jegyzeteket készítette): Dokumentumok a magyar nőmozgalom történetéből 1944–1948. Alfadat-Press Nyomdaipari Kft. Tatabánya, 2014. pp. 13-26.

[3] Magyar Nők Demokratikus Szövetsége: A Magyar Nők Demokratikus Szövetsége az asszonyokhoz. Szikra Kiadó. Budapest, 1945. Az MNDSZ programadó felhívásának első kiáltványszerű részét Aranyossi Pálné írta. Sipos, L. (2014): p. 81.

[4] Sipos, L. (1996): p. 322.

oktatás, vagyis az általános műveltség emelésére és iskoláztatásra vonatkozó feladatokat és végül a 4. az egészségügyi és szociálpolitikai munka. Fontos viszont ezek kapcsán leszögezni, hogy ezek nem teljesen különálló működési területeket jelentenek, hanem tevékenységi körei összekapcsolódtak, akár össze is mosódtak és hatottak egymásra.[5]

Az összes kategória bemutatására tanulmányomban terjedelmi okok miatt nem vállalkozhattam, ezért csak a legutolsó kerül áttekintésre. Az egészségügyi és szociális feladatok kiemelését az is indokolja, hogy az újjáépítés során ezek a feladatok töltötték be a legfontosabb szerepet a szervezet működésében. Ezen a téren érte el a legnagyobb sikereket és az itt kifejtett munkájának köszönhetően eredményesen jutott el és mozgatott meg olyan nőket is, akikhez más formában nem lett volna esélye eljutnia. Ezenfelül a hivatalos szervekkel ennek keretében alakította ki kapcsolatait és vált elismertté és népszerűvé a társadalom és a kormány szemében.[6]

Ahhoz, hogy ezekre a kérdésekre megfelelő választ tudjak adni, – a vonatkozó szakirodalom áttekintése mellett – elsősorban a Magyar Nemzeti Levéltár Országos Levéltárában megtalálható anyagok kerültek feldolgozásra. Emellett pedig a nőszövetség által kiadott korabeli kiadványokat tekintettem át, többek között az MNDSZ képes folyóiratát, az *Asszonyok*at.

II. A Magyar Nők Demokratikus Szövetségének története 1944–1948 között

1944. novemberében Fái Borist[7], a szervezet majdani titkára, a következő küldetést kapta az illegális kommunista párttól: szervezzen be nőket az ellenállási mozgalomba, illetve készítse fel őket a világháború lezárulta utáni feladatokra. 1944. november 5-én Szegeden ebben a tudatban alakult meg az Antifasiszta Dolgozó Nők Szövetsége,[8] mely *„első és legfontosabb feladatának tekinti, hogy kivegye részét Magyarország újjáépítésének, a független, szabad, demokratikus Magyarország felépítésének feladatából”.*[9] Még ebben a hónapban, november 19-én nevet változtatva jelent meg a magyar közélet porondján, mint Magyar Nők Demokratikus Szövetsége. 1945. január 25-én az MNDSZ előkészítésére az MKP budapesti székházába meghívták a párt kerületi szervezeteinek nőmegbízottjait, ahol lefektették az egyesület későbbi működésének alapjait:[10] *„Nem kommunista nőmozgalomra, hanem egy demokratikus nőszövetségre van szükség, amely magában foglalja a párt és társadalmi helyzetre való tekintet nélkül az összes nőket, akik nem fasiszták, nem nyilasok, németek melletti kiállásukkal nem kompromittálták magukat.”*[11]

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[5] Sipos, L. (1996): p. 325-327.; Sipos, L. (2014): p. 20-23.

[6] Megbecsültsége folyamatosan növekedett, aminek folyományaként a népesség és maga a vezetőség is elkezdett rá alapozni és támaszkodni, elvárásokkal fordult felé, újabb és újabb feladatokat bízott rá. Emellett nem lehet arról sem megfeledkezni, hogy tagsága szépen emelkedni kezdett, ami megint csak egy jele annak, hogy egyre nagyobb befolyással bírt a közéletben. Sipos, L. (1996): p. 327-328.; Sipos, L. (2014): p. 24.

[7] Fái Borbála (1908–1982) fiatalon a feminista mozgalomban dolgozott. 1932-ben lépett be a Magyar Kommunista Pártba, majd Franciaországba emigrált és bekapcsolódott a francia nőmozgalom magyar részébe. 1945. február–1946. áprilisa között az MNDSZ országos titkára, majd az országos Titkárság tagja 1949-ig, 1946–1948 közti években főtitkárhelyettes volt. Sipos, L. (2014): p. 41. p.

[8] Fái, B.: A Nők az új életért. In: Lányi, E. - Nagy, E. - Petrák, K. (szerk.): A Szabadság hajnalán. Kossuth Könyvkiadó. Budapest, 1965. p. 259.; Sipos, L. (2014): p. 14.

[9] A Magyar Demokrata Nők Szövetsége szegedi szervezetének felhívása. Délmagyarország, 1944. december 10. p. 7.

[10] Sipos, L. (1996): p. 321.; Sipos, L. (2014): p. 31.

[11] Magyar Nemzeti Levéltár Országos Levéltár (a továbbiakban MNL OL) M-KS-274-19. f. 1. ő. e. 1945. január 25. Jegyzőkönyv az MKP budapesti kerületi szervezetei női megbízottjainak az MNDSZ megalakítása tárgyában tartott értekezletről Megjegyzés: a levéltári források egy része a fent jelölt forrásgyűjteményben is megtalálható, ebben az esetben az ottani címet választottam, a többi iratot magam neveztem el.

A fentebbi feladat kijelölés kapcsán szólnunk kell az MNDSZ és az MKP ellentmondásos kapcsolatáról. Az MKP hivatalosan nem akart külön kommunista nőmozgalmat, hanem az egységes nőmozgalom mellett döntöttek. Emögött az a megfontolás állt, hogy helyzetértékelésük szerint, egy saját női szervezet elidegenítene számos olyan asszonyt, akik egyébként kommunistává átnevelhetők, vagy legalábbis „társutassá" tehetők. Ahogy azt Rákosi Mátyás megfogalmazta 1945 augusztusában: *Nekünk nem az a döntő, hogy kommunista legyen, hanem az ő politikáját befolyásolója legyen kommunista."*[12] Ezt a fajta irányvonalat a későbbiekben meghatározónak tartották, ugyanis bár nem engedték feltétlenül a kommunistákat a szervezeten belül a legmagasabb pozíciókba, mégis igyekeznek azt biztosítani, a tényleges irányítás és a szervezet iránymutatása a kommunisták kezében legyen.[13] Ez az elképzelés bevett módszernek számított az MKP eszközei között, hasonlóan munkálkodott a politikai élet vezetésének elragadása során. A vezetés megszerzése érdekében olyan kulcspozíciókat szerzett meg, – például a Belügyminisztérium és egyben az Államvédelmi Osztály feletti kontroll birtoklása – ami az állam irányításában a legfontosabb helyen szerepelt, együttal lehetőséget teremtett a hatalomváltás minél gyorsabb és könnyebb folyamatára.[14]

Ennek megfelelően határozott az MKP amellett, hogy a legaktívabb és legjobb kádereivel a háttérben elkezdi szervezni az úgymond pártoktól független MNDSZ-t, minden erejével támogatva munkáját.[15] Eközben viszont a nőszövetség igyekezett elterelni a figyelmet arról, hogy bármilyen viszonyban is lenne a párttal, ennek érdekében több intézkedést is hoztak. Külsőségeket tekintve nem használhatták a párt helyiségeit gyűléseikhez, nem viselhették az MKP jelvényét, csak az MNDSZ-ét.[16] A korai belső utasításokban is ez a szándék érhető tetten, avagy igyekeztek csökkenteni azokat a szervezeti elemeket, amik bármilyen formában arra utalnának, hogy a nőszervezet a kommunista pártot másolja szervezeti és munkamódszerei során.[17]

Mindezek ellenére a párt és a nőszövetség tevékenysége szorosan és nyíltan összefonódott. Maga Rákosi Mátyás már 1945 augusztusában rámutatott arra, hogy az egységes nőmozgalom képviselőjeként fellépő MNDSZ nyílt politizálása miatt kommunista fiókszervezetként tűnt fel: *„Az elvtársnők a szövetségből ezt csinálták, egy fedőszervet, amelyből mindig kibújt a kommunista szög."*[18] A fentebbi kritika ellenére az MNDSZ kommunista tagjai tovább kívánták erősíteni a szervezet politikai elköteleződését. A később kommunista nemzetgyűlési képviselővé választott Döbrentei Károlyné[19] a kerületi nőtitkárok 1945. október 11-i ülésén azt hangoztatta, hogy *„anélkül, hogy megmondjuk, hogy kommunisták vagyunk, kifejthetjük a párt*

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[12] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. augusztus 3. Jegyzőkönyv a nőaktíva ülésről, amelyen Rákosi elvtárs beszélt.

[13] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. december 27. Jegyzőkönyv az MNDSZ-ben dolgozó kommunista nők megbeszéléséről.

[14] Palasik, M.: A jogállamiság megteremtésének kísérlete és kudarca Magyarországon 1944–1949. Osiris Kiadó. Budapest, 2000. p. 63.

[15] MNL-OL-M-KS-274-19. f. 17. ő. e. Politikai tájékoztató nők részére.

[16] Pető, A.: Nőhistóriák: A politizáló magyar nők történetéből (1945–1951). Seneca Könyvkiadó Kft. Budapest, 1998. p. 93.

[17] 1945. július 21. Rajk Lászlónak, az MKP KV titkárának javaslata az MNDSZ átszervezésére. Sipos, L. (2014): p. 104.

[18] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. augusztus 3. Jegyzőkönyv a nőaktíva ülésről, amelyen Rákosi elvtárs beszélt.

[19] Döbrentei Károlyné szül. Némety Aranka (1913–1987) 1934-ben került kapcsolatba az illegális kommunista párttal, 1937-ben utasításukra belépett a Magyarországi Szociáldemokrata Pártba. 1944-ben részt vett az újpesti partizán mozgalomban. 1945 márciusában tagja lett a Magyar Kommunista Pártnak. 1945-ben nemzetgyűlési, majd később országgyűlési képviselővé választották. 1945 januárjától ő is alapítói munkálatokat végzett az MNDSZ-ben, majd 1946–1948 között szervezési osztályának volt a vezetője. 1948 májusától 1950. júniusáig Újpest polgármesteri székét töltötte be. In: Vida, I. (szerk.): Az 1945. évi november 29-re Budapestre összehívott Nemzetgyűlés almanachja 1945. november 29 – 1947. július 25. Magyar Országgyűlés. Budapest, 1999. p. 119-120.

álláspontját. A pozícióinkat meg kell erősíteni az MNDSZ-ben."[20] Ezt a gondolatot tovább erősítette Révai Józsefné[21] beszéde egy hónappal később, amikor már egyenesen kimondja, befolyást kell gyakorolni a nőszövetségre, még hozzá a következő módon: *„...az MNDSZ-ből olyan tömegszervezetet teremtsünk, amelynek motorja a kommunista párt, illetve a kommunista tagság."*[22] Szervezetileg is összefonódott a párt a nőszervezettel, ugyanis 1945-ben alapított Nőtitkárság[23] egyik fő feladatának tekintette az MNDSZ munkájának irányítását és támogatását.[24] Mindezek tükrében nem véletlen, hogy a köztudatban kialakult az a vélemény, hogy az MNDSZ *„meglehetősen vörös"*.[25]

Az MKP támogatásával 1945 első negyedévében jött létre az MNDSZ jogi és szervezeti háttere. 1945. január 28-án Debrecenben alakította meg a nőszervezet az országos szervezetét, majd február 18-án Budapesten megszületett a koalíciós alapú országos vezetősége,[26] valamint még ebben a hónapban ünnepélyes keretek között átadásra került központi székháza a Vilma királyné út (ma Városligeti fasor) 42. alatt.[27] 1945 áprilisában dr. Egri Géza ügyvéd, néhány nőmozgalmi vezetővel tárgyalva kidolgozta a nőszervezet alapszabályzatát, majd ezt követően jóváhagyatta ezt a Belügyminisztériummal.[28] Ebből a dokumentumból ismerhetjük meg azt, hogyan határozta meg saját maga a tevékenységi körét: *„A Szövetség célja: a Szövetség párton kívüli társadalmi szervezet, célja minden magyar leány és asszony egy nagy táborba való egyesítése, az ország összes demokratikus tényezőivel, hatóságokkal, pártokkal és egyéb közületekkel karöltve a demokrácia eszméinek megvalósítása társadalmi, kulturális, gazdasági és politikai téren, különös tekintettel a nők különleges helyzetére."*[29]

Az MNDSZ egyik legnagyobb szabású rendezvénye az 1946. április 6–8 között, megtartott első országos nőtalálkozó volt, amin több ezer nő jelent meg Budapesten és hallathatta hangját és mondhatta el véleményét az ország állapotáról és a nők helyzetéről – múltjáról, jelenéről és

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[20] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. október 11. Jegyzőkönyv a kerületi nőtitkárok üléséről.

[21] Révai Józsefné szül. Grünwald Lívia (1905–1990) 1932-ben lépett be a Kommunisták Magyarországi Pártjába. 1945–1949 felváltva dolgozott a Központi Vezetőség Nőtitkárságának nőtitkárjaként vagy helyetteseként. Sipos, L. (2014): p. 113.

[22] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. november 10. Jegyzőkönyv a kerületi nőtitkárok üléséről.

[23] A Nőtitkárságot 1945. áprilisában alakították meg az MKP központjában és egészen 1949 februárjáig működött. Elsődleges feladata a párt nőpolitikájának kidolgozása, annak gyakorlati végrehajtása volt. Az MNDSZ és a szakszervezeti nőmozgalom számára elvi és politikai támogatást adott. A nőszövetség politikai irányításánál az adott gazdasági és politikai helyzetből indult ki, mindig a nők legsürgetőbb gondjaira megadva a választ, mialatt a Baloldali Blokk állásfoglalását támogatta. MNL-OL-M-KS-274-19. f. 3. ő. e. 1947. [január] Az MKP országos Nőtitkárságának jelentése munkájának eredményeiről és hiányosságiról a párt Szervező Bizottságához.; Sipos, L. (2014): p. 18.

[24] MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. október 20. Az MKP Nőtitkárságának javaslatai a nőmozgalom különböző területeinek továbbfejlesztésére.

[25] 1947. november Az MKP Nőtitkárságának javaslatai a Politikai Bizottsághoz a nőmunka megjavítására. Sipos, L. (2014): p. 374.

[26] Vezetősége kezdetben koalíciós alapú volt. A következő pártállású személyekből állt össze: elnöke Tildy Zoltánné a Független Kisgazdapárt, alelnökei Darvas Józsefné a Nemzeti Parasztpárt és Ágoston Péterné a Magyarországi Szociáldemokrata Párt, ügyvezető alelnöke Gárdos Mária a Magyar Kommunista Párt, titkára rövid ideig Hegyesy Erzsébet, majd Fái Boris szintén a Magyar Kommunista Párt köreihez tartozott. 1946-tól főtitkára pedig a kommunista Rajk Júlia volt. Orosz, J.: p. 303.

[27] Az MNDSZ központi székhelye e pár év alatt folyamatosan költözött elsőként a fent leírt Vilma királyné útján volt megtalálható, amelyet korábban a német katonák istállónak használtak. Majd előbbi épület kicsivel több mint egy év múlva hagyta el és rendezkedett be 1946 közepe és 1947 tavasza között az Irányi utca 21-ben majd az Andrássy út 110. alatti villában foglalt helyet, míg végül a Belgrád rakparton volt megtalálható. Orosz, Sz.: Adalékok a Magyar Nők Demokratikus Szövetsége Szabolcs és Szatmár megyei szervezeteinek megalakulásához és tevékenységéhez (1944−1948). In: Dr. Gyarmathy, Zs. (szerk.): Szabolcs-Szatmár megyei helytörténetírás. Nyíregyháza, 1985. p. 437.; Sipos, L. (2014): p. 42., 55.

[28] Alapszabályzatát ezután többször megváltoztatta, 1946-ban az első-, majd 1948-ban a második- és végül 1952-ben az MNDSZ harmadik kongresszusa után. Sipos, L. (2014): p. 81.

[29] Magyar Nők Demokratikus Szövetsége: Magyar Nők Demokratikus Szövetsége alapszabályai. Szikra Kiadó. Budapest, 1946. p. 1.

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jövőbeli elképzeléseiről –, az MNDSZ-en belüli munkásságáról és eredményeiről.[30] Az esemény ugyanakkor nem volt mentes a propagandától, minden lehetséges fórumon, ami a korszakban adott volt – mint például a filmhíradó, a rádió és a sajtó[31] – nem győzte hangsúlyozni, mekkora történelmi jelentőségű jelen kongresszus. Elsősorban arra fókuszált, hogy megmutassa ez volt az az alkalom, amikor először ült össze egy nagy női tábor, ahol nem számított sem a társadalmi helyzet, sem a pártállás, mindenki egyöntetűen állást foglalhatott. Emellett tanúbizonyságot tettek arról, hogy a nőknek és főként a nőszövetségnek is jelentős szerepe van az ország feltámasztásában és életében:[32] *„Az áprilisi kongresszus a demokratikus nők országos seregszemléje volt, megmutatta a nők politikai érettségét és az MNDSZ befolyását országszerte"*[33] – hangzott el a Nőtitkárság aktuális ülésén, ahol összességében eredményesnek titulálták a találkozót.

1946-ban készítette el a korábban már említett dr. Egri és Bíró Vera[34] a nőszövetség egyik alapító tagja az MNDSZ szervezeti szabályzatát. Ebben rögzítésre kerültek munkakörei, melyet öt fő területre osztottak fel, aminek irányítására ennek megfelelően öt osztályt állítottak fel: elnöki, szociális, kulturális és tájékoztató, szervezés, gazdasági. Továbbá meghatározták a szervezet országos felépítését, jogköreit és kötelességeit, munkarendjét, tagjainak számát és megválasztásuknak módját.[35] Egy évvel később viszont Döbrentei Károlyné: *„A Magyar Nők Demokratikus Szövetsége szervezéséről"* című brossúrájában már változóbb képet rajzolt fel az egyesület szervezeti felépítéséről. Ennek hátterében az MNDSZ irányvonalában történt változás állt. Olyan munkaterületek keletkeztek, amik túl sok időt és energiát emésztettek fel, ezek az új útmutatás szerint feleslegessé váltak és megszüntetésre vártak. Viszont előkerültek eddig még kevésbé szem előtt lévő feladatok, amelyek nagyobb törődést igényeltek, mint a női munkanélküliség kérdése vagy a nemi betegségek leküzdése.[36] Ennélfogva a korábbi öt osztály kibővült hétre, újként jelent meg a kulturális mellett a nőnevelő és a személyi, végezetül pedig az *Asszonyok* folyóirat szerkesztősége. Ugyanakkor részben új elnevezéssel folytatta munkáját a kulturális és immáron nőnevelő osztály.[37] Majd még ebben az évben egyes osztályok átalakultak, más néven jelentkeztek, de feladatkörük hasonló maradt, például a nőnevelő és kulturális osztályból kinővő propaganda és közművelődési- osztály. Emellett megjelentek újabb feladatkörrel rendelkező csoportok az egészségügyi – ami kivált a korábbi

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[30] A szabad véleménynyilvánítás azonban relatív volt, hiszen megválogatták kik jöhettek el a találkozóra és arról is, hogy ezen személyek miről tárgyalhatnak. MNL-OL-M-KS-274-19 f. 2. ő. e. 1946. február 6. Jegyzőkönyv a nőtitkársági ülésről.

[31] MNL-OL-M-KS-274-19 f. 2. ő. e. 1946. március 18. Jegyzőkönyv a nőtitkári értekezletről, ahol a nőkongresszus előkészítéséről tárgyaltak.; MNL-OL-M-KS-274-19 f. 5. ő. e. 1946. április Referátumtervezet, a Nőtitkárság jelentése az MNDSZ I. országos Találkozójáról.; Nemzeti Filmintézet Magyarország Filmarchívum: 1946. április. Magyar Nők Demokratikus Szövetségének felvonulása. https://filmhiradokonline.hu/watch.php?id=6126 [letöltés ideje: 2023. 01. 01.]

[32] Az esemény forgatókönyvéről lásd: Magyar Nők Demokratikus Szövetsége: A Magyar Nők Demokratikus Szövetségének I. Országos Találkozója 1946. április 6–8. Szikra Nyomda. Budapest, 1946.

[33] MNL-OL-M-KS-274-19 f. 2. ő. e. 1946. szeptember 11. Az MKP KV Nőtitkárságának jelentése és javaslatai a Magyar Kommunista Párt III. kongresszusára.

[34] Bíró Vera (1918–?) 1939-ben a munkásmozgalomban tevékenykedett, majd 1942-ben lett tagja a szociáldemokrata nőmozgalomnak. 1945-ben a IX. kerületi MNDSZ alapító vezetőségébe tartozott, majd az országos központjában a Propaganda Osztályon dolgozott, ezt követően pedig a budapesti rész kulturális munkájának volt felelőse. 1947. május – 1948 között az MNDSZ budapesti titkára volt, azután a Titkárságának tagja. 1949-ben a Népművelési Minisztériumba helyezték át. Sipos, L. (2014): p. 105.

[35] Magyar Nők Demokratikus Szövetsége: Szervezeti szabályzat. Szikra Kiadó. Budapest, 1946. p. 7.

[36] MNL-OL-M-KS-274-19 f. 7. ő. e. 1947. január 7. A Magyar Nők Demokratikus Szövetsége Szociális Osztályának három hónapos munkatervének vázlata.

[37] Döbrentei, K.: Magyar Nők Demokratikus Szövetsége szervezéséről. A Magyar Nők Demokratikus Szövetsége vezetőképző tanfolyamának anyagából. Szikra Kiadó. Budapest, 1947. p. 13.

szociálpolitikaiból – és a sport – ami a nőnevelő és kulturálisból bővült ki –, valamint megalakították a káderosztályt.[38]

II.1. Cél: az egyedüli nőszervezet létrehozása. Úton az „egység" felé

Az egység gondolata már lényegében az alapítás kezdete óta alapvető célkitűzésként szerepelt az MNDSZ programjában[39], ámbátor több éven keresztül csak illúziónak, utópiának tűnt. Ennek számos oka volt, többek között, hogy több pártnak megvolt a saját maga nőmozgalma, amiről nem volt hajlandó lemondani az újonnan létrejövő nőszövetség kedvéért. Elsősorban igaz volt ez a Magyarországi Szociáldemokrata Párt (MSZDP) nőszervezetére, ami egyben a legerősebb női pártmozgalomnak számított, itt dolgoztak a legképzettebb női politikusok. 1945. áprilisától tagjai nem tölthettek be funkciót az MNDSZ-ben, egyedül jótékony tevékenységükkel segíthették őket abban az esetben, ha saját munkájukat ellátták, de így is inkább a rivalizálás jellemezte a két szervezet kapcsolatát. Kéthly Anna nem volt hajlandó feladni az erős szociáldemokrata nőmozgalmát, egy olyan szervezet kedvéért, aminek irányítása a kommunistáktól függött. Meglátásuk szerint ugyanis az MNDSZ nem volt más, mint az MKP leányszerve. Egyik legerősebb korai nézetkülönbségük abban érhető tetten, amikor Kéthly elutasította a távollétében való megválasztását az MNDSZ alelnöki tisztségére. Ekkoriban indult csak meg a kisgazdák önálló nőszervezetének kialakítása, – élén Stühmerné Oberschall Ilmával[40] – ugyan nem fogadta el az egységes mozgalom javaslatát, de nem is zárkózott el a közös munkavállalástól, illetve tagjainak sem tiltotta meg a belépést az MNDSZ-be. Leggyengébbnek számított a parasztpártiak nőszervezésének kísérletei, bár ennek hátterében az az egyszerű tény is állt, hogy maga a párt is kevés női taggal rendelkezett. A Nemzeti Parasztpárt volt az egyedüli a másik két párttal szemben, aki elfogadta az egységes nőmozgalomra való törekvést.[41] Mindemellett az MNDSZ konkurálni akart olyan nem baloldali szervezetekkel is, mint a volt egyházi nőegyletek, jótékonysági nőegyesületek, sőt még az apácákkal is.[42]

Az egység terve szintén gondokba ütközött „alacsonyabb" szinteken is, még hozzá a társadalom különböző rétegei között. Az MNDSZ munka bázisát a munkás és polgári háziasszonyok köreiből nyerte, ám emellett hiába toborzott minden társadalmi réteg között és bízott abban, hogy így leomlanak az egymás között évszázadokon át épített és fenntartott válaszfalak,

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[38] Magyar Nők Demokratikus Szövetsége: Az MNDSZ munkája és célkitűzései. Tanulj velünk könyvtár. MNDSZ. Universum Nyomda. Budapest, 1947. p. 10.; MNL-OL-M-KS-274-19 f. 3. ő. e. 1948. február 1 – május 1. A Nőtitkárság 3 hónapos munkaterve.

[39] *„Végső fokon minden nőszervezetnek, minden nőmunkának a Demokratikus Szövetség irányítása mellett kell folynia."* MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. január 25. Jegyzőkönyv az MKP budapesti kerületi szervezetei női megbízottainak az MNDSZ megalakítása tárgyában tartott értekezletről.

[40] Stühmerné Oberschall Ilma (1907–?) 1945-ben belépett a Független Kisgazdapártba. 1945 őszétől pedig a párt nőszervezetének vezetői posztját töltötte be, majd nemzetgyűlési képviselő lett. 1946 márciusában a munkáspártok nyomására kizárták a pártból, tizenkilenc társával együtt. 1947-ben az Egyesült Államokba emigrált. Vida, I. (főszerk.): p. 528.

[41] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. március 17. Jegyzőkönyv az MNDSZ országos vezetőségi üléséről.; MNL-OL-M-KS-274-19. f. 3. ő. e. 1947. október 13. Jegyzőkönyv a nőtitkári értekezletről.; Pető, A. (1998): p. 93.; Pető, A.: A nők politikai képviselete a fordulat évében. In: Feitl, I. - Izsák, L. - Székely, G. (szerk). Fordulat a világban és Magyarországon 1947–1949. Napvilág Kiadó. Budapest, 2000. p. 327.; Sipos, L. (1996): p. 322-323.; Sipos, L. (2014): p. 16-17.

[42] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. augusztus 3. Jegyzőkönyv a nőaktíva ülésről, amelyen Rákosi elvtárs beszélt.; 1945. január 25. Jegyzőkönyv az MKP budapesti kerületi szervezetei női megbízottainak az MNDSZ megalakítása tárgyában tartott értekezletéről.; MNL-OL-M-KS-274-19. f. 5. ő. e. Fái Boris előadásának vázlata az MNDSZ I. kongresszusára.; MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. január 31. A Szervező Bizottság által január 17-én kiküldött bizottság javaslatai a nőmunka terén.

csalódnia kellett.[43] Tehát voltak olyan területek, ahol az MNDSZ nem tudott gyökeret ereszteni, ezeken a helyeken más szervezeti formákat kezdett el kiépíteni. Ezeket a csoportokat ugyan függetlenítették az MNDSZ-től, de politikai tartalmuk miatt bármikor könnyen hozzákapcsolhatták.[44] Ilyenek voltak az üzemekben megalakított nőbizottságok, a szegényparasztság Dunántúli részein az Újgazdák és Földhözjuttatottak Országos Szövetsége (UFOSZ), a Földmunkások és Kisbirtokosok Országos Szövetsége (FÉKOSZ). Ezenkívül a vidéki városokban élő kispolgárok és a budapesti tisztviselőnők összefogására is gondolt, melynek során klubokba és egyéb szakmai szervezetekbe akarta tömöríteni őket.[45] További gondot jelentett, hogy nem tudta magához vonzani az értelmiségi nőket, valamint a középparasztsághoz tartozó asszonyokat sem, ezért külön hangsúlyt fektetett rájuk, külön-külön szakosodva az egyes rétegekre, sőt még azon belül is specializálódott a különböző foglalkozásokra, mint például az orvosnők vagy a pedagógusok.[46]

Ahogy az MKP megindította az egész államszervezet, a politikai élet és a társadalom gleischaltolását, azzal párhuzamosan 1948 elején öltött testet a nőegyesületi világ egységesítésének konkrét kivitelezése.[47] 1948. február 6-án az MKP Szervező Bizottságának ülése elfogadta az MNDSZ II. találkozójának a tervét, ahol hivatalosan is kihirdetésre került az új struktúrája a nőmozgalomnak. Az MNDSZ feladatát kereteinek kiszélesítésében jelölte meg, abból a célból, hogy minél több az országban működő nőszervezetet magába olvasszon. Jelenleg még csak azzal az elképzeléssel élt, hogy a nőegyesületek nagy része kollektív tagsággal belép, de a végcél már másképpen nézett ki, a szervezeti önállóságukat akarta megszüntetni.[48] A tervezés során több elképzelés is felszínre került, de végül a következő valósult meg: a szociáldemokrata és kisgazda nőmozgalomnak, valamint a szövetség által életre hívott és irányításuk alá tartozó szakmai nőszervezeteknek – FÉKOSZ, UFOSZ, Vasutas Nőegyesület – együttesen be kellett lépnie az MNDSZ-be. Amíg a koalíciós pártoknak kötelező volt bejelentenie a pártjuk nőmozgalmának megszűnését és beolvadását az MNDSZ-be,[49] addig a professzionális nőegyesületek ugyan szintén társultak, de szervezeti önállóságukat nem adták fel. A vallási alapon megszervezett egyesületeket is igyekeztek bekapcsolni, viszont egyedül a Református Nőegyesületet sikerült magába szívnia, az evangélikus és katolikus szervezetekkel kudarcot vallottak.[50]

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[43] Bíró, V.: A Magyar Nők Demokratikus Szövetségének célkitűzései. A Magyar Nők Demokratikus Szövetsége vezetőképző tanfolyamának anyagából. Szikra Kiadó. Budapest, 1947. p. 13.; MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. ősze a Nőtitkárság javaslata a nők közötti munkáról.

[44] MNL-OL-M-KS-274-19 f. 2. ő. e. 1947. január 30. Útmutató a megyei nőtitkárok számára a nőmunkához.

[45] 1947. november Az MKP Nőtitkárságának javaslatai a Politikai Bizottsághoz a nőmunka megjavítására. Sipos, L. (2014): p. 373-377.; MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. november 3. Az MKP KV Nőtitkárságának javaslata a nőmunka megjavítására.

[46] MNL-OL-M-KS-274-19 f. 3. ő. e. Javaslatok a városi nőmunka megjavítására.; Javaslatok a budapesti nőmunka megjavítására.; Javaslatok a budapesti nőszervezés feljavítására.

[47] Azonban a háttérben már korábban is megindultak a munkálatok az MKP részéről, amikor a kommunista nőaktívák feladatának adta ki, hogy minden nőszervezetet ide kell beépíteni és emiatt el kell érni, hogy ezek az intézmények minél szorosabban együttműködjenek az MNDSZ-szel, hogy a végén egyesülhessenek vele. Erről viszont a nyilvánosság előtt még taktikai okok miatt nem lehetett beszélni. MNL-OL-M-KS-274-19 f. 17. ő. e. Politikai tájékoztató nők részére.

[48] 1948. [február] vége. Az MKP Nőbizottságának javaslata az egységes nőmozgalom megteremtésére. Sipos, L. (2014): p. 412.

[49] A pártok sajtóorgánumai folyamatosan hírt adtak az egység létrejöttéről. Az FKgP lapja az alábbi cikkében írt röviden róla: Egységes női tábor oldhatja, csak meg a feladatokat. Kis Ujság, 1948. április 20. p. 5. Az SZDP a következő írásában adott tudósítást a nagy eseményről: Felhívás a szociáldemokrata asszonyokhoz! Népszava, 1948. április 14. p. 3. Végül pedig az MKP napilapjában publikálta a továbbit: Az ország leghatalmasabb tömegszervezete lesz. Szabad Nép, 1948. április 3. p. 2.

[50] MNL-OL-M-KS-274-19 f. 3. ő. e. 1948. március 15 – április 20. A Nőtitkárság munkaterve.; 1948. április 15-én megtartott pestkörnyéki nőbizottsággal tartott ülés jegyzőkönyve.

1948. április 17–19. az MNDSZ II. országos kongresszusán[51] végső soron megvalósult az „álom", létrejött az egységes, az egész magyar női társadalmat képviselő szervezet.[52] Ekkor még nem látta, hogy ezzel, ahogy Sipos Levente fogalmazott: *„Beilleszkedett a kommunista pártnak a társadalmi, politikai élet, az egész közélet sokszínűségének felszámolására, az egypártrendszer és az azt kiszolgáló tömegszervezetek megteremtését, a civil szervezetek felszámolását célzó politikájába. Nem gondolták, hogy a kongresszuson már hangoztatott termelési propaganda, munkaverseny meghirdetése az egész nőmozgalom egyik rákfenéje lesz."*[53]

III. A Magyar Nők Demokratikus Szövetségének egészségügyi és szociálpolitikai tevékenysége 1944–1948 között

Az MNDSZ 1944–1948 közötti tevékenysége két periódusra osztható, ugyanis egyrészt, ahogy a gazdasági helyzet egyre inkább konszolidálódott – 1947-től – úgy változtak meg az MNDSZ feladatai is, fokozatosan az állam szociális tevékenységének támogatása került előtérbe.[54] Amíg az első körülbelüli két évben – azon belül főleg az első hónapokban – az azonnali segítségnyújtás, a gyors akciókkal volt a legfontosabb cél, addig 1947-re már az állam gazdaságilag és politikailag szilárd talajon állt, ennek eredményeképp került a szervezet előterébe a következő feladatvállalás: *„…. legfontosabb szociálpolitikai feladata: felismerni a legégetőbb, legfájóbb szociális és egészségügyi bajokat*[55] *és azok megoldására akár országos, akár helyi viszonylatban javaslatokat, terveket készíteni..."*[56] A nőszövetség végig igyekezett baráti és jó kapcsolatokat kiépíteni az állam szociális és egészségügyi intézményeivel, arra törekedett, hogy beépüljön annak hivatalos szerveibe.[57] A kormányzati szervekkel való együttműködésnek egyik feltétele volt, hogy minden szociális és egészségügyi tevékenysége összhangban álljon az állami és önkormányzati szervek munkájával. Ennek keretében a nőszervezet segíteni akarta a szakembereket megbízatásukban és mintegy kölcsönösségi alapon igyekezett bevonni őket a saját kötelezettségeibe is, akik tudásukkal biztosították a sikeres munkát. Ennek következményeként megkaphatta ezeknek az intézményeknek az anyagi és erkölcsi támogatását. A másik alapvetésnek számított, hogy az MNDSZ-nek tisztában kellett lennie a családok helyzetével, közvetítve kívánságaikat javaslatok formájában a megfelelő kormányszervek felé, aminek hatására rendeletek és törvények születhetnek,[58] mellyel

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[51] A találkozón elhangzott beszédekről készült az alábbi forráskiadás: Magyar Nők Demokratikus Szövetsége: Együtt a békéért és jólétért! Magyar Nők II. Országos Találkozója 1948. április 17–19. Universum Nyomda. Budapest, 1948.

[52] Pető, A. (2000): p. 332.

[53] 1948. [április vége]. Az MNDSZ központjának értékelése II. kongresszusáról. Sipos, L. (2014): p. 445.

[54] Emiatt a korábban az MNDSZ saját erejéből fenntartott közhasznú intézményekre már kevésbé volt szükség, mivel megerősödtek azok a hivatalos szereplők, akik ezt ellátták. Ezután inkább csak az adott létesítmény felállításban és a megfelelő személyzet kiválogatásában segédkezett, a fenntartás már a közület dolga volt. MNL-OL-M-KS-274-19. f. 18. ő. e. Dátum nélküli. A Magyar Nők Demokratikus Szövetségének munkája.

[55] Ilyen volt például a női munkanélküliség, elhagyott és menhelyi gyerekek gondja, a nemi betegségek elleni küzdelem. MNL-OL-M-KS-274-19. f. 7. ő. e. 1947. január 7. A Magyar Nők Demokratikus Szövetsége Szociális Osztályának három hónapos munkatervének vázlata.

[56] Járó, D.: A MNDSZ szociálpolitikai és egészségügyi feladatai. A Magyar Nők Demokratikus Szövetsége vezetőképző tanfolyamának anyagából. Szikra Kiadó. Budapest, 1947. p. 4-6.

[57] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. március Munkaterv a Magyar Nők Demokratikus Szövetsége munkájáról.; Sipos, L. (2014): p. 24.

[58] Már korábban is fontos szempont volt ennek véghezvitele ilyen volt például, a törvénytelen gyermek fogalmának megszüntetése érdekében támasztott követelésük, melyet az 1946-os találkozójukon hangoztattak. Magyar Nők Demokratikus Szövetsége: Üzenet a magyar Nőkhöz. A Magyar Nők Demokratikus Szövetségének 1946. április hó 6–8-i I. országos találkozójáról. Igazság Nyomda. Budapest, 1946. p. 6. Végül ezt az elnevezést 1946. végén törölték el. Ezer év törvényei: 1946. évi XXIX. törvénycikk a házasságon kívül született gyermek jogállásáról.

folyamatosan javítani tudnak a családok állapotán.[59] Szépen lassan sikerült beépülnie és összefognia a hivatalos hatóságokkal. Például 1947-ben a Népjóléti Minisztérium rendeletének értelmében a szociális bizottságokban két MNDSZ-tag is helyet kapott, ezenfelül együtt dolgozott a minisztérium Társadalmi Gyermekvédelmi Osztályával.[60]

Habár hivatalosan az MNDSZ előtt álló feladatok az állam feladatai közé sorolhatók, ezek az adott körülmények között nem voltak véghez vihetők, mivel az államnak nem voltak erre anyagi lehetőségei. Így a kezdeti években az MNDSZ-csoportok többször nemcsak egyedül dolgoztak, hanem igyekeztek együttműködni különböző pártok, egyházak és más társadalmi nőszervezetekkel, de elsősorban a Nemzeti Segéllyel[61] fogott össze. Azonnali megoldást igényelt a járványveszély elhárításának kérdése, így amikor még a háború javában zajlott megindult a hullák, a romok és a különféle szennyeződések eltakarítása, az utak fertőtlenítése. Majd ezt tovább fokozták 1945 első hónapjaiban, amikor oltási- és tetvetlenítési akciókat kezdeményeztek, a gyerekeket rendszeres mosdatásban részesítették a Széchenyi fürdőben. Másik sürgős problémának számított az éhezés mielőbbi megállítása, emiatt hoztak létre gyerek-, nép- és tejkonyhákat, valamint üzemi és egyéb bölcsődéket, óvodákat, amiknek biztosították az élelmezését, illetve a csecsemők számára megszervezték az anyatejgyűjtést. Utóbbi egyben azt a célt is szolgálta, hogy gátat szabjon a magas csecsemőhalandóságnak. A legnehezebb helyzetben a budapesti gyerekek voltak, országos viszonylatban őket érintette leginkább az éhezés veszélye, ennek megállítására étkeztetési akciókat indítottak, aminek keretében tejesuzsonnák százait rendezték meg, ezenkívül többüket a téli időszakra vidéken helyezték el, ahol az étel biztosítva volt.[62]

Ezen a tevékenységi körön belül meg lehet állapítani nagyobb csoportokat, akikre a nőszervezet elsődlegesen már az 1945-ben megjelent *„Az MNDSZ programadó felhívása"* című kiadványában koncentrált. Ezek a szereplők nem mások voltak, mint az anyák, a nők, a csecsemők és a gyerekek. Lényegében minden követelést, törekvést és célkitűzést az ő javukra és védelmükre fogalmaztak meg és tartották szem előtt a későbbiekben is. Ilyen volt egyebek mellett például az általános egyenlő és titkos választójog bevezetése,[63] az egyenlő munka és egyenlő fizetés elve,[64] minden szakma és pálya megnyitása a nők számára,[65] a szülés előtti és

https://net.jogtar.hu/ezer-ev-torveny?docid=94600029.TV&searchUrl=/ezer-ev-torvenyei%3Fpagenum%3D42 [letöltés ideje: 2023. 01. 01.]

[59] Járó, D.: p. 10.; Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. Tanulj velünk könyvtár. Universum Nyomda. Budapest, 1948. p. 2.

[60] Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája p. 3.

[61] A világháború után minél sürgősebb volt felállítani egy segélyszervezetet, amit végül az 1945-ben alapított Nemzeti Segély testesített meg, egészen 1948. májusáig, amikor beolvadt a Magyar Vöröskeresztbe. Az intézmény az MKP kezdeményezésére alakult meg, de koalíciós alapon működött. Feladatköre elsősorban a közellátás megszervezésében és a gyermekvédelem biztosításában összpontosult. Hantos, J.: A Magyar Vöröskereszt 100 éve. Emberiesség háborúban és békében. Budapest, 1981. p. 123-127.

[62] Bíró, V.: p. 5.; Burucs, K.: MNDSZ. Magyar Nők Demokratikus Szövetsége. História. 1991. Vol. 13. no. 4. p. 24.; Orosz, J.: p. 305.; Magyar Nők Demokratikus Szövetsége: Az MNDSZ munkája és célkitűzései. 3. p.; Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. p. 2.; Sipos, L. (2014): p. 23.; 1945. június Újságcikk az MNDSZ tevékenységének első hónapjairól. Sipos, L. (2014): p. 94-97.

[63] 1945. évi választójogi törvény a nők számára is megadta az általános, titkos választójogot. Pető, A.: A társadalmi nemek közötti egyenlőség története Magyarországon 1780 és 1990 között. In: Bonifertné Szigeti, M. (szerk.): Nők a pályán. Közéleti tudnivalók politizáló nőknek. Nők a Valódi Esélyegyenlőségért Alapítvány. K&F Kiadó. Budapest, 2003. p. 92-102.

[64] Az egyenlő munka és egyenlő bér gondolata azonban ténylegesen csak, mint egy utópisztikus elképzelés maradt meg, melynek hiánya mind a mai napig érezteti hatását a társadalom női felére.

[65] A megvalósulásának előfeltétele és egyben előmozdítója volt, hogy 1945-ben bevezették minden gyerek számára a kötelező, nyolc osztályos általános iskolát, majd 1950-től kezdve elindították a koedukációt. Schadt, M. - Pótó, Zs.: A strukturális változások hatása a nők társadalmi szerepeire és a család-szerkezet átalakulására. In: Spéder, Zs. (szerk.): A család vonzásában, tanulmányok Pongrácz Tiborné tiszteletére. KSH Népességtudományi Kutatóintézet. Budapest, 2014. p. 217-243. A felsőoktatás eddig elzárt fakultásai 1946. augusztusában nyíltak meg a nők előtt, kivéve a katonatiszti és hittudományi intézményeket. Palasik, M.: A női egyenjogúság szabályozása

utáni szabadság és segély biztosítása,[66] a leányanyák és gyermekeik intézményes védelme, megsegítése, a gyermekhalandóság csökkentése, a prostitúció megszüntetése, az árvákról való gondoskodás biztosítása, az éhező és nélkülöző gyerekek azonnali intézményes ellátása és vidékre telepítése.[67]

III.1. A nőegyesület és a gyermekvédelem

Elsőnek és legfontosabbnak számított a gyerekek helyzetén való változtatás és segítségnyújtás. Többek között ennek képezte részét a körülbelül 40 000 magára maradt gyermek elhelyezése árvaházakban, különböző intézményekben, családokban. Továbbá nevelőszülőket kerestek számukra, akik ideiglenes jelleggel vállalták nevelésüket.[68] 1946. januárjában a Népjóléti Minisztérium gyermekmentő akciót hirdetett, hogy a mintegy 100 000 főnyi, nyomorúságos körülmények között élő elhagyott és menhelyen vegetáló gyereknek segítséget nyújtson. Csatlakozásra szólította fel a pártokat, a tömegszervezeteket – az MNDSZ értelemszerűen magáénak érezte ezt a szerepvállalást – és az egyházakat is. Ezzel összefüggésben a nőszervezet hozzá fogott a négyszög akció beindításába, ami azt jelentette, hogy a maradék pamutból az asszonyok munkadélutánjaik során a felesleges anyag felhasználásával sapkákat, sálakat, pulóvereket kötöttek a rászoruló gyerekeknek. A kezdeményezésnek köszönhetően néhány hét múlva már érezhető volt egy jelentős változás: javult a menhelyeken való étkeztetés és öltöztetés, megindult a fűtés, csökkent a létszám.[69] Pár év múlva már egyre kevesebb család volt kénytelen rábízni az államra gyermekét, de még mindig több mint 24 000 fő élt menhelyeken és kihelyezett családoknál. Az MNDSZ folyamatosan arra törekedett, hogy ezen nehézsorsú fiatalok helyzetét megkönnyítse és minél jobb életminőséget biztosítson számukra. Emiatt fogott keresésbe a megfelelő egzisztenciával bíró családok után, akik nemcsak a biztos megélhetést nyújtják a gyermeknek, hanem egyúttal szeretettől hajtva vennék magukhoz, nem pedig anyagi megfontoltságból. A nevelőszülőknél élőket folyamatosan látogatták, ha erőszakot tapasztaltak, akkor az illetőtől elvették a gyermeket. Az MNDSZ fontos intézkedésnek tartotta egy új örökbefogadási törvény meghozatalát, amely gondoskodna arról, hogy az a szülő, aki gyermekével nem törődik ne vehesse azt vissza a nevelő családjától, akkor amikor már gyermeke munkaképes korba lép.[70]

Számos veszély leselkedett még a gondozásba nem vett, utcán csattangoló gyerekekre, akiket az MNDSZ szintén pártfogásába vett. A probléma megoldására együtt dolgozott a Belügyminisztérium Rendőrségi Gyermekvédelmi Alosztályával. Ennek a szervezetnek a feladata volt a züllésnek kitett gyermekek felkutatása, családi körülményeinek ellenőrzése és a

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Magyarországon a 20. század második felében. In: Palasik, M. (szerk.): A Nő és a politikum. A nők politikai szerepvállalása Magyarországon. Napvilág Kiadó. Budapest, 2007. p. 81-125. 1948. novemberében hasonlóan, mint a felsőoktatásban lényegében minden pálya várta a nőket, kivéve a papi hivatalt. Palasik, M.: Női esélyegyenlőség 1945 és 1948 között. In: Feitl, I. - Ignácz, K. (szerk.): Régi és új világ határán – 1945 történetei. Tanulmányok. Napvilág Kiadó. Budapest, 2018. p. 105.

[66] Már 1884-ben megadták a terhes nők számára a szülés utáni négy hetes szabadságot. 1927-ben kiszélesítették ennek időkörét, a szülés előtti hat hétben terhességi-, az azutáni hat hétben gyermekágyi segélyt kaptak, ami alatt az édesanya fizetésének egészét megkapta. Majd a gyermekágyi segély lezárultával tizenkét héten át szoptatási segélyre volt jogosult. 1948-ban újabb jogkiterjesztés történt abban az esetben, ha az anya egy éven aluli beteg gyerekét ápolta. Palasik, M. (2018): p. 110-111.

[67] Magyar Nők Demokratikus Szövetsége: A Magyar Nők Demokratikus Szövetsége az asszonyokhoz. p. 9-16.

[68] Orosz, J.: p. 306.

[69] 1946. január 28. Az MNDSZ budapesti szociálpolitikai vezetőjének körlevele a kerületi vezetőségekhez a gyermekmentési akció megindításáról. Sipos, L. (2014): p. 184-186.

[70] Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. p. 5-6. 1952-ben kiadott családjogi törvény részletesen kitért az örökbefogadás feltételeire és körülményeire. Az ötvenkettedik paragrafus szerint: *„Az örökbefogadás folytán a vér szerinti családi jogállásból származó szülői felügyeleti és tartási jogok, valamint kötelezettségek megszűnnek.”* Nemzeti Jogszabálytár: 1952. évi IV. törvény a házasságról, családról és gyámságról. https://njt.hu/jogszabaly/1952-4-00-00 [letöltés ideje: 2022. 12. 31.]

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kisebb bűnöket elkövető fiatalok felügyelet alá helyezése. 1947-ben e mellé alapították meg – elsősorban Budapesten – az elhagyott és szociális segítségre szoruló gyerekek számára, az MNDSZ több száz asszonyból álló patronázsszervezetét. Munkája részét képezte a rendőrségre kerülő gyerekek környezetének megvizsgálása, részletes jelentés készítése anyagi és családi állapotáról, a szülők bánásmódjáról. Ha szükségesnek ítélték maguktól is felkutathatták a rászorulókat és segítséget adtak számukra, ha kellett a hatóságokkal együtt. A munkavégzést segítette két gyermekotthon – a lányok épülete a Hárshegyen, a másik elsősorban fiúknak szóló Gyömrőn lehetett megtalálni –, amely a Belügyminisztérium szervezésében és fenntartásában működött, az MNDSZ részvételével. Emellett az előbbi teendők megkönnyítésére a Közlekedésügyi Minisztériummal együtt – majd az újjászervezett Belügyminisztériummal – a Keleti pályaudvaron úgynevezett gyermekszobát állítottak fel, ahol az átutazó védtelen nők, gyerekek segítségre lelhettek. Az itt felbukkanó anyákat tanácsadással látták el és ha kellett gyorssegéllyel és munkával könnyítették meg helyzetét.[71] 1948-ban újabb akciót indított a gyermekek javára az alábbi jelszóval, *„Szeresd a gyermeket!”*, amelynek céljai között egyaránt szerepeltek kulturális – különböző szórakozási lehetőségek megteremtése –, politikai és pedagógiai – a közvélemény formálása a demokratikus nevelés mellett –, szociális – kapcsolódni a Népjóléti Minisztériumhoz az elhagyott gyerek fogalmának megszüntetésének tárgyában – irányú elképzelések.[72]

A nőszövetség a gyerekek számára több intézményt is alapított vagy hozott helyre, – 1947-re önerőből összesen 250 darabot – mint bölcsődéket, óvodákat, iskolákat, napközi otthonokat. Utóbbinál törekedtek arra, hogy lehetőség szerint nyáron minél több óvoda alakuljon át nyári napközi otthonná, ezzel is segítve a szülők problémáját a gyermekeik elhelyezésében. A Népjóléti Minisztérium rendeletének köszönhetően 1947-től kötelező volt átformálásuk, természetesen az MNDSZ részvételével. Annak érdekében, hogy itt a kicsik minél jobb ellátásban részesüljenek a nőegyesület az itt dolgozókat ingyenes oktatásban részesítette, ahol a legegyszerűbb nevelői és egészségügyi ismereteket sajátíthatták el.[73]

A gyerekek és egyben édesanyák megsegítésére koncentrált az MNDSZ karácsonyi akciója is, melyet több éven át megrendeztek.[74] A karácsonyi gyűjtés elsősorban a rászoruló és szegény gyerekeknek szólt, akik árvaházakba kerültek, vagy éppen valamilyen okból kifolyólag a kórházban tartózkodtak. Továbbá ide sorolhatók a sokgyermekes családok, akiknek életkörülményei nem tették lehetővé a karácsonyi ajándékozást, sőt sokszor az alapvető elemi anyagi feltételek megteremtése is gondot jelentett. Hogy ténylegesen a hátrányos helyzetben élőket segítsék meg környezettanulmányozásra mentek ki a családokhoz és ezt követően listát készítettek a rászorulókról, amit továbbítani kellett a központba. Így volt ez egy részről egy jótékony, segítő tevékenység a gyerekeknek, amellyel egyízben segítették az illetékes hatósági és kormányszerveket. Ezzel párhuzamosan egy lehetőséget teremtettek az MNDSZ számára szervezeteinek aktivizálására és megerősítésére és egyben lehetőség nyílt a sikeres

[71] Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. p. 5-7.; 1947. december 15. Újságcikk az MNDSZ patronázsszervezetéről. Sipos, L. (2014): p. 394-395.

[72] 1948. január Tervezet az MNDSZ „Szeresd a gyermeket!" akciójának programjára és megszervezésére. Sipos, L. (2014): p. 405-406.

[73] MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. május 20. Az MKP Országos Nőtitkárságának levele az Országos Szervezési Osztályhoz.; Sipos, L. (1996): p. 327.

[74] Decemberben rendszeresen Mikulás napi ünnepségeket is rendeztek, ahol kisebb apróságokat, édességet és gyümölcsöt ajándékoztak a gyerekeknek. Viszont ez a rendezvény mindig kisebb hangsúllyal szerepelt a rangsorban, a karácsonyi akció háttérbe szorította. MNL-OL-M-KS-274-19. f. 1. ő. e. Jegyzőkönyv a kerületi nőtitkárok 1945. november 6-i üléséről.; Jegyzőkönyv a kerületi nőtitkárok 1945. november 10-én tartott üléséről.; MNL-OL-M-KS-274-19. f. 14. ő. e. 1946. december 2. Jelentés az MNDSZ eddigi munkájáról.; Nemzeti Filmintézet Magyarország Filmarchívum: 1946. december. Az MNDSZ Mikulás napi ünnepsége. https://filmhiradokonline.hu/watch.php?id=6284 [letöltés ideje: 2022. 12. 14.]

véghezvitelével a társadalmi elismertség megszerzésére, népszerűségük növelésére.[75] Az eredményes gyűjtés érdekében felhívással fordultak a többi nőegyesülethez, szervezethez, segítséget kértek az államférfiaktól, városoktól, a gazdasági élet irányítóitól, a sajtótól. Azzal a kívánsággal fordultak feléjük, hogy ők is járuljanak hozzá valamilyen formában az adakozáshoz és ha lehetséges ösztönözzék a saját környezetüket az akció fokozására.[76] Az akció népszerűsítésére szolgált a rádióban és sajtóban való hirdetések megjelenítése, különböző plakátok és röpcédulák nyomtatása és elhelyezése. Vagyis lényegében minden eszközzel igyekeztek az egész társadalmat mozgósítani A gyűjtés keretében számos eseményt rendeztek – hangverseny, operaelőadás, műsoros este, tánc- és teadélután, tömbmulatságok –, amelynek bevételei szintén a karácsonyi adományozás javára folyt be. Az anyagi forrásokat kiegészítették a természetbeni adományok, melyek sok tételből álltak össze, például: alapvető élelmiszerek, iparcikkek, játékok, nyersanyagok, ruha és cipő.[77] Az akció sikeresen karácsonyi ünnepségekkel zárult, ahol az MNDSZ-központ irányítása mellett kerületenként és vidéken szétosztásra kerültek az adományokból összeállított csomagok, ezzel 50 000 gyereket boldoggá téve. Ezenkívül az MNDSZ-re is pozitív hatást gyakorolt, felélénkült szervezeti élete, egyre több asszony csatlakozott hozzá, már csak kezességet kellett vállalni ennek fennmaradásáért és későbbi bővítéséért, erősítéséért. Viszont arról nem szabad megfeledkezni, hogy ez nemcsak a nőszövetség érdeme a háttérben állami segítséget is kapott, sőt az MKP is ott állt mögötte és támogatta anyagilag és elvi úton is.[78]

1946-ban, ismét szükségesnek bizonyult az esemény megrendezése az akkori nehéz gazdasági helyzet miatt. Sőt lebonyolítása egyszerre volt már a tagság és társadalom elvárása is. Utóbbit jól alátámasztja, hogy egyéb szervezetek is hozzá fogtak hasonló formátumú esemény megindításához, ami az egyesületet szintén az újbóli szervezésre motiválta. A sikeres gyűjtés érdekében a külföldön lévő kirendeltségekkel is felvették a kapcsolatot, a határon túli segélyszervezeteknek és ismerősöknek levelet küldtek, a követségekhez pedig Gyöngyösi János külügyminiszter táviratozott, majd a Magyarországon tartózkodó külföldi segélyszervezetekhez fordultak felajánlásokért. Az országon belül megint különféle rendezvényeket tartottak, mint a karácsonyi vásárt, – ahol még produkciókat is tartottak a Nemzeti Színház előadóival, divatbemutatót rendeztek – az itt befolyt összeget szintén az adományokra fordította. A siker érdekében, éppúgy, mint egy évvel korábban, bevonták a propaganda legkülönfélébb eszközeit: felhívást és rendszeres tudósítást intéztek a társadalom felé a rádióban és a sajtóban, plakátokat és röpcédulákat készítettek, propaganda autót járattak az országban. Végül összesen körülbelül 100 000 gyereknek juttattak alap élelmiszereket, cipőt, csecsemőholmit, ruhát, játékot. Az MNDSZ ebben az évben még nagyobb általános népszerűségre tett szert, tekintélye tovább emelkedett a hivatalos szervek és a társadalom előtt. Nem mellékesen a határon túli magyar és a hazai külföldi segélyszervezetekkel való kapcsolatán is javított. A vidékre küldött csomagokkal, pedig megerősítette ottani szervezeteit, ellentétben a fővárossal, ahol ez az idő kevésnek bizonyult előbbi véghezvitelére.[79]

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[75] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. december 8. Jegyzőkönyv a nőtitkárok üléséről.; MNL-OL-M-KS-274-19. f. 14. ő. e. 1945. december 29. A Magyar Nők Demokratikus Szövetség Központjának levele a Magyar Kommunista Párt Országos Titkárságának.; Sipos, L. (2014): p. 163.

[76] Legyen mindenkinek karácsonya! Felhívás a magyar társadalomhoz! Szabad Nép, 1945. november 25. p. 2.

[77] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. november 29. Jegyzőkönyv a nőtitkárság üléséről.; 1945. december 1. Jegyzőkönyv a kerületi nőtitkárok üléséről.; 1945. december 8. Jegyzőkönyv a nőtitkárok üléséről.; MNL-OL-M-KS-274-19. f. 14. ő. e. 1946. január 5. Az Országos Nőtitkárság jelentése a Magyar Kommunista Párt Főtitkárságának a Magyar Nők Demokratikus Szövetségének karácsonyi akciójáról.

[78] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. december 29. Jegyzőkönyv a kerületi nőtitkárok üléséről.; 1945. [vége] Az Országos Nőtitkárság szavai a Magyar Kommunista Párt Főtitkárságához.; Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. p. 2.

[79] MNL-OL-M-KS-274-19. f. 7. ő. e. A Magyar Nők Demokratikus Szövetségének 1946. évi munkájának mérlege és jövőbeli tervei.; MNL-OL-M-KS-274-19. f. 14. ő. e. 1946. december 2. A Magyar Nők Demokratikus Szövetségének karácsonyi akciójának munkaterve.; 1947. január 7. A karácsonyi akció elszámolása.; 1947. január

Még 1947-ben is szükségesnek bizonyult az akció lefolytatása a rossz gazdasági helyzet miatt. A korábbiakhoz képest még nagyobb számokban gondolkodtak, legalább 150–200 000 főt vagy akár 500 000 gyermeken, akartak segíteni. A központi cél ekkor az iskolás, főleg a vidéki gyerekek cipő és ruha ellátásában összpontosult. Hasonlóan az előzőkhez itt is még szélesebbkörű összefogást képzeltek el a különböző társadalmi szervekkel és rétegekkel. Viszont nagy különbségnek tekinthető, hogy magát az akciót ekkor már a Népjóléti Minisztérium irányította, az MNDSZ, mint kezdeményező, szervező és végrehajtó jelent meg.[80]

III. 2. A nőszövetség és az egészségügy viszonya

Az egészségügyi munkában végzett tevékenysége szintén széleskörű volt. Központilag küzdött a járványok leküzdése és a népbetegségek ellen. Legnagyobb gondot a magas számú tbc és nemi betegek száma jelentette, illetve ebbe a kategóriába sorolták még az alkoholizmus problémájának megoldását. Az egészségügy feljavítására, megsegítésére és egyben az egyházak lelki-gondozónő hálózatának ellensúlyozására szolgált a fővárosban minden házban, tömbben működő egészségügyi megbízotti rendszer, ahova 1945-től női tagot is választani kellett. Ennek a személynek a teendői közé tartozott az egészségügyi és tisztasági rendelkezések végrehajtása és ellenőrzése. Ezt a funkciót vidéken az utcánkként bevezetett önkéntes népegészségőri hálózat kiépítésének megkezdése jelentette.[81] Utóbbit a Népjóléti Minisztérium 1947-es rendelete után kezdték el megvalósítani, szemben előbbivel, amit kétéves működése után – 1947 nyarán – ismertek, csak el a hivatalos hatóságok. A rendelet értelmében az MNDSZ küldetésül megkapta: *„Az önkéntes népegészségügyi szolgálat megszervezésével a Magyar Nők Demokratikus Szövetségét bízom meg. A Szövetség feladata a népegészségőrök toborzása, munkába állítása és társadalmi tevékenységük, valamint a szociális munkára való képzésük irányítása."*[82] A jelentkezők a hatósági orvosok vezetése alatt, az MNDSZ szervezeteiben jelentkezhettek az önkéntességre, majd egy tanfolyam elvégzése után munkába állhattak. Feladatköre számos területre kiterjedt, többek között az anya-, család-, csecsemő- és felnőttvédelemre, aminek keretében családlátogatásokat tartott. Emellett folyamatosan odafigyelt a köz- és személyihigiéniára, részt vett az egészségügyi akciókban és felvilágosításokban, egyúttal harcot folytatott a népi babonák és a kuruzslás ellen.[83]

Az itteni tevékenységük során kiemelt figyelmet fordítottak az egészségvédelemre, főként az anyák, asszonyok és gyermekek közt. Átmeneti és állandó gyermekambulanciákat állítottak fel, orvosi tanácsadókat létesítettek. A legkiemelkedőbb intézkedésük az egészségügyi vándorautó-akciójukhoz köthető, amelyet a Népjóléti Minisztériummal közösen 1946 ősze – 1947 szeptembere között számos alkalommal útnak indítottak a legtávolabbi falvakba és tanyákba. Összesen ötven autót küldtek le vidékre, több mint 1100 közösségbe, ahol a budapesti szakorvosok, hatósági orvosok, védőnők és MNDSZ asszonyok látták el az egészségügyi kezelésre szorultakat. Az akció során 500 000 fő felett volt a megvizsgált személyek száma, akiknek orvosi ellátása mellett még cukrot, gyógyszert, ruhaneműt, tápszert, szappant,

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9. A karácsonyi akció intézőbizottságának jelentése az MNDSZ akciójának eredményeiről. Ugyanakkor utóbbi forrásnál megjegyzendő, hogy az MNDSZ kommunista vezetői nem érezték kielégítőnek az MKP támogatását, ugyanis véleményük szerint, csak egyes személyek támogatták. Összességben nem adtak elfogadható segítséget a sajtóvonalán, de főként a munkatervük és munkájuk bírálata és annak helyes irányba való terelése is elmaradt. Sipos, L. (2014): p. 294.

[80] MNL-OL-M-KS-274-19. f. 3. ő. e. 1947. október 13. A karácsonyi akció előkészítésének és végrehajtásának vázlatos terve.; MNL-OL-M-KS-274-19. f. 18. ő. e. 1948. Az MNDSZ munkája és célkitűzései.

[81] Járó, D.: p. 3-5.; 9-10.; MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. január 31. A Szervező Bizottság által január 17-én kiküldött bizottság javaslatai a nőmunka terén.; 1945. március 24. Jegyzőkönyv az MNDSZ országos vezetőségi üléséről. Sipos, L. (2014): p. 61.

[82] 1947. október 15. Az MNDSZ országos központja Szociális Osztályának felhívása vidéki helyi csoportokhoz a népegészségőr-hálózat kiépítésére. Sipos, L. (2014): p. 359-360.

[83] Az Önkéntes Népegészségőrök munkaköre. Tanulj velünk könyvtár! MNDSZ. Universum Nyomda. Budapest, 1948. p. 1-8.

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vándorkelengyét vittek.[84] Megjegyzendő, hogy az ellátás mellett azonban az akciónak volt egy másfajta célja is még hozzá a propaganda egy kiváló eszközeként szolgált annak érdekében, hogy az MKP mellett folytasson le agitációt, hogy az augusztus 31-i választáson rájuk voksoljanak. Ráadásul a program második útja már az 1947-ben bevezetett hároméves terv keretében valósult, meg, ami szintén az MKP nevéhez köthető.[85]

Összességében elmondható, hogy az egészségügyben elvégzett munkájuk során sikerült szoros kapcsolatokra szert tenni a hatóságokkal, együttműködtek a tiszti főorvosokkal, hatósági orvosokkal és védőnőkkel, valamint lépéseket tettek, hogy ezt a fajta összefogást kiterjesszék a zöldkeresztes védőnőkre.[86] Sőt az egészségügyi vándorautó-akcióból nőtte ki magát a *„Város a faluért egészségügyi baráti kör"*, amelynek tagjai a vándorautón szolgálók közül kerültek ki. A társaság célul tűzte ki a társadalom egészségügyi működésének szakszerű irányítását, a népegészségőrök munkájának támogatását és további országos akciók lefolytatását.[87]

III. 3. Az MNDSZ és a hadifoglyok kapcsolata

Egyik fentebbi kategóriába sem sorolható az 1945 őszén az MNDSZ által végzett hadifogoly szolgálat, melyet többek között a Vöröskereszttel, a Szociális Testvérek Társaságával és a Nemzeti Segéllyel együtt bonyolított le. 1945 novemberében felállításra került a hadifogoly iroda, melynek feladata a foglyok felkutatása, a kapcsolatok létesítése a hozzátartozóikkal és a hazatértek megsegítésében összpontosult. A szolgálat keretében meleg ételt, szállást és ruhát biztosítottak a hazatérőknek.[88]

1947-ben a februári párizsi béke aláírása előtt a Szovjetunió hozzájárult 31 000 magyar hadifogoly hazatéréséhez. A szerződés kötelezte a magyar államot a győztes hatalmakkal való megállapodásra a foglyok hazaszállításának ügyében. Az MNDSZ szerepe ebben tagadhatatlan, ugyanis, amikor még a tárgyalások csak folyamatban voltak, levelet intéztek Sztálinhoz, melyben arra kérték engedje vissza otthonaikba a nők fogságban ragadt családtagjait.[89] Ahhoz, hogy ez eljusson a Szovjetunió első emberéhez, egy 100 tagú küldöttség kérte fel Rákosit, mint államminisztert[90] az ebben való közreműködésére és az irat továbbítására. Sztálin engedélyével végül már májusban megindult a foglyok hazaszállítása.[91] A munka megkönnyítésére az

[84] MNL-OL-M-KS-274-19. f. 3. ő. e. 1947. május 22. Az MKP KV Nőtitkárságának levele a kommunista elvtársakhoz.; MNL-OL-M-KS-274-19. f. 18. ő. e. A Magyar Nők Demokratikus Szövetségének szociálpolitikai, egészségügyi feladata és munkája.

[85] MNL-OL-M-KS-274-19. f. 14. ő. e. 1947. július 12. A második egészségügyi akció terve.

[86] Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. p. 9. 1927-ben megalapították az Országos Közegészségügyi Intézetet, amelynek első igazgatói székét Johan Béla töltötte be. Az ő nevéhez köthető a falusi egészségvédelem elvi és gyakorlati megvalósítása a Zöldkeresztes Egészségvédelmi Szolgálat képében. A zöldkeresztes védőnők a fenti intézmény foglalkoztatta, egyenruhát viseltek, karjukon a zöldkereszt jelével, mely a hivatásukat szimbolizálta. 1945-ben az egészségügy és intézményei a Népjóléti Minisztérium fennhatósága alá került, majd létrehozták a Védőnői Szolgálatot. 1948-ban az állam újra beleszólt működésükbe és eltörölték a zöldkeresztes egészségvédelemi szolgálat elnevezést és rendelkezéseit helyette az állami egészségvédelemre helyezte a hangsúlyt. Kocsis, P.: „Esőben, sárban való gyalogjárás cipőjüket elkoptatta...". Száz éves a magyar védőnői szolgálat. 2015. december 8. Magyar Nemzeti Levéltár Országos Levéltára. https://mnl.gov.hu/mnl/ol/hirek/esoben_sarban_valo_gyalogjaras_cipojuket_elkoptatta [letöltés ideje: 2022. 12. 14.]

[87] MNL-OL-M-KS-274-19. f. 18. ő. e. A Magyar Nők Demokratikus Szövetségének szociálpolitikai, egészségügyi feladata és munkája.

[88] Acsády, J.: A hazai nőszervezetek 1945-től a rendszerváltás időszakáig. In: Fejős, A. - Szikra, D. (szerk.): Női civilszervezetek az illiberális demokráciában. Társadalomtudományi Kutatóközpont. Budapest, 2020. p. 63.; Orosz, J.: p. 306.

[89] Az MNDSZ levele Sztálinhoz a hadifoglyok hazatéréséért. Asszonyok, 1947. május 15. p. 2.; Sipos, L. (2014): p. 326.

[90] 1947. június 1. Az MNDSZ-központ a hadifogoly-akció feladatairól. Sipos, L. (2014): p. 343.

[91] Ennek nagy jelentősége abban állt, hogy nem várta meg a béke ratifikálását és életbe lépését, hanem már ebben a hónapban jóváhagyta a hadifoglyok elengedését. MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. május 15. Az MKP KV Nőtitkárság levele a kommunista elvtársakhoz.

MNDSZ megindította hadifogoly-akcióját és még ebben a hónapban központjában megalapította Hadifogoly Osztályát, – élén Nádas Klárával – amelynek feladata az akcióval kapcsolatos munka centrális irányítása volt. Emellett úgynevezett hadifogoly bizottságokat alakítottak, részben az MNDSZ-tagjaiból, de ugyanúgy ki vette a részét például az UFOSZ, FÉKOSZ, vagy a Nemzeti Segély.[92] Az akció részét képezte – a korábbiakhoz hasonlóan – a fogadásukban való részvétel, az élelmezésük biztosítása, az egészségügyi ellátásukról és majdani beilleszkedésükről való gondoskodás.[93] Ugyanakkor ezt az eseményt egyben propaganda célokra is felhasználták, végig kiemelt figyelmet fordítottak arra, hogy az egész ország tisztában legyen azzal kinek is köszönhetik, szeretteik hazahozatalát, így került reflektorfénybe a nőszövetség és Rákosi.[94] Az MKP vezetőjére való fokozott koncentráció és érdemeinek méltatása egyben azt a célt is szolgálta, hogy az 1947-es választások során pártja minél nagyobb sikereket érjen el.[95] Ebből következik, hogy ebben a formában (is) az MNDSZ bekapcsolódott a kommunisták népszerűsítésébe. Mindenesetre az itt betöltött munkájának köszönhetően az MNDSZ országos hírnévre tett szert.

III. 4. Az MNDSZ egészségügyi és szociális munkavégzése a hároméves terv keretében

Mindkét munkakörét érintette a hároméves terv bevezetése, amelynek kivitelezésében az MNDSZ is részt kívánt venni. Első feladatként ennek megismerésére, megszerettetésére és népszerűsítésére fókuszáltak, majd miután ez bekövetkezett megindulhatott a mozgósítás azért, hogy a lehetőségek szerint a legtöbb asszony részt vegyen a terv végrehajtásában. A program keretében további fejlesztéseket eszközöltek az egészségügyben, amelyben természetesen különböző formákban a nőszövetség is kivette részét, például: segédkezett az épülő bölcsődék, óvodák, kórházak, szülőotthonok berendezésének előteremtésében, vagy, ha kellett épp falat meszelt, vagy takarított. Egyúttal nagyobb gondot akart fordítani az iskolai egészségügy támogatására, így történhetett, hogy Pest környékén megindította az Országos Közegészségügyi Intézettel együttműködve a vándor iskolafogászatát. Külön kiemelendő, hogy minden olyan munkát magára vett, amire a terv költségvetéséből nem futotta, ígéretet tett arra, hogy azt önkéntes társadalmi munkával vagy gyűjtéssel pótolni fogja, ezzel is előmozdítva a terv sikerét és egyszerre annak túlteljesítését. Ezzel a felajánlással vállalta több intézmény létrehozásában, gondozásában és a felszerelés biztosításában való közreműködését, mint a bölcsődék, az iskolák, és a napközi otthonok. Az előbbi körbe tartoztak még például az egészség-, kultúr- és szeretetházak. Nemcsak az elengedhetetlen intézmények felállításában segédkezett, hanem jelen volt még olyan helyeken, ami hasonlóan illeszkedett profiljába, de már nem a szükség szülte annak megvalósítását. Ilyen volt mondjuk, amikor a gyerekek szabadidős tevékenységi lehetőségeinek bővítését támogatta új játszóterek kiépítésének képében.[96]

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[92] 1947. június 1. Az MNDSZ-központ a hadifogoly-akció feladatairól. Sipos, L. (2014): p. 343-345.
[93] Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. p. 7.; Orosz, J.: p. 306-307.; Pető, A. (1998): p. 111.
[94] MNL-OL-M-KS-274-19 f. 3. ő. e. 1947. május 15. Az MKP KV Nőtitkárság levele a kommunista elvtársakhoz.
[95] Bognár, Z.: A magyar hadifoglyok ügye, sorsa 1947-ben – a párizsi békeszerződés és a parlamenti választások függvényében. Aetas. 2010. Vol. 25. no. 1. pp. 131-143.
[96] MNL-OL-M-KS-274-19. f. 6. ő. e. „Egészséges boldog család". A magyar nők szociálpolitikai és egészségügyi feladatai a népi demokráciában. Elhangzott a magyar nők II. országos találkozójának 1948. április 19-i szakbizottsági ülésén.; MNL-OL-M-KS-274-19. f. 18. ő. e. 1948. Az MNDSZ munkája és célkitűzései.; Magyar Nők Demokratikus Szövetsége: Együtt a békéért és jólétért! p. 115-119.; Társadalmi munkaversenyt indít az MNDSZ a 3 éves terv 2½ év alatti végrehajtásáért. A demokratikus egység jegyében folyt le a nők kongresszusa. Szabad Nép, 1948. április 20. p. 4.

III. 5. A munkák anyagi vonzatának megoldása

A felsorolt munkák költségei igencsak magasra rúgtak, miközben az anyagi feltételek nem voltak természetesnek vehetők. Mivel működésének elején még nem rendelkezett bevételekkel részben az államhoz fordult segítségért. Másik oldalról önerőből próbált meg magának gazdaság alapot teremteni, egyrészről saját üzleteket hozott létre másrészről leépítésekbe és takarékoskodásba kezdett. A helyzet azonban még 1947-re sem javult sokat, így újabb megszorításokat indítványozott, továbbá megpróbálta asszonyait rábírni a tagdíjak rendszeres fizetésére, valamint termelő szövetkezeteinek beindításra. Kiadásainak fedezésére azonban még mindig szüksége volt a különféle adományok bejövetelére. Finanszírozását a saját kétkezi munkájukból származó jövedelmeik, illetve számos rendezvényükből – mese-, mozi-, tea-délutánokat rendeztek, táncestélyeket adtak – érkező bevételekkel egészítették ki. Végül pedig nem szabad megfeledkezni a korábban már bemutatott gyűjtéseiről és akcióiról.[97]

III. 6. Az MNDSZ jótékonysági szervezet-e vagy sem?

Az ismertetett tevékenységi körök alapján joggal gondolhatjuk, hogy az MNDSZ részben egy jótékonykodó nőszervezetként határozható meg, azonban ő maga ez ellen végig tiltakozott. Egyik oldalról karitatív tevékenységére úgy tekintett, mint amit az adott körülmények között átmenetileg neki kell elvégeznie, amíg az állam nem áll újra saját lábára. Habár tény az, hogy a vizsgált években elsősorban a korábbi évtizedekben működő jótékony szervezetekkel számos hasonlóságot mutat. Ezzel a „problémával" folyamatosan küzdött és igyekezett mihamarabb változtatni rajta és kiterjeszteni munkásságát egyéb területekre is.[98] Más részről különbséget állapított meg a jótékonykodók személyében és az adományozás minőségében. Esetükben feltehetően egy sokkal szélesebb társadalmi réteg segített a rászorulókon köszönhetően az MNDSZ különböző hátterű tagjainak, szemben a korábbi évtizedekkel, amikor elsősorban az arisztokrata nők foglalkoztak a szegények megsegítésével. A múlt századokban az előkelő hölgyeknek mintegy kötelessége és egyben a társadalom elvárása is volt, hogy segítsen a nélkülöző embereken, mialatt az MNDSZ ezt főként inkább önkéntes alapon végezte el. Viszont a nőszövetségnek egyben érdeke is volt ez a fajta (sikeres) munkavégzés, ugyanis így juthattak el a népesség minél szélesebb köréhez és egyúttal így nyerhették meg legjobban őket.[99]

IV. Eredmények és összefoglalás

1948-ra az MNDSZ, mint egy tekintélyes tömegszervezet állt a magyar közéletben, amellyel komolyan számolhatott a kormány, a hivatalos szervek, a többi társadalmi szervezet és maga a lakosság is.[100] Mind ezeket az átfogó, színes és egyszerre sikeres munkavégzésének jóvoltából. Azonban már maga az egységes nőmozgalom, majd az 1948 júniusában létrejött MDP egy új típusú irányvonalat sejtetett. Ettől kezdve már nem kellett leplezni az MNDSZ és a párt közötti viszonyt, lehullt az álarc, amit évekig maguk előtt tartottak.[101] Egy új korszak hajnala virradt fel a nőszövetség életében, a korábbi viszonylagos „önállóságát" kezdte elveszíteni. Teljes

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[97] MNL-OL-M-KS-274-19. f. 1. ő. e. 1945. december 8. Jegyzőkönyv a nőtitkárok üléséről.; MNL-OL-M-KS-274-19. f. 2. ő. e. 1946. február 4. Jegyzőkönyv a nőtitkársági ülésről.; MNL-OL-M-KS-274-19. f. 7. ő. e. 1945. szeptember 10. Az MNDSZ-központ átirata az MKP Központi Vezetőségének államsegély kieszközölése tárgyában.; 1946. augusztus 9 – szeptember 7. Jelentés a gazdasági osztály munkájáról.; 1947. január 11. A Magyar Nők Demokratikus Szövetsége gazdasági osztályának jelentése.; 1947. január 13. A Magyar Nők Demokratikus Szövetsége gazdasági osztályának jelentése.

[98] Ennek részletes ismertetésére sajnos terjedelmi korlátok miatt nem tudok kitérni, de új típusú munkának tekinthetjük például a drágaság elleni harcban vagy a választásokban betöltött szerepvállalását.

[99] Magyar Nők Demokratikus Szövetsége: Az MNDSZ szociálpolitikai, egészségügyi feladata és munkája. p. 3.

[100] Sipos, L. (1996): p. 328.

[101] Schadt, M.: Struktúra és funkcióváltozások az MNDSZ-ben 1950 és 1953 között. In: Palasik, M. (szerk.): A Nő és a politikum. A nők politikai szerepvállalása Magyarországon. Napvilág Kiadó. Budapest, 2007. p. 167.

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mértékig az MDP kezébe került, ami kettős célt szolgált, egy részt pártja politikai érdekeinek érvényesítését, más részt pedig a nők feletti teljes kontroll intézményesítését az élet minden területén.[102] Ezzel egyúttal a tevékenységi köre is változó irányt kezdett venni, a korábbi sokrétű munkavégzése kezdett elszürkülni és egysíkúvá válni, köszönhetően a már fentről jövő utasításoknak – megindult a sztálini minta erőszakos másolása. Korábbi arculatát elvesztette, már nem foglalkozott szociálpolitikával, látóköréből kikerült a nővédelem. Új feladatai fókuszába 1949-től már elsődlegesen a gazdasági és politikai érdekek kiszolgálása került, többek között ide sorolandó a szocialista rendszer „békéjének védelme" vagy a termelésben való fokozott részvétel.[103] Mind ezek után jól látható, hogy a korábban pezsgő életet élő nőszövetség hangja megszűnik és szép fokozatosan a párt árnyékába kerül és onnan már nem is tud többet előtörni.

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[102] Schadt, Gy.: A magyar társadalom szerkezetének átalakulása (1945–1956). In: Gyarmati, Gy. - Schadt, Gy. - Vonyó, J. (Összeállította és szerk.): Az 1950-es évek Magyarországa játékfilmeken: oktatási segédkönyv. ASOKA Bt. Pécs, 2004. p. 35.

[103] Orosz, J.: p. 310.; Sipos, L. (1996): p. 328.

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Dante-motívumok Anna Ahmatova és Nyikolaj Gumiljov poétikájában

Tóthpál Sarolta Krisztina, *ELTE BTK, Irodalomtudományi Doktori Iskola*

Jelen tanulmány középpontjában az Anna Ahmatova és Nyikolaj Gumiljov életművében fellelhető Dante-motívumok elemzése áll, különös tekintettel Gumiljov *Firenze* című versére, *Beatrice* című versciklusára és Ahmatova *Dante* című költeményére. Először is azt szeretném megvilágítani, hogy a költők miképpen viszonyultak Itáliához és Alekszandr Blok *Itáliai versek* című ciklusához, amely különösen Gumiljovra volt hatással. A költőkről szóló visszaemlékezések többek között arra is felhívják a figyelmet, hogy ők milyen módon viszonyultak Dante Alighierihez és főművéhez, az *Isteni Színjáték*hoz. A *Firenze* című versben említésre kerül Dante alakja, ezenkívül a Pokol egyes állataira is találunk utalást. A költeményben ötvöződik az *új – régi*, *örök – elmúló*, *jelen – múlt* kettőssége és a Dante-motívumok közül hangsúlyossá válik az egyház ellen megfogalmazott kritika is. Feltételezhető, hogy a *Beatrice* című ciklus negyedik versét ihlető forrás a *Versek Pietra asszonyhoz* című dantei versciklus negyedik verse (*Olyan kemény kívánok lenni szóban*). Ahmatova *Dante* című költeményében feltárulkozik a költőnő sajátos Dante-értelmezése is.

Kulcsszavak: Anna Ahmatova, Nyikolaj Gumiljov, Dante Alighieri, Beatrice, Firenze

I. Bevezetés

Anna Ahmatova és Nyikolaj Gumiljov házaspárként 1912-ben, majd a költőnő egyedül 1964-ben Itáliába tett utazása nagy hatást gyakorolt életművükre. Alapfeladatomnak tekintem annak feltárását, hogy az utazási élmények és az itáliai irodalom mély ismerete hogyan befolyásolták Ahmatova és Gumiljov költészetét. Mindez többek között tetten érhető Ahmatova *Velence* című versében, a Firenzében íródott költeményeiben és feljegyzéseiben. Ám az itáliai élmények még inkább megfigyelhetők férje, Gumiljov lírájában, aki egy teljes itáliai témájú versciklust írt. E művek középpontjában a közösen meglátogatott itáliai városok (pl. Genova, Róma, Nápoly, Bologna, Firenze), műemlékek, képzőművészeti alkotások (pl. Leonardo da Vinci és Fra Beato Angelico alkotásai), illetve történelmi személyek, költők (pl. Caracalla, Dante, Gabriele d'Annunzio) állnak. Jelen tanulmányban a két orosz költőt ért itáliai hatásokat abból a szemszögből vizsgálom, hogy milyen módon értelmezték újra Dantét munkásságukban, különös tekintettel az *Isteni Színjátékra*.

I.1. A költőházaspár Itáliához való viszonyulása

A kortársak visszaemlékezéseiből arról értesülünk, hogy amikor a házaspár elhatározta, hogy Itáliába utaznak, Gumiljov jobban lelkesedett az ötletért, mint Ahmatova. Makovszkij írásából van tudomásunk arról, hogy a költő, azontúl, hogy megragadta az ország kultúrája, Itália iránti vonzalma Masa Kuzmina-Karavajeva, egyik unokatestvére iránti érzelmekből fakadó gondolataiból származik, akit fiatalkorában nagyon szeretett és sok időt töltöttek együtt nyaranta Szlepnyovo-ban (Маковский 1989: 86–87). Gumiljov több is verset szentelt neki, számára ő volt az eszmei és tiszta szerelem megtestesítője. Piermarini szerint Kuzmina-Karavajeva és Gumiljov kapcsolata ahhoz hasonlítható, mint amilyen Beatrice volt Dante számára (Piermarini 2020: 50). A nőt Itáliában kezelték tüdővésszel, s végül San Remóban halt meg. Piermarini rávilágít arra, hogy magáról az itáliai utazásról kevés információ maradt fenn. Sem Ahmatova, sem Gumiljov nem készített feljegyzéseket, leveleket sem küldtek Oroszországba. Ez alól kivételt képez a költő Brjuszovnak írt levele, amelyben leírja, hogy majdnem egész Itáliát bejárta és több itáliai tematikájú verset alkotott, amelyekkel kapcsolatban kikéri véleményét (Гумилев 1986: 110).

I.2. Alekszandr Blok *Itáliai versek* című ciklusának hatása

Gumiljov egy következő Brjuszovnak küldött levelében, azontúl, hogy reagál költőtársa javaslataira az itáliai témájú költeményekkel kapcsolatban, megemlíti Alekszandr Blok nevét, és azt, hogy miért jelentős számára: „A nem teljesen kifogástalan rímek használatára Blok versei vettek rá. Nagyon csábítóan hangzanak".[1] (Гумилев 2007: 165). Gumiljovra nagy hatást gyakorolt Blok *Itáliai versek* című ciklusa, amelynek tanúbizonyságául szolgál az, hogy maga Gumiljov recenzálta Blok azon kötetét (*Ночные часы*), amelyben az előbb említett versciklus található. Ebben az írásában Gumiljov oly módon fogalmaz, hogy úgy, mint Blok, senki más nem tudott két témát összekapcsolni. Ezeket nem állította egymással szembe, hanem egyesítette őket. Az *Itáliai versek*ben egyszerre van jelen a fenséges, fényes múlt és egy bizonyos szél, amelynek éneke áthatol (esetleg áthallatszik vagy átjön) a jövő fekete fátylán (Гумилев 2006: 112). Gumiljov itáliai versei szembementek a szimbolisták költői gyakorlatának. Gumiljov és Blok itáliai versei a költői célokat és eszközöket tekintve egymással szembenálló felfogást mutatnak (Schwarzband 1988: 374). Tanulmányában Schwarzband kifejti, hogy Gumiljov

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[1] Ahol a fordító neve nincs külön megjelölve, azok a szöveghelyek a jelen tanulmány szerzőjének a fordításai.

gyakran polemizál Blok itáliai költeményeivel például a *Sienai templom* költeménnyel a *Fra Beato Angelico* és a *Pisa* című versekben (uo. 376).

Arról már viszont kevesebb információval rendelkezünk, hogy Ahmatova miképpen viszonyult Blok szóban forgó versciklusához. Csukovszkaja a költőnőről írt feljegyzéseiben megemlíti, hogy a ciklus olyan szituációban kerül szóba, amikor Ahmatova megemlíti, hogy Blok halálának tizenkilencedik évfordulója van, és éppen elolvasta a *Sors éneke* című drámai elbeszélő költeményt, amely ugyanabban az évben íródott, mint az *Itáliai versek* (Чуковская 1997: 171–172).[2] Feljegyzéseiben Ahmatova utal Blok versciklusára, amelyben rámutat arra, hogy az *У самого моря* című poéma bizonyos motívumainak alapjául az *Itáliai versek* közül a *Velence* című mikrociklus szolgál (Ахматова 1998: 743).

II. Dante életművének helye az orosz irodalomban

Az *Isteni Színjáték* már a XVIII. századtól kezdve ismert volt Oroszországban, de csak a XIX. századtól gyakorolt hatást a költőkre és írókra (pl. K. Ny. Batyuskovra és A. Sz. Puskinra) (Асоян 2015). Az *Isteni Színjáték* az orosz olvasók számára egészen a XIX. század közepéig ismeretlen volt. A *Pokol*t először prózában (1842), majd versben (1845) fordították le, ami felkeltette az emberek érdeklődését Dante és a kora iránt. Az első teljes fordítás 1907-ben készült el (Vogel 1967: 39). Lényeges kiemelni az Ahmatova ismeretségi körébe tartozó Lozinszkij fordítását (1936-1942 között készült).

Dante csak jóval később, a szimbolisták számára vált fontossá. Ennek egyik magyarázata a szimbolistáknak egy orosz reneszánszról való álmodozásában található, másrészt nyitottak voltak egyes kriptikus dantei képek (Curtius 1943: 156) többféle értelmezési lehetősége és megfejtése iránt (Силард 1989: 61). M. L. Andrejev úgy összegzi a szimbolisták Dantéhoz való vonzódását, hogy a költőóriásban a művészet és a vallás örök titkaiba való beavatottság tapasztalatát keresik (Vogel 1970: 38). Vlagyimir Szolovjov kezdett el foglalkozni Dante örökségének orosz recepciójával. Szofiológiája[3] egyrészt abba az irányba törekedett, hogy saját költői nyelvébe integrálja az *Új élet*ben és az *Isteni színjáték*ban jelenlévő motívumokat, másrészt kijelölte Dante műveinek olvasási módját a jövendő generációknak (Полонский 2010: 194). Davidson hozzáteszi, hogy a szimbolisták Petrarcához és Dantéhoz Szolovjov költészetének közvetítésével fordultak. A szolovjovi kategóriákat hozzákapcsolták saját Dante-értelmezésükhöz.

II.1. Ahmatova és Gumiljov viszonya Dante életművéhez

Hogy hogyan látta és olvasta Ahmatova Dantét, arról több forrásból értesülünk. Csukovszkaja visszaemlékezésében tárgyalja, hogy Lozinszkij milyen kapcsolatban állt a költőnővel. Ő hozta el neki Dante *Pokol*t orosz nyelven. A költőnő a fordítással kapcsolatban így nyilatkozik: „Csodálatos fordítás. Élvezettel olvasom. Egyes helyeken túl erőltetett a fordítás, de kevés ilyet találok. Éppen ülök és ellenőrzöm". Csukovszkaja azon kérdésére, hogy tud-e olaszul, azt válaszolja szerényen, hogy egész életében Dantét olvassa (Чуковская 1997: 25–26). Zsirmunszkij is rámutat, hogy Dante Ahmatova egyik kedvenc költője (Жирмунский 1977). Hlodovszkij írásából kiderül az is, hogy a költőnő kívülről tudott hosszabb részleteket az *Isteni Színjáték*ból (Хлодовский 1992: 75). A naplófeljegyzéseiből pedig tudjuk, hogy Oszip Mandelstammal is értekezett a költőóriásról, aki a munkásságában kiemelkedő figyelmet fordított Dantéra. Találunk leírást arról, hogy Mandelstam épphogy

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[2] A *Sors éneke* című mű 1908-ban íródott.
[3] Szófia Szolovjovnál a teo-kozmikus folyamat központi szereplőjeként jelenik meg. A természete kettős. Ő jelenti az Istenben lévő Örök-Női kezdetet, ő a Világ-lélek, Krisztus teste, az ideális emberiség, ő a teremtés valódi oka és célja (Гайденко 2001: 57).

megtanult olaszul, máris Dantéért rajongott. Ahmatovával közösen olvastak egy részletet a *Purgatórium* 30. énekéből. Ahmatova dantisztikai ismeretei összegzésének nevezhető a *Beszéd Dantéról* című írása, amelyet a szicíliai Taorminában mondott el 1965-ben, a halála előtti évben, Dante születésének 700. évfordulója alkalmából (Ахматова 2002: 7–10).

Habár Gumiljov költészetéből kiderül, hogy mély érdeklődést tanúsított Dante életműve iránt, viszont úgy, mint Ahmatova esetében, külön forrásokból nincs tudomásunk arról, hogy a költő miképpen vélekedett a költőóriásról. Mindez többek között azzal is magyarázható, hogy az akmeisták kiáltványukban a követendő költők közé Dantét nem vették bele, hanem például Villont, Shakespeare-t említették. Ettől függetlenül egyes akmeista költők, ahogyan Gumiljov is, alaposan tanulmányozták Dante munkásságát.

III. Gumiljov: *Firenze*[4]

Gumiljov itáliai témájú versei közül kiemelkedik a *Firenze* című költemény,[5] amelyben számos dantei motívum fellelhető. A költő e tematikájú költeményeivel kapcsolatban elmondható szinte minden esetben, hogy az idő megjelölésével kezdődnek (Головченко 2017: 28), ám a *Firenze* című vers ez alól kivételt képez. A szerző rögtön rátér a város részleteinek bemutatására, majd a történelmi események és a pokol leírása következik (uo. 32). Raszkina megállapítja, hogy Gumiljov e verseiben található toponímiák kulturonímákká alakulnak át, amely terminust úgy határozhatjuk meg, hogy bármelyik város értelmezését a kultúrája és történelme határozza meg (Раскина 2008). A költeményt összességében az *új – régi*, *örök – elmúló*, *jelen – múlt* dualitása jellemzi. A vers a jelenben kezdődik. A lírai én fokozatosan hívja fel a figyelmet arra, hogy a vers Firenze városára utal. Először a szívét szólítja meg, aki hálátlan. Majd egy szép tájrészletről értesülünk: „Neked rózsaszín mandula, […]".[6] Az Arnó neve világít rá arra, hogy Firenzéről van szó: „És a hegyek, amelyek az Arnó fölé magasodnak, […]".[7] A második versszak már rámutat a múltra, s kiderül, hogy a szív az elmúlt napok titkait látja, a tekintete követi az őt ért sértések sorozatát: „Tekinteted fájdalmasan követi / A mélységben elsüllyedt sértések sorát".[8]

A következő versszakban éles váltás következik be, amely nyomon követhető az alábbi sorokban: „*Más szavakra* van szükséged / Más szörnyű időkre".[9] Ez az a versszak, amely az olvasót visszavezeti a múltba. Az olvasó előtt megjelenik a Signoria épülete, amely a politikai hatalmat jelképezi (Treccani). Előtte két tűz jelenik meg. A tűz szimbóluma utalhat a régi hatalom elégetésére. A következő versszak eleje konkrét dantei motívumra hívja fel a figyelmet: a leopárdra. Az *Isteni Színjáték Pokol-kommentár*ja rávilágít a Pokol állatainak a szimbolikájára. A középkori bibliai egzegézis szerint a három állat megfeleltethető a három bűnnek, amelyről János első levelében olvasunk (Mátyus–Nagy 2019: 22). A párduc ennek értelmében a test kívánságát, azaz a bujaságot jelenti. Dante a bűnök szerkezetét a Pokol hármas tagolásában látja: mértéktelenség (párduc), gonoszság (farkasszuka), elállatiasodás (oroszlán) (vö. *Pokol* XI 82–82). A *Kommentár* arra is rámutat, hogy a firenzeiek bűnös magatartását Dante hármas felosztásban adja meg, és ennek nyomán a *gőg* a párduchoz, az *irigység* az oroszlánhoz, a *birtoklásvágy* a farkashoz kapcsolható (Mátyus–Nagy 2019: 22). A tűz pedig örökké új marad: „Sokféleséggel örökké új".[10] A vershez kapcsolódó kommentár magyarázatot ad Leonardo da Vinci *Léda* című festményének elpusztulására. A kép Léda Zeusszal való

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[4] Gumiljov *Firenze* című verse és *Beatrice* című ciklusa jelen tanulmány szerzője fordításában olvashatók.

[5] Gumiljov e költeményt egyik kötetbe sem vette bele.

[6] „Тебе — и *розовый миндаль*, […]" (Гумилев 1998: 139).

[7] „И горы, вставшие над Арно, […]" (uo.)

[8] „Твой взор мучительно следит / Ряды в бездонном потонувших, / Тебе завещанных обид." (uo.)

[9] „Тебе *нужны слова иные*. / Иная, *страшная пора*." (uo.)

[10] „[…] Разнообразьем *вечно нов*." (uo.)

szeretkezését ábrázolja. XIV. Lajos elrendelte, hogy semmisítsék meg, mert azt csábítónak tartotta (Гумилев 1998: 292). A festményt és a versszak elején szereplő leopárdot összeköti a csábítás és a bujaság motívuma. A másik tűz pedig baljós és nehéz, amelyet a lírai én a sárkányhoz hasonlít, aki ezt sziszegi: „Savonarola hiába próbálta megrázni a hatalmon lévő házat”. Savonarola alakját ismerve kiviláglik, hogy a katolikus egyházról van szó. Girolamo Savonarola domonkos szerzetes alakjára is találunk utalást, akit 1498-ban égettek meg máglyán, mivel többek között kifejezte véleményét a kicsapongó életet folytató egyházzal kapcsolatban. Említésre kerül Dante Alighieri alakja, aki lassan lemegy a Pokolba. Az *Isteni Színjáték* szimbolikájából tudhatjuk, hogy a sárkány az egyházszakadást szimbolizálja (Treccani). Dante műve több pontján kifejezésre juttatja az egyházzal szemben megfogalmazott kritikáját, alább az egyik ilyen hely:

Aki a földön helyem bitorolja,
helyem, helyem, mely az Isten fiának
szemében olyan, mintha üres volna:
tette, hogy síromon kloáka támadt,
vér és bűz kloákája, hol a Sátán,
ki *innen* esett, tetszeleg magának. (*Par*. XXVII. 22–27)[11]

Szent Péter szavain keresztül Dante nemtetszését fejezi ki, hogy milyen pápák foglalják el Péter trónját, ebben az esetben VIII. Bonifác pápára utalva. Péter sérelmezi, hogy vértanúságának és temetkezésének helye átalakult: kloáka lett belőle. Fosca hangsúlyozza a *temető – kloáka* ellentétét, amely szerinte rámutat a *múlt* és a *jelen* dualitására (Fosca).

Az utolsó versszak rögtön egy ellentmondással kezdődik: „Ujjonganak ezek az állatok”. Mint a fentiekben rámutattam, az állatok negatív tulajdonságokat szimbolizálnak, tehát a *rossz* örül. E részletben pedig maga Dante is megnevezésre kerül: „Szegény száműzött Alighieri / lassú léptekkel alászáll a Pokolba”. A költemény rámutat arra, hogy akinek igaza van, nem maradhat Firenzében, többek között Dante sem, akit 1302-ben száműznek a városból a fehér guelfek és a fekete guelfek közötti konfliktus miatt (Гумилев 1998: 292). A lírai én pedig megvizsgálhatja a Poklot, ahol a bűnösök találhatók. Külön érdekességnek mondható, ami Lozinszkij archívumából derül ki, hogy Gumiljov kéziratában még egy versszakot szánt a költeménye végére, amellyel a lírai én a jelenre utal: „Mint Buonarotti foglyai / *évszázadokon keresztül* lát minket”.[12] E sorok Blok *Ravenna* című költeményének hatására engednek következtetni: „Csak éjszakánként a völgy fölé hajolva / felsorolja az elkövetkezendő évszázadokat”. Feltételezhető, hogy Gumiljov a kéziratban fennmaradt utolsó versszakot azért hagyhatta el, mert nem akart Blokra hasonlítani.

IV. Gumiljov: *Beatrice* című versciklus[13]

E költemény szintén több dantei motívumot tartalmaz. Erre utal már maga a ciklus címe. A vershez írt kommentár felhívja a figyelmet arra, hogy Ahmatova úgy vélekedett, hogy a versciklust Gumiljov neki szentelte. Mindezt Haight állítása is alátámasztja, miszerint Beatrice alakjában Ahmatova, Dante alakjában pedig maga Gumiljov szerepel (Haight 1976: 12–13). A vers ötvözi az *Isteni Színjáték*ban és a lírai én életében jelenlévő szerelem motívumát.

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[11] A *Pokol* magyar fordításának forrása: Kelemen János, Nagy József (szerk.): *Komédia I. Pokol. Kommentár*. Budapest, ELTE Eötvös Kiadó, 2019. magyar parafrázisa.
A *Purgatórium* és a *Paradicsom* magyar fordítása: Dante Alighieri: *Dante Alighieri összes művei*. Budapest, Magyar Helikon, 1965. (Ford. Babits Mihály).
[12] „Как Пленников Буонаротти, / Через века он видит нас” (Гумилев 1998: 291).
[13] A versciklus a *Gyöngyök* (*Жемчуга*) kötet részét képezi.

Roszlij rámutat arra, hogy az akmeisták miképpen vélekedtek Beatrice alakjáról. Benne ideális fogalmak együttesét, egy sajátos archetípust láttak. Számukra fontos a sérthetetlensége, útitársnak, múzsának való elismerése, bűntelensége, a halál legyőzése és az örök dicsőség megtestesítése (Рослый 2006: 17). Gumiljovról szóló visszaemlékezésekből értesülünk arról, hogy a költő szenvedélyesen kereste az ideális nőt (Гумилев 1989: 189). A versciklus négy részből áll.

Az első rész első versszakában már rögtön említésre kerül Dante neve: „Énekeljetek nekem éneket Dantéról, / Vagy játsszatok fuvolán".[14] A felszólítás a múzsákra vonatkozik: „Múzsák, hagyjátok abba a zokogást, / Énekekbe öntsétek a szomorúságot". Dante alakja Gumiljov munkásságán túl Blok életművét is végig kísérte. Az előbbi sorok és Blok *Ravenna* című verse zárósorai („Dante sasorrú, érces árnya / Az Új Életről énekel.") között olyan módon lehet párhuzamot vonni, hogy Blok Dantét tartja az elmúlt századok méltó emlékének, és méltónak az *új élet*re, míg Gumiljov számára Beatrice az örök nőiség, a hűség és a szerelem megtestesítőjévé válik. Habár Blok konkrétan nem említi Beatrice nevét, tudható, hogy a *Versek a Szépséges Hölgyről* című ciklus megírásában fontos szerepet töltött be Beatrice alakja. A következő versszakban arra találunk utalást, hogy Beatrice elhagyta a Paradicsomot: „Tudjátok-e, hogy nemrég / Beatrice elhagyta a Paradicsomot, […]".[15] A *Pokol* második éneke utal a limbusban lévő Vergilius és Beatrice találkozására:

Azok között voltam, kik függő helyzetben vannak,
és egy hölgy szólított, üdvözült és oly szépséges,
hogy kértem, parancsoljon velem. (*Pokol* II. 52–54)

A *Pokol-kommentár* rávilágít arra, hogy a függő helyzet „a Pokol első körének jellemző állapotot […]" jelenti. Az itt lévők reménytelenül vágynak a boldogságra. A limbus Vergilius állandó helye a túlvilágon (Hoffmann–Mátyus 2019: 41). Vergilius későbbi, Beatricéről szóló megnyilatkozásában még világosabbá válnak a nő erényei:

„Ó, erények úrnője, egyedüli, kinek révén
az emberi nem fölébe emelkedik mindannak,
ami azon ég alatt van, melynek köre a legszűkebb, […] (*Pokol* II. 76–78)

Az új élet rámutat arra, hogy „Beatrice a megtestesült csoda, a Szentháromság közvetlen alkotása" (Hoffmann–Mátyus 2019: 43). Erre neve jelentése is felhívja a figyelmet: boldogító, üdvöt hozó (uo.). Beatrice „[…] az üdvösséghez vezető (teológiai) erények – hit, remény, szeretet – megtestesült közvetítője (uo.).

Sajátos módon jelenik meg a *fehér rózsa* szimbóluma Gumiljov versében („Különös fehér rózsa […]"),[16] amely a dantei égi Paradicsom egyik kulcs-eleme. Dante *Paradicsom*ában ez az a hely, ahol az üdvözültek találhatók. A vizsgált versben a különös rózsa csendes esti hűvösségben van, és Bobrickih megállapítása szerint mindez összekapcsolódik e rész végén található „*különös titok*"[17] motívumával, amelyet az alábbi retorikai kérdések támasztanak alá: „Mi ez? Megint fenyegetés / vagy kegyelemért való esdeklés?"[18] (Бобрицких 2017: 22).

A következő versszakban a lírai én szerelmi életére kerül a hangsúly. Ellentétbe állítja a saját bűnösségét és a szeretett nő magasztosságát Beatrice alakján keresztül:

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[14] „Спойте мне песню о Данте Или сыграйте на флейте" (Гумилев 1998: 100).
[15] „Знаете ль вы, что недавно / Бросила рай Беатриче, […]" (uo.).
[16] „Странная белая роза / В тихой вечерней прохладе…" (uo.).
[17] „Странную тайну отметьте, […] (uo.).
[18] „Что это? Снова угроза / Или мольба о пощаде?" (uo.).

Élt egy nyugtalan művész.
Ravasz ábrázatok világában –
Bűnös parázna, ateista,
De Beatricét szerette.[19]

E rész utolsó versszaka összeköti Dante és Gabriele Rossetti, XIX. századi ezoterikus Dante-értelmező nevét.

A ciklus második része szintén a lírai én szerelmi életét helyezi előtérbe egymással szembe állítva saját magát és a szeretett nőt: „Az én kertemben virágok vannak, a tiédben *bánat…*”.[20] Ahmatova alakját jellemzően a bánat kíséri, amelyet alátámaszt Gumiljovval való viharos szerelmi kapcsolata.[21] A nőben lévő bánatot a lírai én szépnek tartja: „Gyere hozzám, *szép bánattal* […]”.[22] A következő sorok folytatják az első részben már megemlített *titokzatosság*ot a *füst* és a *fátyol* motívumán keresztül: „Bűvölj el, mint *füstszínű fátyol*lal […]”.[23] Ebben a részben - más szemszögből - újra előkerül a rózsa motívuma. A lírai én a szeretett nőt iráni fehér rózsa szirmához hasonlítja: „Te iráni fehér rózsaszirom vagy”,[24] amely Bobrockih értelmezésében a nő tisztaságát és szentségét jelenti (a női szépség ideálját) (Бобрицких 2017: 22). A következőkben olyan kép tárul az olvasó elé, amelyben a mitológiai és az *Isteni Színjáték*ból vett képek keverednek. Dante is többször emelt mitológiai képeket a művébe. A lírai én megkéri hölgyét, hogy lépjen be gyötrelmei kertjébe - megjelenése változást idézhet elő. Azért lép be, hogy ne legyenek heves, önkívületet kifejező mozgások, azért, hogy csak a plasztikus pózok zenéje legyen. Ne a menádok, hanem a lányok kórusa énekelje a szomorú ajkak szépségét. E képek Dionüszosz isten kultuszát jelölik. A menádok Dionüszosz kísérői voltak. Gumiljov nem ezt a kultuszt tartja Beatrice alakjához illőnek. A lírai én megszemélyesíti Beatrice nevét: töprengő névnek nevezi.[25] A versben lévő sziklakiszögellések[26] utalhatnak a dantei Pokolra.

A ciklus harmadik része szintén utalhat a Gumiljov Ahmatova iránt érzett szerelmére (Ahmatova eleinte nem viszonozta azt). A lírai én megkéri a szeretett nőt, hogy könyörüljön rajta: „Nem elég-e a szúró fájdalom, a kétségbeesés sötét kínja és a szégyen gyötrelme”.[27] A lírai én azt is kifejezi, hogy megváltozott: „A végzetes önfejűség kísértését elhagytam / Visszafogottan, alázatosan örökre a tied vagyok”.[28] A tengerhez kapcsolódó motívumokon[29] keresztül értesülünk arról, hogy a két fél szerelme milyen nehézségeket élt meg: sokáig a mélységbe voltak szorítva, ahonnan hullám-vadállatok sziklára vetették őket, ahol a bánat várta őket. A részlet záróversszakából, mondhatjuk, mintegy pozitív hangulatban fejeződik be a vers, bár mégsem a szerelemhez kapcsolódva. Elúsznak a viharfelhők, mivel a felek a szerelemben

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[19] Жил беспокойный художник. / В мире лукавых обличий - / Грешник, развратник, безбожник,/ Но он любил Беатриче" (uo.).

[20] „В моих садах - цветы, в твоих - печаль ..." (uo. 226).

[21] A bánat motívuma gyakori motívuma Ahmatova költészetében, amelyre például a *Májusi hó* című költeményében is találunk példát: „Bánat van bennem, amelyet Dávid király / adott nekem évezredekkel ezelőtt".

[22] „Приди ко мне, прекрасною печалью […]" (uo.).

[23] „Заворожи, как дымчатой вуалью, […]" (uo.).

[24] „Ты - лепесток иранских белых роз" (uo.)

[25] „Войди сюда, в сады моих томлений, / Чтоб не было порывистых движений, / Чтоб музыка была пластичных поз, / Чтоб пронеслось с уступа на уступ / Задумчивое имя Беатриче / И чтоб не хор менад, а хор девичий / Пел красоту твоих печальных губ" (uo).

[26] vö. „[…] с уступа на уступ […]" (uo.).

[27] „Пощади, не довольно ли жалящей боли, / Темной пытки отчаянья, пытки стыда!" (uo. 227).

[28] Я оставил соблазн роковых своеволий, У смиренный, покорный, я твой навсегда" (uo.).

[29] Gumiljov életművében gyakran előfordul a tenger motívuma: pl. *A sarki és a déli tengerekben* (На полярных *морях и на южных*); illetve *A partnál* (У берега).

nem tudnak egyesülni, a lírai én ennek lehetőségét az imában látja, ha a társa is úgy akarja: „Ha akarod, elmegyünk egy közös imára / az arany szigetek ropogó homokjába".[30]

A negyedik vers ihlető forrása vélhetően a *Versek Pietra asszonyhoz* című dantei versciklusnak a negyedik verse (*Olyan kemény kívánok lenni szóban*) (Alighieri 1965: 133). E vers zárórészében Dante azt a vágyát juttatja kifejezésre, hogy (Beatrice által inspirált) költészete nyílvesszőként pusztítsa el a filozófiát szimbolizáló Pietra asszonyt:

Dalom, most indulj útra ama Hölgyhöz,
ki elvette, miközben holtra sebzett,
mi kincse volt szívemnek.
Repítsd vessződet szíve közepébe:
tört becsület bosszútól válik épre. (uo.)

Vagyis Dante a legmagasabb szintű költészet létrehozására törekszik, amelyben szimultán jeleníti meg a keresztény teológia, filozófia és kinyilatkoztatás igazságait az emberiség üdvözülése végett. Gumiljov szóban forgó negyedik verse zárásában is Beatricéhoz esdekel (aki tőrrel a kezében van megjelenítve), hogy – meghaladva (vagyis tőrrel elpusztítva) a bujaságot és a testiséget – vezesse el a költőt az üdvözülés értelmében vett igazi boldogsághoz (Гумилев 1998: 226). A Gumiljov által e kontextusban leírt tőr-metafora a dantei nyíl-metafora parafrázisának tekinthető. Megállapítható, hogy feltehetőleg a *Beatrice* című versciklus intertextusa, egyben ihlető forrása a *Versek Pietra asszonyhoz* című, szintén négy versből álló versciklus, fenntartva, hogy Gumiljov számára az *Isteni Színjáték* is meghatározó irodalmi forrás.

A költemény olyan módon fejeződik be, hogy a lírai én kész elfogadni a szeretett nőtől a kedvességet, de a „halálos remegést" is, amely elvezeti őt a tökéletes boldogság szigeteire (Бобрицких 2017: 22). Mindez felidézheti bennünk egyrészt az aranykormítoszt, illetve Dante égi Paradicsomát.

V. Ahmatova: *Dante*

A vers mottója (Il mio bel San Giovanni. Dante) a firenzei keresztelőkápolnára utal, melyben Dantét megkeresztelték: a keresztség, mint a keresztény ember életében alapvető mozzanat, kapcsolódik itt össze a szülőváros, illetve szülőhaza iránti feltétlen szeretettel. Grebnyeva tanulmányában Firenzéről mint kontrasztok városáról ír (Гребнева 2006). Erre a kontrasztra épült maga a városról és a költőről szóló vers. A tizenkét verssort három négysoros versszakra lehet felosztani. Az első négy sor Firenzét a halál városaként jeleníti meg, ezenkívül hangsúlyossá válik még Dante alakja és a valóság motívuma:

Holta után sem tért soha vissza
Firenzéje vén utcáiba.
Nem tekintett hátra elbúcsúzva.
Erről vágyom énekelni ma. (Ford. Rab Zsuzsa)

A második négysoros rész a költeményben központi helyet foglal el. Az első két sor az első versszakra utal, ugyanis egy temetés képét jeleníti meg. A második két sor pedig a harmadik négy sort idézi meg, ahol az élet uralkodik. Az utolsó két sor álmot jelenít meg. Dante alakja mellett Firenze is előtérbe kerül (Гребнева 2006):

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[30] „Если хочешь, мы выйдем для общей молитвы На хрустящий песок золотых островов" (uo.).

Éj, ölelés, búcsú. Fáklya lobban.
Kinn a sors jajongva térdepel.
Átkozta e várost a Pokolban,
és a Mennyben sem feledte el. (Ford. Rab Zsuzsa)

A harmadik négy sor pedig az életről szól és magát Firenzét ábrázolja:

De vezérlőingben, bűne-bánva,
gyertyát tartva, mezítlábasan
nem tért meg a sóvárgott, a drága,
szennyes, hitszegő Florenciába. (Ford. Rab Zsuzsa)

Az, hogy Dante nem tért vissza Firenzébe, a költemény az alábbi kifejezésekkel külön kiemeli: „nem tért soha vissza" („не вернулся"), „nem tekintett hátra" („не оглянулся"), „nem tért meg" („не прошел") (Davidson 1990: 210). Davidson szintén három részre tagolja a verset: az első versszakot prológusnak nevezi, a második versszak pedig szerinte arra mutat rá, hogy habár a szülővárosát elveszítette, költészetében mégis tovább él. Az utolsó versszakból pedig arról értesülünk, írja, hogy Danténak lehetősége volt visszatérni a városba, de nem élt vele (uo. 212). A versben feltárulkozik Ahmatova sajátos (a „hivatalos" dantisztikával nem kimondottan összhangban lévő) Dante-értelmezése is. Erre utal az alábbi sor: „Nem tekintett hátra elbúcsúzva". Ezzel szemben Dante az *Isteni Színjáték* több pontján kifejezte azt, hogy mennyire vágyódik Firenze után.[31] Ahmatova költeménye azzal zárul, hogy Danténak meg kellett volna bánnia a bűneit: „De vezeklőingben, bűne-bánva, / gyertyát tartva, mezítlábasan / nem tért meg a sóvárgott, a drága, / szennyes, hitszegő Florenciába" (Ford. Rab Zsuzsa). Dante ilyen módon nem is szándékozott visszatérni, mert nem tartotta magát bűnösnek. Dante a város lakóiról kimondja a véleményét, panaszkodik Firenze lakosaira: „De az a hálátlan, rosszakaratú nép, […]" [*Pokol* XV. 61]. A lakók rosszindulata miatt üldözi a város Dantét, a költőóriás viszont dicsőséget hoz a városnak (Kelemen 2019: 226). A *Pokol* XVI. énekében szintén találunk erre további példát:

Az új emberek és a gyors gazdagodás
gőgöt és mértéktelenséget hoztak,
Firenze, rád, s most már ezt panaszlod! [*Pokol* XVI. 73-75]

Az „új emberek kifejezés" azokra az idegenekre utalhat, akik kívülről költöztek Firenzébe és új gazdagokként elfoglalják az ősi nemesség helyét, szétzilálják a hagyományos értékeket. Dante művében „[…] Firenze és a Comunék romlása bizonyos értelemben az egész emberiségre van kivetítve" (Nagy 2017: 140).

Ahmatova versének alapjául az *Isteni Színjáték* ismerete szolgálhatott, azonban a költeményt rokoníthatjuk a *Lót felesége* című 1924-ben írt versével is.[32] Ebben szintén egy várostól, pontosan Szodomától való elbúcsúzásról van szó. A *Dante* című versből az derül ki, hogy Dante nem nézett vissza a városra. Lót feleségét pedig egy belső hang arra bátorította, hogy tekintsen vissza Szodomára, ahová szép múlt köti, amíg nem késő:

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[31] Erre utal többek között a *Pokol* XXIII. 94–96., amelyben Dante nosztalgiát érez Firenze iránt: S én ezt mondtam: „Én a szép Arnó folyó menti / nagy városban születtem és növekedtem, s abban / a testemben vagyok itt is: még mindig az enyém."

[32] Köszönetemet fejezem ki témavezetőmnek Dr. Gyöngyösi Máriának, aki felhívta a figyelmemet a *Lót felesége* című versre.

Nejét egy hang bentről arra ösztönözte:
Fordulj meg, *nem késő*, még megnézheted
Rőt falát Szodoma szülővárosodnak,
Hol fontál, s daloltál, az udvart, teret, […] (Ford. Szöllősi Dávid)

Viszont Lót felesége visszanézett, amiért életét adta:

Visszapillantott és – halálos kín érte…
Nem láttak már többé kövült szemei, […]
Egy pillantásáért adta életét… (Ford. Szöllősi Dávid)

VI. Összegzés

A jelen tanulmány további kutatási irányokra mutat rá a két költő itáliai utazásának tágabb értelmezésére vonatkozólag. Ennek kiindulási pontjául szolgálhat Ahmatova Firenzében íródott verseinek Gumiljov *Firenze* című költeményével való összevetése. A továbbiakban lényeges szempont lehet még kettőjük *Velence* című versének elemzése és összehasonlítása, s ebből kiindulva Gumiljov itáliai tematikájú költeményeinek részletes feltárása. Az elemzett versek rávilágítanak arra, hogy a két költő milyen módon értelmezett újra dantei motívumokat munkáiban. A művek azt a kérdést is felvetik, hogy a költők saját életük eseményeit miképpen kapcsolják össze az *Isteni Színjáték* bizonyos szimbólumaival (pl. Gumiljov *Beatrice* című versciklusa utalhat Ahmatovával való szerelmi kapcsolatára). A költemények egyidejűleg több személyt és korszakot ötvöznek: pl. Gumiljov *Firenze* című versében Dante Alighieri, Girolamo Savonarola, Leonardo da Vinci és a mitológiában szereplő Léda alakja vagy a Beatrice című ciklusban Dante Alighieri alakja és dionüszeiák emlékezete.

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Examination of the agility and decision-making strategies of managers in Hungarian SME sector based on their risk-taking and innovational potential

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Gaining an advantage in the competitive market over businesses performing similar activities is indispensable. One of the most important aspects of that is the agility and decision-making strategy of the management. That is why the purpose of the research is to assess the factors influencing the management decisions and strategies of enterprises operating in the Hungarian SME sector, such as willingness to take risks and innovativeness. The research work consists of 2 parts, secondary research which is a systematic literature review, and primary research. During the primary research, the managers (potential decision-makers) of the companies in SME sector have been asked through online questionnaire about their own management practice. From the results of the research, it is expected to confirm the hypotheses that the decision-making strategies are largely influenced by the managers willingness to take risks and innovational potential. Furthermore, management decisions and thus management performance have an impact on the company's further R&D activities, technological innovations, and financial decisions. Based on the results, it is expected to be confirmed that the competitiveness of the company depends to the greatest extent on the performance of the management. On the conference, the secondary research will be presented.

Keywords: SME; management decision; management strategy; risk-taking; management performance

I. Introduction

Small and medium-sized enterprises (SMEs) are able to significantly contribute to the growth of employment and GDP worldwide (Meekaewkunchorn, et al., 2021). In both developed and developing countries, they play a key role in maintaining and further increasing the standard of living (Amoah et al., 2021). As a result, the key to a country's economic development is in most cases the small and medium-sized enterprise (SME) sector (Kusa, et al., 2021).

There are approximately 22.8 million small and medium-sized enterprises in the European Union. This figure represents 99% of European businesses. 85% of new jobs created within the EU come from SMEs and their added value also accounts for 3/5 of all EU added value (Annual Report on European SME 2021/2022). In addition, in OECD countries – with the exception of the non-financial sector – SMEs provide more than 50% of total employment and 50-60% of added value (OECD 2017). In addition, they generate at least one third of the exports of the main developed economies, which factors make them particularly important (Roffia et al., 2022). As a result, the EU has a so-called SME Strategy, within its framework the European Commission has set the goal of creating a sustainable and digital Europe. Therefore, the EU treats the development of the SME sector as a high priority, especially with regard to boosting economic growth and employment, as well as the fight against poverty (Kusa, et al., 2021).

Looking at the distribution of actors in the SME sector in Hungary, micro-enterprises have a significant preponderance, they make up 95.2% of the SME sector. Small businesses account for 4.2% of the sector, while medium-sized businesses are present in 0.7% (Annual Report on European SME 2021/2022.) Based on KSH data, the number of SMEs over the past nearly 10 years has grown continuously, and the number of people employed by them also shows a linear increase during the same period. This means that the SME sector is an inescapable player in the functioning of the Hungarian economy, so it is important that it is also focused on in terms of research and that a more comprehensive analysis is made of their innovation and risk-taking efforts.

As a result of globalization, the competition between SMEs is constantly increasing, and this intense competition confronts them with many difficulties. In order for SMEs to be able to improve their performance and productivity in this competition, it is advisable to use new management practices (Meekaewkunchorn, et al., 2021). New management practices mean making important strategic decisions that require certain key performance values. These are mostly driven by management strategies and technological change (Aggogeri et al., 2015). And for this, it is essential that they expand their entrepreneurial orientation. Entrepreneurial orientation (EO) contributes to the growth of the enterprise's market share, increase in sales volume, and increase profit growth (Meekaewkunchorn, et al., 2021). The performance of an SME can improve if its managers invest an appropriate amount of internal resources, are able to proactively react to market events, are constantly looking for new opportunities, and if they strive to implement new ideas, even at the cost of greater risk. As a result, the elements of entrepreneurial orientation include innovativeness, willingness to take risks and proactivity (Meekaewkunchorn, et al., 2021).

In pre-COVID period, financial confusion characterized the macroeconomics, the recent financial crisis had important negative consequences in the life of small and medium-sized enterprises (Beltrame, et al., 2019). In this situation, the responsibility of SME managers proves to be crucial when making strategic decisions such as those that promote financial well-being and the realization of digitization processes (Dvorsky et al., 2021). From the point of view of financing, businesses have found themselves in a more difficult situation because the conditions of bank loans have become stricter. This was a huge problem for SMEs and young, riskier businesses. Thus, the entrepreneurial qualities and competencies of managers came to the fore in this period as well (Beltrame, et al., 2019).

In the post-pandemic period, in order to preserve and increase their competitiveness, SMEs are forced to be more innovative. In addition, the uncertain economic situation encourages them to put emphasis on strengthening their partnerships, thus expanding their network of relationships with actors in the supply chain, customers, and the government (Ramírez-Solis, et al., 2022). In the case of large companies, digital technologies already changed the interaction between companies and consumers in the pre-epidemic period. With the transformation of web 2.0, for example, consumers now have access to the information they need, they can communicate with each other and share their experiences with the given product or service (Quinton et al., 2018). In order for SMEs to be able to actively respond to rapid market changes, the use of social media - as an innovative step in the life of SMEs - only became particularly important in the post-COVID period. Since social media is currently the best technological option for businesses to place their ads efficiently and effectively. The practice of SMEs placing their promotions on social media platforms has become popular worldwide, as customers and consumers can access the products and services offered by businesses anywhere and at any time, thus they can react quickly and make purchases (Belas et al., 2021).

II. Literature Review

II.1. Strategic management

SMEs have a particularly important role in the development of national and multinational economies. SMEs have several significant advantages compared to large companies, such as their flexibility, which results from the fact that their internal structure is simpler, they can react more quickly to external factors, and they can make changes more easily. (Pisar, Tomaskova, 2020). However, the practices of SMEs differ from large companies in other areas as well. Namely, in the field of the application of strategic management, which also poses significant limitations to SMEs (Dvorsky et al., 2021). Since in the case of SMEs, the owner and manager are responsible for strategic planning, execution, and control at the same time, due to their small size, the role of the manager is extremely important in terms of the business performance (Raffai et al., 2022).

In the increasingly complex business environment of the 21st century, businesses must be able to continuously change and adapt in order to be successful. The condition for success is that businesses can incorporate these changes into their own strategic management. The right strategy helps businesses to create value and gain a competitive advantage in the market (Varga, Csissárik-Kocsir, 2016).

It has been proven in much previous research that, although the tools of strategic management are used differently and in a limited way, SMEs must be able to innovate, satisfy consumer needs, succeed, and continuously grow. After all, good business performance is the most important aspect for a manager (Dvorsky et al., 2021). Innovation can be defined as a key factor in business life. However, only the company's innovation activity is not sufficient for success, so additional practices that contribute to value creation are needed (Pisar, Tomaskova, 2020). One such example is adapting to the continuous change of digital technologies, in the framework of which SMEs must pay attention to organizational practices as well as the wider environment. So, technological development and organizational strategy formation must be a unified process (Quinton et al., 2018).

In terms of exposure to risks and risk management, there is also a difference between SMEs and large companies. SMEs are exposed to market risks to a much greater extent, thus their strategic management practices must address the aspects of risk prediction and management, so they must be interested in reducing or eliminating the risk. However, risk management is a big

challenge from the point of view of the management of SMEs, which is why it must be emphasized in the decision-making process (Dvorsky et al., 2020).

Among the trends in strategic management, entrepreneurial orientation (EO) is the one that has the greatest impact on the performance of businesses (Meekaewkunchorn, 2021). The reason for this is that entrepreneurial orientation is a kind of strategic positioning that helps businesses to pursue attitudes and behaviors that provide them with the opportunity to be first in the market (Quinton et al., 2018). Therefore, entrepreneurial orientation is the key to long-term growth. In Hungary, businesses have great potential to develop their entrepreneurial orientation, thereby contributing to the growth of the Hungarian economy (Farkas, Málovics, 2013).

II.2. Entrepreneurial orientation

Many previous research have already proven that entrepreneurial orientation (EO) has an impact on the development of companies, including the performance of SMEs. As a result, it can be said that the entrepreneurial orientation can be considered one of the main characteristics of the organization. It can be observed in the case of all businesses - in the case of a new business through the creation of a new business, while in the case of an existing business through product and process innovations - in order to improve their market position (Kusa, et al., 2021).

Previous research has already confirmed that the performance of a company depends significantly on how it can utilize its internal resources. From the point of view of SMEs, this is a particularly important factor, since they basically focus on internal resources, thereby striving to increase their performance and increase their competitive advantage. As a result, SMEs must have distinctive abilities and competencies that enable them to adapt to changes in the external environment and thereby achieve success (Meekaewkunchorn, et al., 2021).

Despite the fact that entrepreneurial orientation can be observed in all organizations, its extent varies during the operation of enterprises. Typically, businesses try to position themselves well in the competition mainly with product market innovation, risky developments, and proactive innovation efforts (Kusa, et al., 2021). In a dynamic economic environment, these factors can have a positive effect on the performance of the enterprise. In addition, the relationship between different strategic orientations can stabilize and make the acquired competitive advantage durable (Ramírez-Solis, et al., 2022).

Entrepreneurial orientation therefore contributes to increasing organizational performance, namely through innovation, willingness to take risks, and proactivity. In the case of SMEs, EO mostly refers to internal management practices, such as being innovative and proactive and taking risks to gain a competitive advantage (Meekaewkunchorn, et al., 2021).

II.1.1. Innovation

From the perspective of an organizational approach, innovation focuses on the extent to which businesses are willing to renew and renew their business processes (Meekaewkunchorn, et al., 2021). And this is made possible by new technologies, new practices and solutions through creative ideas and experimentation (Beltrame et al., 2022). Thanks to creative ideas and experiments, they can take advantage of new opportunities, thereby satisfying consumer needs even more (Meekaewkunchorn, et al., 2021).

This ability to innovate has a great impact on the economic development of businesses and the country as a whole. Regardless of how developed a country is, its leadership pays special attention to innovation in order to grow faster and increase competitiveness. And at the level of enterprises, innovation means competitive advantage and value creation (Kusa et al., 2021). It

also helps SMEs to be unique and able to survive in the long term (Meekaewkunchorn, et al., 2021)

The extent to which a company's performance is influenced by its innovation capability can be influenced by many positive factors, such as the role of social capital or the company's market commitment. In addition, the innovation capacity of a company can also be expressed by the intensity of R&D, how well it is able to acquire new machines and equipment, whether it is willing to introduce innovative technologies, as well as how much it is able to emphasize the training and knowledge acquisition of employees. Such as whether the company employs an employee with a PhD degree or a technical qualification (Kusa et al., 2021).

Looking at innovation from the point of view of products and services, they represent an important role in the added value of the enterprise and contribute to SMEs strengthening their position in the industry in which they operate. This enables them to achieve economic growth and continuously increasing performance. In essence, it means a kind of learning process that seeks to advance the business performance of the given industry with the help of new initiatives (Meekaewkunchorn, et al., 2021).

In terms of academic research, innovation is the one that receives the most attention among the factors of entrepreneurial orientation. The main reason for this is that it is important to support innovative enterprises both at the European Union level and in the Hungarian context. This is necessary because SMEs face structural and financing problems, and innovation is directed to areas - product innovation, process innovation and organizational innovation - which are critical factors in the financing of enterprises. And research contributes to predicting the positive effects of innovativeness (Beltrame et al., 2022).

Innovation can be said to be a fundamental part of EO. The main reason is that with the help of innovation, SMEs and businesses as a whole can explore new opportunities. The impact of innovation on the performance of the enterprise is not entirely clear to researchers yet, on the one hand there are studies that mention a positive effect, on the other hand, there are also many that speak of a negative effect. The reason for this is that the success of innovation can be overshadowed by the risk and cost of the innovation activity, which are present in the case of Hungarian, but mainly international innovation efforts (Kusa et al., 2021). The consequence is that, despite to the fact that innovation has been identified as a key success factor in business life, it is not sufficient in itself for the company to achieve outstanding success, additional factors of EO are also needed (Pisar, Tomaskova, 2020).

II.1.2. Proactiveness

Examined from the point of view of entrepreneurial orientation, proactivity means those processes that aim to anticipate future consumer needs by discovering new opportunities for the introduction of new products and brands even before competitors (Kusa et al., 2021). So, proactivity is a kind of management ability, with the help of which businesses are able to predict the future demand for their products and services. Proactive companies are able to seize the opportunities with which they can develop and provide new products or services (Beltrame et al., 2022).

According to SMB Group's 2012 research, 1/5 of businesses did not have a social media strategy during this period, and this is an untapped opportunity for SMEs to be proactive (Amoah et al., 2021). Proactivity is the most important internal factor of organizational success, which allows businesses to take advantage of the first steps in the industry, which indicates high entrepreneurial activity (Meekaewkunchorn, et al., 2021). Today, more and more companies in the European Union are using social media to attract potential customers and to create value. Social media can be seen as a strategic tool that provides SMEs with the opportunity to connect

with their consumers, directly and in cost-effective manner. The use of social media and digital marketing tools provides enterprises with a more competitive attitude; thus they are able to increase their market share. Furthermore, social media also offers business opportunities for SMEs, as they can improve their ideas and concepts, as well as customer satisfaction for their products and services (Amoah et al., 2021).

The company's well-utilized social media activity is able to identify the future needs of consumers, thereby improving its business performance. As a result, the business will have the opportunity to determine the current market demand and make predictions about future opportunities that can lead to business growth. And for this, the company must not only know the present, but also need to have adequate forecasts for the future (Meekaewkunchorn, et al., 2021).

Being proactive gives businesses the opportunity to identify market opportunities for their new ideas. Despite this, taking the first steps against competitors does not clearly mean a competitive advantage, since in addition to a good idea, effective implementation is also an extremely important factor for business advantage (Meekaewkunchorn, et al., 2021). And this is a particularly important aspect in the life of the enterprise, as it testifies to the existence of a forward-looking perspective (Kusa et al., 2021). Proactivity can shape the environment by creating new products, technologies, and administrative processes, and this is closely related to innovation (Beltrame et al., 2022).

The degree of proactivity in the case of a business can be estimated by factors such as how well the business is able to play a leading role and not follow other businesses, how quickly they can develop new technologies or procedures and introduce new products and services. This plays a particularly important role in the operation of SMEs, since proactivity is the one that can explain the performance of enterprises with low technological standards, among the dimensions of entrepreneurial orientation (Kusa et al., 2021).

II.1.3. Willingness to take risk

Risk-taking is the tendency of organizations, such as taking the initiative or carrying out activities whose outcome is uncertain. This stems from the fact that entrepreneurs have an internal control and desire to engage in risky activities (Meekaewkunchorn, et al., 2021). Based on entrepreneurial orientation, the ability and willingness to take risks is a condition for entrepreneurial activity (Kusa et al., 2021). Several types of risks can be connected to the operation of the business. Examples include discovery of the unknown, default risk, and investment and financing risks (Beltrame et al., 2022). In the case of small and medium-sized enterprises, the willingness to take risks can be related to the higher performance of the enterprise. This is especially true for the impact of financial risks on corporate performance (Meekaewkunchorn, et al., 2021). SMEs have relatively scarce financial resources and are therefore particularly sensitive to financial risks (Kusa et al., 2021).

Compared to large companies, SMEs have quite specific characteristics that can be seen as an advantage. These mainly mean strategic tools such as flexibility or faster development opportunities. However, they also struggle with many constraints, such as limited access to the market and low diversification, which pose high risks to the operation of the business (Dvorsky et al., 2020). In the case of SMEs, financial risk is the most significant and most frequently occurring risk. The financing difficulties and the lack of resources are the most influencing factors in this case, the reason for which is that in the case of SMEs, the operation of the business is fully financed by the owners and managers. As a result, the operating costs of businesses are generally high, and corporate debt is constantly increasing and loan repayment problems arise. And this leads to a particularly high financial risk (Dvorsky et al., 2021).

The degree to which managers are willing to make risky commitments is considered a risk within the organization. According to the EO, a company's willingness to take risks should be determined based on how willing it is to participate in risky projects, how bold or cautious the managers make decisions in order to achieve their goals (Kusa et al., 2021).

How to apply various risk management practices is still a dilemma for SME managers. Nevertheless, EO enables enterprises to search for and determine the performance of their entrepreneurial initiatives from a risk-taking point of view (Kusa et al., 2021).

III. Results: Defining hypotheses

Based on the study of the literature on entrepreneurial orientation, it can be seen that it is one of the most important influencing factors in the operation of SMEs. Many foreign and European research have been conducted for different countries on how the companies operating there relate to EO, including innovation, risk-taking, and proactivity. Since no such survey has yet been prepared for Hungarian businesses, I formulated the following hypotheses for the future questionnaire survey based on the literature.

My first hypothesis regarding Hungarian enterprises is related to how likely they are to use strategic management tools.

> *H1: SMEs use strategic management tools to a lower extent*

My next hypothesis is related to the different orientations within strategic management.

> *H2: Entrepreneurial orientation is the most common strategic management tool*

I formulated three hypotheses regarding the innovation potential. On the one hand, in connection with whether the innovation potential can affect the performance of the enterprise. On the other hand, in relation to which area of innovation is the most popular among companies that can innovate. Finally, whether Hungarian SMEs are able to implement technological innovation or R&D activities more easily.

> *H3: Enterprises with greater innovation potential can achieve better performance and market results*
>
> *H4: In the case of Hungarian SMEs, machine procurement is the most significant innovation practice*
>
> *H5: In the case of Hungarian SMEs, technological innovation is easier to implement than R&D*

From the point of view of risk-taking, I set up two hypotheses, on the one hand, in relation to how risk-taking or risk-avoiding the Hungarian businesses are, and on the other hand, how risk-taking affects the company's performance.

> *H6: The majority of Hungarian SMEs avoid risk*
>
> *H7: With a greater willingness to take risks, SMEs can achieve better performance*

Regarding proactivity, my hypothesis is that there is a correlation between the proactive attitude of the enterprise and the innovation potential and willingness to take risks.

> *H8: Proactive attitude shows a positive relationship with innovation potential and willingness to take risks*

Overall, based on the research it can be said that the performance of management, which includes entrepreneurial orientation, contributes most significantly to the success and competitiveness of SMEs.

IV. Conclusion

The study covered the importance of SMEs in Hungary and the European Union, thereby determining why it would be worthwhile to subject them to a broader analysis both vertically and horizontally.

The aim of the study was to explore one of the most important tools of strategic management, the entrepreneurial orientation. Within the entrepreneurial orientation, it touched on the innovation potential, the willingness to take risks, and the proactive attitude. After analysing the literature, it can be concluded that entrepreneurial orientation is closely related to strategic management, which has an impact on the operation and success of the enterprise.

In terms of the operation of SMEs, there is a significant difference compared to large companies, which on the one hand is an advantage for SMEs. Such factors are flexibility and quick response to developments. However, the disadvantage is that in many cases the owner and the manager are the same person who is responsible for many tasks at the same time - strategic planning, execution, and control - and is therefore the key factor in the success of the business.

Among the factors most influencing innovation are the development of new products, equipment acquisition, technological innovation, and R&D activities. From the point of view of willingness to take risk, the most significant risk factor for SMEs is financing risk, and from the point of view of proactivity, social media presence and activity has the greatest impact on their operation.

After processing the literature, 8 hypotheses were formulated, the proof of which will be served by a future questionnaire survey.

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Consumers about consumers: what do we think about those who use electric cars?

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Mobility plays a decisive role in our everyday life. It does matter how much time we spend with traveling, and it does matter how do we absolve our daily traveling routine. The developed, increased and constantly growing demand has created various types of transportation that help this action. In the meantime, we are constantly using the resources provided by nature to manufacture and operate these vehicles used for transportation, and we are constantly polluting and burdening our environment. At the same time, there are already existing solutions that try to fully satisfy our mobility needs, even if these solutions are slightly limiting us compared to the traditional methods. The solution that currently seems to be the least polluting is the electric car. Although it is spreading in different scales, but its' number is constantly increasing around the world. Their spread is influenced by multiple factors, even the consumers themselves are not always convinced that this is a satisfactory solution, however the use of this alternative solution does surely reduce air pollution in our cities. The question arises as to what we think about electric car owners in general, what characterizes those consumers and their consumption, who choose this form of everyday mobility. This is the research question what is examined in the study, which is based on an online survey of a representative sample of the Hungarian adult population of 1.000 respondents in August, 2022. During the survey, we examined the attitudes toward electric cars and electric car owners, including the explanatory variables of sustainability aspects.

Keywords: mobility, electric car, sustainability, consumer behavior

I. Introduction

We are surrounded by phenomena that affect us all to a greater or lesser extent. An example of this is the phenomenon of global warming, which has been present for centuries, but thanks to technical progress, we only now really see the extent of the environmental burden. In addition to changes such as the disappearance and blurring of seasons, rising sea levels, the gradual melting of glaciers and the appearance of extreme weather factors may become increasingly noticeable (Hideg, 2019). A stronger attention to our environment and the development of sustainability can help curb these phenomena pointing in the wrong direction. There are many social and scientific discourses on the pursuit of sustainability (Brand, 2016). The common goal of the discourses is that it is necessary to change the structure of consumption and production (Köves – Király, 2022). Continuous demands, needs and wishes clearly urge companies to find opportunities for cleaner operation and the production of greener products (Köves – Király, 2021). It is not enough that the consumer decides that he or she will live more sustainably in the future if the manufacturer does not produce products that can make this possible. This is also true in the other direction, even if the manufacturer decides to produce sustainable products, if there is no demand from the consumer side, there is no point to produce sustainable items. So, there must be a sufficient determination from both sides. For now, there are big differences between industries and companies, since as long as there are manufacturers who operate less sustainably, those who operate even a little sustainably are already at an advantage. As long as this does not result in a sharp competitive situation, the companies will not make major changes, as a global, radical change of attitude would be necessary (Delmas – Burbano, 2011). In the automotive industry, we see a kind of global regulation and the regulation of large car manufacturing companies in the direction of greener operation and the production of vehicles that promote sustainability. In order to achieve sustainability, many areas have already been formulated, among which I mainly deal with sustainable mobility. For carefree mobility, we need different types of transport, the use of which, following the trend of recent years, involves a large environmental burden. As an alternative, the electric car appeared, which does not release carbon dioxide into the air during operation, thus making the air in our cities more breathable, and which can be used in many areas (Győrfi, 2018).

I.1. Questions and dilemmas of the research

I formulated the following questions as the main dilemmas of the research. What do people think of those who use electric cars?! In the case of electric car users, does the sustainability ecosystem appear, for example, do they change their diet to achieve sustainability?! Does the fact that they strive for awareness in their transport also manifest itself in other types of consumption of electric car users? I am looking for answers to these questions in my research.

II. Topic explanation

In February 2021, Wunderman Thompson Data surveyed 3,001 people over the age of 18 in the United Kingdom, the USA and China, about – among others – the issue of sustainability. The research results are also compared with the figures of a 2018 study on a similar topic. From the analysis, we see that more and more people want to do more and more for a more sustainable life. While in 2018, 39% answered that they did everything possible to achieve this, three years later this proportion increased to 46%. While previous research showed that 53% of respondents felt they could do more to live more sustainably, in 2021 48% said they could do no more, underscoring that the proportion of those who do everything for the goal has increased. The number of those who do nothing for sustainability has also decreased, while in 2018, 8% stated this, while according to the latest data, 6% of those surveyed felt this way (1. figure).
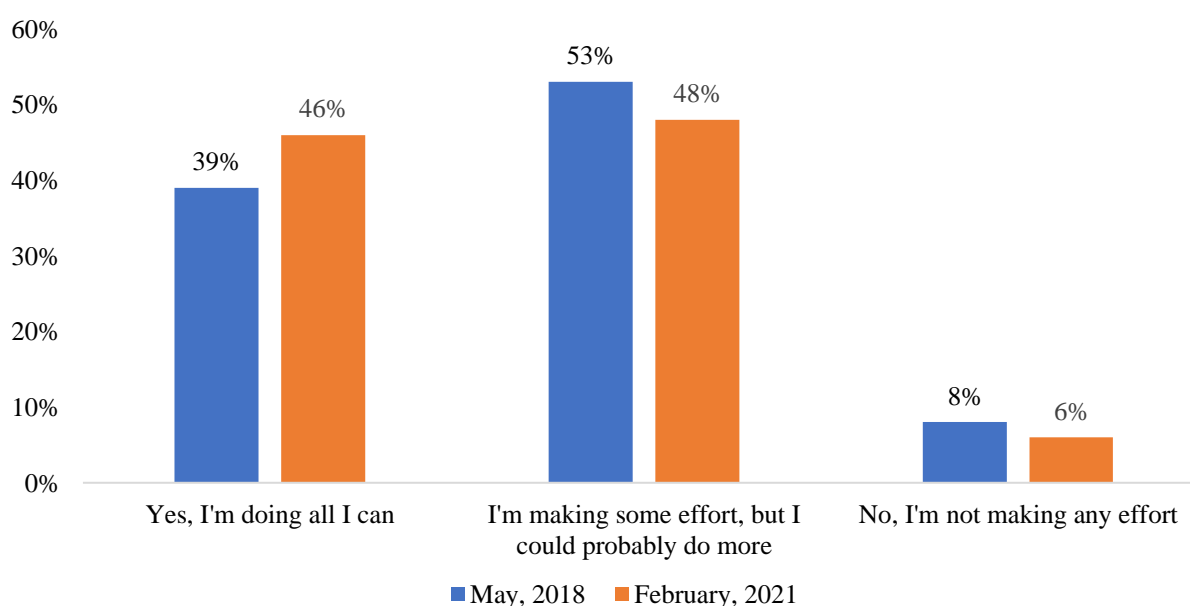
1. figure: Willingness for sustainability. Source: author's elaboration using Wunderman Thompson Data [2021]

The research also reveals that people greatly expect companies to address sustainable development and prioritize the protection of people and the environment over profit. 89% of respondents believe that companies should focus much more than they currently do on working with lower carbon emissions. 88% of those surveyed said that sustainability should be a basic standard in the life of companies, and the same proportion believe that companies should take responsibility for the planet and people. 86% of respondents feel that it is good for companies to use their money and power to draw people's attention to important issues, and the same percentage believes that companies should play a role in solving challenges such as climate change or social justice. So, it is clear that people expect companies to deal with the sustainability of the Earth and people in such a way that they have the opportunity to do something for the environment (2. figure).
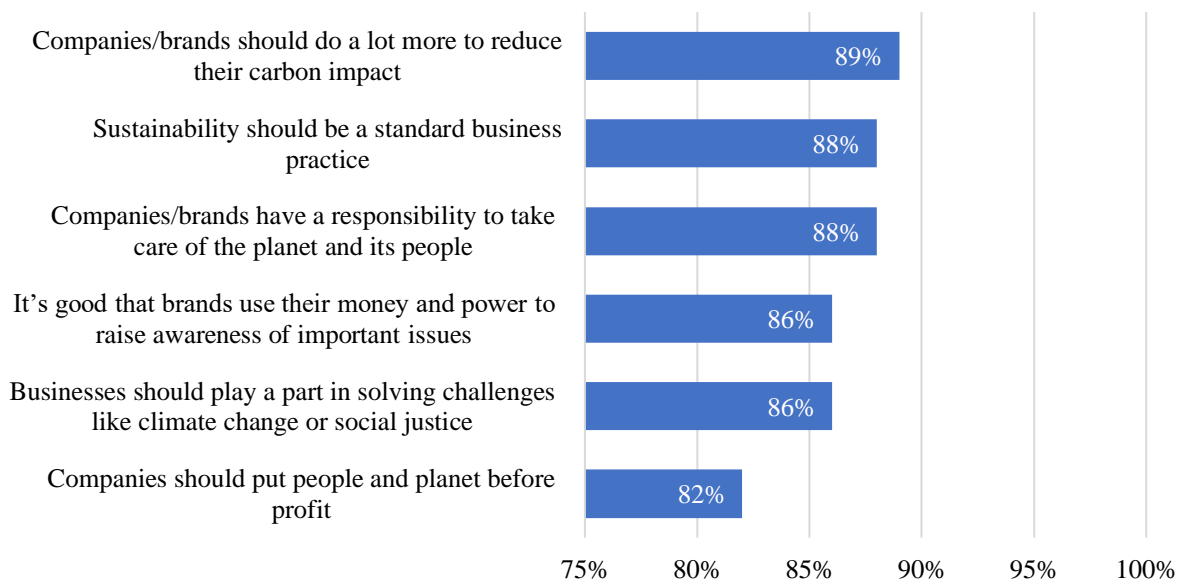
2. figure: Attitudes to company and brand sustainability behaviors. Source: author's elaboration using Wunderman Thompson Data [2021]

The automotive industry has realized that they have to take action, as they take a huge slice out of global environmental pollution, therefore for long years it has been possible to buy vehicles built with various electric technologies, which have a smaller impact on the environment. Despite the pandemic, the changing economic situation and the known limitations of the current electric car technology and infrastructure, the number of EV sales in Hungary is constantly increasing. Figure 3 shows the number of vehicles with green license plates in the period between March 2018 and March 2022. While in 2018 there were just over 5.500 fully or partially electric (hybrid) vehicles on the Hungarian roads, by the following year their number had already doubled. As a result of the continuous increase, in March 2022 there were already 47.771 vehicles with green license plates in Hungary (Simon, 2022).
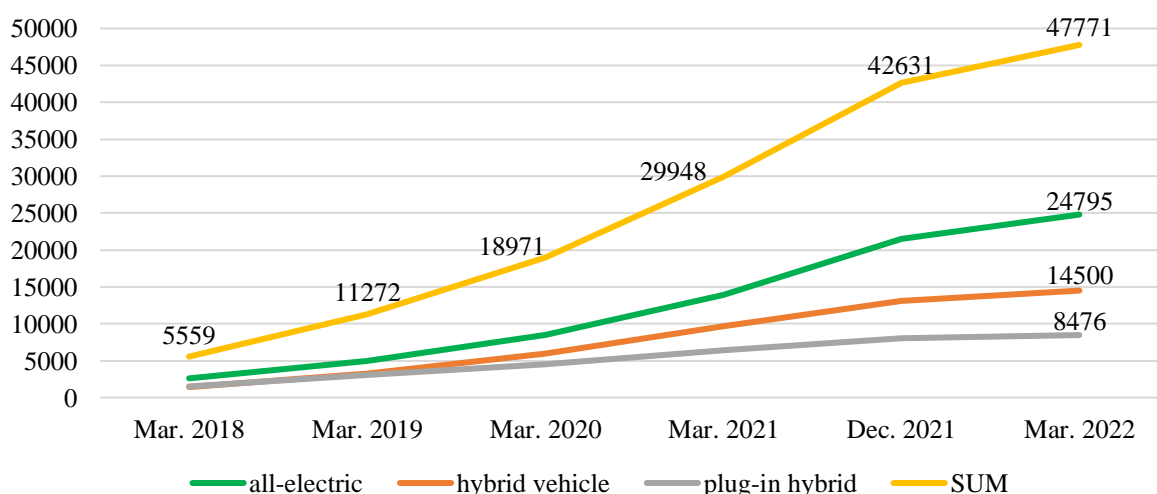
3. figure: Changes in the number of vehicles with green number plates in Hungary between March, 2018 and March, 2022. Source: author's elaboration using Simon [2021]

After March 2022, the extent to which changing fuel prices and the energy crisis will affect the spread of these types of vehicles is yet to be seen, but it is certain that car manufacturers continue to develop their electric cars.

In order to see what is the amount of the fully or partially electric cars from the total number of Hungarian road vehicle fleet, I found the latest December, 2021 data from the Hungarian Central Statistical Office website (KSH, 2022). At the end of 2021, 4.020.159 passenger cars were registered in Hungary, of which only 42.631 had green license plates, which means, only 1.1% of total passenger cars are electric or hybrid. I note that Figure 3 includes not only passenger cars, but also other vehicles that are partially or fully electric (e.g. electric buses), so in fact the ratio is even lower.

III. Results

In August 2022, an online survey was conducted on a representative sample of 1.000 adult Hungarians between the ages of 18 and 74, from which we obtained our results. The questionnaire examined 3 main areas. We wanted to get results about the attitudes towards shopping in the current, changed economic environment, we wanted to get answers to how important the respondents consider environmental protection in their purchases, and we also examined their attitudes towards electric cars. In this study, I mainly worked with the answers to the second and third questions, for which I used the SPSS Statistics software. As a statistical method, I used correlation analysis, I looked for significant matches in terms of environmental awareness and consumption, and I also used a similar method to assess the relationship between the characteristics of electric car owners.

1. table: Introducing the sample

Demographic groups	count	percentage (%)	Demographic groups	count	percentage (%)
Gender	963	100.0%	Settlement types	963	100.0%
male	456	47.4%	Capital	170	17.7%
female	507	52.6%	Town with county rights, county seat	213	22.1%
			Other city	287	29.8%
Age groups	963	100.0%	Village	293	30.4%
18-24 aged	81	8.4%	Region	963	100.0%
25-34 aged	218	22.6%	Northern Hungary	116	12.0%
35-44 aged	162	16.8%	Northern Great Plain	139	14.4%
45-54 aged	204	21.2%	Southern Great Plain	126	13.1%
55-64 aged	162	16.8%	Central Hungary	287	29.8%
65-74 aged	136	14.2%	Central Transdanubia	107	11.1%
			Western Transdanubia	96	10.0%
			Southern Transdanubia	92	9.6%

Source: author's elaboration

The demographic groups show that a little more than half of the respondents are women. Regarding age groups, the majority of people between the ages of 25-34 (22.6%) filled out the questionnaire, and the least represented were those between the ages of 18-24 (8.4%). Most of the people who filled out the questionnaire came from the Central Hungary region, and the fewest from South Transdanubia (1. table).

I present the following data based on the answers of 963 valid respondents. The table below shows the correlation at a 5% significance level between the question *"To what extent do you consider yourself to be environmentally conscious, a person who cares about the impact of your purchasing decisions on the environment?"* and 3 other statements.

While the respondents could answer the main question on a Likert scale from 1 to 10, for the statements in the first column, they could mark the extent to which they agree with, on a scale from 1 to 5. It can be seen that in the case of the entire sample, a weak but reliable relationship (0.3) can be demonstrated for the answers to the statements *"To what extent do you consider yourself to be environmentally conscious, a person who cares about the impact of your purchasing decisions on the environment?"* and that *"protecting our environment is more important than economic growth"*. A weak but reliable relationship (0.3) can be seen also in the case of *"I consider it important to use as many things as possible by sharing"* and the question about environmental awareness. In the case of environmental awareness and the answer *"I reduced my consumption to protect the environment"*, the strength of the relationship is almost 0.5, which is considered a medium relationship (2. table).

2. table: Correlation between environmental awareness and consumption

		To what extent do you consider yourself to be environmentally conscious, a person who cares about the impact of your purchasing decisions on the environment? (1-10)
Protecting our environment is more important than economic growth. (1-5)	**Pearson Correlation**	**.332****
	Sig. (2-tailed)	**<.001**
	N	**963**
I reduced my consumption to protect the environment. (1-5)	**Pearson Correlation**	**.494****
	Sig. (2-tailed)	**<.001**
	N	**963**
I consider it important to use as many things as possible by sharing. (1-5)	**Pearson Correlation**	**.333****
	Sig. (2-tailed)	**<.001**
	N	**963**

Source: author's elaboration

In table 3, I present my examination of the relationship between the respondents' attitudes about electric car users. In this table, only those statements are shown for which a significant relationship can be demonstrated. There is a strong relationship (0.6) in the case of the statements *"someone who owns an electric car thinks responsibly about the future"* and *"someone who owns an electric car chooses environmentally friendly solutions in other areas as well"*. In the case of the questions *"someone who owns an electric car is young"* and *"someone who owns an electric car is a vegetarian",* the relationship is also strong (0.5). A medium relationship (0.4) can be observed for the statements *"someone who owns an electric car has a lot of money"* and *"someone who owns an electric car wants to stand out from his environment"* (3. table). In conclusion, people do believe that those who owns an electric car, have a different kind of thinking. Beside using a car that is less harmful for the environment,

they choose other products in an environmentally conscious way. People also believe, that the electric car users have a lot of money which is understandable, as we know, these products are always more expensive than the traditional ones, so they have to have money to act in a sustainable way.

3. table: Correlation between the electric car user characteristics

		Someone who owns an electric car thinks responsibly about the future. (1-5)	Someone who owns an electric car is young. (1-5)	Someone who owns an electric car has a lot of money. (1-5)
Someone who owns an electric car chooses environmentally friendly solutions in other areas as well. (1-5)	Pearson Correlation	.592**	.254**	.017
	Sig. (2-tailed)	<.001	<.001	.597
	N	963	963	963
Someone who owns an electric car is a vegetarian. (1-5)	Pearson Correlation	.157**	.503**	.038
	Sig. (2-tailed)	<.001	<.001	.235
	N	963	963	963
Those who own an electric car want to stand out from their surroundings. (1-5)	Pearson Correlation	.182**	.317**	.425**
	Sig. (2-tailed)	<.001	<.001	<.001
	N	963	963	963

source: author's elaboration

IV. Summary

Seeing the results, it can be said that people consider it important to protect our environment, and many believe that environmental awareness should play an important role in everyday life. Respondents who chose higher values according to the Likert scale for the question of how environmentally conscious they consider themselves are, on the one hand, they consider the protection of the environment more important than economic growth, on the other hand, they reduce their consumption in order to protect the environment, and on the third hand, they believe it is important to reduce the environmental load, therefore use as many things as possible by sharing. It can also be stated that the attitudes associated with electric car users are significant. As I explained in a previous chapter, the number of electric car users in Hungary is still very small, so reaching them is also difficult, so at this stage of my research I can only base it on the opinions of people who do not use electric cars. Based on their opinion, those who own fully electric or hybrid car, think responsibly about the future, and in other areas of their consumption, some awareness and a sustainability ecosystem can be seen. The electric car really appears in people's minds as a product that is environmentally friendly and as a way to stay mobile with less environmental impact. The opinion of those interviewed is that vegetarianism is mostly characteristic of young people who use electric cars. We can therefore conclude that electric car owners make radical, even lifestyle decisions that they make for the

sake of sustainability. Based on the opinion of the respondents, the people who own an electric car have a lot of money and want to stand out from their environment by using the electric car. I find the topic worthy for further research. In my future research, I would like to reach a large number of electric car owners, to assess whether it is really possible to define a consumer ecosystem among electric car users, in which it can be shown that users of vehicles that emit less harmful substances to the environment also consume differently and more consciously in other areas of their consumption.

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Évjárat hatása a kukorica hibridek alkalmazkodóképességére

Virág István Csaba, *Debreceni Egyetem, Mezőgazdaság-, Élelmiszertudományi és Környezetgazdálkodási Kar, Növénytudományi Intézet, Növénytermesztéstani, Tájökológiai és Növénynemesítési Tanszék*

Dr. Vad Attila Miklós, *Debreceni Egyetem, Agrár Kutatóintézetek és Tangazdaság, Debreceni Tangazdaság és Tájkutató Intézet*

Dr. Kutasy Erika Tünde, *Debreceni Egyetem, Mezőgazdaság-, Élelmiszertudományi és Környezetgazdálkodási Kar, Növénytudományi Intézet, Növénytermesztéstani, Tájökológiai és Növénynemesítési Tanszék*

A kutatásomban a kukorica tőszámreakcióját és produktivitását vizsgáltam eltérő évjáratokban. A kísérletemben hasonló tenyészidejű kukorica hibrideket (Kamária, KWS Kamparis, P9903, DKC4351) vizsgáltam a Debreceni Egyetem Látóképi kísérleti telepén 2020-ban és 2021- ben. Az eltérő állománysűrűségtől (65-75-85-95 ezer tő/ha) eltekintve egységes agrotechnikát alkalmaztam. A tőszám termésre gyakorolt hatását vizsgálva a hibridek átlagában megállapítottam, hogy 2020-ban a termés mind a négy tőszámon magasabb volt, mint 2021-ben. Mindkét évjáratban a legalacsonyabb termést 65000 tő ha^{-1} (2020: 9,95 t ha^{-1}, 2021: 8,38 t ha^{-1}), míg a legmagasabb termést 95000 tő ha^{-1} (2020: 10,37 t ha^{-1}, 2021: 8,78 t ha^{-1}) állománysűrűségnél mértük. A genotípusokat összehasonlítva, mind a két évben a P9903 hozta a legmagasabb termést (2020: 10,89 t ha^{-1}, 2021: 9,88 t ha^{-1}). A DKC4351 2020-ban 9,3 t ha^{-1}, 2021-ben pedig 10 t ha^{-1} hozamot ért el, ami a vizsgált hibridek közt a legalacsonyabb termésingadozásnak bizonyult. Az állománysűrítés hatását vizsgálva az egyes genotípusok produktivitására megállapítható, hogy 2020-ban a termés a tőszám növelésével közel lineárisan emelkedett, a maximális termést a 95000 tőszámon érték el, de 85000 felett a növekedés már nem volt szignifikáns. 2021-ben a Kamária és a P9903 a tőszámok növelésével 65-85000 tőszám közt terméscsökkenést, majd 95 ezres tőszámnál ismét termésnövekedést mutatott. A DKC4351 esetében a 95 ezres tőszám már termésdepressziót eredményezett. A Kamparis hibrid termése lineárisan nőtt a vizsgált tőszámokon. A két év adatai alapján a vizsgált hibridek esetében a 75000 tőszám bizonyult optimálisnak.

Kulcsszavak: Zea mays L., genotípus, tőszámsűríthetőség, termőképesség, évjárat

I. Bevezetés

A kutatásomban a kukorica tőszámreakcióját és produktivitását vizsgáltam eltérő évjáratokban. Pepó és Csajbók (2014) megállapították, hogy az agrotechnikai elemek közül az állománysűrűség 7%-kal befolyásolta a termés mennyiségét. Az állománysűrűség növelésével a kukorica egyedek tenyészterülete csökken, a vizsgált legalacsonyabb tőszámon (65000 tő ha^{-1}) egy négyzetméteren 6,5 növény helyezkedik el, míg a legmagasabb növénysűrűség esetén (95000 tő ha^{-1}) már 9,5 növény osztozik ugyanakkora területen. Az egyedi produkció csökkenése a tenyészterület csökkenésre, valamint fény- és vízellátottsági problémákra vezethető vissza (Pálovics és Sárvári, 2006). A jó tápanyagellátottság mellett a megfelelő vízellátottság is feltétele a tenyészterület csökkentésének (Jakab et al, 2005; Csajbók et al, 2014; Virág et al, 2020). Számos kutatás igazolja, hogy a különböző agrotechnikai körülményekre és időjárási viszonyokra a hibridek eltérően reagálnak (Marton és Szundy, 1990; Jakab és Komarek, 2017; Széles et al, 2019). A termesztés biológiai háttere a nemesítési eredményeknek köszönhetően gyorsan változik, az újabb genotípusok megjelenése elengedhetetlenül szükségessé teszi a szántóföldi agrotechnikai kísérletek beállítását.

II. Anyag és módszer

II. 1. Alapadatok

Kutatásom során hasonló tenyészidejű (FAO 350-400) kukorica hibrideket vizsgáltam a Debreceni Egyetem Látóképi kísérleti telepén 2020-ban és 2021-ben. A kísérleti terület Debrecentől mintegy 15 km-re található (47°33′42″ É; 21°27′02″ K).

Vizsgált hibridek:
Kamária FAO 370
KWS Kamparis FAO 350-400
P 9903 FAO 390
DKC 4351 FAO 370

A vetés 2020.04.16-án és 2021.04.08-án történt pneumatikus szemenkénti vetőgéppel. Egy parcella 3 sorból állt, és 10 m hosszú volt. Minden kezelésből 4 ismétlést állítottunk be. A kísérlet elrendezését az 1. táblázat szemlélteti.
Az eltérő állománysűrűségtől (65-75-85-95 ezer tő/ha) eltekintve egységes agrotechnikát alkalmaztam.
Tápanyagellátás:
Ősszel 30 kg ha^{-1} N, 72 kg ha^{-1} P$_2$O$_5$ 72 kg ha^{-1} K$_2$O, és tavasszal 135 kg ha^{-1} N tápanyagot juttattam ki.
A betakarítás 2020.10.08-án és 2021.09.30-án történt Sampo parcella kombájnnal.
A terméseredményeket a betakarítás során lemértük és minden parcellából mintát vettünk, amiből súlyállandóságig szárítva meghatároztuk a betakarításkori nedvességtartalmat.
A kapott értékek alapján kiszámoltuk a 14% nedvességtartalomra korrigált hektáronkénti termését is.

1. táblázat A kísérlet parcelláinak elrendezése

Tőszám:	65	65	65	65	75	75	75	75	85	85	85	85	95	95	95	95
I. ism	Kamária	Kamparis	P903	DKC4351	Kamária	Kamparis	P903	DKC4351	Kamária	Kamparis	P903	DKC4351	Kamária	Kamparis	P903	DKC4351
II. ism																
III. ism																
IV. ism																

Forrás: Saját szerkesztés [2021]

II. 2. A kísérleti terület talajadottságai

A kísérleti terület talaja a Hajdúsági löszháton kialakult meszes csernozjom. A felső réteg humusztartalma átlagos (Hu% = 2,7-2,8), a humuszréteg vastagsága 80 cm körüli. A talaj Arany-féle kötöttsége (K_A) 43 és 47,6 között van. A felső talajrétegek pH-ja közel semleges (pH_{KCl} = 6,46-6,6). A meszes talaj foszforellátottsága átlagos (AL-oldható P_2O_5 133 mg kg^{-1}), míg káliumellátottsága átlagos-jó (AL-oldható K_2O 240 mg kg^{-1}). A talaj térfogatsűrűsége a művelt rétegekben 1,40-1,46 g cm^{-3}, míg az alsóbb rétegekben 1,23-1,28 g cm^{-3} (2. táblázat).

2. táblázat Talajvizsgálati eredmények (2015, Debrecen)

	Talajréteg				
	0-25 cm	**25-50 cm**	**50-75 cm**	**75-100 cm**	**100-130 cm**
pH (KCl)	6,46	6,36	6,58	7,27	7,36
K_A	43	44,6	47,6	46,6	45,4
$CaCO_3$ (%)	0	0	0	10,25	12,75
Humusz (%)	2,76	2,16	1,52	0,9	0,59
Szerves C (%)	1,60	1,25	0,88	0,52	0,34
Össz N (%)	0,15	0,12	0,086	0,083	0,78
NO_3+NO_2 (mg kg^{-1})	6,2	1,74	0,6	1,92	1,78
P_2O_5 (AL) (mg kg^{-1})	133,4	48	40,4	39,8	31,6
K_2O (AL) (mg kg^{-1})	239,8	173,6	123	93,6	78

K_A: Arany-féle kötöttség, AL: Ammó-laktát oldható, Össz N%: Összes nitrogén Kjeldahl-módszerrel meghatározva

A kísérlet talaja kedvező talajfizikai tulajdonságokkal (középkötött, vályog típus) jellemezhető. A talaj vízgazdálkodási tulajdonságai kedvező vízbefogadó és jelentős víztartó képességet bizonyítanak. A növények vízellátása szempontjából mértékadó talajszelvényben (0-2 m) a talaj mintegy 600-700 mm vizet képes megtartani, tárolni, amelynek kb. 65%-a a diszponibilis víz

mennyisége. A kísérleti területen a talajvíz átlagos mélysége 3-5 m, amely miatt a növények vízellátásában csak mérsékelt szerepet játszik.

II. 3. Az évjáratok értékelése

A 2019-2020-as évi csapadék- és hőmérséklet viszonyokat az 1. ábrán láthatjuk. Megállapítható, hogy a téli időszakban, novembertől- márciusig a 30 éves átlaghoz képest több csapadék hullott, ami lehetővé tette a kiváló vízgazdálkodású csernozjom talaj feltöltődését.
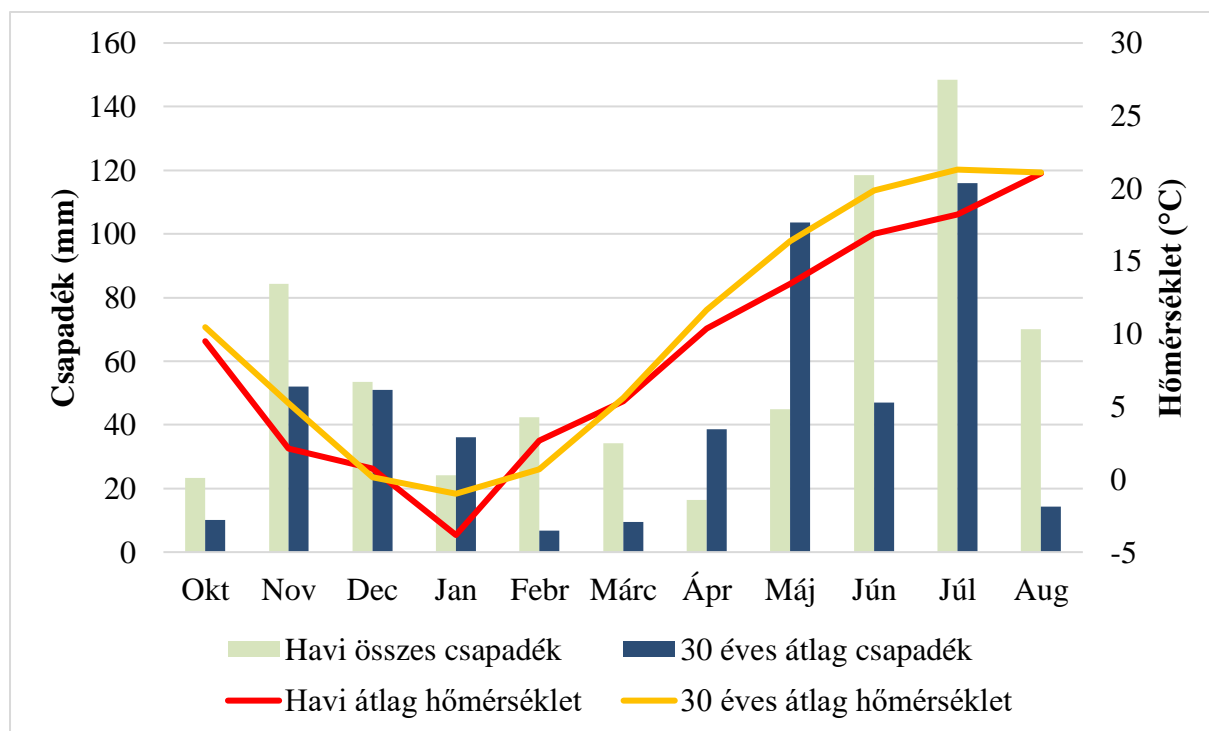
1. ábra A 2019-2020-as év időjárás viszonyai. (Debrecen-Látókép) Forrás: DE-MÉK Precíziós Növénytermesztési Kutatás-fejlesztési Szolgáltató Központ [2021]

A vetés (2020.04.16.) és a kezdeti fejlődés a megszokotthoz képest szárazabb csapadékviszonyok között zajlott, azonban a havi átlaghőmérséklet a tenyészidőszak alatt végig alacsonyabb volt a sok éves átlaghoz képest. A nyár viszonylag hűvös és csapadékban gazdag volt, ami kedvezett az állományok vegetatív fejlődésének.

Ezzel ellentétben a következő kísérleti évben, amint azt a 2. ábrán is megfigyelhetjük 2021-ben a talajok téli feltöltődése nem alakult olyan kedvezően, csupán januárban és februárban haladta meg jelentősen a 30 éves átlagot a lehullott csapadék mennyisége. A tavasz száraz és hűvös, míg a nyár száraz és meleg volt. A címerhányás idején kevés csapadék hullott, valamint a légköri aszály is jelentős volt.
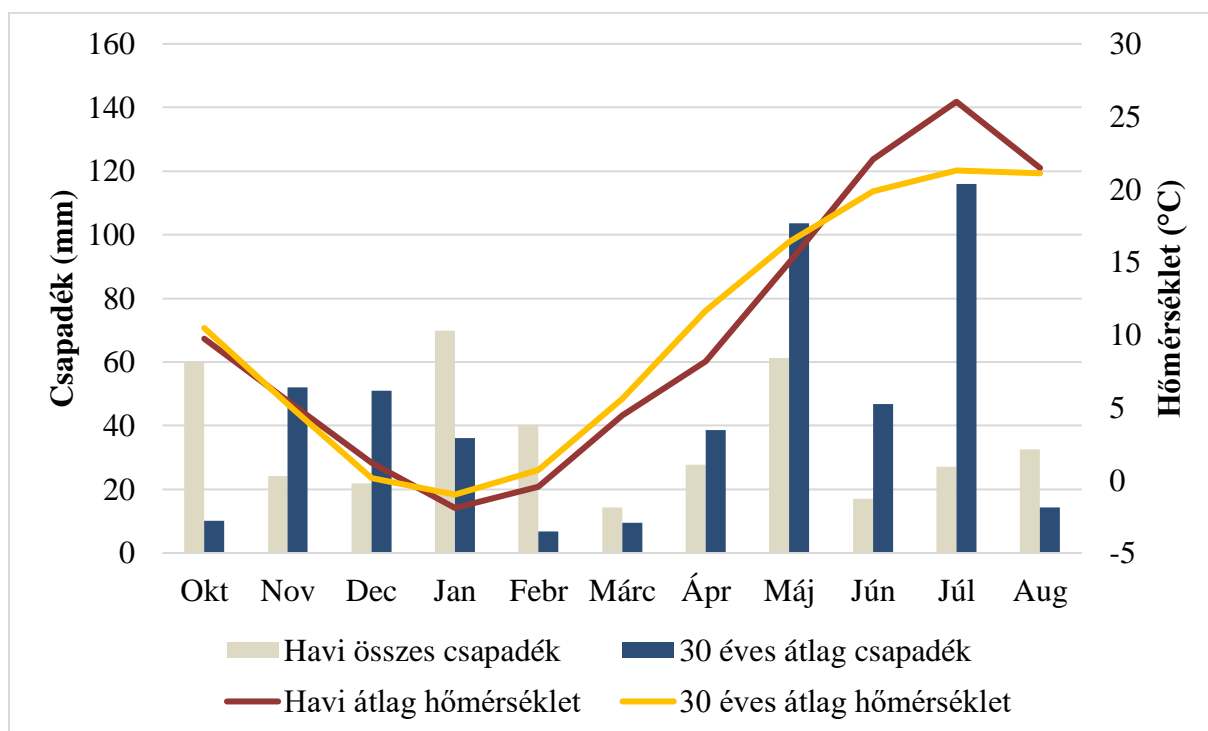
2. ábra A 2020-2021-as év időjárás viszonyai. (Debrecen-Látókép) Forrás: DE-MÉK Precíziós Növénytermesztési Kutatás-fejlesztési Szolgáltató Központ [2021]

II. 4. Statisztikai értékelés

Az adatok statisztikai kiértékelését az IBM-SPSS 22.0 programmal végeztük. Az adatok együttes értékelésére varianciaanalízist (General Linear Model), a páronkénti összehasonlításhoz LSD post hoc tesztet használtunk. Mindkét esetben 5%-os elsőfajú hibával (α) végeztük az elemzéseket.

III. Eredmények

III. 1. Állománysűrűség hatása a kukorica termésére (2020-2021)

A tőszám termésre gyakorolt hatását vizsgálva a hibridek átlagában megállapítottam, hogy 2020-ban a termés mind a négy tőszámon magasabb volt, mint 2021-ben (3. ábra). Mindkét évjáratban a legalacsonyabb termést 65000 tő ha^{-1} (2020: 9573 kg ha^{-1}, 2021: 8376 kg ha^{-1}), míg a legmagasabb termést 95000 tő ha^{-1} (2020: 10372 kg ha^{-1}, 2021: 8781 kg ha^{-1}) állománysűrűségnél mértük. A kedvezőbb 2020-as évjáratban a tőszám növekedésével a termés lineárisan növekedett, azonban szignifikáns eltérést a 75-85-95 ezres állománysűrűségnél elért terméseredmények között nem tapasztaltunk. 2021-ben a vizsgált tőszámok között a termés vonatkozásában nem találtunk statisztikailag igazolható különbséget.
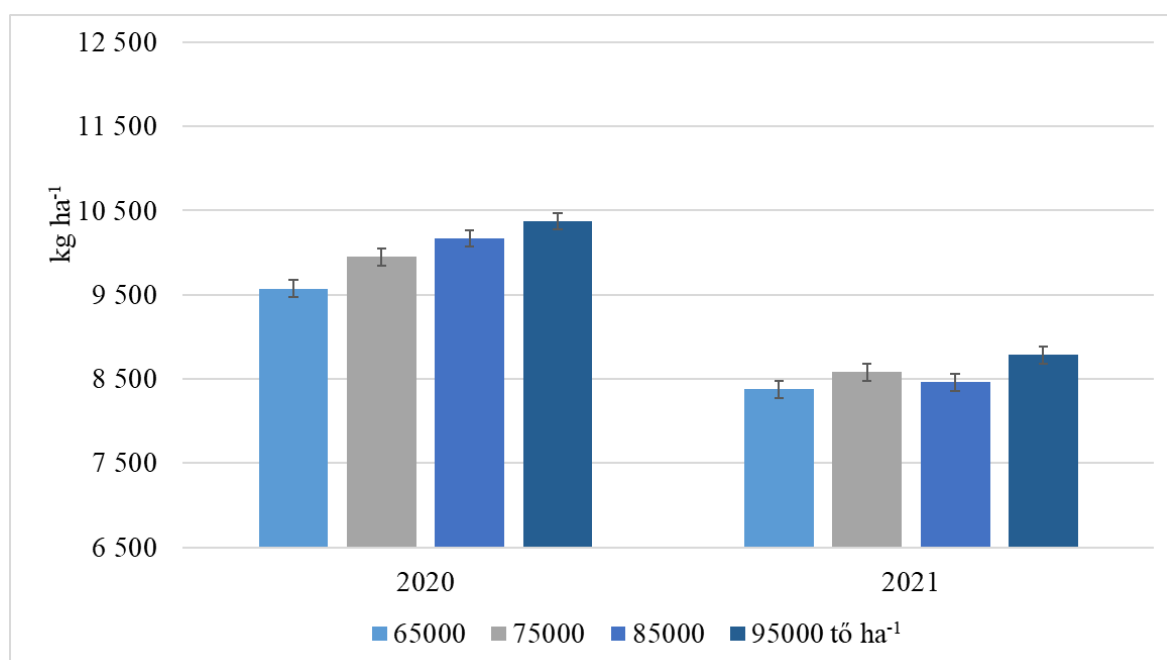
3. ábra Kukorica termése a genotípusok átlagában (Debrecen-Látókép 2020-2021)
Forrás: Saját szerkesztés [2021]

III. 2. Genotípus hatása a kukorica termésére (2020-2021)

A genotípusok produktivitásának összehasonlítása érdekében szemléltettük az elért terméseredményeket a vizsgált tőszámok átlagában (4. ábra).

	Kamária	P9903	DKC4351	Kamparis
2020	9983	10894	10068	9563
2021	8243	9887	9308	8416
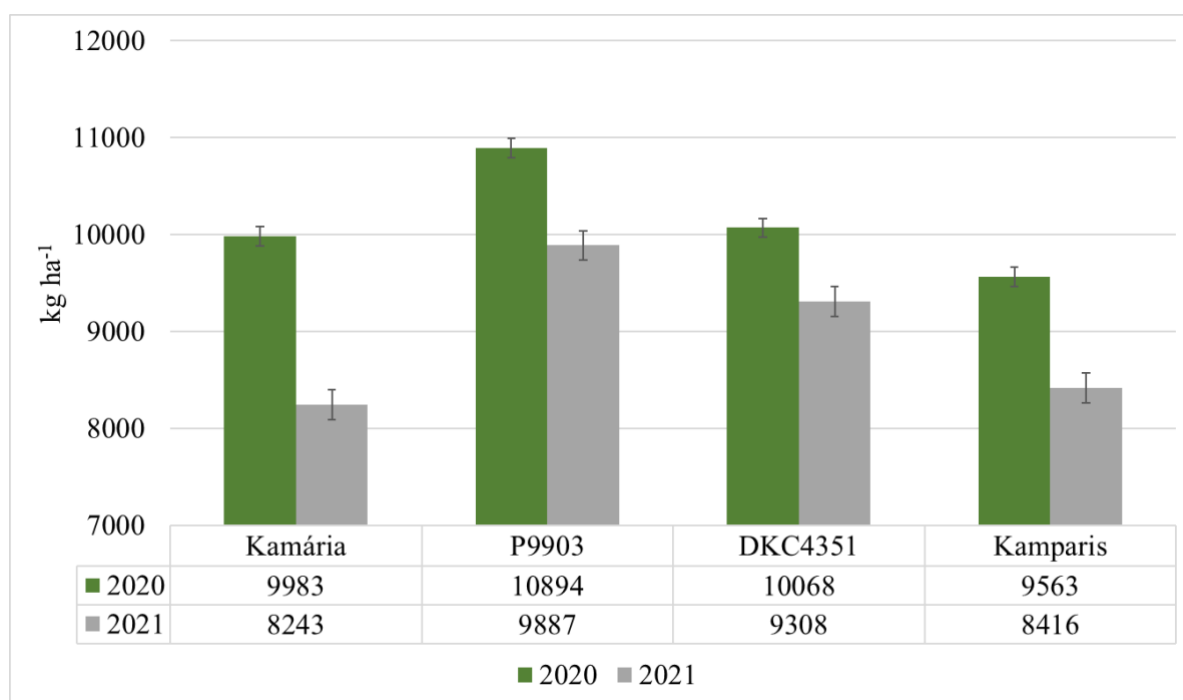
4. ábra A kukorica termése a vizsgált tőszámok átlagában (Debrecen-Látókép 2020-2021)
Forrás: Saját szerkesztés [2021]

A termés minden hibrid esetében a kedvezőbb 2020-as évben volt nagyobb, azonban az eltérő hőmérsékleti és vízellátottsági feltételekre a genotípusok különbözően reagáltak.

Mindkét vizsgált évben a P9903 hozta a legmagasabb termést (2020: 10894 kg ha^{-1}, 2021: 9887 kg ha^{-1}), ami a hibrid kiváló produktivitását és jó alkalmazkodóképességét mutatja. A Kamária és a DKC4351 hibrid termése 2020-ban gyakorlatilag azonos volt, azonban a DKC4351 hibrid adaptábilitását, kiváló abiotikus stressztűrő képességét mutatja, hogy a különösen száraz 2021-es évben mindössze 760 kg-mal ért el kevesebb termést (2020: 10068 kg ha^{-1}, 2021: 9308 kg ha^{-1}), mint a kedvezőbb évjáratban. A Kamária hibrid az abiotikus feltételek romlására jelentős terméscsökkenéssel reagált, majdnem 1740 kg-mal ért el kevesebb termést, mint 2020-ban. Jobb vízellátottság mellett a Kamparis hibrid termése volt a legalacsonyabb, azonban a feltételek romlására kisebb terméscsökkenéssel reagált, mint a gyengébb szárazságtűrő képességű Kamária.

III. 3. A hibridek tőszámreakciói (2020-2021)

Az állománysűrítés hatását vizsgálva az egyes genotípusok produktivitására megállapítható, hogy a Kamária hibridnél (5. ábra) gyakorlatilag ugyanazokat a hatásokat figyelhettük meg, mint a hibridek átlagában. Jobb vízellátottságú évben 85 ezres tőszámig nőtt a termés bár 95 ezresnél már termésdepressziót tapasztaltam, azonban hozzá kell tenni, hogy a terméskülönbség a 75-85-95 ezres tőszám esetében nem szignifikáns. Jelentősebb termésnövekedés csak a 65-75 ezres tőszám között volt megfigyelhető, ami megkérdőjelezi a sűrítés gazdaságosságát. Száraz évjáratban a 65 ezres tőszám felett szignifikáns termésnövekedést nem tapasztaltunk.

A Kamparis hibrid termése lineárisan nőtt a vizsgált tőszámokon 2021-ben, míg 2020-ban csak a legkisebb állománysűrűségnél volt jelentősen kisebb a termés. Mindkét évjárat esetében csak a 65 és 75 ezres tőszám közötti terméskülönbség volt szignifikáns.
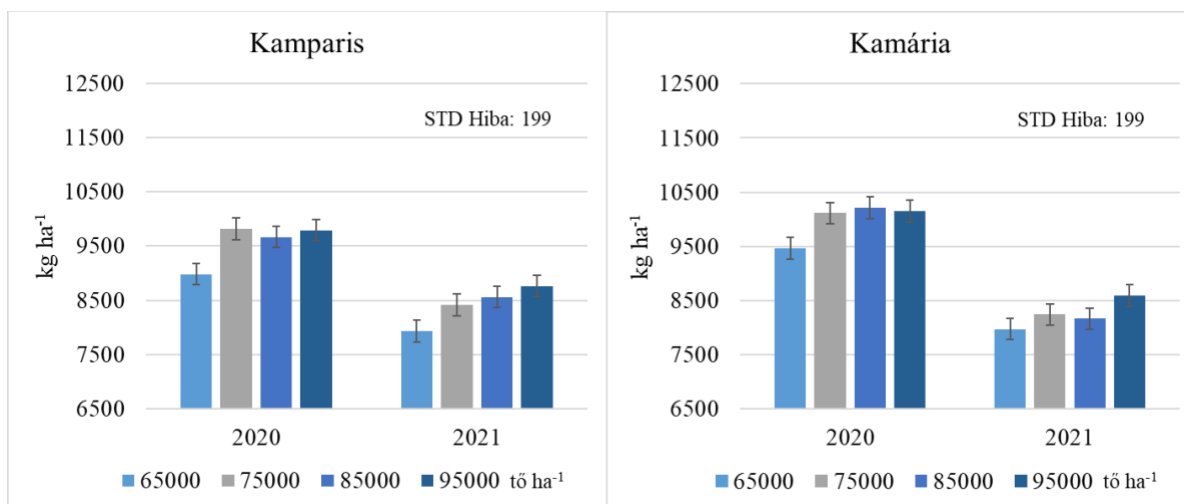
5. ábra A Kamparis és Kamária hibridek tőszámreakciói Forrás: Saját szerkesztés [2021]
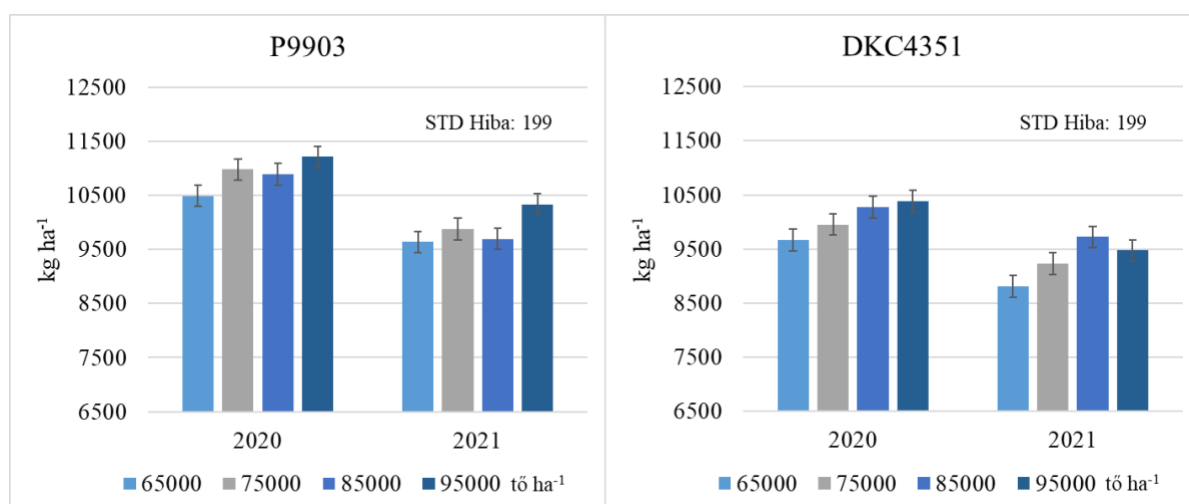
6. ábra A P9903 és DKC4351 hibridek tőszámreakciói Forrás: Saját szerkesztés [2021]

A DKC4351 és a P9903 hibrid esetében is elmondhatjuk azt, hogy a jobb vízellátottság mellett a termés a magasabb tőszámmal tovább növelhető, azonban ezeknél a hibrideknél a legkisebb tőszámhoz képest a termésnövekedés nem volt olyan jelentős egyik évjáratban sem. A mindkét vizsgált évjáratban legkedvezőbb produktivitású P9903 hibrid esetében (6. ábra) megfigyelhető az az érdekes tendencia, hogy habár nem szignifikáns mértékben, de a tőszámok növelésével a 75 ezres és a 85 ezres tőszám közt terméscsökkenést, majd 95 ezres tőszámnál ismét termésnövekedést tapasztaltunk. A DKC4351 esetében a 95 ezres tőszám 2021-ben már termésdepressziót eredményezett, míg 2020-ban lineárisan nőtt a termés a tőszám növelésével párhuzamosan.

IV. Összefoglalás

A kutatási eredményeimet összegezve, a két eltérő évjáratban elért terméseredmények alapján a vizsgált négy hibrid közül két hibridet tudnék kiemelni. A P9903 kiemelkedő terméseredményt ért el, azonban a DKC4351 termésstabilitása bizonyult legkedvezőbbnek, ami a hibrid kiváló abiotikus stressztűrését mutatja.

Annak ellenére, hogy a legtöbb hibridnél az állománysűrűség növelése a termést növelte, ez a növekedés nem mindig volt szignifikáns. Általában a kedvezőbb vízellátottságú évben a termés a tőszám növelésével közel lineárisan emelkedett, a maximális termést a 95 ezres tőszámon érték el a hibridek, de 75 ezres tőszám felett a növekedés már nem volt szignifikáns. Kedvezőtlen vízellátottság mellett pedig 75 ezres tőszám felett egyes hibrideknél már termésdepressziót is tapasztaltam. A termésbiztonság és a termesztés gazdaságossága érdekében a 75 ezres tőszámtól magasabb állománysűrűséget egyik hibrid esetében sem javaslok, mivel gyakran kedvezőbb évjáratban sem gazdaságos az állománysűrítést növelni, hiszen sokszor nagyobb mértékben nő a vetőmag költsége, mint amennyit a hozam növekedéséből származó többletbevétel jelent.

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The Effect of Supply Chain Management on Organizational Performance in Four Seasons Hotel in Syria

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Abstract

The purpose of this paper is to investigate the effect of supply chain management on organizational performance in four seasons hotel in Syria. In addition, it aims to assessing the level of awareness and understanding the concepts of supply chain management and organizational performance in the Syrian context.

The research methodology involved the adoption of a survey as a research strategy and quantitative approach, utilized a self-administered questionnaire, to arrive at the major findings of the study. The type of research is a single cross-sectional design in which the collection of data from the respondents was carried out only once. Data was analyzed using the statistical package for social sciences (SPSS).

The paper revealed that there is an effect of supply chain management on organizational performance in four seasons hotel in Syria. It also revealed that there is a high level of awareness among the respondents about the concepts of supply chain management and organizational performance.

As far as the researcher is aware, this paper is the first to investigate the effect of supply chain management on organizational performance in four seasons hotel in Syria; thus, its finding will be an original contribution to the field of supply chain management and organizational performance. In addition, as there has been a shortage of research in the field of supply chain management, generally in the Middle East countries, the researcher hopes that this paper will establish a foundation for further research in the region.

Keywords: Supply chain, Supply chain management (SCM), Organizational performance.

I. Introduction:

The world is witnessing many challenges, represented by intensive competition, lack of available resources, increasing societal needs. Which requires dynamic changes in all aspects of the organization to ensure survival and continuity in the light of these rapid changes. Therefore, the organization has to continuously explore and identify the potential markets for its products, obtaining a distinct competitive position, expanding its market share, and accessing geographical places far from the organization's location whether within the borders of the country or outside.

Hence comes the importance of supply chain management, which has become a bond, linking the production sites with market and consumption sites, which is why the management of supply chains is considered as one of the vital factors in achieving the organizational performance of the organization.

Based on the above, the need for supply chain management emerged, due to its ability to enable the organization to achieve organizational performances, through its role in the relationships between the organization, suppliers and customers. The supply chain management represents a mixture of science and art to improve the ways how the organization obtains the raw materials needed to provide the service, produce the products and deliver or ship it to customers, which achieves the continuity and distinction for the organization in the market.

II. Research Problem & Question:

The problem of the study goes back to the fact that hotels in Syria are affected by many challenges, and the great damage in the tourism sector, which has been affected by political and economic factors in Syria and the region.

As most organizations operate in a work environment characterized by intensive competition, change in the needs and desires of customers and changing market conditions, Therefore the organization is required to build strong relationships with suppliers through efficient and effective supply chain management, and work to secure the best types of support to achieve the set goals.

In light of the above, the problem of research can be identified by the following main question:

To what extent does supply chain management affect the organizational performance in four seasons hotel in Syria?

III. Literature Review:

III.1 Evolution of Supply Chain Management

In the 1950s and 1960s, most manufacturers emphasized mass production to minimize unit production cost as the primary operations strategy, with little product or process flexibility. New product development was slow and relied exclusively on in-house technology and capacity. Bottleneck operations were cushioned with inventory to maintain a balanced line flow, resulting in huge investment in work in process (WIP) inventory. Sharing technology and expertise with customers or suppliers was considered too risky and unacceptable and little emphasis appears to have been placed on cooperative and strategic buyer supplier partnership. The purchasing function was generally regarded as being a service to production, and managers paid limited attention to issues concerned with purchasing. In the 1970s, Manufacturing Resource Planning was introduced and managers realized the impact of huge WIP on manufacturing cost, quality, and new product development and delivery lead-time. Manufacturers resorted to new materials management concepts to improve performance within the "four walls"" of the company. (Tan, 2001, p.39)

The evolution of supply chain management continued into the 1990s accompanied by increasing logistics and inventory costs and the trend toward market globalization, the challenges associated with improving quality, manufacturing efficiency, customer service, and new product design and

development also increased. To deal with these challenges, manufacturers began purchasing from a selected number of certified, high- quality suppliers with excellent service reputations and involved these suppliers in their new product design and development activities as well as in cost, quality, and service improvement initiatives. This is done so by reducing the supply base as much as a single supplier and enter in to a long-term agreement as strategic alliance in doing their business. As companies began implementing supply chain management initiatives, they began to understand the necessity of integrating all key business processes among the supply chain participants enabling the supply chain to act and react as one entity. (Ensermu, 2013, p.54)

III.2 Supply Chain Management Definitions
The Council of Supply Chain Management Professionals (CSCMP) (2004), a leading professional organization promoting SCM practice, education, and development, defines SCM as:
SCM encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities, including coordination and collaboration with suppliers, intermediaries, third-party service providers, and customers. Thus, the supply chain encompasses all activities involved in the production and delivery of a final product or service, from the supplier's supplier to the customer's customer.
In essence, supply chain management integrates supply and demand management within and across companies (www.cscmp.org), CSCMP emphasizes that SCM encompasses the management of supply and demand, sourcing of raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, and distribution and delivery to the customer.
Cooper et al. (2007) define SCM as the management and integration of the entire set of business processes that provides products, services and information that add value for customers. (Cooper et al., 2007, p.14)
Several authors have defined supply chain management, Christopher (2003), New and Payne (1995), and Simchi-Levi et al. (2000) define supply chain management as "the integration of key business processes among a network of interdependent suppliers, manufacturers, distribution centers, and retailers in order to improve the flow of goods, services, and information from original suppliers to final customers, with the objectives of reducing system-wide costs while maintaining required service levels". (Stapleton et al., 2006, p.108)
The Global Supply Chain Forum (GSCF) defines supply chain management as "the integration of key business processes from end user through original suppliers, that provides products, services, and information that adds value for customers and other stakeholders" (Lambert et al., 1998, p.1).
The APICS dictionary (1995) describes SCM as – "the processes from initial raw materials to the ultimate consumption of the finished product, linking across supplier-user companies". (Green et al., 2008, p.317)
A supply chain is a network of organizations performing various processes and activities to produce value in the form of products and services for the end customer. (Christopher, 2003, p34)
SCM concerns the integrated and process-oriented approach to the design, management and control of the supply chain, with the aim of producing value for the end customer, by both improving customer service and lowering cost. (Giannoccaro & Pontrandolfo, 2002, p.153)
Lummus & Vokurka (1999) summarize SCM as "all the activities involved in delivering a product from raw material through to the customer, including sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, delivery to the customer, and the information systems necessary to monitor all of these activities". (Lummus & Vokurka, 1999, p.13)

According to Li et al. (2006) the dual purpose of SCM is to improve the performance of an individual organization as well as that of the entire supply chain. (Li et al., 2006, p.124)

CLM definitions clearly establish that SCM is more broadly conceived than merely "logistics outside the firm". (Lambert, 2004, p.18).

Recent research supports this conception, portraying SCM as a strategic level concept (Stank et al., 2005, p.27).

III.3 Supply chain performance indicators

Supply chain performance is a two-dimensional definition which consists of effectiveness & efficiency, Effectiveness is about "doing the right things" & efficiency is about "doing things right". Supply chain effectiveness relates to the preference of the end-consumer & the sole indicator is consumer satisfaction. (Donald et al., 2006, p.16)

Conversely, supply chain efficiency relates to the objective performance of processes. Efficiency indicators measure an output level against an input level (Arawati, 2011, p.95).

The supply chain operations reference (SCOR) model was introduced in 1996 by the Supply- Chain Council, which is a global organization of firms interested in SCM.

The SCOR model advocates hundreds of performance metrics used in conjunction with five performance attributes: reliability, responsiveness, flexibility, cost, and asset metrics. (Cousins et al, 2006, p.697)

Sabry (2015) states that in modern SCM, quality is taken as a given and that factors in quality management and improvement are somewhat separate from those in SCM development. (Sabry, 2015, p.23)

Supply Chain Council (2006) presents five attributes of SC performance as quoted by (Sillanpää, 2011, p.47):

1. SC reliability: The performance of the SC in delivering the correct product to the correct place, at the correct time, in the correct condition and packaging, in the correct quantity, with the correct documentation, to the correct customer.
2. SC responsiveness: The speed at which a SC provides products to the customer.
3. SC flexibility: The agility of a SC in responding to marketplace changes to gain or maintain competitive advantage.
4. SC costs: The costs associated with operating the SC.
5. SC asset management: The effectiveness of an organization in managing assets to support demand satisfaction. This includes the management of the both assets: fixed and working capital.

III.4 Organizational Performance

Organizational performance refers to how well an organization achieves its market- oriented goals as well as its financial goals (Yamin, 2009, p.56). The short-term objectives of supply chain management are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain (Tan, 2008, p.12). Financial metrics have served as a tool for comparing organizations and evaluating an organization's behavior over time (Holmberg, 2000, p.92). Any organizational initiative, including supply chain management, should ultimately lead to enhanced organizational performance. A number of prior studies have measured organizational performance using both financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, the growth of market share, and overall competitive position represented by constructs like, Price/Cost. It is the ability of an organization to compete

against major competitors based on low price and quality, the ability of an organization to offer product quality and performance that creates higher value for customers' delivery dependability. It includes the ability of an organization to provide on time the type and volume of product required by customer(s). (Li, 2006, p.107)

IV. Research Hypothesis, Variables & Model:

In light of the research problem and its question, the hypothesis is formulated as follows:
Hypothesis H1:
"There is a statistically significant effect of supply chain management on organizational performance at the level of significance ($\alpha \leq 0.05$) ".
The present study relied on supply chain management as an independent variable (X), and on organizational performance as a dependent variable (Y).
In light of the above, the model of the study will be as follows:

Independent Variable

Supply Chain Management

H1 →

Dependent Variable

Organizational Performance
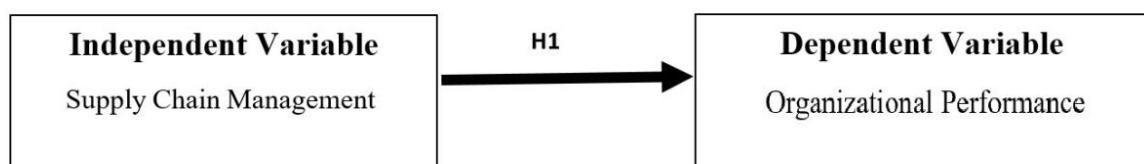
Fig 1: Research Model

V. Research Methodology:

V.1 Study Population and Sample:

The population of this study is hotels in Syria, four seasons hotel as a case study.
The volume of the sample was determined by using the form of Krejcie & Morgan as the following (Krejcie & Morgan, 1970, p.607):

$$n = \frac{p(1-p)}{\frac{p(1-p)}{N} + \frac{E^2}{SD^2}}$$

n: sample volume.
N: community volume.
P: 0.5   E: 5%   SD: 1.96
Since N=93 which is the total number of the workers in four seasons hotel, so by using the above formula we find that n=75.
The questionnaire had been administrated personally, (90) questionnaires were distributed, (75) returned and analyzed with a (84%) response rate.

V.2 Instrument Validity and Reliability:

Validity: The questionnaire was reviewed by four experts from the Faculty of Economics at Damascus University, whose knowledge and experiences were sufficient in this scope and to make sure that each item is measuring exactly what is intended to be measured. Furthermore, a pilot study was conducted on 30 respondents to test the research instrument before distributing it to the whole sample. Upon the feedback of the experts and the pilot study the questionnaire had been amended taking into consideration their suggestions, comments, and directions to achieve the validity of the instrument.

Reliability: Reliability is the extent to which a variable (or set of variables) is persistent in what is intended to measure (Hair et al., 2005). The Cronbach's Alpha value used to test the reliability of the items measuring each variable. A reliability measure coefficient reflects how well items in a set are positively correlated to one another. Accordingly, the internal consistency method was used in this study to examine the reliability of each variable. Table 1 below shows that all the values of alpha are above 0.60, which are considered to be acceptable.

Table 1: Summary of Reliability Analysis

Components	Cronbach's Alpha	Number of Items
Supply Chain Management	0.807	4
Organizational Performance	0.728	4
Total	0.835	**8**

Source: SPSS outputs

V.3 Pearson Correlation:
V.3.1 for Supply chain Management:

Table 2: Pearson Correlation for Supply chain Management

Sentences	Pearson Correlation	Sig. (2-tailed)
Our hotel seeks to build long relationships with its suppliers	.808**	.001
Our hotel involves its suppliers in planning and development	.859**	.001
The relationships with the suppliers are based on trust, commitment and mutual benefits	.881**	.001
Our hotel continuously measures and evaluates the supplier's satisfaction	.882**	.001

Source: SPSS outputs

The Pearson Correlation value for all sentences is more than 0.5, which can be considered moderately correlated.

V.3.2 for Organizational performance:

Table 3: Pearson Correlation for Organizational performance

Sentences	Pearson Correlation	Sig. (2-tailed)
Our hotel is expanding its Market share	.829**	.001
Our hotel has a growing return on investment	.809**	.001
Our hotel achieves its market- oriented goals	.781**	.001
Our hotel is improving its overall competitive position	.865**	.001

Source: SPSS outputs

The Pearson Correlation value for all sentences is more than 0.5, which can be considered moderately correlated.

V.4 Test of Normality:

Based on table 5 we find that Sig for all variables is more than (0.05), so all data are subject to normal distribution.

Table 4: Test of Normality for the variables

Statistics		Supply chain management	Organizational performance
N	Valid	75	75
	Missing	0	0
Mean		3.8533	3.7289
Std. Deviation		.95741	1.08039
Skewness		-1.389	-.845
Std. Error of Skewness		.277	.277
Kurtosis		1.732	-.048
Std. Error of Kurtosis		.548	.548

Source: SPSS outputs

V.5 Descriptive Statistics of the Data:

V.5.1 Supply chain Management:

Table 5 below depicts the Mean and Standard Deviation for supply chain management, the values were calculated based on the answers from the respondents.

Table 5: Descriptive Statistics of the Data for Supply chain Management

Supply chain Management	N	Mean	Std. Deviation	Test Value = 3		
				t	df	Sig. (2-tailed)
Our hotel seeks to build long relationships with its suppliers	75	3.8400	1.12754	6.452	74	0.000
Our hotel involves its suppliers in planning and development	75	3.8267	1.10739	6.465	74	0.000
The relationships with the suppliers are based on trust, commitment and mutual benefits	75	3.8233	1.10659	6.452	74	0.000
Our hotel continuously measures and evaluates the supplier's satisfaction	75	3.899	1.10521	6.219	74	0.000
Supply chain Management	75	3.8533	0.95741	7.719	74	0.000

Source: SPSS outputs

Based on the data collected from the respondents the mean of the data after the calculation was 3.8533, which is more than 3.4 and less than 4.2, and Sig is 0.000 less than 0.05, so the workers agree to the content of the sentences.

This means the respondents demonstrate optimal level of attitude towards supply chain management. In other words, the respondents show positive attitude towards supply chain management.

V.5.2 Organizational performance:

Table 6 below depicts the Mean and Standard Deviation for organizational performance, the values were calculated based on the answers from the respondents.

Table 6: Descriptive Statistics of the Data for Organizational performance

Organizational performance	N	Mean	Std. Deviation	Test Value = 3		
				t	df	Sig. (2-tailed)
Our hotel is expanding its Market share	75	3.7333	1.25562	5.058	74	0.000
Our hotel has a growing return on investment	75	3.7733	1.36137	4.919	74	0.000
Our hotel achieves its market- oriented goals	75	3.6800	1.40616	4.188	74	0.000
Our hotel is improving its overall competitive position	75	3.5432	1.42154	4.195	74	0.000
Organizational performance	75	3.7289	1.08039	5.843	74	0.000

Source: SPSS outputs

Based on the data collected from the respondents the mean of the data after the calculation was 3.7289, which is more than 3.4 and less than 4.2, and Sig is 0.000 less than 0.05, so the workers agree to the content of the sentences.

This means the respondents demonstrate optimal level of attitude towards organizational performance. In other words, the respondents show positive attitude towards organizational performance.

VI. Hypotheses Tests:

Main Hypothesis H1:

"There is a statistically significant effect of supply chain management on organizational performance at the level of significance ($\alpha \leq 0.05$) ".

Table 7 below explains the effect of supply chain management on organizational performance, the correlation coefficient (R) is 0.453, which is greater than zero, that indicates to a positive relationship between supply chain management and organizational performance.

The square of the correlation (R Square value) is 0.205, which indicated that 20.5 % of the volatility and variability in organizational performance is explained by supply chain management.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.453[a]	.205	.194	.96621

Source: SPSS outputs

Table 8 below indicates that calculated F is 18.828 with Sig 0.000, which is less than 0.05, that means that there is a significant effect of supply chain management on organizational performance.

Table 8: ANOVA[b]

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.577	1	17.577	18.828	.000[b]
	Residual	68.150	74	.934		
	Total	85.727	75			

Source: SPSS outputs

Table 9 below shows that Beta is 0.531, meaning that any increase in supply chain management will cause an increase the organizational performance multiplied by 0.531.

The Regression model can be formulated as the following:

$$\text{organizational performance} = 1.750 + 0.531 \text{ (supply chain management)}$$

Table 9: Coefficients[a]

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.750	.477		3.667	.000
	supply chain management	.531	.122	.453	4.339	.000

Source: SPSS outputs

Based on the above tables, we find that:
"There is a statistically significant effect of supply chain management on organizational performance at the level of significance ($\alpha \leq 0.05$) ".

VII. Conclusion:

The correlation analysis and regression analysis show a significant positive correlation between supply chain management and organizational performance, meaning that there is a statistically significant effect of supply chain management on organizational performance at the level of significance ($\alpha \leq 0.05$).

The workers of four seasons hotel demonstrate optimal level of attitude (positive) towards supply chain management and organizational performance.

However, additional tests and data collections will be needed to come to a more conclusive result as to whether supply chain management is an important factor in analyzing organizational performance.

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A Corpus-driven Pilot Study of Learner Englishes from Greater China

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English has penetrated deeply into Chinese societies in the last few decades, and corresponding linguistic research has been fruitful. However, scrutiny of related literature shows that learner language research in the three major regions of Greater China, viz, mainland China, Hong Kong, and Taiwan, remains to be isolated, possibly due to political barriers. A primary problem that arises from such a situation is that little is known about how learner Englishes from Greater China are related. The present study intends to address this gap by identifying the similarities and differences between the three learner Englishes from Greater China. Considering that corpus research has formed the backbone methodology of learner language research, the corpus-driven approach is adopted to analyze the three Chinese learner data sets from the International Corpus Network of Asian Learners of English (ICNALE). The results of the research prove that the three learner Englishes from Greater China share certain similarities, but at the same time, marked differences can also be observed between them. The present study concludes that the three learner Englishes from Greater China are better to be studied separately.

Keywords: learner English; learner language research; Chinese learners of English; Greater China; corpus research

I. Introduction

English has penetrated profoundly into the Chinese societies of Greater China for the last few decades and played a fundamental role in connecting them with the outer world. As in other non-English-speaking societies, English in the context of Chinese societies has been extensively studied. Among the abundant volume of English research in Greater China, learner language analysis accounts for a substantial portion owing to the fact that it can directly provide pedagogical support and guidance for L2 teachers and learners. Unfortunately, possibly because of political barriers, scrutiny of related literature indicates that learner English analysis in the three major regions of Greater China, viz mainland China, Hong Kong, and Taiwan, remains to be isolated from each other though they are geographically close and are bound together by shared history, culture, L1, etc. More specifically, it is found that the vast majority of learner English analyses center around one single region of Greater China, while analyses that might involve two or more regions of Greater China, to the best knowledge of the author, are zero. One consequence of this is that little is known about how (or whether) the learners Englishes from the three major regions of Greater China are related. One thing that is certain about their relationship is that, according to L1 transfer theory, they are somehow homogeneous due to their shared L1 background. However, despite the close ties, the societies of Greater China, at the same time, are hugely different (Feng, 2012) in numerous aspects, including but not limited to the English context (English as a second language versus English as a foreign language), language policy, social values, etc., it seems reasonable to anticipate that the three learner groups may exhibit certain differences in their English production.

Another problem the segmented status poses is that it may impede the pedagogical improvements and practices of English learning in Greater China. Admittedly, focusing on one specific learner group may enable scholars to manage their research better and, at the same time, to delve in greater depth, whereas research results collected in such a way cannot be immune to the issue of overgeneralization since a large number of learners are excluded. Plenty of research that claims to be based on Chinese learners of English is confined to learners from mainland China. As a matter of fact, several works have already shown that certain differences in English use can be observed between different Chinese learner groups of English. For example, Hong & Cao (2014) confirm that Chinese learners of English overuse self-mention markers (e.g., *I*) and engagement makers (e.g., *you*) in their English argumentative writing, whereas Hyland (2002) finds that Chinese learners of English from Hong Kong tend to avoid the use of author references (including self-mention and engagement markers) in thesis writing. Therefore, it might be misleading to apply some linguistic phenomena found in one learner group of Greater China to another.

Against the above backdrop, this paper reports on a corpus-driven pilot study that intends to identify the similarities and differences between the three learner Englishes from Greater China. It is hoped that the results received in the present study may offer an empirical basis for determining whether the three learner Englishes from Greater China should be studied separately – a primary question that the author's dissertation aims to answer.

II. Research methods and data

Given that the corpus-based/driven approach has formed the backbone methodology of learner language study, the present study followed this mainstream. Moreover, considering that this study is pilot in nature, the author selected two basic corpus-driven methods – raw

word frequency and keyword analyses, and employed the tool called AntConc 4.1.4, a versatile toolkit developed by Anthony (2022) for corpus analysis. As for corpus data, the International Corpus Network of Asian Learners of English (ICNALE) complied by Ishikawa (2013 & 2014) is adopted as the language data source. ICNALE was chosen not only because it is the only available corpus database that includes English learners of Chinese from different regions of Greater China, but also to its high representativeness. It is considered representative in that its data are produced under strictly controlled compilation conditions, including genre, topics, composition time, and text length. In the present study, four native and non-native corpora, Native English Speaker corpus (NES), Mainland China learner corpus (CHN), Hong Kong learner corpus (HKG), and Taiwan learner corpus (TWN), were constructed by extracting corresponding texts from ICNALE (See Table 1). The chosen corpora were further split into eight spoken and written sub-corpora (S marks for spoken data and W for written data). The native English data were collected out of a two-fold consideration: to undertake the role of the baseline for word frequency comparison between the Chinese L2 learner corpora and to serve the reference corpus for keyword generation.

Table 1. Corpus data

	Sub-corpora	Texts	Tokens
Native English corpus (NES)	S_NES	600	106,895
	W_NES	400	177,370
Mainland China corpus (CHN)	S_CHN	600	82,155
	W_CHN	800	372,510
Hong Kong corpus (HKG)	S_HKG	200	25,562
	W_HKG	200	92,865
Taiwan corpus (TWN)	S_TWN	400	42,864
	W_TWN	400	179,372
Total	8	1800	1,079,593

III. Results and discussion

III.1. Spoken data

The top 20 most frequent words of the four spoken corpora are presented in Table 2, along with their normalized frequencies in 1000 words. It can be seen that the three learner corpora from Greater China do demonstrate certainly high homogeneity. Firstly, Chinese learners of English show an overuse of the definite article *the* in their speaking as compared to native English speakers, but bub in the use of the indefinite article *a*, they are markedly lower. In his study based on Brown corpus, Johansson (1978) associates the high frequency of the definite article with high repetition and complexity of noun phrases, as well as high nouniness and high frequency of personal pronouns. In Li (2023), Chinese learners of English at different education levels (including high school students) from mainland China indeed make substantially more frequent use of nouns, and in the latter part of this paragraph, the three learner corpora are shown to be low in vocabulary repetition in comparison with the native English corpus. It thus might be safe to say that Chinese learners of English from Greater China lay more emphasis on nouns or noun phrases in their English production. The second thing to note is that native speakers and L2 learners differ greatly in their use of *to*. In the three learner corpora, *to* is markedly underused, and a strikingly high number of it occurs in the context of reiteration of the ICNALE topic, *it is important for college students to have a part-time job*, but in the native corpus, *to* is used in diverse contexts. This point is additionally

corroborated by the fact that *students*, *part-time,* and *job* are present in the top 20 most frequent words of the three learner corpora. The pronoun *it* is another highly-ranked word that Chinese learners of English significantly underuse. As with *to*, the pronoun *it* in the three learner corpora is similarly used in a very limited way, that is, to reiterate the topic. It is also quite interesting to see that three forms of copula verb *be* emerge in the top 20 frequent words of the native corpus, while in that of the three learner corpora, only its singular form *is* appears, indicating that English production by Chinese learners of English contains minor morphological variation concerning plurality. This is perhaps expected given that learners' L1, Chinese, is widely known as a non-inflected language, and consequently, Chinese learners of English may incline to use the most common form of *be* (i.e., *is*, *be,* and *are*) due to the transfer of native language. The last point that is worth mentioning about the shared features of the three learner corpora is that they are both high in vocabulary repetition, which is manifested by the overuse of words contained in the two topics of ICNALE (*it is important for college students to have a part-time job* and *smoking should be completely banned at all the restaurants in the country*). In addition to fewer topic-related words, the low vocabulary repetition of the native corpus is also illustrated by its relatively rare use of common words like *think* and *can*.

Table 2. Top 20 most frequent words of the four spoken corpora

	S_NES		S_CHN		S_HKG		S_TWN	
Rank	Words	1/1000	Words	1/1000	Words	1/1000	Words	1/1000
1	to	32.57	the	34.30	the	31.98	I	37.12
2	the	29.88	uh	32.80	to	26.84	the	30.82
3	and	25.79	and	25.09	and	26.08	to	29.72
4	it	25.04	to	20.90	I	23.88	and	29.14
5	I	20.50	I	18.51	is	23.15	a	18.99
6	a	16.87	a	17.66	they	22.85	it	18.50
7	that	16.86	it	17.45	a	22.04	is	17.24
8	in	16.57	is	16.16	that	16.69	have	16.96
9	they	14.34	in	15.85	in	14.90	in	16.61
10	you	13.73	smoking	15.75	it	13.39	think	16.12
11	of	13.00	for	15.55	for	13.13	smoking	15.77
12	is	12.99	we	15.13	think	12.36	for	13.69
13	be	12.68	can	12.75	of	12.28	you	13.32
14	for	11.08	think	12.14	smoking	12.27	job	12.48
15	have	10.91	part-time	11.93	have	10.81	they	11.94
16	smoking	9.98	of	11.32	so	10.35	can	11.85
17	people	9.24	job	10.77	can	8.83	part-time	11.36
18	think	8.20	that	10.60	part-time	8.56	that	10.43
19	not	8.09	have	10.43	job	7.90	because	9.85
20	are	7.96	so	10.02	their	7.71	not	9.59

Despite the above similarities, notable differences can also be observed between the three learner corpora from Greater China. Table 2 shows that the pause filler (or hesitator) *uh* ranks second in the column of S_CHN, but is absent in that of other corpora, indicating that Chinese learners of English from mainland China speak in a fairly disfluent way. Another distinctive feature of S_CHN lies in that the 1st person plural pronoun *we* squeaks into the top 20 most frequent words. This may partially explain the relatively low frequency of the 1st person pronoun *I* in S_CHN because at times, the two types of pronouns enjoy a complementary

relationship. In the texts contained in S_CHN, *we* is primarily used in a way called "generic" (Quirk et al., 1985, p.354). In ICNALE, the spoken data are comprised of texts transcribed from spoken monologues in which the addressee is absent, therefore *we* in expressions such as *we have no right to stop them* and *as we know...*, are more likely to refer to the whole human race. For instance, in the expressions just referred to, the L2 speakers seem to highlight the message that their claims and supporting arguments can be universally accepted, and hence to increase the persuasiveness of their argumentative monologues. Apart from the rhetorical purpose, the heavy use of *we* in S_CHN may additionally suggest that L2 learners from mainland China are apt to think and speak from a collectivistic angle.

S_HKG appears less interpersonal and speaker-involved (or author-engaged) than the other two learner corpora. The column of S_HKG in Table 2 demonstrates that the 3rd person plural pronoun *they* is utilized by Hong Kong learners of English with a markedly high frequency. *They* in the texts of S_HKG usually have specific referents, viz *smokers* and *students*. Unlike L2 learners from mainland China who are inclined to involve themselves in the discussion of the topics by using *we* and *I* repeatedly, Hong Kong learners, on the contrary, seem to avoid being engaged in the discussion but prefer to use *they* or its referents. Although the 1st person pronoun *I* is ranked in the forefront of the column of S_HKG as it does in other corpora, it is found that in most cases, Hong Kong learners simply use *I* to make the central claim (i.e., to agree or not to agree with the statement of the topics) at the beginning of the monologue. This echoes Hyland's (2002) finding that Hong Kong learners of English commonly are reluctant to refer to themselves for the sake of objectivity when "presenting and justifying claims" (p. 1099). S_HKG also stands out with its comparatively low vocabulary repetition. It can be seen that the topic-related words, *part-time*, *job,* and *smoking* are less frequent in S_HKG than in the other two learner corpora.

S_TWN differs from S_CHN and S_HKG in that it is highly interpersonal and speaker-involved. S_TWN is interpersonal because of the frequent occurrence of the 2nd person pronoun *you*. *You* is commonly used in contexts where the addressee is present or is assumed to be present. The frequent use of *you* thus implies the high interpersonal interaction between the speaker and the addressee. Apparently, in the genre of spoken monologue where the addressee or the hearer is absent, *you* is certainly used in an irregular way. Concordances of *you* in S_TWN reflect that *you*, as *we* in S_CHN, is used generically. Concordances such as *you can learn a lot of lessons from a part-time job*, *if you smoke*, and *when you go to restaurants* all indicate that the addressee is not specific. Instead, *you* here refers to anyone who can learn lessons from a part-time job, smoke, or might go to restaurants. Like generic *we*, generic *you* also makes it possible for the speaker to construct audience involvement and hence helps increase persuasiveness since the author can establish a community that consists of people who match what the speakers describe. Interestingly, a survey of the use of *you* in S_NES which is also large in the frequency of *you* reveals that native English speakers and L2 learners from Taiwan are rather consistent in the use of generic *you*. Lastly, S_TWN is said to be highly speaker-involved as it contains the most frequent use of the 1st person singular pronoun *I* which signifies the involvement of the speaker.

Table 3 presents the top (keyness-ranked) 20 positive and negative keywords of the three learner corpora from Greater China. Not surprisingly, the three learner corpora share some similarities but meanwhile differ from each other. Firstly, 1st person plural pronouns occur in the three corpora with a significantly high frequency. Given the fact discussed above that the three learner groups display a significant discrepancy in the use of personal pronouns for different rhetorical purposes, the heavy use of 1st personal pronouns might be due to learners'

shared cultural value related to 1st person plural pronouns – collectivism. Chinese societies in general are collectivistic. In his exploration of the role of Chinese EFL learners' rhetorical strategy use in relation to their achievement in English writing in Taiwan, Chien (2007) states that "collectivistic cultures have a great emphasis on groups and think more in terms of '*we*'" (p.134). Table 3 also shows that L2 learners from Greater China commonly overuse modal verbs *can* and *will*. A close inspection of the concordances of *can* confirms that its sense of ability is massively utilized in the three learner corpora, for example, *it can help them to... .* Interestingly, however, the appearance of *able* in the top 20 negative keywords of the three corpora indicates that native English speakers prefer to express the mentioned ability sense with the phrase *be able to*, for instance, *students should be able to take ... .* As for *will*, in the three learner corpora it is often used in its sense called habitual prediction in Quirk et al's (1985) definition of the modal verb *will*, for example, *smoking will do harm to everyone' health*. Unlike their L2 counterparts from Greater China, native English speakers, as given in the top 20 negative keywords, are apt to use *be going to* (keyword *going*) and *would* that are close to *will* in meaning. It is interesting to note as well that native and non-native English speakers exhibit different preferences for major private verbs. Table 3 reveals that native English speakers prefer *believe* while Chinese learners of English favor *think* or *in my opinion*. Native and non-native corpora additionally differ significantly in the frequency of *that*. It is classified as a negative keyword and therefore can be said to be frequently used by native English speakers. In all the corpora, *that* is predominantly used in the construction of *that*-complement. The rarity of *that* in the three learner corpora thus suggests that Chinese learners of English make little use of *that*-complement in their English speaking. This is expected given that there is no equivalent use of *that*-complement in Chinese and that Chinese learners of English may intentionally avoid unfamiliar English constructions when faced with time pressure (the monologue task in ICNALE is timed). Parallel to *that*-complement, the presence of *where* being a negative keyword may also be ascribed to the transfer of Chinese as *where* in the four corpora mainly serves as a relativizer that introduces a relative clause, whereas such a construction does not exist in Chinese. *While* is another keyword that occurs substantially more in the native English corpus than in the learner corpora. In the native corpus, *while* serves as a subordinator used to introduce temporal adverbial clauses, but in the three learner corpora, temporal adverbial clauses are more likely to be introduced by *when*. The explanation may be that *when* is more common than *while* in actual language use. After all, it can be conceivable that L2 learners are inclined to use their most familiar expressions when driven by time pressure, while native speakers undoubtedly have greater choice in word selection. The last noteworthy difference between native and non-native corpora shown in Table 4 might be sentiment related. The presence of positive keywords that are with negative semantic meanings, including *harm*, *hate,* and *harmful*, illustrates the shared negative sentiment of Chinese learners of English in their monologue production. Concordances of *harm* and *harmful* prove that the negative sentiment can only be discovered in texts about the smoking topic. This finding is in accordance with the statement in Hsia & Spruijt-Metz (2003) and Wang et al. (2012) that in Chinese societies smoking is not as acceptable as it is in Western societies.

In addition to the similarities presented above, the keywords contained in Table 3 vary largely across the three learner corpora. The top positive keyword *uh* and the top negative keyword *ah*, indicate the different choices of mainland China learners and native English speakers in terms of pause fillers. The most salient feature displayed in the keyword list of S_CHN is the strong presence of 1st person pronouns. While it has been stated that the heavy use of 1st person pronouns can be attributed to the rhetorical purpose as well as the collectivism that is deeply rooted in Chinese societies, the abnormally high frequency of 1st person pronouns of

S_CHN requires more explanation. One account could be the influence of the socialistic system implemented in mainland China. Collectivism and socialism have long been closely related, and sometimes the two terms can be used "interchangeably"(Wee, 1999: p.337). It may be the case that the socialistic ideology strengthens the collectivistic sense of learners from mainland China and thus makes them think and speak more from a collectivistic angle. The 3rd person pronoun *they* being a negative keyword emerges in the column of S_CHN and hence suggests that *they* is significantly underused by L2 learners from mainland China. The reason could be the aforementioned overt collectivism of mainland China learners manifested by the heavy use of 1st person plural nouns. This would also apply to the appearance of the negative keyword *you* because it in S_NES, as proposed earlier, is generic and is undoubtedly in conflict with the generic *we* which is widely used in S_CHN. Another point that merits noting about S_CHN is the presence of the negative keywords that are in '*verb-ing*' structure, including *being*, *working,* and *having*. Concordances of the three words in S_NES show that they often exist in gerund phrases and progressive structures. Examples include *working in the world is an important part of ...*, *... while they are working*, *they don't get a choice*, *having a part-time job is ...*, etc. The explanation might be two-fold: one being the transfer of Chinese as it is a language short of inflections and the other being the lack of proficiency since linguistic elements like gerund are relatively difficult to grasp for Chinese learners of English (Li, 2010).

Table 3. Top 20 positive and negative keywords of the three spoken learner corpora

	Rank	S_CHN		S_HKG		S_TWN	
		keywords	keyness	keywords	keyness	keywords	keyness
Positive keywords	1	uh	1862.51	umm	212.43	we	244.28
	2	we	995.26	secondhand	136.72	our	243.64
	3	our	838.05	our	121.63	I	233.43
	4	can	292.00	earn	75.85	think	163.24
	5	some	236.22	can	68.82	can	139.67
	6	us	206.84	we	61.29	agree	135.3
	7	will	198.99	society	58.76	completely	134.39
	8	society	196.65	is	56.97	will	118.82
	9	harm	168.68	because	55.74	my	104.98
	10	opinion	128.36	will	52.47	job	99.06
	11	make	114.85	the	48.42	because	91.82
	12	part-time	104.66	example	48.29	make	87.83
	13	the	104.12	harm	48.22	smoking	80.13
	14	harmful	94.92	so	48.02	is	75.91
	15	more	89.98	think	42.31	learn	72.58
	16	is	82.47	daily	37.82	harm	69.68
	17	many	73.17	like	37.26	part-time	68
	18	smoking	72.93	uhh	37.06	restaurant	67.94
	19	first	72.13	may	35.43	at	62.06
	20	job	64.54	strike	33.97	hate	60.23
	1	that	413.25	s	132.88	um	412.8
	2	would	197.89	believe	73.19	that	236.68
	3	able	196.56	re	72.2	re	113.31
	4	be	189.07	it	60.65	able	102.65
	5	believe	168.88	you	56.62	believe	101.72
	6	they	167.06	was	55.37	would	94.31

	7	work	126.8	where	52.46	of	85.94
	8	you	120.22	able	51.03	going	78.82
	9	while	113.28	t	47.45	them	68.13
Negative keywords	10	going	110.88	while	39.51	as	61.13
	11	where	102.77	go	38.65	where	53.48
	12	being	89.91	that	31.46	mean	53.05
	13	go	89.5	non	30.66	non	48.63
	14	working	88.73	a	29.38	s	46.98
	15	or	74.14	m	27.57	around	46.68
	16	having	72.63	education	26.8	being	45.13
	17	area	70.36	could	25.07	while	44.45
	18	it	69.57	going	23.52	on	44.16
	19	restaurants	64.77	had	21.15	helps	41.79
	20	ah	59.92	good	20.82	be	40.93

With respect to the features of S_HKG, it is interesting to see that two pause fillers, *umm* and *uhh*, emerge as the top 20 positive keywords of S_HKG in Table 3. This might be an indication that Hong Kong learners use a relatively more diversified set of pause fillers. It is of interest to note as well that *so* is listed in the top positive keywords of S_HKG. Concordances of *so* shows that it is mostly used as a conjunction to connect what have stated previously with sentences or clauses it introduces, such as *smoking – uh – generally speaking is harmful for humans, so I think...* and *It's so hard for them to quit this habit. So, I think there are many other men ...* . The constructions linked by *so* apparently are all in a causal relationship. This finding, along with another positive keyword *because*, seems to imply that Hong Kong learners tend to explicitly mark the causal logic between their claims and supporting arguments. The most striking observation from the keyword column of S_HKG in Table 3 is the low frequency of keywords that are associated with common English contractions including *'s*, *'re*, *'t*, and *'m*. According to Biber et al. (2002), contractions mainly occur in highly interactive spoken discourses. The low frequency of contractions of S_HKG thus implies that spoken English production by Hong Kong English learners is more formal.

As with the results identified in the word frequency analysis, the keywords contained in the column of S_TWN in Table 3 also highlight that high speaker-involvement is the most prominent feature of S_TWN. As can be seen, there are four positive keywords associated with 1st person pronouns. Not to mention the collectivistic involvement signified by frequent 1st person plural pronouns, S_TWN also exhibits high individualistic involvement manifested by the presence of 1st person singular pronouns *I* and *my*. Therefore, compared with the remaining two learner corpora, S_TWN can be said to be particularly distinctive in its highly individualistic speaker-involvement. Furthermore, S_TWN displays a more overt negative sentiment towards the smoking topic. Other than the keywords *harm* and *hate* that encompass obvious negative semantic meanings, the positive keyword *completely* is also found to co-occur with *should be* frequently in a negative context, for example, *I think smoking should be completely banned at all*.

III.2. Written data

Table 4 gives the top 20 most frequent words of the four written corpora. The first observation might be that the words contained overlap considerably with those in Table 2, with marginal variation in the rank. Consequently, a significant number of the findings presented in the analysis of the spoken data can be applied here as well. It can be seen that compared with the

native corpus, the three learner corpora again are low in the frequency of the indefinite article *a* but high in the definite article *the*. Other frequency differences regarding *to*, *it*, the three forms of copula verb *be*, vocabulary repetition found between native English speakers and Chinese learners of English in their spoken production also can be observed in their written production. Despite that, two notable differences between them still can be identified in the use of the coordinating conjunction *and* and the 1st person singular pronoun *I*. Table 4 shows that *and* occurs less frequently in the three learner corpora than in the native corpus, indicating that Chinese learners of English underuse *and*. It should be specifically noted, however, that the underuse of *and* is not the only trait belonging to Chinese learners of English. Instead, it is better assumed to be a universal feature shared by all non-native English speakers as Granger & Paulson (2014) similarly confirm L2 learners' underuse of *and* in their effort to profile learner texts from ICLE (International Corpus of Learner English). With regard to the frequency of *I*, W_NES is greater than the three learner corpora and thus displays higher author-involvement than its counterparts from Greater China.

In relation to the individual characteristics of the three learner corpora, W_CHN, no surprise at all, differs from the other two corpora with its high frequency of the 1st person plural pronoun *we*. As with its spoken counterpart S_HKG, W_HKG is similarly distinctive for the relatively frequent occurrence of 3rd person pronouns (i.e., *they* and *their*). Besides, W_HKG appears to be particularly low in author-involvement as 1st and 2nd pronouns are absent in the column of S_HKG. W_TWN contains a relatively high frequency of *I* and therefore can be characterized as high in author-involvement. Another major feature of W_TWN is the underuse of the preposition *of*. It is a common preposition that is chiefly used in the pattern "noun + *of* + noun". The low frequency of *of* in W_TWN may thus illustrate that Taiwan learners tend to use single nouns in their writing.

Table 4. Top 20 most frequent words of the four written corpora

	W_NES		W_CHN		W_HKG		W_TWN	
Rank	Words	1/1000	Words	1/1000	Words	1/1000	Words	1/1000
1	to	19.67	the	22.36	the	23.66	the	23.94
2	the	18.23	to	17.14	to	19.12	to	18.16
3	and	14.27	a	13.10	a	12.88	a	12.02
4	a	13.68	in	12.08	is	12.00	and	10.34
5	that	11.74	is	11.05	of	10.81	is	10.30
6	I	10.51	and	10.05	in	10.74	in	10.23
7	of	10.47	of	9.22	and	8.94	I	8.72
8	in	10.31	smoking	8.67	smoking	8.51	smoking	7.95
9	is	9.82	it	8.11	for	7.63	of	7.67
10	it	7.41	part-time	7.36	part-time	6.84	it	7.17
11	have	6.42	we	6.98	it	6.73	for	6.39
12	they	6.11	can	6.57	students	6.61	that	6.34
13	for	6.06	for	6.34	job	6.49	job	6.27
14	smoking	5.58	job	6.19	that	6.23	part-time	6.24
15	be	5.42	that	6.13	be	5.62	have	5.96
16	their	4.47	people	5.18	they	5.33	can	5.76
17	not	4.44	have	5.12	not	5.17	not	5.40
18	are	4.25	students	4.84	their	5.00	people	5.24
19	as	4.08	be	4.53	have	4.91	they	4.84
20	part-time	3.88	are	4.41	can	4.83	be	4.77

Table 5 presents the top positive and negative keywords of the three written learner corpora. It can be seen that the three learner groups still share some similarities, though perhaps not as many as those identified in their spoken production (see Table 3). The most visible similarity is the high vocabulary repetition represented by the frequent use of topic-related words. As in Table 3, the keyword lists of the three learner corpora in Table 5 contain a number of positive keywords that are contained in the two topics of ICNLAE, including *part-time*, *job*, *smoking*, *smoke*, *restaurants*, *all*, *country*, *students*, and *university*. Further adding to the high vocabulary repetition of the three learner corpora is the presence of *can*. Another similarity concerns the negative sentiment of Chinese learners of English towards the smoking topic. The two positive keywords that are previously considered to carry negative meanings or occur within negative contexts, *harm* and *completely*, appear again in Table 5. Moreover, the presence of negative keywords *would* and *that* in Table 5 suggests that Chinese learners of English underuse the two words in their written essays as they do in performing spoken monologues. Lastly, the three learner corpora are similar in that they have low frequencies of the two past tense forms of the copular verb *be*. This finding, coupled with the fact that *is* is used more in learner corpora (see Table 4), implies that Chinese learners of English avoid past tenses but prefer to use present tenses in their essay writing.

Table 5. Top 20 positive and negative keywords of the three written learner corpora

		W_CHN		W_HKG		W_TWN	
	Rank	keywords	keyness	keywords	keyness	keywords	keyness
Positive keywords	1	we	775.86	university	676.05	can	179.2
	2	our	520.98	Hong Kong	140.94	people	178.6
	3	can	347.77	students	120.59	you	157.27
	4	us	262.91	job	115.68	we	145.1
	5	part-time	251.62	part-time	104.54	country	141.28
	6	society	238.03	the	90.01	job	140.95
	7	people	223.08	earn	89.3	the	137.84
	8	public	215.27	may	79.52	smoke	129.53
	9	more	202.34	smoking	77.16	completely	119.37
	10	job	174.47	fee	68.51	learn	110.54
	11	smoking	156.28	can	66.24	second	98.72
	12	harm	137.17	completely	60.81	part-time	97.4
	13	jobs	120.03	communication	58.13	smell	93.71
	14	completely	109.74	area	57.07	our	85.25
	15	you	107.29	hence	55.51	Taiwan	80.67
	16	nowadays	102.81	restaurants	54.61	earn	79.5
	17	the	98.22	second-hand	53.6	experiences	77.56
	18	country	97.89	academic	53.1	smoking	72.87
	19	knowledge	95.02	lots	50.77	but	71.65
	20	others	94.71	all	50.54	besides	64.68
	1	I	687.39	I	514.76	that	303.82
	2	would	472.78	college	374.2	would	123.68
	3	that	464.44	that	207.27	and	119.55
	4	and	191.1	and	151.52	as	90.89
	5	work	179.94	was	105.79	of	82.21
	6	was	164.72	my	81.52	bans	72.11
	7	or	154.4	would	62.66	simply	68.28
	8	this	130.36	think	59.55	been	67.28

Negative keywords	9	any	123.73	work	59.55	able	66.58
	10	they	119.18	me	52.55	this	66.14
	11	able	103.1	then	52.38	enough	62.64
	12	me	86.49	very	45.84	bit	55
	13	were	85.66	where	43.43	upon	55
	14	their	84.24	world	40.5	while	54.36
	15	allow	77.37	been	38.84	were	52.53
	16	bans	76.5	or	38.26	any	45.62
	17	studies	72.16	were	38	already	44.63
	18	already	71.9	if	34.9	degree	41.58
	19	bit	63.42	bans	34.37	was	41.23
	20	enough	62.74	really	32.93	business	40.66

Concerning the distinguishing features of the three learner corpora, the three learner written corpora do not differ much from their spoken counterparts. The positive keywords of W_CHN are highly similar to those found in S_CHN, with the exception of filler pause. Likewise, the 1st person pronouns, *we*, *our,* and *us*, take the forefront of the positive keyword list of W_CHN and therefore underlie that learners from mainland China, as already stated, overuse 1st person plural pronouns. Probably because of the overuse of 1st person plural pronouns and the underlying denotation of collectivism, the 1st person singular pronouns as well as 3rd person pronouns are significantly underused by mainland learners and consequently are categorized as the negative keyword of W_CHN (i.e., *I*, *they*, and *their*). Another minor but noteworthy distinctive feature of the mainland China learner group is that they make relatively fewer references to the place where they belong. It can be seen that none of the positive keywords of W_CHN is related to a specific place while in W_HKG and W_TWN *Hong Kong* and *Taiwan* emerge as a positive keyword respectively.

The keywords of W_HKG in Table 5 clarify that it is a corpus low in author-invovlement. This is reflected by the absence of personal pronouns in W_HKG's positive keyword list as well as the presence of the negative keywords *I* and *me*. Another feature of W_HKG that is worth mentioning is related to the keyword *hence*. Like the logical connector *so*, *hence* also helps to denote a logical consequence. The fact that *hence* appears as a positive keyword of W_HKG supports the Hong Kong learners' inclination to explicitly mark the causal logic which is presented in the discussion of features of S_HKG.

As with S_TWN, W_TWN can be distinguished from the other two learner corpora with a highly interpersonal focus that is revealed by the presence of *you* being a positive word. Another major feature of W_TWN shown in the keyword list might be collectivism which is associated with 1st person plural pronouns. As can be seen, *we* is listed as the fourth most important keyword in the column of W_TWN, though not as high as it is in that of W_CHN.

IV. Conclusion

This study's purpose is to identify the similarities and differences between the three learner Englishes from Greater China, whereby the author can answer the question of whether they should be studied separately or as a whole. The results generated from the word frequency and keyword analyses suggest that there are some similarities between the three learner Englishes from Greater China, but they are, at the same time, quite distinctive from each other. Therefore, this study concludes that they are better to be studied separately.

In spite of the pilot nature, this study is of both theoretical and practical significances. From a theoretical point of view, the present study paid a special focus on different L2 learner groups from a single L1 background and tentatively confirmed that there could be noticeable differences between them. The differences found between the three learner groups from Greater China might serve as a reminder to linguistic researchers, that is, not to ignore the intra-L1-group heterogeneity in their L2 production. Another theoretical significance of this study might be that in addition to native language, L2 learners' culture is reported to be influencing their foreign language learning and leaves some special traits that can help to identify their L2 production. However, it is equally essential to note that these traits are not definitely indelible. This point is particularly supported by Hong Kong learners' rare use of *we* in their written essays. The practical significance of this study lies in that the underuses and overuses of the three learner groups that are identified with native English corpus being the baseline may carry some important pedagogical implications.

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Moving an n-jointed Robot Arm in Plane Without Using a Jacobian Matrix

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Abstract:

In robot arm control programming tasks, it is challenging to describe the geometry of the arm when we only know the required position of the end point. The currently used algorithms are computationally demanding and imprecise, the accuracy of which can be increased through an iterative process, consuming additional computational capacity. Our goal is to develop purely geometric algorithms that provide accurate results with low resource requirements during computing robot arm or prosthesis movement tasks. We assume that there are several geometric solutions to the problem. In our previous research, we managed to compute 3 joint coordinates in 2 dimensions only from the intersection points of the circles during the movement of the robot arm. In this study, we describe the extension of this algorithm to control a robotic arm with more than 3 joints.

Keywords: robotic arm control, movement calculation, movement analyzes, kinematics

I. Introduction

In robotic arm control programming tasks, there are several solutions if only the target to be reached by the arm and the initial geometry of the arm are known. Inverse kinematic calculations are commonly used to solve this problem, which has several limitations. In the inverse kinematics problem, we consider the Jacobian matrix of the robot, which may become singular during the motion, so that no further calculations are possible without re-detecting the arm geometry by instrumentation. Furthermore, the process never gives the correct solution to the problem, only an approximate result that can be refined by multiple iterations. (DeMers, 1997)

Suppose we want to move a robot arm out of an existing state without specifying the end state, but only the position of the end tool, which we call the target. (Faitli, 2018)

Denote the unknown hinge position of the arm by q and the target by G_D. The inverse geometric problem of the robot is given by the solution of the following system of nonlinear equations:

$$G_R (q) = G_D \qquad\qquad Eq.\ 1$$

where G_R describes the geometry of the robot.

Let's put the system of equations into the following form:

$$G(q)=0,\ \text{where}\ G(q)=G_R (q) - G_D \qquad\qquad Eq.\ 2$$

To solve the system of equations, expand the right side of equation 2 into a Taylor series.

$$G(q + dq) = G(q) + \frac{\sigma G}{\sigma q} dq + O(q) \qquad\qquad Eq.\ 3$$

$O(q)$ includes the second and higher order members. If we neglect $O(q)$ in the row decomposition, we obtain the step size dq with respect to an initial q for which $G(q+dq)$ is equal to zero. Solution:

$$dq = -\frac{\sigma G_R^{-1}}{\sigma q} (G_r - G_D), \qquad\qquad Eq.\ 4$$

where $\frac{\sigma G_R}{\sigma q}$ denotes the Jacobian matrix of the robot.

This latter relation does not give an exact solution to the direct geometric problem. However, the step dq brings us closer to the correct solution than the initial q

position. Thus, the relation can be applied to an iterative procedure. After each step of dq is calculated, we use $q+dq$ *as* the new starting point and then recalculate dq. (Szabó, 2014)

In our previous research, we analyzed the purely geometric possibilities for robot claw moving tasks instead of the inverse kinematics solution. We managed to create an arm algorithm consisting of 2 and 3 joints both in plane and space, but moving the robot with more joints required further research. In this article, the movement of a robotic arm consisting of more than 3 joints is presented in a plane. Our solution is still under development, so we have not compared it with other results.

II. Material and method

To understand the procedure, it is necessary to present our solution for a 2 and 3 jointed arm. Our algorithm computes the possible solutions using circles that can be written around the hinge points. In the case of 2 joints, let's call the starting point of the robot arm and its only fixed point P_0, and the corresponding joint $\underline{v_1}$. Let the opposite point of the vector v_1 be the first and in this case the only joint point P_1, the corresponding joint $\underline{v_2}$, and the end point P_2. The target point is called P_t. Form a circle around the point P_0 with a radius corresponding to the length of the vector v_1 (C_0), and then form a circle around the point P_t with a radius corresponding to the length of the vector v_2 (C_t). If the two circles do not intersect, the problem has no solution, if they intersect at 1 point, the problem has 1 solution and the arm is fully extended in this case, if they intersect at 2 points, the problem has 2 good solutions and the point P_1 is located at one of the intersection points in the final state. A possible solution to this problem is illustrated in Figure 1 (Zsenák, 2018)
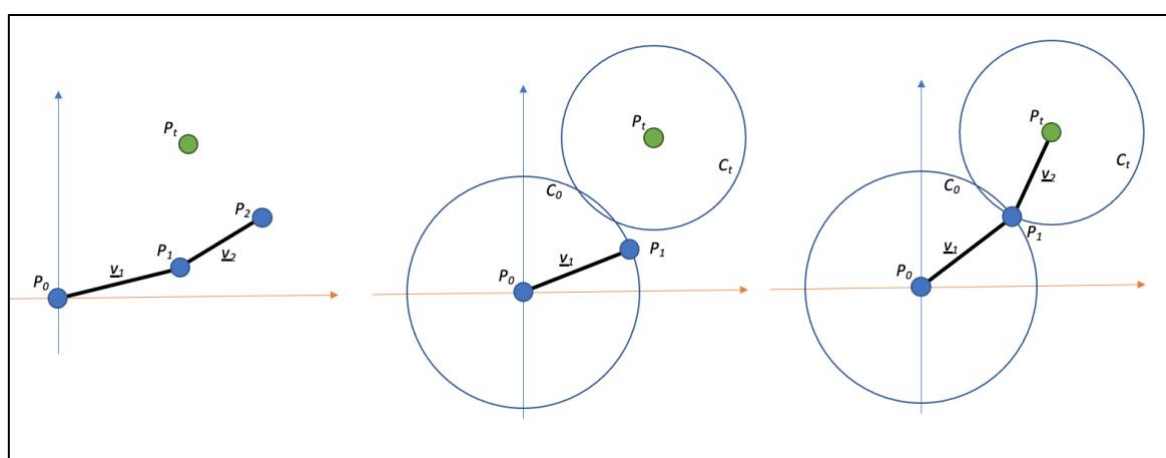

Figure 1: One possible state of the task for a robot arm with 2 joints.

It can be seen that we are not concerned with the initial state when solving the problem, our goal is only to calculate a possible final state. Since knowing the end states, the task is no longer of an engineering nature, influenced by engineering indicators, we do not simulate the actual motion. Knowing the initial state and a possible end state, angular velocities can be calculated using the angles at the hinge points and the time of motion.

For three joints, the solution can be calculated in the same way, but in this case the middle joint must be placed between the circles formed. In this case, we do not necessarily get a maximum of two points as a good solution. If the arm is fully extended, as in the previous case, a single point is obtained as a possible solution, but if the arm is not fully extended, a circular arc is obtained which either contains all the possible positions of the joint starting from the fixed point, or from this arc we must subtract the points which would result in a situation in which the opposite point of the joint to the end joint extends beyond the circle formed around the target point. In our example, let P_t be the target, and for simplicity, let us name the joints according to the components of the human arm, i.e. the fixed point from which the arm starts, the shoulder, followed by the upper arm, elbow, forearm, wrist, hand, and the end point. Let P_0 be the shoulder, P_1 be the elbow, P_2 be the wrist, and P_3 be the endpoint, and vector v_1 be the upper arm, v_2 be the forearm, and $\underline{v_3}$ be the hand. Form a circle of radius equal to the length of $\underline{v_1}$ around the point P_0, denoted C_0, and form a circle of radius equal to the length of the vector v_3 around the point P_t. This gives the position in the plane of P_1, the elbow, and P_2, the wrist. Now we need to determine the points on the circle C_0 where the arm will reach the target point by moving the point P_2. Form a circle around point P_t, which we will call C_{t_1} and call its radius r_1, for which it is true that

$$r_1 = ||v_2|| + ||v_3||. \qquad\qquad Eq. 5$$

A C_{t_1} the point or arc of a circle formed by the intersection of circles C_0 and P_1 will be the possible position of the point P in the state in which the arm reaches the target. However, there may be some of these points at which, when the elbow is positioned, the wrist extends beyond the point or points furthest from P_0 of the circle C_t, so let us form another circle around the point P_t, called C_{t_t} and its radius r_2, for which it is true that

$$r_2 = ||v_2|| - ||v_3||. \qquad\qquad Eq. 6$$

A C_{t_2} and the intersection of circles C_0 provides the point or arc for which the above statement is true, i.e. it will not be appropriate to the position of the elbow. Such a case occurs when the target is too close to the point P_0, in which case the resulting points must be removed from the set of good solutions, i.e., the point P_1 has two circular arcs, or in the extreme case, only two points, which creates a condition in which the arm reaches the target. A possible state is represented in Figure 2 (Zsenák, 2018)
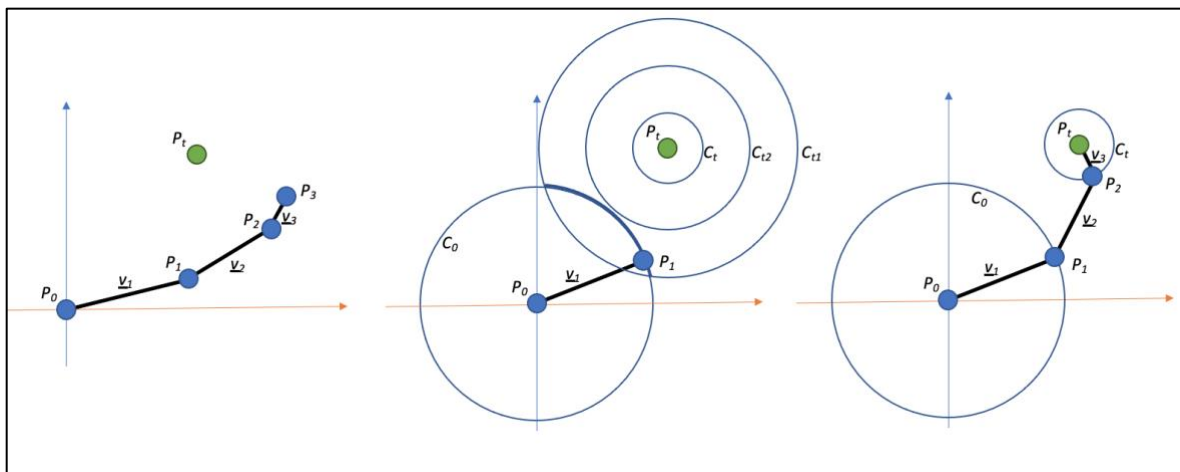

Figure 2: One possible state of the task for a robotic arm with 3 joints.

The algorithm written for the two- and three-joint arm cannot be applied simply by including additional joints, as there may be states that are correct according to the above algorithm, but the location of the additional joint does not allow the desired end state to be achieved. A possible state is represented in Figure 3, where it can be seen that the C_{t_1} and C_0 circles intersect and the elbow is located within the intersection, (P_1) but the arm does not reach the target.
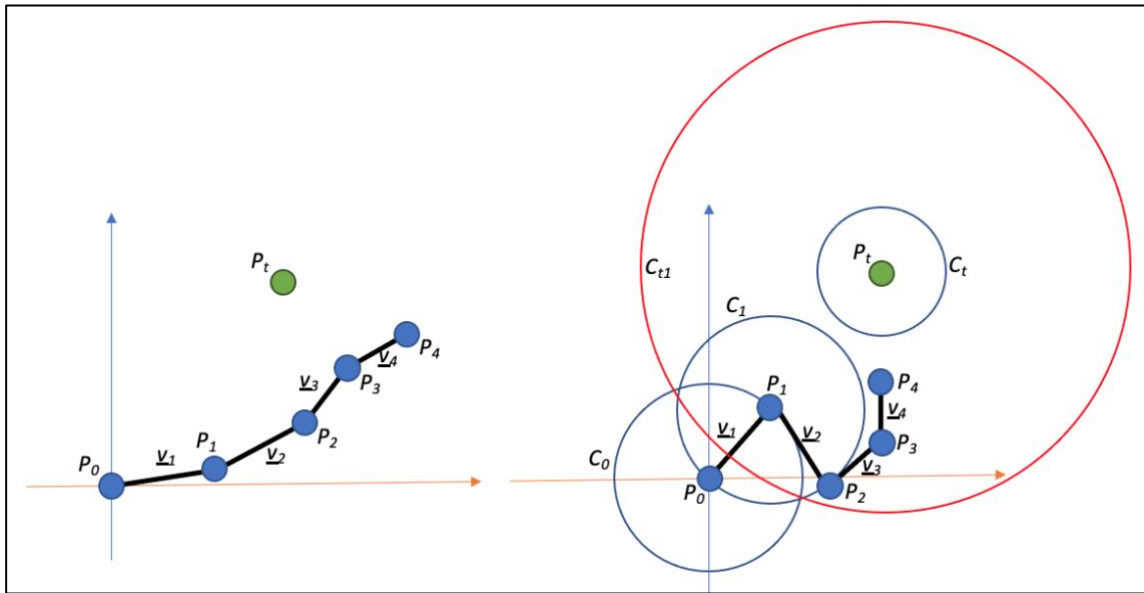
Figure 3: A possible state of a 4-jointed robotic arm for which the above algorithm does not provide a guaranteed good solution (The radius of C_{t_1} in this example is the sum of the lengths of the vectors $\underline{v_2}$, $\underline{v_3}$, and $\underline{v_4}$.)

This is unfortunate because the more joints we perform the computation on, the steeper the increase in capacity requirement of the Jacobian matrix solution, while the capacity requirement of the purely geometric problem increases linearly.

In this paper we show how the above algorithm can be applied to a robotic arm with more than three joints.

To make our algorithm work, we introduced the following two constraints:

- We only move the joints that we need to move to reach the target.
- The displaced joint is positioned to provide the greatest degree of freedom for subsequent calculations.

If we want to implement the above algorithm with 4 joints, we need to fix the position of a hinge point, so that the problem can be converted to an algorithm with 3 arms of joints. The question is which hinge point to do it with. To help answer this question, we have invoked a frequently encountered engineering need in moving high-performance robotic arms, namely the need to move the arm as little as possible. In our solution, we aim to move only those hinge points from their original position that are actually necessary for the arm to reach the target. Given a robot arm with *n* joints, consider the *n-3th* joint. Form a circle around it, called $C_{t_{n-3}}$ and let its radius be r_{n-3} , for which it is true that

$$r_{n-3} = ||v_{n-2}|| + ||v_{n-1}|| + ||v_n||. \qquad\qquad \textit{Eq. 7}$$

If the point P_t is outside the circle thus formed, the calculation is performed with point P_{n-4} , then with point P_{n-5} , and so on, until the point P_t falls inside the circle formed around the point P_{n-k} , so that $C_{t_{n-k}}$ its radius is always the sum of the lengths of the joints starting from the hinge point P_{n-k} . $(0 < k \leq n\text{-}3)$

If the point P_t is located inside a circle formed by the point P_{n-k} , then we must fix the coordinates of this point P_{n-k} . The coordinate geometry problem can be solved even more simply by calculating that the length of the line drawn from point P_{n-k} to point P_t is less than or equal to the sum of the lengths of the remaining joints. A possible situation is represented in Figure 4 with 6 joints.
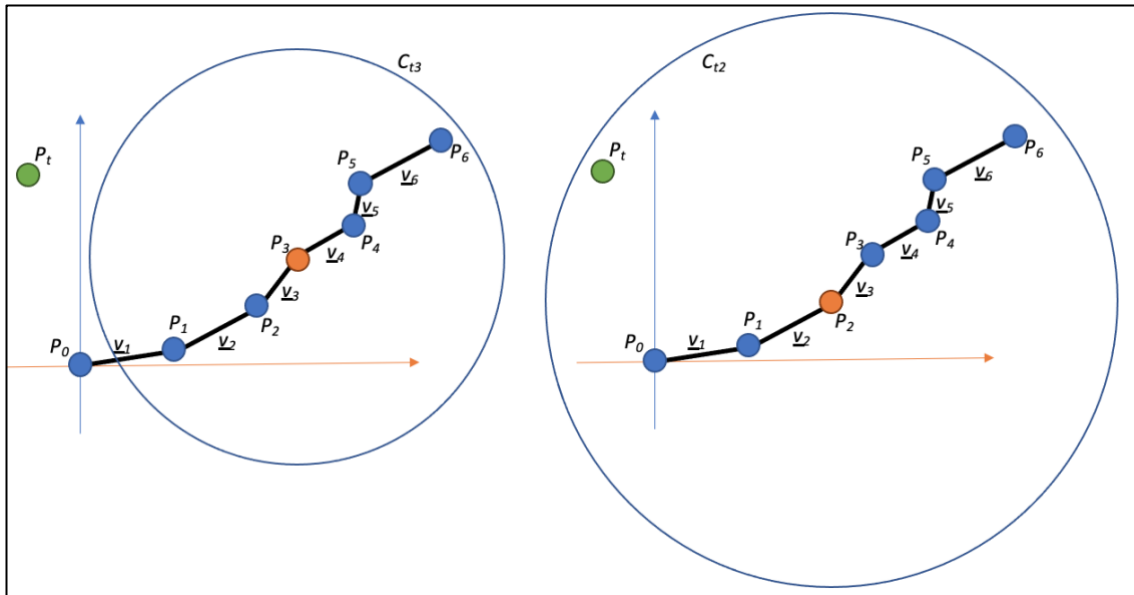
Figure 4: Determination of the fixation point of a 6-joint robotic arm from the position of the circles around the hinge points and the target.

Figure 4 illustrates how we can determine the point that we should consider as fixed. From here, the next step is to move the remaining components of the arm towards the target point. Using the above notation, connect (line *s) the* point *Pn-k* to the point *Pt* , which is the first hinge point from which the target is accessible. Form a circle of radius equal to the length of the vector v_{n-k+1} around the point *Pn-k* , where $\underline{v}_{n-k+1}$ is the vector starting from the point *Pn-k* and pointing to the point *Pn-k+1* . Let this circle be called *Cn-k* . The line *s* from *Pn-k* to *Pn* will intersect the circle *Cn-k* at a point. Move to this point the joint *Pn-k+1* . Now start the algorithm again and see that $C_{t_{n-3}}$ if the target is inside the circle. If not, move back one joint again, as we did before. If you find a wrist point that you no longer need to move, move the joint starting from it to the straight line *s* and start the algorithm again. Follow this procedure until *k = 3*. A possible situation is illustrated in Figure 5, using 6 joints.
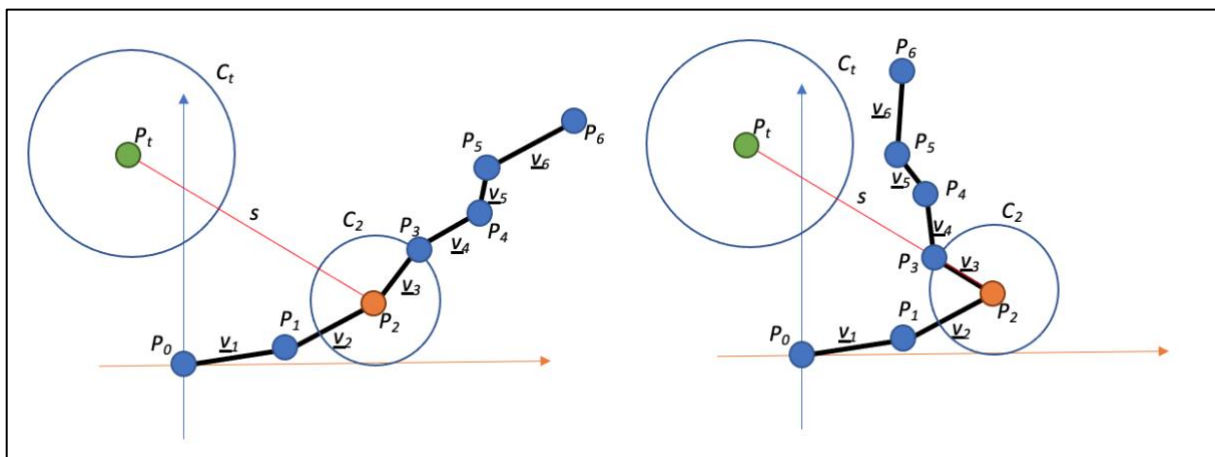

Figure 5: Optimal state of a joint ($\underline{v}_3$) starting from a fixed point.

When we reach *k = 3*, the problem is simplified to three joints, which can be solved using the algorithm described earlier. If we want to save computing power, it is not necessary to calculate all points, only the C_{t_1} and the intersection points of the circle *Cn-3* , which will yield one or two good solutions. If we need additional potential solutions, we can use our algorithm for 3 joints

to calculate the arc of the circle on which the elbow can be located. A possible situation is illustrated in Figure 6 with 6 joints.
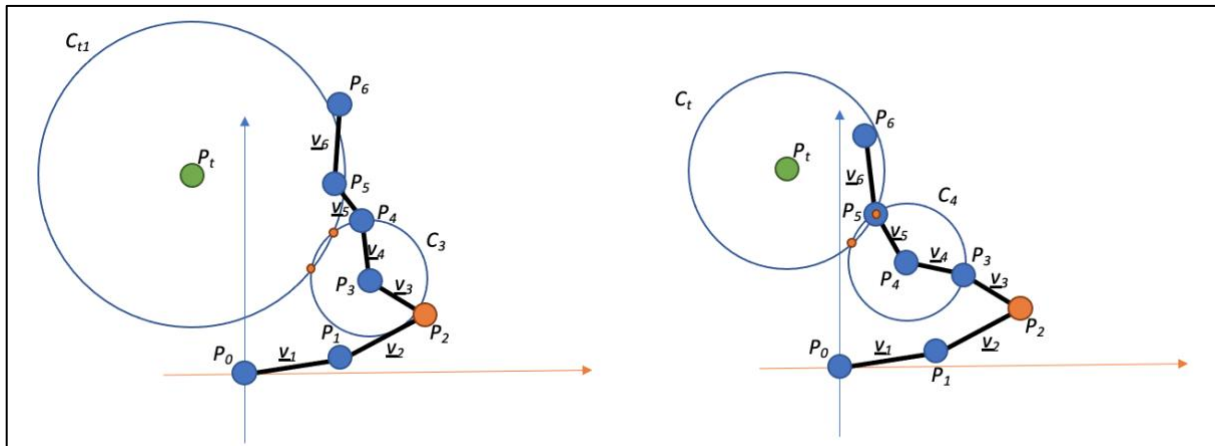

Figure 6: A quick solution to the problem after simplifying it to the three-joint robot arm problem.

III. Results

Already in 2010, there were publications on the control of industrial robots using only object-oriented application programming interfaces (APIs), yet academia still prefers structured or procedural languages. Meanwhile, according to a 2017 publication on the popularity of programming languages, four of the top five most popular languages are based on an object-oriented approach (Cass, 2017; Angerer, 2010)

When developing our algorithm, we paid special attention to meeting the requirements of the object-oriented methodology. A study in 2020 highlighted the importance of visual block-based and object-oriented technologies in programming education, which led us to conclude that it is advisable to choose an object-oriented methodology for programming procedures not only to facilitate our own development, but also for educational purposes and to facilitate the understanding of the tacit knowledge elements of the algorithm (Plaza, 2020).

Without describing the full specification of the software, we note that in the context of the object-oriented implementation, we have created classes for the joint, the hinge point, and the circles around the hinge points, as well as for the arm itself. The straight line referred to as the straight line in example *s* exists in our program as a joint, since it has the same properties as joints.

Since the problem has multiple solutions in most cases, the possible states of the arm are stored in a list of instances of the arm class. Our solution does not address which of the possible solutions the programmer should choose, since this is an engineering task.

IV. Summary

Using a geometric approach, we have developed an algorithm that computes the possible positions of a robot arm in the state of reaching a target without error. By applying the object-oriented methodology, the code is easy to understand and can be further improved. A spatial extension of the solution is in progress, but in this case it requires the inclusion of additional engineering indicators, which are explored using both empirical and a priori methods.

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The rehabilitation of the Budapest School at the Hungarian Academy of Sciences (1988-1990)

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The General Assembly of the Hungarian Academy of Sciences (in the following: HAS) rehabilitated the members of the Budapest School in May of 1989 before the regime change in 1989/1990. In my presentation, I will examine why and how the Academy was able to rehabilitate Ágnes Heller and her colleagues before the political regime change. I will provide an overview of the process through the following questions: What role did Ivan, Berend T. (the President of the HAS) and István Láng (Secretary-General of the HAS) play in the proceedings? How were the events catalysed by the new, independent trade union, the Democratic Trade Union of Scientific Workers (TDDSZ)? How did the HAS try to re-integrate the Budapest School after the Great Assembly? How can we evaluate these rehabilitations in the context of the regime change?

Keywords: Hungarian Academy of Sciences, Regime Change, Budapest School, Rehabilitation, TDDSZ

I. Introduction

On May 10 1989 a newspaper reader could read the following piece of news in the second biggest Hungarian, political journal, Magyar Nemzet: „*The great assembly [of the Academy – B. Zs.] considered it a seriously damaging, anti-scientific and unlawful act that in 1973, after a political resolution, professional and political discrimination was applied on the grounds of incompetence [...]*"[1] Then, on May 27 of 1989 one could also read here that „*The Hungarian Socialist Workers' Party [MSZMP, Party – B. Zs.] Political Committee annulled the 1973 decision against social scientists.*"[2] On the basis of these facts it appears that the Hungarian Academy of Sciences (HAS, Academy) was a little bit ahead of the party narrative. In my paper, I will examine why and how the Academy was able to rehabilitate the followers of Lukács György before the political regime change. Answering this research question is also important because the Academy was the leading body of Hungarian scholarship during this period (for example, it managed the centralised scientific certification, participated in the preparation and implementation of national scientific plans).

First of all, it is also important to explain the significance of the 1973 Party decision. In 1973 the MSZMP launched an attack against Lukács György's followers (the Budapest School including the Lukács School and the Lukács Kindergarten). The process took place as the party denounced the Budapest School and the Academy dismissed the scientists who worked here: Ágnes Heller, György Márkus, András Hegedűs, Mária Márkus, János Kis, Mihály Vajda, György Bencze. The timing of the party decision was not a coincidence. Firstly, after the death of Lukács, the party wanted back the legacy of the philosopher (that the party lost after the revolution of 1956). Secondly, the Budapest School had dangerous thoughts about the pluralism of the Marxism that could easily have led to the idea of the political pluralism. This phenomenon was unacceptable for the MSZMP. Thirdly, from the perspective of the bigger political context the regime led by János Kádár had to put a brake on the economic reforms of 1968. The pursuing economic reforms could have raised the need to reform other subsystems which did not meet the intentions of the party leadership.[3]

II. The Process

II. 1. First steps

The rehabilitation of the Budapest School was first proposed by the colleagues of the Research Institutions of the Academy namely Mária Ludassy (with László Garai) and Ágnes Erdélyi (with Zádor Tordai). On March 10 1988 two separate letters were sent to the Academy's president, Iván Berend, T.[4] One of the letters was written by Mária Ludassy and László Garai who refer to Berend's paper in which he described the party decision of 1973 as a repression.[5] The president forwarded the letters to the Secretary General, István Láng because he had jurisdiction in the matters regarding the Research Institutions.[6] At this level the process had

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[1] Magyar Nemzet, 1989. május 10. 4.

[2] Magyar Nemzet, 1989. május 27. 3.

[3] Dérer Miklós: Pertörténet. Filozófus-per 1973. Világosság. 1989. Vol. extra. 15-16., Kelemen János (Fehér Márta, Garai László, Ludassy Mária, Tordai Zádor és Szamuely László közreműködésével): Tizenhat év után. Filozófus-per 1973. Világosság. 1989. Vol. extra. p. 19-20.

[4] AL 3. Elnök 255. doboz, Iktatott iratok, E-158/1988, Ludassy Mária és Garai László Berend T. Ivánnak, 1988. márc. 10., Tordai Zádor és Erdélyi Ágnes Berend T. Ivánnak, 1988. márc. 10.

[5] Berend T. Iván: A magyar reform sorsfordulója az 1970-es években. *Valóság*, 1988/1. sz. [1]-26. [különösen: 18.]

[6] AL 3. Elnök 255. doboz, Iktatott iratok, E-158/1988, Berend T. Iván Ludassy Máriának és Garai Lászlónak, 1988. ápr. 18., Berend T. Iván Tordai Zádornak és Erdélyi Ágnesnek, 1988. ápr. 18.

stopped and the relevant sources do not provide further information. What were the reasons behind this stoppage?

The main reason was that the MSZMP disapproved the views of Ágnes Heller and her colleagues. Therefore as long as the party leadership did not decide in this question again, the Academy had narrow space for manoeuvring. First the party condemned the Budapest school, and then the Academy drew the conclusions, i.e. the scientists concerned were effectively fired.[7] I did not find any steps from the Academy to take back these scholars in the relevant sources. However, the issue did not sink, because a new organisation came to life and held the subject on the agenda.

II. 2. The role of the Democratic Trade Union of Scientific Workers (TDDSZ)

On May 14 of 1988 the Democratic Trade Union of Scientific Workers (Tudományos Dolgozók Demokratikus Szakszervezete = TDDSZ), the first independent trade union, were established by the colleagues of various scientific institutions (research institutions, universities). According to the participant's memoirs the rehabilitation of the scientific workers was a debateable subject initiated by Júlia Szalai in this inaugural meeting.[8] The debate was so heated that György Bencze had to calm down the arguing parties, who said: "*If we could wait fifteen years, we can wait a few more months…*"[9] At the same time this initiative had not been included in the organisation's programme yet, [10] but The TDDSZ group of the Institute of Philosophy of the Hungarian Academy of Sciences had started the preparation of the rehabilitation of the Budapest School.[11]

Meanwhile the party saw that the time came to revise the party programme and the interpretation of its past as part of a larger renewal programme.[12] Hence, in the summer the party leadership created a Historical Subcommittee (Történelmi Albizottság) managed by Berend T. as a member of the party leadership (and as the HAS president historian).[13] It meant that the party had also started the process of reinterpreting the past.

The number of TDDSZ groups increased exponentially at the Academy since the establishment of the union. Thus, these groups created the Committee of the Academy during the summer to provide more effective representation of interests.[14] From the beginning, this Committee tried to establish a relationship with the administration of the academy.[15] In its reply, the administration created a consultative forum with the TDDSZ and other unions (for example Tudományos Dolgozók Szakszervezete = TUDOSZ). In the first meeting of this forum in

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7 Dérer Miklós: Pertörténet. Filozófus-per 1973. Világosság. 1989. Vol. extra. p. 17.

8 Vásárhelyi Mária: Az ártatlanság kora: előjáték a rendszerváltáshoz: a TDDSZ és a Liga születésének története. Pozsony, Kalligram, 2008. 49-57.; Ágnes Erdélyi interview. Created by Ágnes Hadházy in 2005. 1956-os Intézet Oral History Archívuma, 818. sz.

9 TDDSZ Tájékoztató 1989/6. 6-7.

10 For example Beszélő, 1988/24. 50-51.; TDDSZ Tájékoztató 1988/1 [8-11.]

11 TDDSZ Tájékoztató, 1988/1 [6.]

12 Ripp Zoltán: *Rendszerváltás Magyarországon*, 1987-1990. Budapest, Napvilág, 2006. 146.

13 Történelmi utunk. *Társadalmi Szemle*, 1989. 1. különszám, 2.

14 AL 5. Főtitkár (Láng István) 321. Szakszervezet (1988, 1989, 1990), Erdélyi Ágnes levele Akadémiai Választmány megalakításáról, 1988. jún. 3.

15 AL 5. Főtitkár (Láng István) 321. Szakszervezet (1988, 1989, 1990), Emlékeztető 1988. júl. 1-i TDDSZ Akadémiai Választmány üléséről

September the TDDSZ suggested the rehabilitation of the Budapest School but this initiative remained echoless.[16]

The events sped up at the end of the year 1988. The Academy created a committee for the rehabilitation of the academicians and TDDSZ established a Rehabilitation Working Group (Rehabilitációs Munkacsoport) for the rehabilitation of the researchers (members: Júlia Szalai, Ágnes Losonczi, László Bruszt, Zoltán Kárpáti).[17] This Working Group was initiated by the TDDSZ group of Sociology Research Institution and their chief aim was the rehabilitation in the field of the social sciences (history, sociology, philosophy – these fields were most exposed to the ideology).[18] Simultaneously the union included in its programme a demand for the rehabilitation of all scientists: "*We believe that researchers who have been discriminated against for political reasons should be rehabilitated in all aspects. We consider it part of the rights of workers that qualified professionals should be able to practise their profession regardless of their political views. The TDDSZ will use all the means at its disposal to defend those discriminated against because of their political views*."[19]

Shortly afterwards in January of 1989 Láng István brought up the topic of rehabilitation in a meeting with the TDDSZ's spokesperson. Láng asked the TDDSZ to make suggestions on the forms and the extents of the rehabilitations because the Academy wanted to resolve the question until the general assembly in May.[20] At this point, it seems that the TDDSZ achieved its goals in the questions of rehabilitations. But the story did not come to an end here.

II. 3. Rehabilitations with questions

From this year's February the TDDSZ began to involve the public to put pressure on the Academy regarding the topic of the rehabilitation. The TDDSZ wrote a (later open) letter to the Minister of State, Imre Pozsgay and to the HAS president, Berend T.[21] In the letter, the members of the TDDSZ summarized the desired principles of the rehabilitations: theoretical (negative political interference), scientific (reintegration) and socio-political (compensation).[22] Moreover, another TDDSZ member András Fodor made a list of the to be rehabilitated natural scientists and sent it to the Academy.[23] The HAS did not reply to the first letter at that time and replied negatively to the second. The negative reply was induced by the fact that Fodor's lists

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[16] AL 5. Főtitkár (Láng István) 321. Szakszervezet (1988, 1989, 1990), Összefoglaló emlékeztető a TDDSZ, a TUDOSZ, valamint az Akadémia elnöke, főtitkára és vezető munkatársai 1988. szept. 21-i találkozójáról., 1988. szept. 30.; Csorba László: Egy korszerűbb Akadémiáért. TDDSZ Tájékoztató 1990/12. 5.

[17] AL 151 Elnökségi ülések, 1988. október 31. 79. doboz, 8. dosszié; AL 45. Személyzeti osztály 405/1 Előterjesztés alkalmi bizottság kiküldésére az akadémikusi visszaminősítések és kizárások elvi kérdéseinek vizsgálatára. Berend T. Iván, 1988. okt. 11.

[18] BFL X/33. Tudományos Dolgozók Demokratikus Szakszervezete, 4. doboz Csoportok alapítólevelei, jegyzőkönyvei 1988-1989, Kezdeményezés Rehabilitációs Munkabizottság életre hívására, 1988. december 6.

[19] TDDSZ Tájékoztató 1989/5. 2.

[20] AL 5. Főtitkár (Láng István) 321. Szakszervezet (1988, 1989, 1990), Feljegyzés az Akadémia főtitkára Láng István és a TDDSZ Országos Választmányának szóvivője, Őry Csaba között 1989. jan. 11-én történt megbeszéléséről

[21] AL 3. Elnök 270. doboz, Iktatott iratok E-122/1989, Szalai Júlia, Karádi Éva, Gáspár Zsuzsa, Ludassy Mária, Klaniczay Gábor, Volák Katalin és Fodor András (TDDSZ Rehabilitációs Munkacsoportja nevében) levele Berend T. Ivánnak és Pozsgay Imrének, 1989. febr. 28.

[22] Ibid.

[23] AL 3. Elnök 270. doboz, Iktatott iratok, E-122/1989, Fodor András Király Tibornak, 1989. febr. 9.

contained scientists from the universities.[24] Nevertheless, the TDDSZ published the above mentioned letters in a daily newspapers in March and in April.[25]

The time of the assembly was very close but there was silence around the status of the rehabilitation. Berend then responded (at the same time as Pozsgay) to the February letter of the TDDSZ and assured that the Academy would rehabilitate the academicians and Ágnes Heller and her colleagues, moreover the Academy would initiate the rehabilitation at the party as well.[26] Berend's letter is strange from many perspectives. Firstly, Berend was the leader of the Historical Subcommittee that had already completed the task of interpreting the past. The Subcommittee re-interpreted the events of 1956 and the party resolution of 1973 by March.[27] Secondly, on the basis of this re-interpretation, the party organisation of the Philosophical Institute asked the party headquarters about the rehabilitation of Heller and her colleagues.[28] In any case, as a result of the trade union campaign, probably a few days later, behind the scenes, Berend initiated the rehabilitation of the Budapest school in the Party's Social Policy Committee (Társadalompolitikai Bizottság).[29]

The process changed radically as early as 3 May, when the above mentioned party committee found the 1973 party decision to be flawed and recommended that the Political Committee draw further political conclusions.[30] A few days later on 9 May, the general assembly of the HAS rehabilitated these scientists (along with many academicians): Ágnes Heller, György Márkus, András Hegedűs, Mária Márkus, János Kis, Mihály Vajda, György Bencze.[31]

This method was somewhat controversial, because the assembly members had not been informed about the rehabilitation of the Budapest School until the opening speeches of Berend and Láng. [32] Berend reported on the party initiative for rehabilitation as follows: "*The review of an external, political body's decision, which is in sharp conflict with the freedom of scientific research, was launched - on our initiative - the week before the assembly.*"[33] It is therefore not surprising that one of them asked for details of the case.[34] Apart from that, the theoretical rehabilitation took place without debate.

Finally, in late May, the party's Political Committee annulled the 1973 decision.[35] Over the summer, the Academy continued the rehabilitation process by reintegrating and compensating the affected scientists (providing jobs and academic qualifications).[36] This year János Kis was

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[24] AL 3. Elnök 270. doboz, Iktatott iratok, E-122/1989, Király Tibor Berend T. Ivánnak, 1989. febr. 22.

[25] Magyar Hírlap, 1989. márc. 18. 3.; murányi: Egy megválaszolatlan levél - „Rehabilitáció mindenkinek jár." Magyar Nemzet, 1989. ápr. 21. 4.

[26] AL 3. Elnök 270. doboz, Iktatott iratok E-122/1989 Berend T. Iván Szalai Júliának, 1989. ápr. 12.; Magyar Nemzet, 1989. április 22. 3.

[27] Történelmi utunk. *Társadalmi Szemle*, 1989. 1. különszám

[28] Horváth Pál (párttitkár, az MTA Filozófiatudományi Intézet MSZMP alapszervezete nevében): Érvénytelenítsék a társadalomkutatókról hozott 1973-as állásfoglalást. Magyar Nemzet, 1989. márc. 17. 4.

[29] Magyar Nemzeti Levéltár Országos Levéltára (= MNL OL), M-KS 288-41 Magyar Szocialista Munkáspárt Agitációs és Propaganda Bizottság (Társadalompolitikai Bizottság), 521. ő. e., Társadalompolitikai Bizottság 1989. május 3-i ülés; Közgyűlési jegyzőkönyv, 1989. 1. Berend: 74.

[30] Népszabadság, 1989. máj. 4. 5. oldal

[31] MTA 1989. évi közgyűlésének határozata. Magyar Tudomány. 1989. Vol. 96. No. 9. p. 762.

[32] AL Közgyűlési jegyzőkönyv, 1989. 1. Berend: 69-75. [különesen: 73-74.]; Láng: 92-93.

[33] AL Közgyűlési jegyzőkönyv, 1989. 1. Berend: 69-75. [különesen: 73-74.]

[34] AL Közgyűlési jegyzőkönyv, 1989. 1. Károly Nagy and János Mészáros academicians on the topic: 392-393.

[35] MNL OL M-KS 288. f. 5 Magyar Szocialista Munkáspárt Politikai Bizottság, 1066. ő. e., Politikai Bizottság 1989. május 26-i ülés jegyzőkönyv, 145-148.

[36] AL 3. Elnök 290. doboz, Iktatott iratok, E-145/1990 Heller Ágnes, Márkus György, Szelényi Iván ügye.; AL 3. Elnök 273. doboz, Iktatott iratok, E-345/1989 Márkus Mária Makó Csabának, 1989. aug. 8.

given a position at the Institute of Philosophy of the Hungarian Academy of Sciences, Mihály Vajda at the Kossuth Lajos University of Sciences and György Bencze at the Eötvös Loránd University of Sciences.[37] In addition to these measures, Ágnes Heller and Iván Szelényi were elected as corresponding members and György Márkus as an external member at the General Assembly in May 1990. Mária Márkus did not apply for any kind of rehabilitation.[38] Interestingly enough, in spite of the trade union's demands on the extension of the rehabilitation, the Academy would not rehabilitate scientists from Research Institutions other than the Budapest School.[39]

III. Conclusions

How can we interpret these episodes of the rehabilitation in the context of the regime change? The issue of rehabilitations was a key point of the regime change, in which the case of Imre Nagy and the revolution were prominent.[40] Thinking about the rehabilitation started in parallel with the major political events of the topic at the Academy. On the one hand, the Academy initiated the rehabilitation of the academicians on its own. On the other hand, in case of the Budapest School the space for manoeuvring was narrower but with the pressure of the TDDSZ the available space could grow. This meant that the Academy could be one step ahead of the party narrative on this issue and make verbal promises. As a consequence, the Academy could rehabilitate the members of the Budapest school before the decision of the Political Committee.

As the TDDSZ had strong ties to the democratic opposition[41] and since the Academy was more or less part of the establishment, these events can be interpreted as a stage in the struggle between the party and the opposition on the road to regime change. Moreover, not only does the process reflect the struggle between the party and the opposition, but also, as I pointed out, the contradictory nature of political regime change at many points.

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[37] AL 3. Elnök 273. doboz, Iktatott iratok, E-345/1989, Pritz Pál feljegyzése Berend T. Ivánnak, 1989. nov. 2.

[38] AL 3. Elnök 290. doboz, Iktatott iratok, E-145/1990 Heller Ágnes, Márkus György, Szelényi Iván ügye.; AL 3. Elnök 273. doboz, Iktatott iratok, E-345/1989 Márkus Mária Makó Csabának, 1989. aug. 8.

[39] AL 3. Elnök 288., Iktatott iratok, E-23/1990 Spira György Berend T. Ivánnak, 1989. júl. 28., Berend T. Iván Spira Györgynek, 1989. szept. 21.

[40] György Péter: *Néma hagyomány: kollektív felejtés és a kései múltértelmezés: 1956 1989-ben: a régmúlttól az örökségig*. Magvető Kiadó, Budapest, 2000. 20., 156-8.; Pótó János: Nagy Imre emlékezete a rendszerváltásban. Mozgó Világ. 2020. Vol. 46. No. 7-8. 126-7.

[41] –slt [Solt Ottilia]: Érzelmes utazás a TDDSZ bölcsőjéhez. Beszélő, Vol. 3., No. 22. p. 3.

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AL 3. Elnök 270. doboz, Iktatott iratok E-122/1989 Berend T. Iván Szalai Júliának, 1989. ápr. 12.

AL 3. Elnök 273. doboz, Iktatott iratok, E-345/1989, Pritz Pál feljegyzése Berend T. Ivánnak, 1989. nov. 2.

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AL 3. Elnök 290. doboz, Iktatott iratok, E-145/1990 Heller Ágnes, Márkus György, Szelényi Iván ügye.

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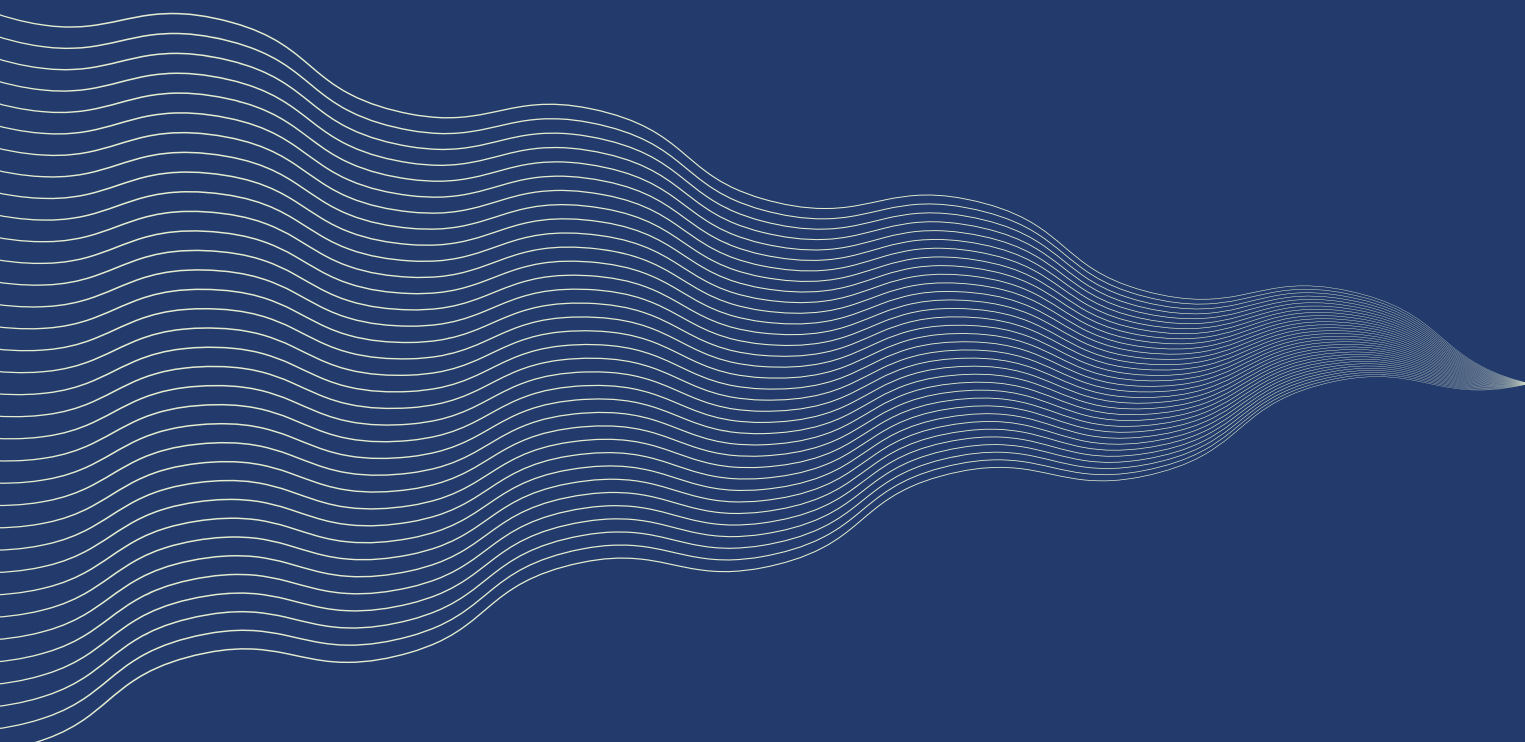
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