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INTRODUCTION

Dear colleagues, authors and readers of the Scientific Journal of Polonia University (PNAP – *Periodyk Naukowy Akademii Polonijnej*)!

Congratulation on the release of a new PNAP 43 (2020)!

In this issue we are presenting scientific articles, which deal with urgent problems of language, culture, communication, and education, as well as Sociology and Political Science, issues on health and environment, technology, creativity and implementation, Law and Public Administration.

The collected papers in language, culture, and communication are devoted to topical issues of intercultural communication, discourse analysis, language ecology and translation. Special attention has been paid to investigation Ukrainian music in the globalization era and polycultural trends of Ukrainian ethno pop folk music of the 21st century, linguocultural constants of slavonic typical texts, metaphorical concept “BODY” in the sacred Pentateuch texts of the English Bible, stylistic peculiarities of political phenomena in British newspapers. A new insight has been gained into such problems as word-formation of ecology terms, historical pragmatics, the role of employment of people with disabilities, substantiation of the effectiveness of innovative teaching methods in training future doctors, social and cultural factors of primary school teacher training in Canada (1950–1990s).

The scientific issue also contains theoretical, empirical and/or pragmatic researches in social sciences and related disciplines. Reflecting the objectives of the suggested articles, PNAP 43 (2020) highlights the current problems of volunteer activities in the sphere of human rights protection in modern society. Health issues are focused on informative value of morphometric indices of erythrocytes in different forms of iron deficiency in colorectal cancer, main parameters of iron metabolism in patients with urotelial bladder cancer at different stages of malignant neoplasm anemia, and eco-analytical monitoring of radioactive microelements and their impact on dental periodontological status.

We thank our authors, who have already sent their scientific articles to PNAP, and those, who will submit their research results for publication to our journal. We would also like to express our particular gratitude to all the members of the Editorial Board, and to those who kindly accepted our proposal to work together and contribute to the creation of PNAP.

Maciej Rudnicki

LANGUAGE, CULTURE, COMMUNICATION

UKRAINIAN ELECTRONIC MUSIC IN GLOBALISATION
AND NATIONAL REVIVAL**Andriy Bondarenko**Researcher, Kyiv National University of Culture and Arts, Ukraine
e-mail: bondareandre@gmail.com, orcid.org/0000-0002-6856-991X**Summary**

The article considers the impact of globalisation and national revival processes on the development of electronic music in Ukraine. It is shown that in the early stages of development (the late 1990s – early 2000s) Ukrainian electronic music is dominated by the focus on Western European music culture, and early festivals of dance electronic music (“The Republic of Kazantip”, “Ultrasonic”) also borrow Russian traditions, which indicates the predominance of globalization and peripheral tendencies in this area. At the same time, the first creative searches related to the combination of electronic sounds with the sounds of Ukrainian folklore are intensified. In particular, the article considers the works of the 2000s-2010s by O. Nesterov and A. Zahaikevych, representing folk electronics in the academic sphere, and works by Katya Chilly, Stelsi, Kind of Zero representing folk electronics in non-academic music. The aesthetic basis of such combinations was the musical neo-folklore of the last third of the XX century and the achievements of folk rock in the late 1990s. Intensification of these searches in the late 2010s, in particular the popularity of such artists as Ruslana, Onuka, Go_A allow us to talk about intensifying the national revival processes in the musical culture of Ukraine and involving Ukrainian music in the world culture preserving its national identity.

Keywords: electronic music, Ukrainian music, globalization, national revival, ethno-phonism, folk-electronics

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1. Introduction

The large number of works dedicated to electronic music could be divided into several areas. Technological researches are focused on studying electronic music instruments and computer software, musicological researches are focused on the analysis of the electronic music sound, styles and genres of electronic music. Cultural studies of electronic music are less represented. In particular, the issue of the impact of globalization processes on music art development on the one hand, and attempts to counter these processes by finding nationally characteristic artistic solutions on the other, is especially relevant in recent years.

At the end of the XX century intensification of globalisation led to the delimitation of cultural space into centres of world culture, producing major artistic innovations, and periphery,

oriented on the processes taking place in cultural centres (Siuta, 2006). Ukraine's position in this context is complicated by historical factors: until 1991, Ukraine was part of the USSR and, accordingly, remained a periphery in relation to Moscow as the cultural centre of the USSR. 30 years after independence proved to be a too short period to overcome the economic and social gap that separated Ukraine from the most successful countries in Europe, so the problem of Ukraine's peripheral position remains unresolved today.

At the same time, as a reaction to the processes of globalization, opposite tendencies arise – national revival, which is actualized in the art of music in search of nationally characteristic means of music expression. Globalisation and nationalism became two central phenomena of the modern world, that have both shaped and been shaped by each other (Halikiopoulou, 2013). Relevant processes are observed in contemporary music in many European countries. For example, there are significant researches related to the use of electronic music instruments with English folklore sound (Sweers, 2005), Kazakh folklore (Murzalieva, 2020) or the emergence of the Turbo-folk music genre, combining the features of modern dance electronic music and Balkan folklore, as a representative of the national identity of the Balkan peoples on the world stage (Čvoro, 2012). This paper aims to analyze the effects of globalization and national revival processes in Ukrainian electronic music.

2. Ukrainian electronic music under conditions of globalisation

In Ukraine, electronic music began to develop much later compared to European. If in Europe the 1950s were considered the period of electronic music formation and were associated with the work of specialized studios in Cologne and Paris, in Ukraine the first experiment in electronic music is considered to be the work “Scherzi domestici” by V. Godziatsky written in 1964. This work is performed in the style of specific music and resembles the first experiments of P. Schaeffer in the 1940s. Until the mid-1990s, electronic music in Ukraine did not have the potential to develop, due to Kyiv's peripheral position concerning Moscow and the Communist Party's hostility to creative experimentation.

Independence of Ukraine opened wide opportunities for Ukrainian musicians to learn from the European experience, to establish creative contacts with artists in Europe and the United States. At the same time, the problem of the peripheral situation remains relevant for Ukrainian artists, only the orientation changes – if before the 1990s it was exclusively about the orientation to Moscow, then after the 1990s the unidirectionality is replaced by multidirectionality – the orientation to Moscow and cultural centres of Western Europe at the same time.

In such circumstances, “for a composer from the national periphery in the process of such convergence, the fulcrum is often the principles and patterns used in the works of recognized colleagues from The “cultural centres” (Siuta, 2006: 24). What exactly are these trends in electronic music?

According to Siuta, such tendencies have musical and non-musical features. The first is the genre and stylistic orientation, which is manifested in the imitation of appropriate structural, timbre, intonation decisions. The second – in external features, such as titles of works, organization and names of festivals, etc.

As for experimental electroacoustic music, its stylistic features are largely stipulated by the fact that Ukrainian composers use foreign-made software. First of all, these are programs for sound synthesis such as Supercollider, Csound, Max / MSP, which largely determine the timbre palette of her works. These programs offer ample opportunities for generating sound objects of multiphonic and noise-like sound timbre typology, the greatest diversity of which

we find in the works by A. Zahaivevych, and later – in the younger generation of composers – O. Retinsky, A. Stuk, M. Shalygin, A. Arkhangorodska and others.

In terms of genre, no later than the end of the 2000s, Ukrainian authors mastered the main European genres of electronic music – “acoustic music” (among the most prominent works: “Coloured Fluography” by O. Nesterov, “Motus” by A. Zahaivevych, “Africa” by O. Retinsky, etc.), Music for tape and acoustic instruments (“v.runchak.b_clari@net” by V. Runchak, “The last rite of the old wizard” by I. Nebesny, etc.) and live electronics (“Venezia”, “Mithe IV: KS” A. Zakhaykevych, etc.), video installations. Algorithmic composition technologies also have been assimilated by Ukrainian authors (“Algorhythm754” by G. Potopalsky, “Please wait” by Yu. Bulka, “Air Mechanics” by A. Zakhaykevych, etc.).

Regarding the exterior design, the Ukrainian edition of CDs “Electroacoustic works of Ukrainian composers 1964-2017” is indicative. It includes 25 works and only 2 of them are named in Ukrainian and written in transliteration – “Naoslip” by O. Chorny and “Kolomyika” by K. Olenych. All the others as well as the information about the authors is provided exclusively in English, which is evidence of the orientation of a foreign connoisseur.

As for dance electronic Music (EDM), Ukrainian authors are focused on popular EDM genres in Europe – techno, house, trance, drum-n-base etc. First EDM festivals are indicative – “The Republic of Kazantip” (1997-2013) and “Ideology” (2003-2013). The organizers of these festivals rely on well-known Western artists and prefer Russian-language PR technologies, which indicates the predominance of peripheral tendencies with a simultaneous focus on both the West (as the main centre) and Russia (as a regional centre). In 2010, however, we note a certain shift in the situation with the organization of festivals “Ultrasonic” (2011-2014) and, especially, “Gamselit” (2014-2019), which are characterized by Ukrainian-language PR-company and a more significant representation of the work of Ukrainian musicians.

3. National revival in Ukrainian electronic music

Despite the unfavorable political situation in Ukraine during the Russian and Soviet occupation, the interest of Ukrainian musicians in folklore has not faded, at least since the work of M. Lysenko, who managed to combine European musical genres with intonations of Ukrainian folk songs. The role of M. Lysenko in the development of Ukrainian music is compared with the role of F. Chopin for Polish or M. Glinka for Russian music.

At the beginning of the XX century, modern composers, such as I. Stravinsky, B. Bartok, partly S. Prokofiev, M. de Falla, L. Yanachek, Ukrainian composers L. Revutsky, B. Lyatoshynsky also showed interest in folklore. The work of these authors has received the general name “neo-folklore”, the stylistic feature of which is the use of individual songs of archaic folklore origin, which are developed based on repetition and variability, the theme itself is often “blurred contours” or “transfer to counterpoint layers” (*Derevyanchenko, 2005: 16*).

In the 1960s and 1970s, the so-called The “second wave of folklore”, which in the conditions of the Soviet “thaw” was embodied in the works of Ukrainian authors. A distinctive feature of the works of the “second wave of folklore” was the use of ethnophonisms, which are characterized as “timbre-sound aspect of folk instrumentation” (*Broiako, 2020: 23*). Examples of such a combination are the folk opera “Fern Blossom” by E. Stankovich, written in the mid-1970s.

In the late 1980s, neo-folklore became the property of mass culture in a number of countries in the Soviet space accompanied by “the spiritual awakening of the people and their fight for the restoration of independence” (*Klotinš, 2002: 107*). This trend also applies

to Ukrainian music culture and the organization of such festivals as Chervona Ruta and others. Finally, at the turn of the century, one can talk about the emergence of the “third wave of folklore”, associated with the interaction of folk sounds (ethnophonisms) with the latest timbres of electrical and electronic instruments. The latter can be expressed by the inclusion of folk instruments, folk style of singing, along with the involvement of recognizable plots of folk epics.

In Ukraine, the ground for attracting folklore was the most favourable. Despite the urbanization processes, by the end of the XX century in Ukraine the tradition of folk singing was preserved, notably in two forms – in the academic (for example, Vervovka choir) and authentic (for example, “Drevo”, “Bozhychi” ensembles). Note that the folk timbre is characterized by more intense higher harmonics and less intense lower formant, which gives the sound “depth and roundness”. A similar manner of singing is observed in Polish folklore, where it is called “white singing” (śpiew biały) or “śpiewokrzyk”, although the identity of Polish and Ukrainian singing styles is not in question.

Oleksandr Nestorov’s album “Contaminated Sounds” (1998) was the first experience of combining electronic with ethnic sounds in Ukrainian music. The ratios of authentic and electronic layers in this album are different. These can be timbre-texture integrations, when electronic timbres “co-intone with singing, forming urban heterophonic tutti”, or “timbre-disintegrated ensembles, where the electroacoustic layer shades singing, creating a timbre-rhythmic background” (Zahaikevych, 2008: 51-52).

In the 2000s, examples of the combination of electronic and folk sound include work of Kateryna Kondratenko (under the pseudonym Katya Chilly), Serhiy Kindzersky (under the pseudonym Kind of Zero), the band Stelsi and A. Kyrychenko.

A. Kyrychenko’s album “A Tangle of Mokosha” features a folk ensemble “Oira” and includes 10 folk songs that are sung in an authentic manner with electronic accompaniment. Their compositions are dominated by timbre-disintegrated ensembles – electronic accompaniment forms rhythmic and harmonic resistance, as well as colour effects. Songs by S. Kindzersky, featured vocal ensemble “Barvynok” combines drum-n-base electronic style and authentic vocal performed by “Barvynok” vocal ensemble. In Kateryna Kondratenko’s album “I’m Young” (2006) we find unique examples of combining authentic vocals with high, “falsetto” singing. The authentic vocals in this album are accompanied by the most refined specific electronic sound, while the accompaniment of singing in the upper tessitura is more inclined to the traditions of rock music.

In academic music, the most striking example of combining electronics with authentic singing was the project by A. Zahaikevych “Nord / Owest” (2011) – an electroacoustic performance for folk voice, violin, flute, percussion and electronics. In this composition, electronic sounds are framed into multi-layered layers with their drama of development and form an equal dialogue with authentic singing and playing on folk instruments. A. Zahaikevych’s appeal to authentic singing is not accidental – in the late 1980s – early 1990s the composer herself sang in the ensemble “Drevo” and participated in folklore expeditions, which became the “ideological prerequisite” of the composer’s appeal to “another, alternative and closed culture” (Rakunova, 2008: 97).

Authentic singing style is the most expressive, but not a necessary condition for classifying a composition as folk-electronic. Works have become more popular, in which both the specific electronic sound and the elements of authenticity remain veiled, harmoniously fitting into the general outline, sustained in the popular style with its pop vocals, and rhythmic reliance on the standard rhythm section. Ruslana’s victory at Eurovision (2004) with the song

“Wild Dances” played a significant role in popularizing this trend, proving that music inspired by Ukrainian folklore can achieve international success. A number of folk songs inspired by Ruslana were released as an electronic remix by Mikhail Nekrasov (under the pseudonym CJ Nekrasov) as bonuses to the album “Wild Dances + Eurobonus” (2004). In 2010, M. Nekrasov once again turned to ethnic themes, creating a video for “The Kukushka” with singer Inna Bordyug (performing under the pseudonym Zlata Ognevych). Thanks to the application for Eurovision, “The Kukushka” has probably become the second most popular composition including Ukrainian ethnic motifs after “Wild Dances”.

4. Ukrainian electronic music in late 2010s

In the late 2010s, new projects related to the interaction of electronic and folk Music appear. First of all, the project “Onuka” is trying to combine characteristics of dance electronic music with the sound of Ukrainian folk instruments, such as bagpipes, cymbals, trembitas and others. Among the most revealing are the songs “Fire”, “Zenith”, “Who”. These songs are written in Ukrainian, and the sound of Ukrainian folk instruments is well identifiable by ear.

And, finally, a notable victory at the Ukrainian selection of the Eurovision Song Contest by Kateryna Pavlenko and the Go_A project was achieved in 2020. Her song “Nightingale” is characterized by close to the folk style of singing, the use of Ukrainian folk instrument – “sopilka”, reliance on folklore and electronic accompaniment (pedal sounds and percussion).

What is the place of the compositions mentioned above in the globalized world culture?

According to musicologists, “in modern life, neo-folklore as a holistic phenomenon is important in the cultural and spiritual revival of the country, the preservation of the invaluable heritage of the Ukrainian people, its cultural identity both within the country and abroad” (Chabanenko, 2019: 137). Moreover, a combination of folk art with the techniques of modern pop “prolongs the life of folk song and its nation”, while “one-sided focus on scientific and technological achievements, which has long been accompanied by a superior attitude towards traditional cultures (especially non-European) is certainly a thing of the past.” (Lytovka, 2013: 107). This fully applies to electronic music.

The position of the musicians themselves is also interesting. Thus, according to N. Zhyzhenko, the appearance of her project coincided “with an explosion of self-identification” and the emergence of a tendency to “listen to Ukrainian music” (Lesyshyn, 2019). K. Pavlenko justifies his position as follows: “For centuries Ukraine has been trying to win the right to the existence of its culture, its language. And today is the very moment when we are not forbidden to speak Ukrainian, we are not forbidden to write and sing. You can just open a laptop and make cool Ukrainian music. Now everything is available and this is the perfect time to create something cool” (Korshunov, 2020).

It is noteworthy that K. Pavlenko’s victory at the Eurovision Song Contest provoked fierce discussions on social networks – part of the audience sincerely rejoiced at the success of Ukrainian songs, and others expressed scepticism if the song in Ukrainian with national characteristics can succeed in international competitions. This dispute shows a different attitude of Ukrainian citizens to national revival processes. If one part values these processes, the others perceive them as a threat. However, the very fact of the discussion testifies not only to the relevance of the folk-electronic trend but also denies the predictions of some researchers on the levelling of national cultural features soon.

5. Conclusions

The development of Ukrainian electronic music reflects two opposite trends in world culture in recent decades – the trend towards globalization and levelling of individual national cultures and trends towards national revival in modern forms of culture. In Ukraine, electronic music is developing with a late recovery to Western Europe and therefore in the early stages of development, was inevitably focusing on Western European traditions. At the same time, from the beginning of the XXI century, the search for a combination of electronic sounds with the characteristic sounds of Ukrainian folklore, which received a general name – folk electronics, has intensified. The success and recognition of folk electronics in Ukraine over the past few years allows considering the gradual neutralization of peripheral tendencies in the Ukrainian cultural space, forming regional cultural centres in Ukraine, attracting Ukrainian music to world culture preserving its national identity. A detailed study of Ukrainian folk electronics is a prospect for further research.

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LINGUOCULTURAL CONSTANTS OF SLAVONIC TYPICAL TEXTS

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Summary

The subsystem of the linguistic cultural constants formed at the early stages of the ethnic genesis and correlated with the subsystem of the ethnos' moral and ethical values expressed by linguistic means, represents the basis of each idioethnical linguistic system, since it reflects the existential perception of the world and oneself in it as an individual linguistic personality and the community of individuals as a whole.

The formal and semantic structural plans of the basic constants, expressed by linguistic units of the ancient Indo-European origin, are associated with Indo-European roots. It is the ancient Indo-European root (the first root) of a linguistic unit of the lexical level as a component of a textual construction that often acts as an etymon (archetype) in the etymological reconstruction of a lexical unit. In turn, the primary meaning of the Indo-European root (the formal-semantic basis of the lingual cultural constant) necessarily correlates with the ancient sacred symbol-image that exists in the collective-individual consciousness of the ethnos, possibly from the pre-literary period, sacred for the ethnos, sometimes with several symbol-images forming a semiotic sacred-mythological linguistic subsystem.

The subsystem of the linguistic cultural constants characterizing an ethnos contains information on its ontological peculiarities: its language system and its cultural profile as a set of the linguistic unity, the type of thinking and the nature of textual information perception.

Consequently, the social dynamics of the linguistic cultural constants, represented by the translated Typical, or Statutory canonical Christian texts in the Slavic Liturgical discourse of the Kiev Russian at the end of the tenth century determines the specific stability of the purposeful verbal impact as the content of the Slavic-speaking communicative process that took place during the Christianization of the society of Kievan state.

Keywords: subsystems, primary meaning, Indo-European root, verbal sacred image.

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1. Introduction

Taking into consideration the research of A. J. Greimas and J. Courte, we consider the corpus of the Church Slavonic Typical texts in the early medieval East Slavic Liturgical discourse as a sociodynamic subsystem of linguocultural constants (*Varbot, 1963: 194–212*). The scope of the concept of the linguocultural constants, introducing scientific circulation by Yu.S. Stepanov, covers the stable principles of culture in the broadest context, and first of all, the alphabetic principles (principles of creating an alphabet) which are projected onto an integral multi-level system of the ethnic group representations as a whole and its individual

about the image of the world order (*Stepanov, 2013: 13, 17, 83–89*). According to A. N. Leontyev's hypothesis, the multidimensional linguo-psychological organization of the world order is reflected in the structures of the collective and individual ethnic consciousness with the help of the linguocultural constants through five quasi-dimensions, which include the coordinates of space, time and the subsystem of meanings embodying the results of the cumulative social practice. According to the linguists, the significances of the units of the lexical level of the native language – intensions – are also included in the subsystem of the linguocultural constants, since a constant represents a stable unit in a series of variables that does not change its values. So the information about the denotation contained in the linguistic sign and communicated by it remains unchanged, or is taken as unchanged (within the scope of the research tasks) (*Leontjev, 1959: 63–91*).

So, the purpose of the article is to identify the initial meanings of the linguistic units representing the linguocultural constants of the canonical Christian texts, linking together the phenomena of the linguistic order, including the irregular and non-standard ones, phonetic and semantic laws, and their deviations, various contaminations, features of the functioning of a lexeme as a structural component of a text unit in the early medieval Slavic Liturgical Discourse.

2. Subsystem of the linguocultural constants

In our study, we consider linguocultural constants as basic mental quantities with an axiological potential of unchanging meanings, constantly structuring the collective (and individual) linguistic consciousness of an ethnic society and an individual. Singled out on the basis of the stable principles of culture and manifested by the idiopathic system of the language in the texts, they carry conceptual information on the ideological values of a particular ethnic (national) community about the world and other people, about themselves and their activities.

As is known, the subsystem of the linguocultural constants is sociodynamic. More precisely, in the communicative process, the stages of formation, storage, transmission, perception of the constants are regulated by the general cultural profile, the specifics of the native language system, and the type of thinking of the addressee of the texts. In turn, the sociodynamics of the subsystem of existentially significant linguocultural constants, which is actualized by the mental sphere of the individual linguistic personality and the ethnic community as a whole, containing verbalized concepts of the real and ideal worlds, determines the specifics of the semiotic stages of the generation and reception of a text by the addressee – addressee(er), which are linked to each other, and therefore stipulates the stability of the verbal impact on the addressee.

In the coordinates of the linguistic geography of the Kievan Rus state in the second half of the tenth century as the spatio-temporal center of the location of the collective addressee of texts (the East Slavic (heterogeneous) ethnic community) this subsystem was transformed into a genetic matrix of the stable long-term verbal influence, which is carried out by activating protogrammatic forms of the collective and individual linguistic consciousness of the addressee of texts dating back to the ancient Indo-European roots. It is the ancient Indo-European root (first root) of a linguistic unit of the lexical level as a component of a textual construction that often acts as an etymon (archetype) in the etymological reconstruction of a lexical unit. In turn, the primary meaning of the Indo-European root (the formal-semantic basis of the linguocultural constant) necessarily correlates with the ancient sacred symbol-image that exists in the collective-individual consciousness of the ethnos, possibly from the pre-literary period, sometimes with several symbol-images that form a semiotic sacred -mythological language subsystem.

There is an independent theory (although it has received an ambiguous assessment in scientific linguistics) according to which a certain sacred language, close to Vedic Sanskrit, existed and was supported throughout the Indo-European linguistic area. This sacred language seemed to be the source of the relative unity of linguocultural constants throughout the entire area of the Indo-European language and indirectly, through the primary meanings of the Indo-European roots of the ancient sacred symbols that are related to them, the images reflected in the further history of the Indo-European languages (*Pizany, 1968: 3–21*). There is a unity, that in the process of reconstructing the primary forms and meanings of the ancient Indo-European root, allows ambiguous solutions in some cases, explained by the presence of not one, but several heterogeneous semasiological connections in a word, in which, according to M.M. Makovskiy, psycholinguistic categories of the ancient religious (including pagan) mentality (*Makovskiy, 2013: 6, 72*).

From our point of view, the specificity of the linguocultural constants of the Church Slavonic Typical texts as the first written canonical Christian monuments in the early medieval Slavic Liturgical discourse is determined by the unique synergy of super-complex, multi-level semiotic and linguistic systems (subsystems).

3. Synergy of semiotic and linguistic systems

In turn, each of the selected semiotic and linguistic systems (subsystems) contains its inherent means of forming and verbalizing linguocultural constants inherent in the respective cultural and linguistic area. These include:

- macrosystem of the sound (oral) common Slavic language, common to the entire Slavic ethnic family of tribes;
- writing as an artificial or conventional sign system and cultural phenomenon, naming the units of the oral language.

Herewith, the regularity noticed by A. A. Volkov is manifested, when in relation to “oral language” (in this case, common Slavic), – “written language” (Church Slavonic), other writing systems (Cyrillic, Greek) are included;

- a subsystem of signs for converting texts of an oral language into texts of a written language. This is a sign subsystem of the oral language, in which the signs of the Cyrillic letter are named, using special designations of letters and signs, for example, alpha, beta, verb, etc.;
- sign-semiotic subsystem of the military verbal communication. This is a kind of oral verbal communication, which is designed to provide and support the dominant joint military activity for the multiethnic East Slavic society, which is especially significant in the universe of Kievan Rus.

When identifying interacting semiotic and linguistic systems (subsystems), the factor of complicating the functioning of the translated Church Slavonic Typical texts mentioned in the works of E. A. Selivanova is taken into consideration. In our study, this is a factor of the mediation of the original of Church Slavonic Typical texts by the preliminary double translation: from Hebrew into Ancient Greek (Septuagint), then from Ancient Greek into Church Slavonic. This factor determines the combination of the positions of the translator of the canonical texts, respectively, from the Hebrew (Semitic) language into the ancient Greek language and the translator from the Ancient Greek into the Church Slavonic language, as well as the interpreter of the Greek originals of these texts.

It is worth mentioning an important observation for our research, relating to the ancient Greek version of the Typical Texts. It is noted that the first Old Slavonic (Church Slavonic)

texts, presumably of the Aprakos Gospel and the Psalter, translated by a team of philologists under the leadership of Equal-to-the-Apostles brothers Cyril and Methodius from about 863 to 885 on Mount Olympus in Bithynia, where the Slavs lived, characterize some phonological, morphological and lexical features the Greek language of Asia Minor. These include the use of the Greek folk vocabulary of the Asia Minor origin, the reduction of the consonants, the introduction of the Greek words left without translation into the structure of texts as direct borrowings, such as the term *τυπικόν* and others.

The purpose of the verbal influence of the Church Slavonic Typical texts is the formation of standards of superethnos speech activity, transmitted from generation to generation, based on a holistic idea of their status in the universe of the state (ideology, army, education, trade) as a part of the Universe.

4. Typical, or Statutory text corpus

As already mentioned, from the end of the tenth century in the East Slavic Liturgical discourse of the Kievan Rus (as a state-political and relatively unified ethnocultural integrity) the Typical, or Statutory text corpus, according to the tradition formed in Byzantium, were primarily formed by the texts of the Gospel, Epistles and Acts of the Apostles of the type of incomplete aprakos. It should be clarified that only in the Church Slavonic Liturgical discourse, the borrowed Greek term APRAKOS, morphologically represented by a masculine noun, is used to nominate compositional and architectonic varieties of the Typical texts intended for proclamation on Sundays and holidays, the dates of the celebration in honor of an event, starting from the Easter period. More precisely, the texts of the Aprakos are organized by calendar, and not by chapters, in the canonical order established at the Laodicean Council. The oldest surviving Slavic Christian manuscripts, monuments of the eleventh century, written in Cyrillic, Savvina's book, Ostromir Gospel, Archangel's Gospel, named Aprakosy.

Along with the borrowed substantive APRAKOS, in the Slavic Liturgical discourse format, the adjective in the singular form of the neuter APRAKOSNE (plural – APRAKOSNE) is used, formed according to the Slavic word-formation scheme (Greek basis APRAKOS + suffix *-n-* + inflection), as an attributive component only in noun phrases, where the position of the main member is mixed with the singular neuter GOSPEL and / or MESSAGE (Apostle).

According to A. Ch. Kozarzhevsky, the term APRAKOS is a derivative of the ancient Greek adjective *ἀπράγμων*, which is translated using the Slavic equivalent with the meaning of idle (doing nothing); according to I. I. Sreznevskiy, this term is associated with a stable Greek phrase *ἀπρακτος ἡμέρα* (plural. *ἀπρακτοὶ ἡμέραι*) – *свободный (от работы) день, праздничный день* (Sreznevskiy, 1989).

In the East Slavic lexical fund, there are semantically identical old Slavic equivalents to borrowings: *праздънь* with the meaning *праздничный, торжественный*; *праздъ* with the meaning *свобода > праздникъ (праздънь + subject suffix-ик- / праздъ + suffix-н- + subject suffix-ик-) – день торжества / день, свободный от труда > неделя, недельный (<*nedělja) > (negative particle не + verb stem делати + суффикс -j- + флексия) – нерабочий, праздничный день (day when they don't do anything) > воскресенье as праздничный день. The researchers believe these values are the secondary ones, evolved from earlier meanings.*

So the meaning and the form of the lexeme *праздънь*, developed from the proto-Slavic **porzďнь* – *empty (unoccupied)*. Ancient Proto-Slavic combination *-or-* between consonants was transformed into a combination, characteristic of the common Slavic language *-pa-* (*праздънь <*porzďнь*), and in the East Slavic language – in a full-voiced combination *-oro-*:

порожьнь (укр. порожній): < *празднь < *porzdнь with a secondary meaning *sterile, aimless*. (Sreznevskiy, 1989).

In the Typical Texts, the Slavic adjective *празднь – праздный* is used to translate a number of Greek lexemes *ἀμοτρος, ἀργος, ἔρημος* and others. For instance «λέλω δέ ὑμῖν, ὅτι πᾶν ρήμα ἈΡΥΟΝ (ἀργόν), ὁ ἂν λαλήσωσιν οἱ ἀνῦρωποι ἀποδώσουσι περὶ αὐτὸ λόγον ἐν ἡμέρα χρίσεως» (Greek text of the Gospel of Matthew; chap. 12, 36) – «Глаголю же вам яко всяко СЛОВО ПРАЗДНОЕ, еже аще рекут человеци, воздадят о нем слово в день судный» (Slavic text of the Gospel of Matthew; chapter 12, 36); «τότε λέγει Επιστρέφω εἰς τὸν οἶχόν μου, ὅθεν ἐξῆλθὼν εὐρίσχει σχολάζοντα, σεσαρομένον χαί χεχορημημένον» (Greek text of the Gospel of Matthew; chap. 12, 44). – «Тогда речет: возвращаюся в ДОМ мой, отнюдуже изыдох: и пришед обрящет ПРАЗДЕН, пометен и украшен» (Slavic text of the Gospel of Matthew; chapter 12, 44); «εἶδεν ἄλους ἐστώτας ἐν τῇ ἀγορᾷ ἈΡΟΓΟΥΣ» (Greek text of the Gospel of Matthew; chapter 20, 3, p. 130). «...vide ины, стояци на торжици ПРАЗДНЫ» (Greek text of the Gospel of Matthew; chapter 20, 3).

It is worth emphasizing that in the Slavic Liturgical discourse, the borrowed terms *АПРАКОС, АПРАКОСНОЕ* are used only for naming specifically fragmented – festive – texts of the Gospel and the Epistle of the Apostles. Obviously, they are these lexemes, originating from the most ancient Indo-European roots, with which, according to M.M. Makovsky, the corresponding cultural and historical symbols, sacred to the ethnic community, are correlated, prototypes that form the basis of the world outlook of the ethnoses. They activate the existentially significant linguocultural constant of HOLIDAY in the structure of the linguistic consciousness of the recipient (individual, collective) (Makovskiy, 2013: 69).

Along with the *aparakos* Gospels and the Apostolic Epistles, the Typical, or Statutory text corpus includes the other important texts (books) of the Lenten and Colored Triodi, the Psalter with a section on 20 kathisma and biblical songs. In addition, the text corpus under study included the *Paremiynik*, the *Service Menaea*, the *Chetya* (collections of the statutory readings of the Minean, triode, seven-day and daily liturgical circles), *Octoichs Izborny*, *Paraclitic*, *Irmologii*, *Service Book*, *Trebnik* and *Book of Hours* for the ancient Greek text of the ancient Greek word, which are supposed to be pronounced during daylight hours. The first basis of the ancient Greek composite *ὠρολόγιον* is formed by the noun *ώρα*, which is translated into Old Church Slavonic with the basic meaning of time or hour; the second basis of the composite is the participle from the verb *λέγω*, translated by one of two available meanings: to speak; collect. If we assume the production of the Greek verb *λέγω* from the Indo-European root *kel- / *kol-, meaning to sound or to call, we can make a conclusion about the primacy of the meaning of the semantically close meaning of the verb “to speak”. (Varbot, 1963: 194 – 212). Then the literal translation of the ancient Greek composite *ὠρολόγιον* is “the sounding hour” (*час звучаицуйи*), or named (*названнуйи*), or proclaimed – the hour of the Word – *час Слова*.

It is worth adding that the Greek lexeme *ώρα* with the meaning “time” is associated with the Indo-European root *ar- / *er-, which is the basis of the Indo-European words *k̑er-tor – “four”, *ȗer-up, “to rise”, *ȗer- “snake”.

As M. M. Makovsky points out, the meanings of these Indo-European words are primary, since they correlate with ancient sacred images or symbols on which linguocultural constants are based, and which are valuable for the collective consciousness of the ethnic groups developing in the Indo-European linguistic area. Thus, the image of “the snake” was considered to be a symbol of the Divine who created the Universe, personifying the “true present” time – cherished now, or now – when the Divine created the Universe. All sacred actions in ancient times were interpreted as taking place in true, present, divine time. The snake was also a symbol

of the Number, personifying the Divine Universe: the number four and a multiple of eight are symbols of the Divine integrity (Makovskiy, 2013: 9).

Therefore, according to the Hebrew tradition, the praise of God by the members of society – the proclamation of thanksgiving prayers to God – had to be fourfold, since it was associated with the Jewish principle of counting discrete daytime, which is based on the division of the day into four parts, which is recorded in the Book of Nehemiah: «И стояли на своём месте, и ЧЕТВЕРТЬ ДНЯ читали из Книги Закона Господа Бога своего, и ЧЕТВЕРТЬ исповедывались и поклонялись Господу Богу своему» (Book of Nehemiah, chapter 9, 3). And although the Hebrew texts reflect the collective understanding of the concept of the unstable duration of each of the four parts of the day depending on the length of the day, in Greek and translated Church Slavonic Typical texts these parts are equated to hours and are called “часами”, more precisely, “hours of prayer”: the first, third, sixth and ninth hour. These Jewish day parts – “hours” correspond to the modern “six”, “nine” o’clock in the morning, “twelve” o’clock noon, “three” o’clock in the afternoon, differentiated according to the Roman principle of counting discrete daytime, which is based on a twelve-hour daylight period.

It should be emphasized that the verbalization of the linguocultural constant of the absolute Divine TIME through the linguocultural constant of the discrete time in the Church Slavonic Typical texts is based on two different traditions of counting the day, taking into account either the Hebrew account, or the Roman (modern) account.

So, the principle of the Hebrew reckoning of the discrete daytime, which is based on the division of the day into four parts: the Jewish clock, is used in the texts of the Gospels of Matthew, Luke, Mark. For example: «καὶ ἐξελθὼν περὶ τὴν ΤΡΙΤΗΝ (τρίτην) ὭΡΑΝ (ὥραν) ... » (Greek text of the Gospel of Matthew, chapter XX, 3). -. «И изшед в ТРЕТИЙ ЧАС...» (Slavic text of the Gospel of Matthew, chapter XX, 3); «И когда настал ЧАС, Он возлег и двенадцать Апостолов с Ним...» (Gospel of Luke, chapter XXX, 14).

The principle of the Roman (modern) counting of the discrete daytime, which is based on a twelve-hour period of the day, is applied in the Gospel of John, for example: «He asked them: В КОТОРОМ ЧАСУ стало ему легче? Ему сказали: вчера В СЕДЬМОМ ЧАСУ горячка оставила его. Из этого отец узнал, что это был ТОТ ЧАС, в который Иисус сказал ему: сын твой здоров, и уверовал сам и весь дом его» (Gospel of John, chapter V, 52, 27); «Они пошли и увидели, где Он живёт и пробыли у Него день тот. Было ОКОЛО ДЕСЯТОГО ЧАСА» (Gospel of John, chapter I, 39).

The texts also record other meanings of this lexeme, which functions in the structure of the utterances and as an independent linguistic unit, as *ώρα* ἡ – “the season”, “time”, and as the basis of the complex words formed in a morphemic way, for example, *ώραία* ἡ – “the proper time”; *ώραίος* – “ripe”. As you can see, in the East Slavic Liturgical discourse, there are functional and semantic differences between the lexemes “hour” and “time”.

5. Conclusions

The multifaceted architectonics of the first written Church Slavonic Typical texts in the Liturgical discourse of the early medieval Kievan Rus is the result of the synergy of the super-complex, multi-level semiotic and linguistic systems (subsystems), which determines the specific interaction of the linguocultural constants inherent to the corresponding cultural and linguistic areas to which the original and translated written versions of these Christian canonical monuments are dated.

In the textual structure the linguocultural constants are represented by common Slavic and borrowed (Greek, etc.) linguistic units belonging to the common Indo-European area and thus associated with ancient Indo-European roots, leading to their primary meaning. The Indo-European roots correlate with the ancient polycultural sacred symbols, or images, the activation of which with the help of verbalized linguocultural constants provides a cooperative effect influencing the collective-individual consciousness of an ethnic community.

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SUBSTANTIATION OF INNOVATIVE TEACHING METHODS IN TRAINING FUTURE DOCTORS

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Summary

The article presents material on solving the problem of improving modern methods and technologies in teaching in medical institutions of higher education, as higher medical education requires rapid changes and non-standard creative solutions, especially in today's conditions. Innovative teaching methods are aimed primarily at the processes of information perception and successful acquisition of practical skills, memory, development of creative and clinical thinking, proficient behavior in extreme situations, and gaining communication experience. The methods are calling innovative because they significantly change both the role of the teacher and the role of students. At the same time, the level of training of future doctors must meet clear criteria of goals and competence approach by the requirements of the quality of education. The importance of innovative teaching methods in the training of future doctors is highlighting. The theoretical and methodological analysis of the educational process of medical institutions of higher education. The content of the application of innovative teaching methods in the training of future doctors is generalized and systematized. Aspects of professional competence of the future doctor are covered. The effectiveness of case studies and situational role-playing methods is substantiated and identified as integral elements of teaching in medical institutions of higher education.

Keywords: students, educational process, professional competencies, professional motivation.

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1. Introduction

Theoretical principles of training future doctors, which have been focusing on new standards of higher education in European countries through innovative methods in higher education have been basing on the Bologna Process and the European Commission's international project «Harmonization of educational structures in Europe». For medical institutions of higher education in Ukraine, the issue of, the strategy of the national innovative training program for future doctors today is very acute and extremely necessary. Innovative methods in medical institutions of higher education for the training of future doctors – are a new product of the advanced

technological process, which has been using by teachers in practice to train future doctors capable of independent research, research, innovation in health care institutions, research institutes and other (Gumeniuk *et al.*, 2020).

The main task in the training of future doctors in the development of the European educational process is the training of highly qualified, competent specialists in higher medical education. One of the conditions of competitive higher medical education is the stimulation of clinical thinking in students, the use of interdisciplinary approaches in saturating them with knowledge, skills, abilities (Piskun *et al.*, 2014). Besides, the future doctor must be prepared to systematically process a significant flow of information, to integrate knowledge from new disciplines. Not only programs and curricula but also pedagogical methods and forms of education must meet these requirements.

Therefore, the purpose of our study is to summarize and systematize the importance of innovative teaching methods in the training of future physicians and justify the effectiveness of their use.

Materials and methods were scientific analysis of domestic and foreign sources, content analysis of curricula and plans of medical institutions of higher education, biblio-semantic and descriptive research methods.

2. Professional competencies of the future doctor

The introduction of a competency-based approach to higher medical school will solve many problems, one of which is the training of highly qualified, competitive professionals who will be able to make responsible, non-standard decisions and predict their consequences. But it also requires a high level of professional training of teachers, improving their skills, promoting their development, and improving working conditions (Shevchuk *et al.*, 2020).

A doctor who has mastered the professional-oriented activity and the corresponding system of knowledge at the stage of acquiring higher education must study independently with the optimal combination of educational, professional-practical, and scientific activities in the conditions of continuing education (Klishch *et al.*, 2014).

The chief competencies for graduates of higher medical education, which they acquire in the learning process are: integrated – the ability to solve complex problems and problems in the field of health care in the professional activities of future doctors or in the learning process, which involves research; general competencies – the ability of future doctors to abstract thinking, analysis and synthesis; ability to learn and be modernly trained, knowledge and understanding of the subject area and comprehension of the specifics of the profession, the ability to apply knowledge in practical situations; skills in the use of information and communication technologies, the ability to search, process and analyze information from various sources, the ability to adapt and act in a new practical situation; ability to work independently, making responsible decisions following the acquired professional knowledge, skills, and abilities.

Of particular importance are the so-called special (professional, subject) competencies – maintaining medical records, processing state, and social information, collecting medical information about the patient's condition, evaluating the results of laboratory and instrumental studies, diagnosing the disease, diagnosing emergencies, performing medical manipulations and, most importantly, the preservation of medical secrecy (Khliestova, 2014).

The quality of doctor's training depends on the professionalism of teachers, the use of modern pedagogical teaching technologies, the involvement of students in research work (student scientific societies, scientific circles), methodological support of educational activities,

research individual tasks, and projects. Regarding the professionalism of teachers, it is advisable to note the ability to comprehensively influence the formation of all components of professional competence of students using the latest technologies (*Morokhovets et. el., 2017*).

A modern teacher of higher medical education must demonstrate a high level of knowledge, constantly develop and participate in the implementation of innovative new technologies and methods. It should also create conditions for acquiring knowledge of the basics of health technologies should be an example for future doctors and demonstrate personal and professional growth, professional self-improvement, be an example and teach students to achieve these plans and goals. At the same time, senior teachers studied under different conditions, and it is difficult for such teachers to move and adapt to new innovative teaching methods. A modern teacher of higher education is required to have an interactive approach in the presentation of educational material using modern technologies, innovative didactic approaches, the introduction of simulation tools and practical skills, a comprehensive interdisciplinary approach to solving clinical problems.

The training of future doctors requires from teachers not only practice-oriented technologies but also the mandatory use of innovative technologies in the system of teaching methods, which include not only training but also self-study, development, and improvement of practical skills. The use of innovative teaching methods in the training of future doctors affects the motivation and values of a highly qualified medical professional.

3. Case method as an integral element of education in medical institutions of higher education

In the modern pedagogical concept, the case method has been considering to be the most effective innovative method and techniques in the training of future doctors. The case method has been using first in the educational process at the Harvard University of Law in 1870, but this method gained extensive practical significance in 1920. The first collections on the application of these methods were published there. In this direction, foreign researchers have gained experience in both theoretical and practical issues of application of Case study to improve the learning process and knowledge acquisition by students. The following scientists E. Monter, M. Leader, J. Erskin, and others, worked in this direction.

Also, in 2002 our scientists offered the Ukrainian Center for Innovation and Development a fundamental manual, «Situational analysis, or the anatomy of the case method». The works of domestic scientists R. Gurevich, N. Kalashnik, V. Kremen, J. Tsekhmister were devoted to scientific-practical and general-theoretical issues (*Hurevych et al., 2019; Skrypnyk et al., 2012*).

The case method is a specially prepared material for students, which has been borrowing from an authentic event. To solve this problem, students have been forcing to look for solutions in a specific artificial situation, which allows students to act as a team, or individually. In this situation, students show their knowledge and skills to the extent that they have mastered them.

To form the meta competence of the future doctor in solving the problem in the classroom case method helps to master the material, students conduct a comprehensive analysis of the problem and help to solve similar problems that will arise in professional activities. In the process of modeling team actions in a given problem situation, provides their own beliefs in the acquired skills, which have been practicing in class, as well as allow making the right decision on the situation «Here and now», gives a clear algorithm, gives the chance to substantiate the actions and to convince of the correctness of the actions at the decision of the set task, to critically and constructively estimate the and command actions and mistakes (*Kozak, 2015*).

During the students' discussion of the situation, the teacher not only observes but also manages the students' discussion of the task. In the educational process, the teacher takes an active part in the discourse, analysis, or discussion. A great educational and methodological responsibility has been taking by the teacher who prepares the case-task. The created task, in turn, should be of interest to future doctors, and the teacher should monitor the successful or erroneous analysis, make a quick team decision on the task and actively learn skills.

Case methods can be used at any time, both in the learning process and in the control process, to consolidate the material passed. However, there are certain advantages and disadvantages of the case method, the content of which is presenting in table № 1.

Table 1

Advantages and disadvantages of the case method

The main advantages	The main disadvantages
<ul style="list-style-type: none"> • Ability to identify, analyze and calculate each step in mastering the theoretical aspects of the discipline 	<ul style="list-style-type: none"> • In a similar actual situation, a young specialist without the support of the group is unlikely to be able to recall the experience quickly.
<ul style="list-style-type: none"> • A unique opportunity is creating to study complex professional issues in an emotionally favorable atmosphere of the educational process. 	<ul style="list-style-type: none"> • Time constraints may not allow the group to develop objective and effective ways to solve the task. This can lead to dissatisfaction with the method.
<ul style="list-style-type: none"> • The communicative nature of the method provides an opportunity, with the appropriate knowledge, to make a quick but thorough assessment of the issues to be studied and the proposed solutions. 	<ul style="list-style-type: none"> • Low student activity leads to a decrease in the effectiveness of the method. Students may feel uncomfortable if they do not feel supported by a teacher or classmates.

At the same time with the help of case tasks, future doctors develop analytical, communicative, social, creative, practical skills of each lesson, and gain extensive experience, identify, and develop their personal qualities most importantly master the ability to work in a team or small groups the ability to identify the main task, and in their actions. After such classes in the following practical categories by future doctors, it is observing that they are faster and more accurate to assess the following situations, more responsibly choose the best solution, more grouped, balanced, listen to all options of their team.

4. Methodical principles of situational role-playing game

In recent years, the method of situational role-playing has been widely using in the teaching field of medical institutions of higher education. The theoretical basis of this method is the position of the crucial role of active, specially organized activities of students in the process of acquiring practical knowledge and skills. The expediency of using active methods is consistent with the data of experimental psychology, according to which 10% of the material received by the ear, 50% of the material seen, and 90% of what students perform independently.

The essence of the method of situational role-playing is improvised role-playing that simulates a typical clinical situation. The game involves a group of students who perform tasks provided by the script. The identical circumstances can be playing several times to allow game participants to play themselves in different roles. There are numerous modifications of situational games using non-identical techniques. One of the varieties is basketball – a method in

which most students have been involved at the same time some act as victims, others as rescuers or doctors of emergency medical teams (EMT). The situation modeled in the role play should be as close as possible to reality (Averchenko et al., 2013).

The chief point of the situational role-playing game is an accurately developed scenario for it and an understandable sequence of actions in assisting victims and patients at the pre-hospital stage, which should have been recording in the checklist grown for each task. The proposed clinical situation should include the plot of the role-play; a clear clinical problem; the nature of the given situation and the conditions of its implementation; clear distribution of roles and consistent execution of help algorithms.

Therefore, during the preparation of a situational role-playing game, the teacher must anticipate all possible ramifications of the initial situation, must always be ready to provide students involved in the game information about changes in the patient's or victim's condition due to actual actions of students during the game. Directly during the execution of help algorithms to correct striking mistakes so that the skill to be mastered has been not fixing incorrectly. Therefore, the preparation of methodological support for situational role-playing is a very complex and time-consuming organizational work. During the devising of the game, it is difficult to predict all possible actions of students (Volkova et al., 2018).

Therefore, the purpose of situational role-playing is the most important – the formation of cognitive and professional motivations, systematic clinical thinking of the future doctor, teamwork and independent decision-making skills, teamwork and interaction skills.

Table № 2

Characteristics of stages and content of the situational role-playing game

№ The stage of the game	Name the stage of the game	The content of the game stage
I stage of situational role-playing game	Introducing students to the source information	<ul style="list-style-type: none"> • presentation of source information by the teacher; • joint definition of game tasks and educational tasks; • distribution of roles among students
II stage of situational role-playing game	Preparing students for role play	<ul style="list-style-type: none"> • analysis of source information; • study of theoretical issues and basic algorithms of assistance on the topic of the lesson; • preparation for role functions
III stage of situational role-playing game	Conducting a role play	<ul style="list-style-type: none"> • performance of role functions by participants; • game management, teacher control over compliance with the rules of assistance; • reflection, analysis of game results; • summarizing the game by the teacher.

Analysis of the effectiveness of situational role play in achieving goals and providing feedback between student and teacher is chief and necessary in a better understanding of the clinical situation in the proposed task and helps to understand actions in an extreme situation.

The effectiveness of situational role-playing in the training of future doctors is that it helps to objectively assess the preparation of the student for the lesson; transparency in knowledge assessment; develops skills of public speaking and work in simulated extreme situations; develops the ability to formulate an opinion using professional terms; situational role

play reduces the time of accumulation of professional experience; development and formation of professional competencies and works both in a team and independent decision-making. An example of the use of situational role-playing in the learning process is presenting in Fig. 1.



Fig. 1. Situational role-play with students and a mannequin

Thus, situational-role (positional) games solve mainly the problem of forming the communicative component of the professional activity of future doctors, determining an active position in acquiring professional competencies, devising stereotypes of professional behavior and its correction in communication with victims, patients, their relatives, and colleagues.

5. Conclusions

Thus, analyzing scientific domestic and foreign sources, we can conclude that the chief vector of development of modern higher education in Ukraine medical profile is determining by the general focus on the process of entering domestic higher education in the European and world educational space. The introduction of innovative teaching methods in the training of future doctors is a priority of the concept of reforming and modernizing the instruction of medical students in creating an unconventional educational environment in higher education institutions through the promotion of progressive innovations. The application of a wide range and the introduction of innovative teaching methods should become one of the hallmarks of modern approaches in the teaching of professional disciplines. The conducted theoretical and methodological analysis gives grounds to determine further prospects for the effectiveness of innovative teaching methods in the training of future doctors and practically check in the course of the further experiment the feasibility of implementation.

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THE ROLE OF EMPLOYMENT OF PEOPLE WITH INTELLECTUAL DISORDERS

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Summary

The article provides a theoretical analysis of the role of work in the correction of people with disabilities due to intellectual disabilities. Different types of work in special institutions are outlined. The role of work in the education and development of people with disabilities due to intellectual disabilities is now particularly important due to the difficulties in preparing them for practice. In Ukraine, state and public systems of educational institutions and establishments have been created and are constantly developing, in order to cover all people with disabilities. An integral part of this system are special institutions where people with disabilities who have certain deviations of physical or mental development can study, get educated, prepare for independent life and socially useful work.

People with disabilities should be oriented about the role they play in the work force of the society; in that they should provide useful and affordable work. This is done in order to prepare themselves for socially useful activities, they must see the main goal to be pursued in the learning process.

In the system of pedagogical measures to influence the psyche of a person with a disability due to intellectual disabilities work is one of the most important means of correcting intellectual disabilities. The corrective value of employment for people with disabilities due to intellectual disabilities is that work greatly contributes to the education of positive personality traits. It is known that people with intellectual disabilities make poor use of work skills in new situations. Work contributes to the application of knowledge and skills acquired during training in practical activities outside the institution.

Keywords: education, upbringing, work, development, special institutions, people with disabilities.

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1. Introduction

The role of work in the correction of people with disabilities due to intellectual disabilities is considered at all stages of their development and is quite relevant.

In the works of V. Bondar, L. Vavina, O. Gavrilov, I. Dmitrieva, I. Yeremenko, M. Kozlenko, N. Kolominsky, M. Matveeva, G. Mersyanova, S. Mironova, T. Sak, V. Sinyov, N. Stadnenko, M. Suprun, K. Turchynska, O. Khokhlina, D. Shulzhenko and others. Attention is focused on the problems associated with the use of correctional training and education of

people with disabilities due to intellectual disabilities. The researches done in this problem field of such scientists and practitioners deserve special attention: L. Wenger, G. Vygodska, O. Kataeva, E. Strebeleva, M. Sheremet and others. They emphasized the impact of early intervention and the development of the intellectual component on the further education of children with special needs in special institutions (*Mironova, 2015*).

Theoretical analysis of research by Soviet authors (O. Graborov, G. Dulnev, M. Kuzmytska, I. Yeremenko, L. Zankova, etc.) showed that the problem of teaching people with disabilities manual and professional work is quite relevant in terms of correctional work with this category of people.

Ukrainian researchers, such as V. Bondar, V. Zasenکو, V. Sinyov and other authors, emphasized the provision of equal rights of all children to quality education, taking into account their typological and individual characteristics through the development of various forms of education – inclusive and special institutions.

Immersed in the problem of social rehabilitation of people with disabilities, is considered occupational therapy, which L. Vakulenko described rather narrowly, as a method of helping people with physical and mental disabilities, to teach them to behave better, and for people with intellectual disabilities – to overcome emotional problems. By involving them in specially organized activities (*Vakulenko, 2018*).

The issue of teaching people with disabilities due to intellectual disabilities has been studied by a number of researchers (I. Akimenko, A. Graborov, I. Daniushevsky, G. Dulnev, M. Kuzmytska, M. Ryabtsev, and V. Tarasov).

However, the theoretical analysis of the problem of the role of work in the correction of people with disabilities due to intellectual disabilities showed its lack of development, which actualizes research in this area. Therefore, the aim of the work is a theoretical analysis of the role of work in the rehabilitation of intellectually disabled people and the development of recommendations for the organization of work aimed at correcting the disabilities of people with disabilities due to intellectual disabilities.

The study sets the following objectives:

1. Analysis of psychological and pedagogical literature on the research problem.
2. Determining the role of work in the correction of defects in people with disabilities due to intellectual disabilities.
3. Identifying the effectiveness of organized labor in the rehabilitation of intellectually disabled people.
4. Development of recommendations for the organization of work aimed at correcting the disabilities of people with disabilities due to intellectual disabilities.

The following methods were used in the study:

- Analysis of scientific and methodological literature on the research problem.
- Observations.

2. Correctional work with people with disabilities in special institutions

Domestic institutions of auxiliary schools and rehabilitation institutions pay great attention to labor training in the development of people with disabilities due to intellectual disabilities. This is reflected in the curricula and programs of these institutions. By teaching people with disabilities due to intellectual disabilities, the teacher corrects the shortcomings of work and forms their relationships in the team. It is obvious that labor education is associated with physical, moral, aesthetic and environmental education. Systematically performed work allows

them to develop a sense of duty, responsibility for the task and such personality traits as perseverance, honesty, truthfulness (*Mersiyanova, 2012*).

Occupational therapy allows people with disabilities to feel included in processes which has a beneficial effect on the whole body. They develop the necessary skills: personal hygiene, the habit of monitoring the cleanliness of the room, which creates the conditions for a healthy lifestyle. The inclusion of people with disabilities due to intellectual disabilities in various types of work also allows them to understand the beauty, to enjoy the result.

In the process of studying in special institutions, the teacher deals with a certain category of people with disabilities due to intellectual disabilities, which are significantly different from their peers in terms of mental activity. Knowledge of these features is necessary for effective work, to understand the reasons for the successes and failures of teaching and education, to find adequate ways and methods of pedagogical influence.

S. Mironova noted that people with disabilities due to intellectual disabilities are deficient in all levels of mental activity. They are complicated by the solution of the simplest practical problems, such as combining a 2-3-part image of a familiar object, choosing a geometric shape, identical in shape and size to the corresponding one available on the surface of the recess ("mailbox") and they perform similar tasks with a large number of errors, after many attempts, and the same errors are repeated many times. I must say that the implementation of practical actions in itself is complicated, because the motor and sensory cognition of people with disabilities due to intellectual disabilities is incomplete (*Mironova, 2004*).

Characterizing the thinking of people with disabilities due to intellectual disabilities, we should emphasize the stereotypes, rigidity of this process. That is why the application of existing knowledge in new conditions causes them difficulties and often leads to incorrect task performance.

Specially organized training and education are essential for the promotion of general development, for the acquisition of knowledge, skills and abilities in this category of people. Special training aimed at the development involves, first of all, the formation of their higher mental processes, especially thinking, this important area of correctional work is theoretically justified by the fact that defects in the process of thinking are particularly sharp and in turn, inhibit and complicate knowledge of the world around us. However, it has been proven that the thinking of people with disabilities due to intellectual disabilities is undoubtedly evolving. In the process of correction of intellectual activity there is a development in general and this creates a real basis for social and labor adaptation of people with disabilities.

Thus, the specific features of the psyche of people with disabilities due to intellectual disabilities leads to the need to take into account these features in the training and education in the correctional work of teachers of special institutions and rehabilitation institutions.

3. Psychological preparation of people with disabilities for work

Special institutions are designed to pay great attention to psychologically prepare these people for work and set themselves for a number of tasks.

One of such tasks is to correct the shortcomings of the general mental development, each task is closely related to each other, no task is less important – in order to ensure conscious and strong assimilation of information by clients in the workplace information, skills and abilities (*Sinyov, 2008*).

In the process of labor training, clients form the right attitude towards the messages of the teacher and the development of skills. Performing the necessary processes of measurement,

weighing, determining in the process of work the shape, size, volume, color and other qualities of the material with which the client operates, he is convinced that the knowledge reported by the teacher is important for him (*Kutishenko, 2010*).

People with disabilities due to intellectual disabilities are known to be taught with great difficulty. They often have to go through failures, to make sure they are not always able to properly perform the tasks of a teacher. All this shapes the clients' attitude towards learning as an activity that is not very accessible to them. It should also be born in mind that the importance of education, its benefits and significance for society can be fully understood only from the standpoint of the future, in terms of the role it plays in the social and labor activities of the client after graduation. Such awareness is given to people with disabilities due to intellectual disabilities with great difficulty.

Quite different results are obtained when combining training with work. For work to be successful, a person with a disability must master the ways and purposeful actions needed to achieve the goal. The activity itself should stimulate and support the client's activity. This means that work is impossible without volitional and cognitive processes. A sign of work – the presence of a conscious goal (*Krushelnytska, 2000*) and the results of the work can be felt directly. The work itself and the resulting product (products) – cause people with disabilities due to intellectual disabilities lively interest and encourage them to be active and purposeful.

4. Types of work

In special institutions, different types of work are used to work with clients. Work can take place in the process of learning activities in the classroom, and in the free time of the client.

Labor activity can be divided into four main types:

1. Self-service.
2. Household work.
3. Manual labor.
4. Socially useful work.

Self-care is a constant concern for the cleanliness of the body, for order in clothes, readiness to do everything necessary for this and to do without external requirements, out of internal need, to follow hygienic rules. This attitude of clients to self-service work can be achieved only through painstaking systematic work of the teaching staff and family. In self-service, customers always have a specific goal, the achievement of which is clear and vital for them. By caring for oneself, a person with disability shows some physical and mental effort. People with intellectual disabilities, especially those with complex defects, need to be taught the simplest but much-needed self-care skills. Hygienic culture is as important for a person as the ability to speak, write, and read. Self-care gives a person a wonderful feeling of purity, health: every cell of the body begins to live in an optimal mode, bringing joy to each person. It is through self-care that a person for the first time establishes a known relationship with others realizes his responsibilities to them, seeks to be useful, not to burden others, to manage on their own (*Mersiyanova, 2012*).

Self-service training takes place in the form of joint activities of the teacher and clients, with the leading role belongs to the teacher. Such conditions are created for training, which give each client the opportunity to work at an affordable pace, showing possible independence. The educational material is variable and is selected by the teacher independently depending on the level of development of each person with a disability due to intellectual disabilities. In the learning process, the teacher can use different forms of organization of the educational process:

classes involving different types of activities: game (role-playing, didactic, theatrical, moving game), elementary labor, constructive work on the subject). The success of teaching children with moderate and severe mental disability from people with intellectual disabilities due to intellectual disabilities depends on the variety of methods and techniques used in the classroom. Their choice depends on the content of the lesson, the peculiarities of the psychophysical development of the clients.

In the process of teaching people with disabilities due to intellectual disabilities self-care skills, it is advisable to use the following methods and techniques:

1. Detailed display and explanation of each movement in their sequence. Crucial to this is the active behavior of the client, i.e. his practical participation in this action.
2. Keeping the same method unchanged, the same sequence of actions to develop the algorithm.
3. Repeated repetition of the same actions in a certain sequence.
4. Gradual transition from demonstration to verbal explanations. They help to consolidate skills, develop precise movements, and provide an opportunity to act in accordance with each word of the teacher.

When developing washing skills, it is important not to limit the independence of customers. As some master the skills, the teacher engages them in helping peers. Cultural and hygienic skills are formed in the process of nutrition: the ability to eat independently and neatly, to hold a spoon correctly, etc.

People with disabilities are more helpless in dressing and undressing due to intellectual disabilities. When learning this, it is necessary to follow a certain sequence: what to take off or put on first, where to put clothes. Teaching the client, the teacher at the same time encourages him to actively participate in the process of dressing. The clients listen to what the teacher is saying and gradually begin to do the same. When they become more independent, the teacher offers them to help each other unbutton buttons, lace up shoes, put shoes in a bag.

In household chores, clients take care of furniture, houseplants, perform simple cleaning work, are able to recognize types of clothing and footwear correctly name and classify them. The main purpose of the lesson "Household work" is to master the simplest practical skills of housekeeping. Thus, through classes on household work, the involvement of people with disabilities is formed due to intellectual disabilities to socially useful work available to them and the acquisition of social experience.

Manual work develops design skills, plays an important role in the mental and aesthetic education of people with disabilities due to intellectual disabilities, the development of their creative and technical abilities.

Manual labor is the most important type of work in special institutions; it is aimed at training clients to work with different materials. In addition, manual labor has a corrective effect on the mental development of people with disabilities. For example, special attention in handicraft classes is paid to educating clients in the habit of thinking about the task, rather than immediately performing it. In this regard, it is difficult to overestimate the value of application work, during which it is necessary to pre-determine the place of gluing of individual parts of the application, as well as to follow the sequence of gluing. In the process of such classes, clients develop skills of organization, the ability to act according to a pre-arranged plan.

Application works are used to develop spatial representation, as people with disabilities due to intellectual disabilities experience significant difficulties in the correct placement of parts relative to each other. Similarly, in the independent use of the corresponding words: above, in the middle, around, above on the right, on the left, and so on.

Even more importance is attached to socially useful work. It should be noted that to increase the interest and activity of people with disabilities due to intellectual disabilities in the learning process, it is necessary that they realize the importance and usefulness of what they do, understand that the results of their activities have known practical and social significance. This awareness is facilitated by combining learning with community service.

People with disabilities due to intellectual disabilities need to be taught to put into practice the knowledge acquired in institutions. Initially, in work lessons, clients work with paper and cardboard, textiles, modeling, working with wood. And in the future, gaining some experience, engaged mainly in one of the types of work – sewing, carpentry, cardboard and binding, etc. including self-service work.

5. Organization of classes in leisure time

All the research and extensive practice of special institutions help to solve many issues of training intellectually disabled people to live in the society and to work in the conditions of production, their social and labor adaptation. One third of the study time is devoted to labor training in special institutions. However, this fact does not preclude the expediency of organizing classes in the client's free time.

Extracurricular activities are one of the forms of work with people with disabilities due to intellectual disabilities, which greatly contributes to the education of positive personality traits. It is known that people with disabilities due to intellectual disabilities make poor use of work skills in a new situation. Extracurricular activities promote the application of knowledge and skills acquired during training in practical activities outside the institution.

The content of extracurricular activities should help solve the main tasks facing labor training in special institutions: labor training should be socially significant. That is, it should practically prepare customers for inclusion in the productive work of the society; labor training should be used to correct the psychophysical deficiencies of people with disabilities due to intellectual disabilities; labor activity should contribute to the formation of moral qualities of the client's personality. Extracurricular activities are a natural addition to the types of work performed under the labor training program (*Mironova, 2004*).

In extracurricular activities, clients deal with the same materials and tools as in occupational classes. However, the nature of classes and types of products differ significantly. Naturally, extracurricular activities should not duplicate the types of work that clients study in the labor training program. Types of work should be selected in such a way that the knowledge, skills and abilities acquired in the employment classes and in the general education cycle, can be improved and consolidated in extracurricular activities.

For example, if the clients are engaged in modeling in labor lessons, it is useful to organize work with paper or natural materials in extracurricular activities.

It should be born in mind that the instability of the cognitive interests of people with disabilities due to intellectual disabilities and fatigue from monotonous activities require at some point to change the types of work. Therefore, the content of extracurricular activities should include several different types of work. It is also necessary to take into account the sensory experience of clients and to include in the content of training elements of artistic activity, game moments, as well as observations in nature. In addition to the fact that extracurricular activities are closely related to lessons of labor training and general education subjects, they also have connections with other types and forms of amateur activities of clients. These include, for example, puppet and shadow theaters which involves

the manufacture of products from wood, metal, paper, papier-mâché, making decorations, sewing costumes, etc.

Forms of extracurricular activities, such as excursions to enterprises, agricultural organizations, job interviews, and screenings of films about adult production and work, are very important for labor training and education of people with disabilities due to intellectual disabilities. Such meetings and conversations significantly expand the clients' understanding of the nature of different professions, the specifics of production and arouse interest. It is desirable to carry out such work in special institutions as often as possible. Using a variety of forms of educational work on labor training, the teaching staff of special institutions will be able to more successfully solve the tasks of preparing people with disabilities due to intellectual disabilities to participate in productive work of society, correction of psychophysical shortcomings of clients and education of their positive qualities.

6. Recommendations for the organization of labor activity

Recommendations for the organization of labor activities, which are aimed at correcting disorders in people with disabilities due to intellectual disabilities:

1. Use a variety of work activities. In the process of this activity it is necessary to develop the skills of independence, collectivism, etc.
2. Work should take place in conditions of curiosity, with the use of games, entertainment moments. So, during the shifts in the dining room you can hold a contest, for example, for the best table setting. You can have conversations with customers about what appliances will be needed to set the table, how best to set the table and how it can be decorated.
3. Involve clients themselves in the evaluation of their work. Teach them to express judgments about the quality of work done by their peers.
4. Work should be based on the mental capabilities of people with disabilities due to intellectual disabilities.

7. Conclusions

Work is a necessary condition for the formation of important personality traits. Joint work with the teacher – self-service, household, manual labor becomes important for people with disabilities due to intellectual disabilities and allows them to successfully enter into real labor relations. Improving the process of labor training is one of the main tasks in light of reforming the correctional education. After all, only in work a person can fully and comprehensively develop, reveal his/her abilities and talents and find place of their own in life.

The results of theoretical research indicate the importance of work in the correctional development of people with disabilities due to intellectual disabilities. Specific features of the psyche of people with disabilities due to intellectual disabilities lead to the need to take into account these features in education and upbringing in special institutions. This primarily applies to the use of corrective purposes for different types of work. In special institutions when working with people with disabilities due to intellectual disabilities, different types of work are used. Work can take place in the process of learning activities in the classroom, and in extracurricular activities. Such types of labor activity are used as: self-service, household work, work on care of plants and animals, manual work. With the proper use of various types of work in special institutions, the correction of the development of people with disabilities due to intellectual disabilities will effectively approach their education and training.

The study showed that the independence of clients in work is ensured by the appropriate construction of a developmental environment, targeted assistance to the teacher in mastering the methods of work.

Thus, the results of the study indicate the need for a program of labor training, taking into account such requirements.

1. The program of labor training should be based primarily on the principle of unity of training in knowledge, skills and abilities to work with correctional work to correct their mental disabilities.

2. Learning takes effect as a developmental factor only if the goal is the client himself. True correction of mental defects can be done only by following this principle.

3. The labor training program should include more work aimed at developing creative thinking in clients. To this end, it is necessary to introduce into the program classes with ready-made parts – designers, work with semi-finished products for various construction games, etc.

4. The most important thing to consider is the need to accustom clients to independence as an important quality of personality needed in human life.

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METAPHORICAL CONCEPT “BODY” IN THE SACRED PENTATEUCH TEXTS OF THE ENGLISH BIBLE

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Summary

The aim of the paper is to determine the content and structure of a basic metaphorical concept BODY identified in the Pentateuch texts of the English Bible. The nature and mechanism of the metaphorical concept is considered in the light of recent linguo-metaphorological investigations with the emphasis on distinction between the notions of “metaphorical concept” and “conceptual metaphor”. The method used in the research includes procedures of the analysis of metaphorical concepts elaborated by Yu.V. Kravtsova within the semantic-cognitive approach to study of metaphors and modelling of metaphorization. As a result, first, the composition of the content of the metaphorical concept at the semantic and cognitive levels of its stratification was established; second, the identified cognitive features were structured according to their significance within a given ethno-culture; the third, the hierarchy of senses relevant for the concept bearers was revealed. Overall, the conducted analysis has offered a fresh insight into the author-specific conception of reality as a human body, in its various forms and manifestations.

Keywords: usual metaphor, occasional metaphor, representative, associates, qualifier.

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1. Introduction

For almost half of a century there has been unfading interest among linguists in issues connected with different aspects of the concept: its origins, evolution, acquiring the status of a mental unit, and others. The string of works devoted to the research of this structure is overwhelming, it “grows at an exponential rate” (*Vorkachev, 2011: 65*). Nevertheless, the recent investigations of metaphorical concepts have proven that a multifaceted phenomenon of “concept” is yet (if ever) to be fully comprehended.

In their seminal work “Metaphors we live by”, G. Lakoff and M. Johnson introduced the notion of “metaphorical concept” as a notion equivalent to a notion of “conceptual metaphor” (*Lakoff & Johnson, 2003: 6*). Since then, in the works of some scholars, such as A.P. Chudinov, D.Ye. Ertner, I.M. Kobozeva, and some others, the dividing line between these notions has remained blurred allowing the researchers to use them interchangeably. However, recent linguo-metaphorological investigations have proven that metaphorical concepts are formations other than conceptual metaphors with distinctive characteristics of their own (*Cherkhava, Homyak, Majkowski, 2020; Kravtsova, 2014*). The study of these formations becomes a fresh and promising topic of conceptual research. It allows the researcher to penetrate into the language-reasoning depth, and to look at the phenomena of language through the lens of figurative analogue and associative relations revealing the reality that may otherwise remain hidden or lost.

The present paper *aims* at determining the content and structure of a basic metaphorical concept BODY of the Pentateuch.

Objectives:

- to enhance the distinctive features of the metaphorical concept;
- to introduce the methodological foundation of the study;
- to describe the content and structure of a basic metaphorical concept BODY of the Pentateuch.

The research is conducted on material of the Pentateuch texts of the “The Orthodox Study Bible. The St. Athanasius Academy of Orthodox Theology”, namely: “Genesis” (Gn.), “Exodus” (Ex.), “Numbers” (Nu.), “Deuteronomy” (Deut.). The choice of material for investigation is conditioned by the need for further comprehensive semantic-cognitive research of fideistic discourse in general and the Pentateuch texts of the English Bible in particular.

2. “Metaphorical concept” and “conceptual metaphor”

Although it is impossible to fully describe the peculiarities of the metaphorical concept and the conceptual metaphor within the scope of this paper, yet to sketch out their nature and mechanism seems reasonable and important. Let us first dwell on the phenomenon of conceptual metaphor.

It worth noting that regardless of some innovative developments and revisions of the theory of conceptual metaphor, in the past forty years, the core of the definition of the conceptual metaphor has remained the same. According to G. Lakoff, the metaphor is a fundamental cognitive mechanism that organizes human thinking and language. The conceptual metaphor, in its turn, is “a cross-domain mapping in the conceptual system” (Lakoff, 1993: 203). Its essence consists in comprehension of one thing in terms of something else. In the Biblical metaphor *God is Father*, for example, God is experienced in terms of earthly father-children relations that evokes a range of different meanings. Just few of them are that God takes care of, feeds, protects, and chastens us (His children), like earthly father does. Thus, in conceptual metaphor two conceptual domains or “domains of experience” (Kövecses, 2018; Lakoff, 1993) are activated. The elements and relations of a less familiar conceptual domain (a target domain) are “asymmetrically” (Croft, Cruse, 2004: 196) mapped onto a more familiar conceptual domain (a source-domain). The latter one is structured by a system of frames (scenarios, slots, concepts) (Chudinov, 2003: 71). Importantly, these mappings, that is to say, conceptual metaphors are fixed within a linguistic and cultural tradition of ethnos (Baranov, 2014:32). Although we believe that such metaphors as, for instance, *God is Father, Rock, Fire, Healer, Creator*, and others ought to gain the status of trans-ethnic, because they cross far over the boundaries of one ethnic group. In addition, in the light of the above discussed, it is important to keep in mind that G. Lakoff by stressing the cognitive character of the metaphor has made a distinction between conceptual and language metaphors thereby relegating language metaphors to position of derivatives of the metaphor in thought (Steen, 2011: 28). This tenet entails that language metaphors are possible only because they exist “in thought”.

Like conceptual metaphors, as Yu.V. Kravtsova has shown in detail, metaphorical concepts are mental formations. Indeed, they are the core units of the metaphorical (conceptual) image of the world which integrates figurative analogue and associative conception of the world. However, in contrast with the conceptual metaphor, which is the metaphor by itself, the metaphorical concept (hereafter MC) is a mental construct explicated by metaphors. It is the general figurative conception that reflects stable in the collective and individual consciousness figurative analogue and associative relations of realities, and is objectified via a string of metaphors. Thus, the MC can be simply viewed as a figurative-mental paradigm, a system of

metaphorical variants (with their usual and occasional metaphorical meanings) of a particular figurative-mental invariant (Kravtsova, 2014: 96-98). For instance, in the texts of the Pentateuch, the metaphors *face, countenance, fatness, mouth, hand, foot/feet, finger, foreskin, legs* are representatives, that is to say, metaphorical variants of the figurative-mental invariant, that is MC BODY (*the **face** of the ground, the **fatness** of the earth, the **mouth** of their seed, the **hand** of God, the **finger** of the Lord, etc.*).

Importantly, by analogy with the concept in general, we distinguish between content and structure of the MC. The content of the MC along with verbalized cognitive characteristics (associates) includes its usual and occasional metaphorical realizations (nominative representatives). A structure of the MC is arranged according to the kernel-periphery principle and reflects the hierarchy of senses. In particular, the associations that are the most salient in the consciousness of the bearers of a MC constitute its nucleus and the area around the nucleus. The peripheral zone incorporates individually significant cognitive characteristics (Kravtsova, 2014: 55, 96-98). Overall, a metaphorical concept fixes and at the same time reveals the collective ethnic-specific figurative analogue and associative conception of reality refracted through individual figurative consciousness of its bearer.

Thus, all afore-said demonstrates the need to make a distinction between conceptual metaphors and metaphorical concepts. Metaphorical concepts are complex mental formations that reflect stable in the collective and individual consciousness figurative analogue-associative relations, and are explicated via metaphors in a process of creative verbal activity of their bearers.

3. The method and techniques

To examine the basic metaphorical concepts of the Pentateuch, we adopted the procedures elaborated by Yu.V. Kravtsova within the semantic-cognitive approach to metaphor investigation. In this research, basic metaphorical concepts are understood as those that are objectified by a considerable number of metaphorical nominations. Identification of basic metaphorical concepts is performed by establishing all metaphorical contexts of the Pentateuch texts with their subsequent elucidation in order to ascertain which exactly basic metaphorical concepts the discovered metaphorical nominations realize. For instance, the results of the Pentateuch metaphorical contexts examination demonstrated the presence of a basic MC BODY. The metaphorical nominations that explicate its presence are *face, eyes, mouth, back, countenance, hand, arm, foot/feet, leg, finger, fatness, foreskin*. In the Pentateuch, when this MC reflects the author's figurative idea of different manifestations of objects\phenomena, we find it objectified as the metaphors *face, countenance, eyes, hand, back, finger, mouth, foreskin*. Indeed, the consequences of such manifestations can be terrifying (*I will set My **face** against that soul who eats blood and will utterly destroy him from among his people (Lev. 17:10)*), or bringing protection and support (*the Lord lift up His **countenance** upon you (Nm. 26:6); the Lord brought us out of Egypt with a mighty **hand** and an outstretched **arm** (Deut. 6:21), You stretched out **Your right hand**; The earth swallowed them up (Ex. 15:12)*). In addition, the MC BODY is explicated in association with observable front surface (*the **face** of the ground (Gn. 1:8)*), location in space (*at the **foot** of the mountain (Ex. 19:17)*), fruitfulness of the earth (*the **fatness** of the earth (Gn. 27:28)*), etc.

Subsequent analysis of discovered basic metaphorical concepts, according to Yu.V. Kravtsova, implies seven steps: 1) specifying usual (fixed in the dictionaries) figurative meanings; at this stage, the absence of regular labelling of figurative senses in both American

and British dictionaries complicates the analysis; 2) establishing and interpreting occasional metaphorical meanings; 3) identification of cognitive features of metaphorical projection on the basis of component analysis of all representatives of the MC and cognitive interpretation of semes; their subsequent description in terms of associates and their qualifiers according to hyperonymo-hyponymic relations; 4) verification of established cognitive features by means of semantic-cognitive metaphorical modelling; this allows determining a common semantic-cognitive feature that undergirds metaphorization and is a qualifier of the associate (for instance, the model “human physiological characteristics → terrestrial objects” form”: the submodel “parts of a human body → a piece of land” contour”: *the whole face of the earth (Gn. 1:6)*); 5) description of the MC content at the semantic (usual-metaphorical and occasional-metaphorical sublevels) and cognitive (associative-metaphorical) levels; 6) ranking the identified cognitive features (associates) by the degree of frequency and the nature of manifestation; description of the analyzed MC structure in terms of its nuclear, around-nuclear zone, and periphery (*Kravtsova, 14: 274*).

Thus, the above seven-step technique of the MC analysis reveals the structure and content of a MC, allows the researcher to establish the hierarchy of figurative senses relevant for representatives of a particular linguo-culture and refracted through the lens of the author’s specific consciousness.

4. Results and discussion

The findings of undertaken analysis of the Pentateuch texts have allowed identification of the following basic metaphorical concepts VOICE, CHARACTER, BODY, PLANT EMOTIONS, DESIRE, LIFE, LOVE, and FIRE. This paper will focus on examination of the content and structure of the MC BODY.

As our research has shown, the content of the MC BODY is formed by the following representatives and associates:

I. Semantic level (metaphorical representatives):

1. The usual figurative meanings sublevel (usual metaphorical meanings): *face, countenance, hand/arm, mouth, eye, legs, fatness.*

Face. 1. Front (*Strong, 1996: 691*), somebody’s presence (*Mounce, 2009: 231; Strong, 1996: 691*).

Countenance. Turning the countenance toward someone means showing the favour (*Mounce, 2009: 141*).

Hand/Arm. Strength, power, sovereignty, mercy, provision, and justice (*Mounce, 2009: 317*).

Mouth. 1. Speech, edge (*Strong, 1996: 486*). 2. Opening of things (*Mounce, 2009: 458*).

Eye. 1. A fountain (*Strong, 1996: 473*). 2. Someone’s attitude toward or judgement of a person or situation (*Mounce, 2009: 230*).

Legs. The furniture support (*Mounce, 2009: 263*).

Fatness. 1. The best part of something (*Mounce, 2009:242*). 2. Abundance (*Strong, 1996:350*).

2. The occasional metaphorical meanings interpretation: *face, mouth, back, eyes, hand, arm, countenance, finger, foreskin, fatness, foot/ feet, legs.*

Face. 1. Observable exterior surface (front): *the face of the ground (Gn. 1:8)*. 2. Someone/something’s manifested presence, strongly revealed in a response to something/somebody: *I will set My face against that soul who eats blood (Lev.17:10); I will forsake them and turn*

My face from them (Deut. 31:17). 3. Somebody\something's manifested essence, personality: *There shall be no different gods before My face* (Deut. 5:7); *the Lord make His face shine upon you* (Nu. 6:25).

Mouth. 1. The same as speech (unveiling)\disclosing something): *but by every word proceeding from the mouth of God man shall live* (Deut. 8:3); *forgotten... from the mouth of their seed* (Deut. 31:21). 2. Something abruptly opened and shut: *by opening its mouth the earth shall swallow them down* (Nu. 16:30); 3. The rounded opening to a hollow space: *they would roll the stone from the well's mouth* (Gn. 29:3), *the mouth of his sack* (Gn. 42:27).

Back. Somebody\something partially manifested: *I will take away My hand, and you shall see My back* (Ex. 33:23).

Eyes. Opinion, judgment: *"Lord," he said, "if I have found favor in Your eyes"* (Ex. 34: 9).

Hand. Somebody\something's strength and power manifested: *I will stretch out My hand and strike the Egyptians with all My wonders* (Ex 3:20); *The sanctuary, O Lord, which Your hands established* (Ex. 15:17).

Arm. The same as hand: *the Lord brought us out of Egypt with a mighty hand and an outstretched arm* (Deut. 6:21).

Countenance. The same as face 3: *the Lord lift up His countenance upon you* (Nu. 6:26).

Finger. Divine power in action, manifested (Ryken et al., 1998): *He gave him two tablets of testimony, tablets of stone, written with the finger of God* (Ex. 31:18); *the sorcerers said to Pharaoh, "This is the finger of God"* (Ex. 8:14).

Foreskin. Obstacity, tenacious unwillingness to yield (manifested): *circumcise the foreskin of your heart* (Deut. 10:16).

Fatness. Something characterized by excellence and surplus: *the fatness of the earth* (Gn. 27:28).

Foot/feet. 1. The lower end (part) of somebody or something: *they stood at the foot of the mountain* (Ex. 19:17); *Under His feet was, as it were, a paved work of sapphire stone* (Ex. 24: 10).

Legs. The lower extension of something functioning as support: *legs of a table* (Ex. 25:23, 26).

The most frequently used metaphor: **face** (45 cases).

II. Cognitive level (associates) of the MC BODY:

1. The object manifestation:

1) the object disclosure: 'partial' (*see My back, but My face shall not be seen*), 'complete (as for a man)' (*before My face, the Lord make His face shine upon, the Lord lift up His countenance*);

2) the object disclosure in response to something\somebody: 'strong reaction' (*I will set My face against that soul, I will ...turn My face from them*);

3) realization: 'expressed ability' (*I will stretch out My hand and strike the Egyptians; the Lord brought us out of Egypt with a mighty hand and an outstretched arm; Your hands establish; I have found favor in Your eyes*);

4) activity: 'action' (*the mouth of God, the mouth of their seed, the finger of God*);

5) intensity: 'tenacious resistance' (*the foreskin of your heart*).

2. Dynamics:

movement: 'something abruptly opened and closed' (*opening its mouth the earth; the earth, which has opened its mouth*).

3. Form:

geometry of object: 'the top front boundary' (*the whole face of the earth; the face of the ground*), 'rounded' (*the well's mouth; the mouth of his sack the mouth of Hahiroth*).

4. Form/Function: ‘the extension bearing the weight of another thing’.

5. Quantity/Value: ‘much larger than is needed’, ‘having the most positive qualities’ (*the fatness of the earth*);

6. Correlation: location: ‘the lowest part, bottom’ (*the foot of the mountain, under His feet*).

Verification of established cognitive features by semantic-cognitive metaphorical modelling:

1) “human physical characteristics → terrestrial objects › form”: the sub-model “parts of a human body → a piece of land › contour”: *the whole face of the earth (Gn. 1:6); the face of the ground (Gn. 1:8); the mouth of Hahiroth (Nu. 33:7)*;

2) “human physical characteristics → God › the object manifestation”: a) the submodel “parts of a human body → God › in response to something › somebody”: *I will set My face against that soul who eats blood (Lev. 17:10)*; b) the submodel “parts of a human body → God › the object disclosure (partial/complete)”: *the Lord lift up His countenance upon you (Nu. 6:26); the Lord make His face shine upon you (Nu. 6:25); I will take away My hand, and you shall see My back (Ex. 33:23)*; c) the submodel “parts of a human body → God › realization”: *Your right hand, O God, dashed the enemy in pieces (Ex. 15: 6); I will stretch forth My hand and smite you (Ex. 9: 14), “Lord,” he said, “if I have found favor in Your eyes (Ex. 34: 8)*; d) the submodel “parts of a human body → God › activity”: *Then the sorcerers said to Pharaoh, “This is the finger of God” (Ex. 8:14), The sanctuary, O Lord, which Your hands established (Ex. 15:17); by every word proceeding from the mouth of God man shall live (Deut. 8:3)*;

3) “human physical characteristics → atmospheric phenomenon › form”: the submodel “parts of a human body → condition of the atmosphere › contour”: *the face of heaven’s firmament (Gn. 1:20)*;

4) “human physical characteristics → terrestrial objects › dynamics”: the submodel “parts of a human body → a piece of land › movement (presence/absence)”: *opening its mouth the earth (Nu. 16:30); the earth, which has opened its mouth (Gn. 4:11)*;

5) the model “human physical characteristics → household items › form”: a) the sub-model “parts of a human body → container › contour”: *the mouth of his sack (Gn. 42:27)*;

6) the model “human physical characteristics → buildings › form”: the submodel “parts of a human body → constructions › contour”: *would roll the stone from the well’s mouth, water the sheep, and put the stone back in its place on the well’s mouth (Gn. 29:3, 8, 10)*;

7) the model “human physical characteristics → physical characteristics of plants › the object manifestation”: the submodel “parts of a human body → parts of plants › activity”: *from the mouth of their seed (Deut. 31:21)*;

8) the model “human physical characteristics → God › correlation”: the submodel “personal appearance → God › spatial location”: *under His feet (Ex. 24: 10)*;

9) “human physical characteristics → human mental characteristics › the object manifestation”: the submodel “parts of a human body → human inner parts › intensity”: *the foreskin of your heart (Deut. 10:16)*;

10) the model “human physical characteristics → terrestrial objects › amount/evaluation”: the submodel “personal appearance → a piece of land › a great deal/positive evaluation”: *the fatness of the earth (Gn. 27:28)*;

11) the model “human physical characteristics → terrestrial objects › correlation”: the submodel “personal appearance → a piece of land › spatial location”: *the foot of the mountain (Ex. 19:17)*;

12) the model “human physical characteristics → household items › form/function”: a) the submodel “parts of a human body → device › contour, function”: *legs of a table (Ex. 25:23, 26)*.

Thus, the content of the MC BODY includes the following representatives and associates:

1. Semantic level:

1) the usual figurative meanings sublevel: *face, countenance, hand, mouth, eyes, arm, legs, fatness;*

2) the occasional metaphorical meanings interpretation: *face, mouth, back, eyes, hand, arm, countenance, finger, foreskin, fatness, foot/ feet, legs.*

2. Cognitive (associative-metaphoric) level:

‘the top front boundary’; ‘strong reaction’; ‘action of unveiling\disclosing something’; ‘partial disclosure’; ‘complete disclosure (as for a man)’; ‘rounded and hollow’; ‘abruptly opened and closed’; ‘much larger than is needed’; ‘having the most positive qualities’; ‘expressed ability’; ‘tenacious resistance’; ‘the lowest part, bottom’, ‘vertical part of something bearing its weight’.

The ranking of the identified cognitive features (associates) revealed the following:

– the nuclear zone is constituted by associates with the qualifiers: “the object manifestation (realization)” – 37 %; “form ‘geometry of an object’ – 31 %”;

– the around-nuclear zone is constituted by associates with the qualifiers: “the object manifestation (the object disclosure)” – 14%;

– the peripheral zone is constituted by associates with qualifiers: “the object manifestation (the object disclosure in response to something\somebody)” – 6 %, “the object manifestation (activity)” – 4 %, “the object manifestation (intensity)” – 1 %, “correlation (location in space)” – 3%, “dynamics (movements (presence\absence))” – 2 %, “quantity/value (much larger than is needed)/(having the most positive qualities)” – 1%, “function (‘vertical part of something bearing its weight’)” – 1%.

As we can see, the MC BODY structure is organized in the following way:

– the nuclear zone includes associates with the qualifiers “the object manifestation (realization)” and the “form (geometry of an object)”;

– the around-nuclear zone includes associates with the qualifiers “the object manifestation (the object disclosure)”;

– the peripheral zone includes associates with qualifiers “the object manifestation (the object disclosure in response to something\somebody, activity, intensity)”;

“correlation (location in space)”;

“dynamics (movements (presence\absence))”;

“quantity/value (much larger than is needed/having the most positive qualities)”;

“function (‘vertical part of something bearing its weight’)”.

5. Conclusions

As the findings have shown, at the semantic level, the content of the MC BODY is represented by the usual figurative meanings (*face, countenance, mouth, eyes, hand, arm, fatness, legs*) and the occasional metaphorical meanings (*face, mouth, back, eyes, hand, arm, countenance, finger, foreskin, fatness, foot/ feet, legs*). At the cognitive (associative-metaphoric) level, the following cognitive features (associates) are found: ‘the top front boundary’; ‘strong reaction’; ‘action of unveiling\disclosing something’; ‘partial disclosure’; ‘complete disclosure (as for a man)’; ‘rounded and hollow’; ‘abruptly opened and closed’; ‘much larger than is needed’; ‘having the most positive qualities’; ‘expressed ability’; ‘tenacious resistance’; ‘the lowest part, bottom’, ‘vertical part of something bearing its weight’.

As far as the MC BODY structure, for the author of the Pentateuch, the most salient associations (the nuclear and around-nuclear zone) are qualified as “the object manifestation

‘realization’ (37 %), the “form ‘geometry of an object’ (31 %”, and “the object manifestation ‘the object disclosure’ (14%). The peripheral zone includes associates that are qualified as various “object manifestations” (‘the object disclosure in response to something\somebody’ (6 %), ‘activity’ (4 %), ‘intensity’ (1 %)), “correlation (3%)”, “dynamics (2 %)", and “quantity/value (1%)”, “function (1 %)".

Importantly, among metaphorical representatives of the MC BODY, the metaphor *face* (45 cases) is the most frequently observed. It can be explained, first of all, by the fact that the face is a part of a human body used to detect and identify the individual. As a result, the face of a person is often associated with a person himself. Secondly, a face is the observable front surface of a human body that is not stone-still, but, like the water or land surface, constantly changes its expression and colour palette. In our view, it is this specificity of a human face that has become the motivating metaphorical characteristics for the author of the Pentateuch, and explains the prevailing number of the metaphor *face* among other representatives of the MC BODY.

Thus, the conducted analysis has allowed identification and description of the structure and content of the MC BODY. It reflects the author-specific conception of reality as a human body, in its various forms and manifestations.

Prospects for future research are to analyze the rest of the basic concepts of the Pentateuch and to determine the metaphorical conceptosphere of the author of the sacred texts. Taking in consideration the origin of the Pentateuch, such task seems promising.

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COMPOSITA W POLSKIEJ TERMINOLOGII EKOLOGICZNEJ

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Streszczenie

W obliczu zagrożeń powodowanych przez działalność człowieka dyskurs ekologiczny aktualnie jest jednym z najczęściej powoływanych tematów na świecie (przy czym w Polsce nieco rzadziej). Powszechnie propagowane idee ochrony środowiska naturalnego stanowią z jednej strony element dyskusji naukowej, z drugiej zaś – polemiki potocznej. Ze względu na fakt zaś, że czasu na podjęcie zdecydowanych działań w tym zakresie jest (jak udowadniają naukowcy) coraz mniej, temperatura dyskursu rośnie. Wskaźnikiem coraz bardziej emocjonalnego podejścia do debaty ekologicznej mogą być composita pojawiające się w obszarze społecznościowym, których analiza jest głównym celem prezentowanego tekstu.

Słowa kluczowe: ekologia, dyskurs publiczny, derywaty, composita, termin ekologiczny.

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1. Wprowadzenie

Niektóre właściwości ekosystemów i sama koncepcja ekosystemu są wskazywane jako podstawa do zdefiniowania obszaru badań zwanego ekologią. Problemy, metody, narzędzia i podejścia ekologii są brane pod uwagę przy definiowaniu zadań, problemów i szkoleniu ekologów systemów. Problematyka ta generuje interdyscyplinarny charakter badań. Przykłady metod, koncepcji i zastosowań pochodzą z różnorodnej literatury dotyczącej ekologii, zarządzania zasobami naturalnymi i matematyki, która interdyscyplinarny charakter ekologii dodatkowo ilustruje. Mimo, że problematyka związana z ekologią pojawia się w dyskursie publicznym pod koniec XIX wieku – dopiero na przełomie wieku XX i XXI stała się niemal codziennie poruszonym zagadnieniem. „Ernest Haeckel, który w 1886 r. utworzył wyraz ‘ekologia’, nie mógł przepuszczać, że stanie się on jednym z odznaczających się najróżnorodniejszymi zabarwieniami polityczno-ideologicznymi haseł tego wieku” (*D. Birnbacher, 1993*). Termin ‘ekologia’ współcześnie cechuje się różnymi zabarwieniami znaczeniowymi, które niezwykle daleko sięgają poza pierwotne znaczenie (nadane mu w roku 1886). Neologizm ten przekraczając granice nauk przyrodniczych, wkroczył do nauk społecznych, humanistyki, ekonomii, inżynierii itd. Przeniesienie tego pojęcia stało się tak swobodne, że pojawiły się żądania ochrony tego słowa przed nawykowymi nadużyciami. Dzieje się tak częściowo dlatego, że termin „ekologia” jest zwyczajnie wyrażeniem modnym (*Wróblewski, 1999*). Celem prezentowanego tekstu jest dokonanie analizy composita występujących w ramach dyskursu ekologicznego o zabarwieniu – jak wskazano w tytule – rewolucyjnym, czyli oddającym rosnącą presję związaną z koniecznością podejmowania natychmiast zdecydowanych działań na rzecz ochrony środowiska naturalnego. Materiałem badawczym w tym przypadku były złożenia odnalezione w powoływanych źródłach, a ich katalog został poszerzony o analizę composita pojawiających się w mechanizmie wyszukiwania najpopularniejszego portalu społecznościowego w Polsce. Założeniem bowiem było dokonanie nie tylko analizy dyskursu naukowego, ale i potocznego.

2. Tło i model

Komunikacja polega w przypadku dyskursu na temat ekologii na zderzaniu się różnych dyskursów w negocjowaniu znaczeń, zwłaszcza w odniesieniu do konotacji rozumianej jako pragmatyczna, dotycząca relacji między użytkownikami znaków a samymi znakami (Steciąg, 2008). Środki masowego przekazu wiele uwagi poświęcają różnym kwestiom środowiskowym, takim jak zanieczyszczenie powietrza, dziura ozonowa, choroby przemysłowe, zmiany klimatyczne, życie roślin i zwierząt w ekosystemach, różnorodność gatunków i kwestie wymierania, które kształtują postawy ekologiczne społeczeństwa w skali lokalnej i globalnej (West i in., 2003). W ten sposób powstają wspólnoty ludzi myślących podobnie, a co więcej, społeczności komunikacyjne posługujące się określonym dyskursem (Grzmił-Tylutki, 2000). Ponieważ termin ‘dyskurs’ jest nieco niejednoznaczny i wywołuje dyskusję metodologiczną, należy zauważyć, że na potrzeby prezentowanego artykułu jest on rozumiany w sensie post-strukturalnym, jako narzędzie komunikacji charakteryzujące się specyficznym dla danej społeczności użyciem języka i związany z kontekstem społecznym w taki sposób, że funkcjonuje w innych konkurencyjnych społecznościach komunikacyjnych, tworząc własne modele (Steciąg 2008). Konkurencja dotyczy osiągnięcia hegemonii w opisywaniu świata poprzez zawłaszczanie znaków, a co więcej, tendencji i zachęcania innych do przyjęcia określonego sposobu myślenia (Bugajski, 2006).

Postrzeganie ekologii w Polsce uległo znacznej ewolucji w ciągu ostatnich dwóch dekad. Te zmiany świadomości społecznej są spowodowane głównie oddziaływaniem mediów, które w szerokim zakresie poruszają różnorodne zagadnienia ekologiczne, kształtując postawy ekologiczne zarówno na poziomie globalnym, jak i lokalnym. Efektem tego procesu jest pojawienie się wspólnoty społecznej podzielającej podobne przekonania, a w konsekwencji pojawienie się wspólnoty mowy posługującej się określonym dyskursem. W świadomości społecznej można zaobserwować poważną zmianę, ponieważ ekologia nie jest już postrzegana jedynie jako gałąź nauki, ale raczej jako wyraz podstawowych potrzeb człowieka: przyszłości ludzkości i życia na Ziemi w ogóle. Ekolodzy są zwykle uznawani za aktywistów walczących o ochronę środowiska, a nie za naukowców zamkniętych w swoich laboratoriach (Sztumski, 1999). Przyczyną tych zmian w świadomości społecznej mogą być zarówno ogólnie rozumiane zagrożenia dla przyszłości cywilizacji, mające istotny wpływ na warunki życia, jak i popularyzacja ekologii przez różne osoby lub organizacje aktywnie uczestniczące w debacie publicznej. Ponadto światowe media oferują szeroki zakres różnorodnych zagadnień ekologicznych, od zanieczyszczenia powietrza, dziury ozonowej, chorób cywilizacyjnych, żywności modyfikowanej genetycznie, wzrostu populacji, globalnego ocieplenia i zmiany klimatu, po zagrożone ekosystemy oraz gatunki fauny i flory kształtujące postawy ekologiczne, zarówno na poziomie globalnym i lokalnym (West i in., 2003). Chociaż tematy środowiskowe nie są (i nigdy nie były) na pierwszym miejscu w polskiej debacie publicznej, w wyniku tego procesu pojawia się społeczność społeczna o podobnych przekonaniach, a co za tym idzie – społeczność językowa posługująca się określonym dyskursem (Steciąg, 2010). Dyskurs ekologiczny można wyobrazić sobie dość wąsko jako posiadający specyficzne cechy, które odróżniają go od innych form zachowań komunikacyjnych i które są ograniczone do społeczności językowej ludzi, którzy interesują się ekologią i opisują świat za pomocą własnego systemu poznania i interpretacji. Cechą charakterystyczną jest wysoki poziom świadomości ekologicznej, rozumianej powszechnie jako odpowiednia postawa ludzi wobec środowiska naturalnego, oparta na specjalistycznej wiedzy i silnych przekonaniach oraz systemie wartości, które są motorem ich działania (Papuziński, 2006). Szeroko rozumiany dyskurs środowiskowy, w którym temat wydaje się

odgrywać pierwszoplanową rolę, można zdefiniować jako „całość tekstów (rozumianych jako dające się oddzielić i ustrukturyzowane sekwencje wypowiedzi pisanych lub mówionych), w których relacja między człowiekiem a środowiskiem naturalnym jest definiowana publicznie, tj. w mediach, lub w których omawia się wpływ działalności człowieka na środowisko i jej konsekwencje dla ludzi” (*Jung, 2001*).

Kwestie środowiskowe są coraz częściej przedstawiane w jednym z centralnych pól dyskursu (przede wszystkim w mediach). Nie oznacza to jednak, że takie historie silnie oddziałują na masową publiczność lub generują nową perspektywę spojrzenia na świat. Dyskurs ekologiczny jako gatunek ma poznawczy charakter mozaikowy, fragmentaryczny, chaotyczny i niesystematyczny. Rzadko opiera się na głębszej analizie czy logicznej argumentacji, aby stworzyć poważny artykuł publicystyczny. W efekcie można odnieść wrażenie, że kwestie środowiskowe nie są poważne, ale dziwne lub po prostu zabawne, patrząc z ogólnie dominującej perspektywy. Nie ulega wątpliwości, że taki sposób prezentacji nie sprzyja kształtowaniu świadomości ekologicznej. Poszerzonej wiedzy o przyrodzie, ekosystemie i harmonijnym funkcjonowaniu człowieka i przyrody powinna towarzyszyć wrażliwość moralna (na poziomie jednostki i społeczeństwa), która wpływa na relacje między ludźmi, cywilizacją i przyrodą. Nie można jednak zaprzeczyć, że choć przefiltrowane przez przepisy o masowej komunikacji, przyzwyczajania językowe ulegają zmianie (*Papuziński, 1997*).

We współczesnych systemach słowotwórczych języków słowiańskich, w tym języka polskiego, można zauważyć wysoką aktywność nowego modelu słowotwórczego, na podstawie którego powstają liczne złożone wyrazy (zwłaszcza rzeczowniki) z pierwszym elementem obcym. Status tego typu słów jest obecnie przedmiotem badań wielu językoznawców, a pozycje prezentowane w różnych opracowaniach nie są jednolite, zwłaszcza w odniesieniu do pierwszego składnika złożenia, o których mowa będzie w dalszej części prezentowanego tekstu. Niewątpliwie jednak konstrukcje te mnożą się i są coraz częściej potwierdzane zarówno w odmianach językowych wspierających wyspecjalizowane obszary działalności człowieka (polityka europejska, informatyka, dyskurs ekologiczny itp.), jak i w języku mediów. Słowa te często przenoszą się z języka angielskiego na inne języki w formie odpowiednich zapożyczeń. Aktualnie obserwuje się pojawienie się serii pojęć, które nie mają obcych odpowiedników i niewątpliwie powstają na rodzimej ziemi. Na aktywność nowego modelu słowotwórczego wywiera wpływ kilka ważnych czynników, które powodują zmiany zachodzące w otaczającej rzeczywistości. Nie ulega również wątpliwości fakt, że źródłem tych zmian najpewniej jest proces postępującej globalizacji, który generuje dominującą rolę języka angielskiego w mechanizmach komunikacji (*Długosz, 2015*). Globalizacja bezsprzecznie wspiera unifikację wielu przejawów ludzkiej działalności. Zmienia się również proces komunikacji. Następuje przewartościowanie roli języka w sytuacji komunikacyjnej. Produktywność omawianego modelu słowotwórczego w wielu językach słowiańskich wskazuje również na pewne przejawy unifikacji językowej, zwane niekiedy przejawami słowotwórczości w językach słowiańskich (*Waszakowa, 2005; Długosz, 2011*).

3. Composita

Złożenie w rozumieniu słownikowym to stałe powiązanie dwóch lub więcej wyrazów zachowujących samodzielność gramatyczną i znaczeniową, ale tworzących wspólnie nową jednostkę semantyczną, najczęściej nazwę (*Głowiński, Sławiński, 2010*). W języku funkcjonują różne rodzaje compositów – w języku polskim zestawienia to niemal zawsze osobne wyrazy, czyli konstrukcje analityczne, zdecydowanie rzadziej (jak np. w języku niemieckim) syntetyczne

(Altman, 2016). Do tej pory ciąg słów będących przedmiotem badań analizowano w języku polskim jednak także z wykorzystaniem strukturalnego i semantycznego aparatu metodologicznego. Zwrócono uwagę na strukturę związków, status pierwszego z członków związków, relacje między członami oraz konstrukcję słownikowej definicji pierwszego z członów kompozycji, często opartą o parafrazę formacyjną (słowotwórczą). W mniejszym stopniu badania koncentrowały się na normatywnych i tekstologicznych aspektach funkcjonowania composita (Długosz, 2012). Pojawiają się też pierwsze próby kognitywnej interpretacji znaczenia, polegające na zastosowaniu encyklopedycznych metod semantyki, uwzględniających wszystkie aspekty wiedzy i doświadczenia, w tym przede wszystkim kontekst sytuacyjny (Waszakowa, 2003; Długosz, 2013). Badania tekstologiczne przeprowadzone na composita z pierwszym zdeintegrowanym obcym pokazują, że tego typu złożone struktury, choć tworzone w oparciu o prosty schemat, charakteryzują się wysokim stopniem gęstości semantycznej. Wyodrębnienie wszystkich elementów znaczeniowych często nie jest możliwe jedynie w oparciu o definicję strukturalno-semantyczną, na wiązkach cech semantycznych składników kompozycji i relacji motywacyjnej między nimi. Aby oddać całą treść bogactwa złożonych słów z elementami występującymi w dyskursie o ekologii, należy wziąć pod uwagę czynniki pozajęzykowe, które nie wynikają z czysto formalnej struktury słowa i nie są określone pod względem składu (Długosz, 2015). Semantyka encyklopedyczna zaproponowana w modelu gramatyki poznawczej pozwala na aktualizację większej liczby cech należących do językowego obrazu wybranego elementu rzeczywistości zawartego w danej złożonej strukturze. Opiera się ona na założeniu, że procesy konceptualizacji zachodzące w ludzkim umyśle sięgają do różnych poziomów świadomości, wywodzą się z doświadczenia umysłowego oraz z wszelkiego rodzaju zdolności umysłowych lub zgromadzonej w nim wiedzy. Zatem na znaczenie wyrażenia językowego składa się także pewna dodatkowa struktura wynikająca z „umysłowego dostępu do otwartego zbioru wiedzy dotyczącej danego przedmiotu lub zjawiska” (Langacker, 2009). Z poznawczego punktu widzenia istotne wydaje się postawienie problemu, czy polskie i bułgarskie związki z ‘ekokomponentem’ powtarzanym w serii wyrazów można uznać za semantyczne jednostki języka. Zgodnie z założeniami gramatyki poznawczej jednostkami języka są tylko te struktury, które spełniają warunek swego rodzaju automatyzacji, czyli taką strukturę można uznać za stałą (zrutynizowaną) w danej społeczności językowej do tego stopnia, że jej użycie nie wymaga od mówcy wysiłku budowania za każdym razem od nowa, ale pozwala odtworzyć całość (formę i znaczenie) poprzez przywołanie określonego wzoru (Langacker, 2009).

4. Composita w treściach o problematyce ekologicznej

Puryści językowi postulują ściśle rozumienie pojęcia ekologii. Według tego podejścia zróżnicowanie i niejednorodność kontekstów użycia tego pojęcia jedynie pozornie nastroczą może problemów. O ile jednak w komunikacji naukowej można odwoływać się do standardowych definicji (rządzących) pojęciem ekologii i wymagać szacunku dla tych ustaleń, o tyle trudno jest wysunąć podobny postulat użytkownikom języka potocznego (Cottle, 2011; Ha, Fang, 2012; Pearman i in., 2008; Riedlinger, Rea, 2015). We francuskiej szkole analizy dyskursu tekst uważa się za produkt dyskursu, natomiast analiza dyskursu ma polegać na poszukiwaniu śladów dyskursu w tekście. Oznacza to, że dyskurs każdorazowo wiąże się z interpretacją tekstu, ale także z jego budowa może być przezeń determinowana. Konstrukcja bowiem tekstu lokuje go w ramach określonego dyskursu. Wiąże się to z faktem, że komunikowanie polega na ciągłej aktualizacji dyskursu, a rolą odbiorcy tekstu jest rozpoznanie tła w postaci dyskursu w danym przekazie. Tekst jest w takim razie pewną strukturą znaczeniową, której

odczytanie (zrozumienie) wymaga dostępu do dyskursu, co staje się możliwe dzięki kontekstowi właśnie (Plowens, 2017; Jenkins, 2004). Pojęcie ‘ekologia’ nabiera w dialogu nowych znaczeń, a użytkownicy języka potocznego nie są skłonni do przejmowania znaczeń słów zdefiniowanych przez ekspertów. Niejednoznaczność w języku naukowym i potocznym nie zawsze jest wadą, którą należy usunąć za wszelką cenę. Ważne jest, aby w tym przypadku zaistniała potencjalna niejednoznaczność, czyli sytuacja, w której kontekst wypowiedzi ujednoznacznia rozumienie niejednoznacznego terminu. Tak wszechstronna (wielowątkowa) ewolucja tego pojęcia spowodowana jest nie tylko chęcią nawiązania do żargonu naukowego, którym ma być uszlachetnianie, ale przede wszystkim użyciem źródłowego znaczenia terminu ekologia w języku naukowym, oraz korzystanie ze słownika języka ekologii (Wróblewski, 2004). Dyskurs o ekologii nie jest prowadzony jako wierne przedstawienie, ale jest interpretacją tematycznego fragmentu rzeczywistości na różne sposoby, deformując obraz źródłowy. Informowanie reprezentuje bowiem hegemoniczną perspektywę poznawczą, określoną przez powszechne postrzeganie świata, opartą na codziennych doświadczeniach, dostępną dla wszystkich członków społeczności komunikatywnej (Steciąg 2009). Jeśli dodać do tego coraz większą presję społeczną na kwestie środowiskowe można mówić o rewolucji ekologicznej. Rewolucja ekologiczna jest terminem powoływanym w literaturze – najczęściej jednak definicja pojęcia tego opiera się o dyskurs naukowy (w tym polityczny i ekonomiczny) (Gellert, 2010; Foster, 2010; Foster, 2017; Skinner, Kinderman, Mashburn, 2019).

Zarejestrowane w rezultatach wyszukiwania composita o rewolucyjnym charakterze pojawiają się raczej rzadko (na 90 rekordów tych związanych z presją społeczną w zakresie dyskursu ekologicznego pojawiło się 27, z czego 7 się powtarzało – o czym dalej). Kilka z rezultatów wyszukiwania na podstawie analizy jakościowej autor zakwalifikował do terminologii „rewolucyjnej” (tabela poniżej).

Tabela 1

Wyniki analizy

Kategoria	Composita	Ilość rekordów
Odnoszące się do organizacji czy systematyki działania	ekosystem	5
	ekomachina	1
	ekostrajk	12
	ekomechanizm	4
Odnoszące się do zagrożenia	ekopatrol	7
	ekostraż	2
	ekowarta	1
Odnoszące się do nacisku	ekopresja	10
	ekojazda	1
Odnoszące się do protestu	ekostrajk	9
	ekobunt	6
	ekoprotest	3
Odnoszące się do ocen	ekoświry	1
	ekoterror	11

Źródło: Opracowanie własne

W analizie pod uwagę zostały wzięte wyłącznie composita w języku polskim. Wszystkie z ujętych w analizie composita pojawiają się w organizacyjnych profilach. W pierwszej

kategorii zdiagnozowano nośniki w postaci profili grup, organizacji, stowarzyszeń, które w celach działalności (bardziej lub mniej zorganizowanej) deklarują dbałość o środowisko naturalne. Podobnie w przypadku określeń odnoszących się do zagrożenia – *composita* w tym ujęciu stanowią albo nazwę profilu albo tytuł akcji przeprowadzanych przez poszczególne organizacje publikujące treści na wybranym portalu społecznościowym. Hasła związane z wyrażaniem nacisku z kolei pojawiały się częściej na portalach osób prywatnych – choć powiązanych z kilkoma organizacjami, których rekordy dotyczyły najczęściej. Na szczególną uwagę zasługuje w tej kategorii hasło *‘ekojazda’* – rozumiane w prezentowanym na profilu kontekście może być odczytywane jako swego rodzaju groźba. To samo określenie (oczywiście) pojawiło się również w kontekście ekologicznego użytkowania pojazdów spalinowych, ale ze względu na cel nakreślony we wstępie rekordy wynikające z tego kontekstu nie były brane pod uwagę. Wspomniane (niemal te same organizacje) często powołują się na złożenia wyrażające protest – tu najczęściej pojawiały się w kontekście strajku klimatycznego młodzieży. W zakresie kategorii określeń odnoszących się do ocen również pod uwagę zostały wzięte wyłącznie te, dotyczące charakteru rewolucyjnego – to istotne zastrzeżenie, bowiem na wybranym portalu społecznościowym występuje również profil o nazwie *„Ekoświry”*, ale w kontekście informacji publikowanych na nim należy stwierdzić, że chodzi nie o rewolucjonistów w omawianym tu sensie (protestu, buntu), ale w rozumieniu ludzi *‘pozytywnie zakreślonych’*.

Z dokonanej na potrzeby prezentowanego tekstu zatem analizy (krótkiej i przy użyciu możliwie prostego narzędzia w postaci wyszukiwarki profilowej) zarysowała się jednak obecność rewolucyjnej *‘ekoterminologii’* – poczynawszy od słabego w natężeniu emocjonalnym organizowania się ludzi i wywierania nacisków (w założeniu: pokojowych), aż po działalność bardziej zdecydowaną w swoim wydźwięku (wspomniana *‘ekojazda’* czy działalność *‘ekoterrorystów’*).

5. Podsumowanie

Współczesny świat charakteryzuje się niezwykle szybkimi zmianami. W wyniku postępu, którego nie można zatrzymać, nieustannie pojawiają się nowe problemy ekologiczne i społeczne. Zjawisko wyraźnie widoczne jest w sferze informacyjnej społeczeństw, zwłaszcza społeczeństw wysoko rozwiniętych. Stąd często obserwowane są debaty, dyskusje i kampanie perswazyjne obecne w przestrzeni publicznej, ukierunkowanych na zwiększenie świadomości ekologicznej i promowanie postaw proekologicznych. Z kolei zmiany w środowisku wpływają na język, który również podlega dynamice. Nowe zjawiska, problemy, idee i koncepcje wymagają nazwania, a to generuje konieczność poniekąd tworzenia nowych pojęć. Pod tym względem język polski wykazuje wyraźną tendencję do lawinowego wzrostu liczby i częstotliwości słownictwa odnoszącego się do szeroko rozumianych zagadnień ekologicznych. Procesowi temu bacznie przyglądają się przedstawiciele krytycznego nurtu nowej dyscypliny, która powstała na styku ekologii i języka, czyli ekolingwistyki. Jednym z najczęściej w literaturze przytaczanych aspektów badań wydaje się analiza słownictwa ekologicznego, kluczowych dla tej dziedziny leksemów, ich funkcjonowania w dyskursie ekologicznym, ich konotacji, kolokacji itp. O ile proces adaptacji języka do zmian jest naturalny i jest zjawiskiem innym niż tworzenie swego rodzaju nowomowy w warunkach językowej *‘poprawności ekologicznej’*, to zgodnie z założeniami większości ekolingwistów należy go rozumieć jako *‘budowanie krytycznej świadomości języka’*, który ma odpowiadać zmieniającemu się sposób postrzegania problemów ekologicznych i ich miejsca w życiu człowieka i społeczeństw (Steciąg, 2008). Tak czy inaczej proces ekologizacji języka postępuje, czego rezultatem jest problematyka poruszana w

prezentowanym tekście. Funkcjonowanie pojęcia ekologii w języku naukowym i potocznym jest ciekawym przykładem tego, jak w dialogu specjalistycznym (naukowym) i spontanicznym (w życiu codziennym) słowo zaczyna nabierać nowych znaczeń, a mimo to partnerzy dialogu są w stanie je zrozumieć (Wróblewski, 2004).

Chociaż działania zmierzające w kierunku zapewnienia bezpieczeństwa ekologicznego to tematy wszechobecne w dyskursie publicznym i choć ich zasadniczym celem jest osiągnięcie proekologicznej transformacji, czyli rozwoju trwałego, zdawać należy sobie sprawę, że dyskurs ekologiczny dotyczy coraz bardziej naglących problemów. Przyjrząwszy się wybranemu wycinkowi polskiej rzeczywistości językowej w dyskursie społecznym – właściwie społecznościowym (czyli w praktyce wyrazom złożonym z komponentem ‘eko-’), można stwierdzić, że racjonalnością ekologiczną niekiedy staje w tyle za rewolucyjną. Obie płaszczyzny analizowanego dyskursu jednak dotyczą niezwykle istotnych kwestii społecznych, nie powinna więc dziwić rosnąca temperatura analizowanego rodzaju dyskursu.

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SOCIAL AND CULTURAL FACTORS OF PRIMARY SCHOOL TEACHER TRAINING IN CANADA (1950–1990S)

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Summary

The article analyzes the demographic and economic ties and describes the social and cultural factors that in Canada in the 1950 -1990s determined changes in the tasks, organization, and training of teachers to work in primary school, taking into account the cultural needs of the population and government education policies. The application of historical and genetic as well as comparative methods of documentary sources analysis made it possible to identify the social and cultural-regional conditionality of the tasks and content of teacher training and their preparation for work in primary schools in different provinces. The article highlights the main contexts according to which the professional training of Canadian primary school teachers was carried out: historical, multicultural, traditional cultural, pedagogical, and religious. As a result of the comparative analysis of historical development, it was found that in Canadian cities such as Montreal, Toronto, and Vancouver there were concentrated large settlements of migrants, which played a dominant role in social and cultural development of Canada. Two main vectors of teacher training, multicultural and cross-cultural, which met the requirements of Canadian social environments and educational policy of Canadian governments, are studied. The training programs for primary school teachers in the provinces of Quebec, Ontario, and British Columbia, initiated mainly by the federal government of Canada, are described. The Government of Canada, together with the Ministries of Education, colleges and universities, has been found to have influenced the training of Canadian primary school teachers by creating a variety of educational programs best suited for the needs of society.

Keywords: teacher training, social factors, cultural factors, educational programs, vocational training, primary school teacher, multicultural and cross-cultural education.

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1. Introduction

Today, the education sector is the engine of social and cultural development of countries. Therefore, we consider the modernization of education in Ukraine as a vital source of both economic and social relations improvement. In the educational environment, in line with the development of the New Ukrainian School, there is a growing interest in the best examples of foreign experience in teacher training, including Canada in the chronological framework of the 1950s to 1990s.

Historical and educational studies show that Canada gained significant teacher training experience in the second half of the 20th century, including primary education in the context of educational reform. Additionally, the country's modern school education meets the needs of its citizens' cultural and economic development and is quite successful. In view of this, it is of scientific interest to study the social and cultural factors of primary school teacher

training in Canada of 1950 – 1990s. The results of the research provided new insights into the progress of educational change in the training of primary school teachers in Canada's diverse cultural space.

Despite considerable interest in the outlined problem and numerous studies on the history of Canadian education, the question of social and cultural factors influencing primary school teacher training is not covered in historiographical and scientific sources, so it needs new reading. In this context, both scientific and practical significance is given to the study of social and cultural factors that influenced changes in the purpose and objectives of primary school teacher training in Canada (1950-1990).

Analysis of scientific sources shows that some aspects of this problem have been indirectly studied by both Ukrainian and foreign scientists. Noteworthy are the studies that cover the following: formation of the content of general teacher training (*Akusok, 2009*), professional training of primary school teachers (*Khomich, 1998*), formation of professional skills of future teachers (*Karpinska, 2005*), formation of sociocultural competence in primary school students (*Bakhov, 2014*), training of future teachers within the system of multilevel teacher education in Canada (*Pavlyuk, 2012*), issues in curriculum transformation (*Macdonald, 1977*), the development of multicultural education in the USA (*Gollnik, 1980*), social and cultural training of primary school teachers in Canada (*Dubaseniyuk, 2010*). The role of social trust in teacher education is highlighted in the context of the adoption of the Growing Achievement Assessment Policy in Ontario, Canada. The authors of the above study consider social trust as a means of the meaningful adoption of an educational policy (*Wayne, Ian, 2020*).

Ontario and most Canadian provinces centrally reformed school education based on the pedagogy of measurement and performance. Accordingly, there were paradigmatic changes in the tasks and goals of primary education and teacher training for working in primary schools (*Milewski, 2020*).

It was found that the study of adaptation problems of young teachers to work in school, the problem of teacher burnout prevention and the problem of the impact of school culture and mentoring on the effectiveness of teaching and teacher activity is determined by social and cultural need to preserve human resources in the context of school education renewal in Canada in 2010s (*Whalen, Majocho, Nuland, 2019*).

Some aspects of teacher education and training in Canada have been covered by scholars, but the stated scientific problems have not been fully studied, which makes the scientific and practical meanings of social and cultural factors of primary school teacher training within these chronological limits relevant.

The aim of the article is to clarify and generalize the influence of social and cultural factors on the development of primary school teacher professional training in Canada within the historical and educational progress of the 1950-1990s.

The research is aimed at studying the peculiarities of the primary school teacher training in social and cultural perspective. Methodological approaches are based on the logic of scientific research, namely: historical and pedagogical approach allowed to identify the state of the problem in historical and pedagogical science, the experience in providing theoretical and practical components for the teacher's activity by educational establishments, the level of recognition of children's, their parents', and society needs; culture study made it possible to highlight the connection with a demand to prepare teachers to work in the multicultural environment of Canada in the context of demographic and economic change; hermeneutic approach was vital for a new reading of texts and the discovery of useful ideas in the context of the scientific research.

To achieve the goal, a set of methods was used, namely: general scientific (analysis, synthesis, comparison, systematization, and generalization) was applied to studying the essence of social and cultural factors (statistics) that impacted the change in the goal and methodological approaches to organizing primary school teacher training in line with the educational reforms carried out by Canadian governments in the second half of the 20th century; historical and genetic made it possible to structure factual information; comparative-comparative allowed to distinguish the features of primary school teacher training and components of teacher training at different stages, identify similarities and differences and formulate adequate conclusions; generalization of documentary printed sources had a purpose of integral representation of the investigated problems; the historical-genetic method contributed to the exposure of changes in terms of the study subject and their generalization.

2. Primary school teacher training in Canada in the context of demographic change

The retrospective analysis of Canada's demographic palette shows that in the second half of the 20th century, the majority of the country's population growth was due to immigrants, primarily from European countries, involved in World War II (including Ukraine). According to J. Elliott (1979), during 1951–1981 the demographic growth in Canadians of Ukrainian descent was characterized by a natural increase in emigrants in the postwar years. The influx of Ukrainian migrants to Canada, in contrast to European countries, has decreased significantly in recent years, comparative results are presented in Table 1 (Elliott, 1979: 389).

Table 1

Dynamics of population growth of Canadians of Ukrainian origin (1951–1981)

Years	1951	1961	1971	1981
Number of Canadians of Ukrainian origin (thousand)	395	473,3	580,3	529,6
% to the total population	2,8	2,6	2,7	2,2

Source: developed by the author

Demographic growth in Canada was facilitated by the country's geographical location and the policies of its government, as well as the absence of military battles here during World War II. Note that in the second half of the 20th century, the growth of industrial and agricultural production has necessitated an increase in the number of workers in various industries. Therefore, in the 1945s – 1950s, at the federal and provincial levels, Canadian government supported the involvement of immigrants, who were a powerful productive force at the time, in various areas of the economy and culture. This contributed to the expansion of a multilingual socio-cultural environment of this country.

According to the American scientist Anne-Marie Mooney Cotter, Canada in the second half of the 20th century facilitated the formation of cultural diversity (Anne-Marie Mooney Cotter, 2011). We believe that the above social and cultural changes have had a positive impact on the formation of educational policy in Canada (1951-1991). The federal government (1970-1980) supported the policy of cultural diversity in practice and considered immigration an important social factor in the country's development (Johnson A, 2018). In the study "Multicultural Aspects of Higher Education in Canada and Poland" (2014), Mariana Gavran describes the population of Canada as heterogeneous in terms of ethnic, racial and cultural indicators.

Multiculturalism has been supported by official Canadian policy (over 30 years) and has been based on relevant legislation. Therefore, the established norms in the training of primary school teachers and their preparation for professional activity largely met social and cultural needs of the Canadian population in those years (*Raven, 2018*), according to the Constitution of 1982 (*Canada Act, 1982*) and the Canadian Multiculturalism Act 1985. The recognition of cultural diversity has become a basic principle of Canadian society in the field of education, and the political and socio-administrative system of Canada in those years contributed to the economic, cultural and educational growth of the country (*Dubaseniuk, 2010*).

3. The influence of social and cultural factors on the training of primary school teachers in Canada (1950-1990s)

We agree with the opinion of the researcher A. Romanyuk that economic and social freedom and tolerance of cultural diversity have contributed to the population growth in the largest cities of different provinces of Canada: Montreal (Montréal), Toronto (Toronto), Vancouver (Vancouver). Urbanization has led to the growth of megacities, which were the leading centers of social change. The priority in the changes belonged to the development of an education system for children and youth in the multicultural space of Canada. Therefore, the development of the educational sector included a task for a quality intercultural teacher training (*Romanyuk, 2018*).

It is established that in the 1950s and 1960s, Canada faced a shortage of teachers to work in the primary grades. This problem stemmed from the lack of the necessary number of educational institutions for the primary school teacher training and qualified teachers ready to train young professionals for primary schools. Therefore, there was an urgent need to establish the work of vocational education institutions for the primary school teacher training. Based on the needs of the society for teacher education, in the period of history between 1945 and 1958 teachers from universities in the United States and Europe were invited to work in colleges in various provinces of Canada.

Summarizing the results of historical and educational research it can be stated that social factors favored the development of education because population growth and economic growth in Canada produced the need to improve the quality of children education so as to prepare them for life and work in the condition of economic and cultural growth. It is concluded that the transformation in the training of teachers qualified for the primary schools is due to social and cultural factors.

The retrospective analysis of the impact of Canadian cultural diversity on educational processes suggests that the content of Canadian university education within the chronological framework of 1945-1950 significantly reproduced the cultural and historical traditions of the immigrants from the Old World and is characterized by evolutionary progress. Curricula and features of education in higher professional teaching schools (institutions) mostly reflected the interests of individual cultures with their own educational values and multicultural community.

The impetus for positive changes in primary school teacher education was the use of new information technologies, including distance learning, which increased the number of indigenous students in the northern Canadian provinces (*Dzhurynsky, 2014*).

Cultural factors influenced the curriculum and content development for teacher education in the federal jurisdictions of Canada. Cultural dominants constituted the primary components of the educational environment of vocational training institutions for primary school teachers (*Bates, 2019*).

The study of the factors influencing primary school teacher training led to the conclusion that taking into account the interrelation of economic, social and cultural factors led to the development of a regulatory framework that contributed to the progress in the organization, content and technology of primary school teacher training in Canada.

4. The influence of social and cultural factors on the organization of primary school teacher training in Canada (1950-1990)

The content of teacher training in colleges and universities in 1950-1990's in some way ensured the interests of different ethnic groups as carriers of their own educational values and ethnic consciousness. As noted above, the provincial authorities of Canada paid significant attention to the functioning of educational institutions that provide educational services to indigenous peoples to prepare professionals for work in primary schools. In general, educational institutions that provided primary school teachers for indigenous peoples operated in the province of Saskatchewan at the University of Regina, Indian Federal College (First Nations University of Canada). The number of students in this institution was up to 300 people annually. The task of the school was to provide conditions for higher education for the natives (indigenous peoples – Indians). As confirmed in A. Dzhurynsky's research, graduates who successfully mastered the disciplines of the educational program received a bachelor's degree in the history of culture, art and education of Indians and had an opportunity to work as teachers in secondary schools (*Dzhurynsky, 2014*).

The above-mentioned feature of organizing the primary school teacher training for those aiming to work in primary schools for indigenous peoples and people of different cultures developed in the second half of the 1970s in Montreal, with the support of the Quebec government. To address the problem outlined above, McGill University launched a preschool and elementary school teacher training programs for those who intended to work with Inuit children (Nunavut area). To this end, a specially designed program was stipulated as distance learning for students over 21 who were teaching in one of the schools for Aboriginal people but had no teaching education. The education of these students was funded by local education committees. The period of study lasted 4-5 years and also included two mandatory annual sessions. The theoretical component that students studied at the university, they implemented in practical teaching activities in collaboration with their students. Considerable attention was paid to the organization of professional support for students provided by experienced teachers of this institution and teachers of local schools. At the forefront of educational programs for primary school teachers training were disciplines in the following fields of knowledge: history, culture, traditions, and ethnic features of the Inuit. It was found that providing students with teaching materials did not meet their needs. Therefore, professional training was sometimes reduced to fragmentary and unsystematic acquisition of knowledge. It was time to reform the education of students studying to become primary school teachers. Modernization of educational and professional programs was aimed at combining teaching and professional activity of teachers – with sessions (once a year for 3-4 weeks), held at McGill University (*Dzhurinsky, 2014*).

According to Canadian education documents of those years, the development of multicultural and cross-cultural teacher training programs was initiated primarily by the Federal Government of Canada and supported by the Official Languages in Education (OLE). The program facilitated learning two languages: English and French. The knowledge of both languages provided future teachers not only with social, cultural, and political rights, but also with economic and professional competitiveness (*Duff, Li, 2009*).

The analysis of the work “Increasing the Success of Students Immigrants from Arab Countries” found that in those provinces where teachers were taught in English, French was taught at a basic level because students were not Francophones. Prospective primary school students studied English and French because these languages were widely used throughout the country. Widespread use of French in the provinces of Quebec and New Brunswick (in all spheres of public life), led to studying French in primary school from the first grade. In the rest of the provinces, elementary school students studied French from 4th to 5th grade. During the training period, students took approximately 600 hours of French language courses (Aydin H., Kaya I., 2013), which led to the expansion of the content lines of the language industry in the curricula of primary school teachers.

Schools in the provinces of Ontario and British Columbia developed language curricula including languages and dialects used by the residents of these administrative territories. This approach provided favorable conditions for the education of the members of different ethnic groups – representatives of different cultures living in Canada. To this end, multicultural educational programs for primary school teachers were introduced, taking into account cultural characteristics of different ethnic groups (James, 2001). Thus, in 2002, British Columbia (Vancouver) began teaching future teachers in Chinese at the elementary level. As well, training programs for primary schools in South Asian communities were developed in Surrey (Aydin and Kaya, 2013). It was found that in most schools in British Columbia, teaching was in English and French. Nevertheless, these schools provided conditions for taking exams in other languages: Japanese, Hindi, Chinese, French, Spanish, German (intermediate level), which updated the changes in the preparation of teachers to work in a multilingual environment.

The situation in Quebec with regard to the multiculturally based teacher training was somewhat different. In general, the French-speaking province of Quebec did not accept the idea of multicultural policy, which became widespread in Canada in those years. The prevailing view here was that the standardized status of all cultures could pose a threat, equalizing the status of other cultures to French (Ghost and Abdi, 2004). According to the Charte de la langue française, also known as “Law 101” (“Loi 101”), French remained the official language of the province of Quebec. This law also regulated the French language as the official working language of public administration, public and professional organizations. According to the above law, there were caveats: only students who have mastered the English language at a sufficient level can enter schools that provide education in English (Ciftci, 2013).

At the national level, the educational policy of the Government of Canada was based on the current situation with the languages spoken by most Canadians; Indigenous languages or languages that Canadians want to learn in terms of cultural ties, personal identity, history and mentality (Duff, Li D., 2009). In Canada, within the chronological framework of the study, a characteristic feature of the primary school teacher training was the functioning of a wide range of educational programs, including cross-cultural, which met the needs of ethnic groups in the provinces. Therefore, vocational schools developed adequate training programs for primary school teachers. The Canadian Multicultural Education Foundation (1990) and the Alberta Teachers’ Association offered a number of resources that were useful to teachers when working with students and their parents. Educational programs for primary school teachers corresponded to the disciplines studied by students at school, namely:

- social studies;
- music – familiarizing students with the music of other nations;
- art – the studying of other nations’ writing;
- language arts – introduction and listening to works of art and poetry;

- math – a set of statistics on countries and the creation of charts (*Awid, Dayoub, 2016*).

It was the job of primary school teachers to create safe living environments for children of different ethnic and indigenous backgrounds. In the context of teaching teachers to work in primary school, an important place was occupied by school policy on the student learning organization, which consisted in:

- 1) providing a safe educational environment for all students; implementation of school policy among parents and students; unacceptability of discrimination and disrespect;
- 2) involvement and encouragement of teachers of different nationalities in teaching and learning;
- 3) the provision of interpretation and translation services in different languages for such documents as the “Student Code of Conduct”;
- 4) implementation of teacher diagnostics and support of students;
- 5) staff support and development;
- 6) initiative and organization of multicultural events.

Social and cultural factors (1950-1990) obviously determined changes in the organization and content of primary school teacher training in Canada (colleges and universities) in order to bring the school closer to the language, traditional mental and economic needs of residents of different provinces.

Despite significant democratic initiatives within individual provinces, as discussed above, Ontario developed state strategies for training primary school teachers. The Royal Commission on Education in Ontario (1995) recognized the “climate of uncertainty” in the province (vol. 1, p. 1), which was caused by economic and technological changes, limited public funds, and concerns about the viability of traditional social institutions in Ontario. Although the Royal Commission praised teacher training programs and instructors, it also recommended that the Ontario College of Teachers should monitor the teaching of teachers (*Kitchen, Petrarca, 2013/2014*). Under Ontario’s jurisdiction, a primary school teacher education system was built in these years. Since Ontario College of Teachers was a self-regulatory body as well as an institution that held community teachers accountable, its responsibilities included accrediting all curricula and teachers. As recommended by the Ontario College of Teachers Implementation Committee (1995), this institution was empowered to set standards for teacher education and to ensure that they are taught in accordance with those standards.

Following the adoption of the Ontario College of Teachers Act (1996), the institution accredited teacher education programs. Special attention was paid to the implementation of educational policy and defining the strategy for educational faculties in terms of organizing courses and programs consisting of an introductory program for teachers and systematic professional development (*Darling-Hammond, Lieberman, 2012: 159*).

The Ontario Department of Education, the Teachers College, and the universities are three educational institutions that are closely linked not only to each other but also to teacher education. The Organization for Economic Cooperation and Development praised the interaction of Canadian educational and government institutions in teacher education to meet the needs of Ontario (*Organization for Economic Cooperation and Development, 2011*).

5. Conclusions

It has been studied that in the period of history 1950-1990 the development of the mission and visions of primary school teacher training in Canada was significantly influenced by social and cultural factors. At the heart of the factors described above were the quantitative indicators

of demographic change due to the intensive involvement in various sectors of the economy of immigrants from different cultures. Changes in the training of primary school teachers, as well as education in general, are primarily due to the need at the provincial and state levels to prepare children and young people for life and work in multicultural communities. In Canada, in the years outlined by the chronological boundaries of the study, a system of teacher training was built taking into account the cultural needs of indigenous peoples, national minorities, cultural traditions that have developed in the provinces with mostly permanent population. Canada's achievements in the two-tier management of education (at the provincial and state levels) can serve as a model for building a system of in-service teacher training in multicultural environments common to many countries, including Ukraine.

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IDENTITY CONSTRUCTION ON SOCIAL NETWORKS THROUGH THE PRISM OF DEFENSE MECHANISM “OVERCOMPENSATION”

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Summary

The aim of the article is to study the identity construction in Ukrainian sector of Facebook social network through the prism of defense mechanism “overcompensation”. Psycholinguistic research methods, namely discourse analysis, the method of contextual and intuitive logical interpretation analysis are used in this empirical, inductive study. The study identified that the most desirable characteristics for an individual are hardline attitude, self-confidence, self-control, persistence, buoyancy, ambition for self-development and self-actualization, steadfastness, rebelliousness, adventurism, humanity, kindness. The Ukrainian social network users are strongly attracted by such gender roles as “real man” and “strong woman” as well as such situational social roles as “powerful man”, “rebel”, “learner”, “cynic”, “expert-adviser”, “nihilist”, “sage”, “leader”, “hedonist”. We argue that an individual who constructs his/her personal identity through the defense mechanism “overcompensation” has clearly demonstrated need for power, an individual is convinced of the moral righteousness of what he/she believes in. The need for power motivates an individual in quest for leadership. In this case, an individual is focused on charismatic leadership, that is, he/she positions himself/herself as a person who, by virtue of his/her personal abilities and qualities, is able to have a profound and extraordinary influence on the people around him/her. The preferable psychological types of leader are “hero leader”, “leader-standard”, “erudite leader”. The charismatic leadership is only an immanent orientation of consciousness toward a desired identity, no matter it is real or imagined, but this orientation certainly affects the real identity construction.

Keywords: leadership, social networks, identity construction, discourse analysis.

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1. Introduction

1.1. Interdisciplinary approach to the study of identity. The potential of mass communication technologies, social networks and the blogosphere for communicating with a wider audience inspires research studies, which focus on scientific understanding of modern communication processes from the perspective of the impact of innovative technology on the transformation of various social practices. Research interest in the relevant processes in the areas concerning Internet communication has been reflected in various fields of scientific knowledge, namely philology, psychology, sociology, cultural studies, philosophy, etc. The feasibility of integrating interdisciplinary viewpoints, research approaches and methods developed within the framework of long-established scientific disciplines has contributed to the emergence of a number of interdisciplinary studies (visual studies, digital studies, media studies, etc.). Experience of interdisciplinary research in the field of modern media and communications has proved the usefulness of the interdisciplinary approach to the study of identity (both personal and

social) in the global communication environment in general, and in social networks in particular. Research carried out by Back, Stopfer, Vazire, Gaddis, Schmukle, Egloff, Gosling (*Back et al., 2010*) substantiated and confirmed by experimental data that social networks have effective potential for studying real identity, since they transmit reliable information about a person (close environment, appearance, interests, likes and dislikes, behaviors, etc.), although certain aspects can be idealized. Despite the fact that modern Internet technologies provide ample opportunities for creating identities, researchers have endeavored to expand the scope of studying the social and communicative features of network user identity beyond the outlined circle of the Internet. The reasons were to be found in the fact that the concept “network culture” is used not only to characterize the communicative environment of the Internet, but also to designate a culture based on network logic. Thus, the concept “network culture” can be applied to all society, whose everyday culture is increasingly represented in the form of network structures (*Romm & Luchikhina, 2011*). At present network culture is considered as a new cultural type that has arisen to respond to the spreads of global networks and that is going to replace the culture of postmodernism (*Varnelis, 2020*). Therefore, identity as an object of research will continue to maintain its current broad scope and relevance in the interdisciplinary discourse of humanitarian knowledge.

1.2. Identity on the Web as an object of research. The research area of identity is complex and multifaceted because social, ethnic (national), personal, gender, professional, religious and other types of identity are investigated at present time. The widest possible definition of the research area of identity has made it possible to bring together the research interests of linguists, psychologists, sociologists, cultural scientists and others. So, analyzing personal identity as a person’s awareness of his/her own unity and integrity in space and time, Lysack and Kosenschuk (*Lysack & Kosenschuk, 2016*) distinguished in the structure of personal identity two levels, namely individual, which includes a set of unique, peculiar qualities, and sociocultural, which involves identification with the norms of the social environment and with the symbolic world of culture. Based on analysis of impact of a blogosphere and computer games on identification processes in modern society Lysack and Kosenschuk argue that the main mechanisms of identity construction are narration and reflexive interaction. Bogomolova (*Bogomolova, 2014*) revealed complex differentiation associated with social network users’ ambiguous approaches to identity, that are subjective or non-subjective. The first approach to identity takes the form of disclosure of individual’s true identity in real and virtual life, the second approach to identity manifests itself in an effort to avoid real contacts, withdraw into virtual space, and in the false identity formation. Borgmann (*Borgmann, 2013*) argues that the culture of technology, and of information technology particularly, has opened up fields of diversity and contingency that invite us to comprehend our identities in newly responsible, intricate, and open-minded ways. Davis (*Davis, 2014*) applied classical theories of identity from psychology and sociology to research on the nature of youth identity in a digital age, and conducted an empirical investigation that examined how youth approach identity expression, both online and offline. Terras, Ramsay, Boyle (*Terras et al., 2015*) outlined a psychologically driven discussion of the similarities and differences between online and offline contexts, and factors that influence online content creation and identity. Researchers point to the need for a comprehensive understanding of two factors, namely the increasing opportunities for content production, interaction and collaboration owing to Web 2.0 technologies and the increasing difficulties for users to reflect upon how these new practices have changed behaviors in online compared with offline environments. In this study the personal identity construction in Ukrainian sector of social network Facebook has been researched from the perspective of the communicative-compensatory

processes. The scientific value of the research is in the further development of the social identity theory related to the communication adaptation theory. The research purpose is to study the real or projected identity construction in Ukrainian sector of Facebook social network through the prism of the psychological defense mechanism “overcompensation”.

2. Materials & Methods

General scientific research methods were used in the study: analysis, classification, observation, description. And furthermore, so it is the empirical, inductive study we believe it would be justifiable to use such psycholinguistic research methods as discourse analysis, the method of contextual and intuitive logical interpretive analysis. The starting point of discourse analysis is the statement that we gain access to reality through a language that not only reflects reality, but also constructs it. In other words, language is not just a channel for information exchange about phenomena, facts or behavior of people, but a mechanism that generates and constitutes the social world (*Jorgensen & Phillips, 2002*). When viewed from the perspective of psycholinguistics, the sphere of research interests of identity becomes the external phase of speech production, which affects the grammatical structuring and choice of the word form (the level of the lexical and grammatical structure of the sentence), and the internal phase of the speech-thinking process, in which the explication of intentions is realized, notably the embodiment of the internal (semantic) program of utterance (semantic syntax) and the verbalization of the meanings selected in the internal speech (*Akhutina, 2008*). At the same time, discourse analysis in the framework of psycholinguistic study on the text organization in specific socio-cognitive practices highlights the reflexive mechanisms settled in these practices and defined by them and, in turn, have a reciprocal effect on the practices (*Machikova, 2015*). Therefore, in this study the method of contextual and intuitive logical interpretive analysis was used in order to identify the meanings of publications based on personal experience and logical thinking. Content analysis was used to separate certain patterns into thematic groups, which made it possible to identify the dominant senses in publications. The material for this empirical research are text fragments that are posted on the Ukrainian websites of Facebook social network.

3. Results and discussions

3.1. Social-psychological approach to identity studies. In this paper the conceptualization of identity is based on the social-psychological approach, according to which identity is not so much an internal integrity as a result of coordination, balance between the potential integrity, personal meanings and societal values, which must be recognized by those whose opinion matters in society (*Selyugina, 2012*). Thus, under this approach, identity, on the one hand, is a reflection of internal processes, on the other hand, social systems and context are something that can impose an imprint on the individual (*Patyrbaeva et al., 2012*). The processes of identity constriction at a certain phase of its development and its repeated changes that occur owing to the dialogues between a person and other people are the factors due to which the dichotomies “inner self – consistency with social values”, “stability – variability”, “integrity – adaptation” become internally integrated (*Selyugina, 2012*). Mead’s theory of the ‘Generalized Other’ (*Mead, 2015*) has been chosen as a starting point for this research study. Mead regards a man as a product of biosocial evolution, who has capacity to internalize norms and values, that is, to use the reactions of “Others” to one or another situation to construct his own internal motives for activity. The most important mechanism of social

norm internalization becomes “role-taking” in which the individual responds to social gestures, and adopts common attitudes. The individual assumes the role of another person, and in each imaginary situation he/she as if plays out a certain scenario in front of an audience (Schwabe, 2019). Each social role promotes certain social values. Since each individual has his/her own understanding of social values, each event becomes relevant in the context of the social roles he or she adopts. In the concept of social personality each actor is regarded in two aspects, namely as a performer and as a stage character, the embodiment of some kind of vital energy, attractive personal and business qualities, the effect of which is reproduced by an individual due to his ability to get into character. By simulating and imitating a certain character, a person tries to ascribe the desirable features to himself/herself and then to anchor his/her image in the minds of other peoples (Goffman, 1958). Developing the general idea of social formation of personality, Lysak and Kosenchuk adopted the concept “roleplaying set”. According to their concept, along with a core of personal identity, there is a dynamic roleplaying set that aids a person in adapting to changing life situations, while the core of identity remains intact. Adopting some ideas and opposing others, accepting and sharing new attitudes, values, norms, a person relates them to certain social conditions and environment. That makes it possible to change these attitudes, values, norms depending on the situation, without losing the feeling of own integrity (Lysak & Kosenchuk, 2016). Based on the foregoing, this study will define a personal identity as the embodiment of all roles, characteristics and capacities that are constructed by an individual in accordance with specific realities of the social fabric. The identity construction can occur in a variety of ways. Thus, according to Goffman (1958), the successful staging of any fictional characters requires the same technique to which human beings resort to cope with adversities; they have to abide by the chosen definition of the situation and engage appropriate means of individual expression (Goffman, 1958).

The characteristic technique employed by the Ukrainian social network users is reckoning themselves among important people, ascribing themselves certain qualities, characteristics, character traits with the help of posting on social network accounts the specially-tailored versions of aphorisms and quotations (real and attributed ones) of famous people with accompanying pictures of these people (famous historical figures, literary and movie characters, mythical heroes, national heroes, etc.). Such posts confirm that in the process of socialization the Ukrainian social network users bring themselves into correlation not only with specific social roles, but also with person-related descriptions that correspond to their own personal tendencies. Such ideal figurative constructions, which have a clearly defined value relevance, bear a symbolic meaning, and are the result of interpretation of culture and its symbols (Assmann, 2013), connect a person with his/her contemporaries, form “a common space of experience, expectation, activity, which binding force provides mutual trust and the possibility to select the guidance appropriate to needs” (Lysak, Kosenchuk, 2016). We consider it is important to note the significance and preference of this technique for constructing identity, which is based on the dialogical mutual affirmation “I – You”, “I – We”. Thus, in the view of Gladyshev (2012), the ideal form of identity construction is always a dialogic interpenetration, which contributes to the full self-affirmation of both an individual and society and has the highest social value (Gladyshev, 2012). Since identity construction is a phenomenon that takes place at all levels of mental activity, identity should be studied not only as a contents, but also as a process. This approach provides an opportunity not only to explore types of identity, but also to understand the rationale of the choices made. In the view of Tselmina (2003), the starting point for the social-psychological study of identity is identifying specific forms of psychological defense mechanisms. Tselmina argues that the system of psychological defense acts as one of the mental

determinants of identity, behavior, and personality adaptation, playing along with social and biological determinants an important role in the identity construction (Tselmina, 2003).

In this study social networks are regarded as an environment for compensatory communication, which aims to harmonize the communicative world of the individual if he/her lacks for close emotional ties with people and suffers from deficiency of close, intimate, trusting relationships, that is to say, that is usually experienced in loneliness (Gladyshev, 2001). An important element in studying compensatory communication is a special focus on its pragmatic aspect, that is longing for self-affirmation and gratification of emotional hunger (Vaughan, 1926).

3.2. *Components of personal identity in the Ukrainian sector of social networks.* Communicative-compensatory processes that find expression in the Ukrainian social network users' posts to be the integration of verbal components with visual images of famous people, are triggered by defense mechanism "overcompensation", which at the linguistic level is manifested in the evaluating some person as a unique individuality worthy of admiration. Thus, the real or illusory image of such person is used by a creator of the image to assert his/her power, significance, value, that is, for self-affirmation and enhancing the status. The study of the Ukrainian sector of social networks found that the personal identity construction through the defense mechanism "overcompensation" is carried out in two directions. In the first case, when identification takes place on the basis of desired characteristics owned by a role model, a person answers the question "What am I like?". The study identified the most important components of personal identity, namely:

1. Communicative component. Interactive ability, that is ability to establish contact and then interact on verbal and empathic levels, is emphasized in the following examples: *Never go back to places where you feel ill at ease. Never ask those who once turned down your request. And stay away from those who once hurt you; Never apologize, never explain. Spare your excuses both for ones who like you and, above all, for ones who do not like you. The ones who do not like you will never believe you, and the ones who like will themselves figure out the excuses for you; I explain my success by the fact that I have never made excuses and never listened to excuses* (FB). Among the psychological features of communicative personality behavior that are exhibited in the posts and considered the most desirable in the personal identity structure, predominate hardline attitude, categoricalness, inflexibility.

2. Emotional volitional component. In the examples presented, the peculiarities of volitional self-regulations, which are manifested in situation-specific conditions correlated with the certain degree of calamity and challenge are emphasized, namely self-confidence: *I want that. So it will be* (FB); self-control: *The scale of your personality is determined by thresholds of the problem that can drive you crazy; I haven't not fail. I have just found 10,000 ways that won't work* (FB); persistence: *The hardest thing is to start acting, everything else depends only on perseverance; Sometimes even the maximum of our capabilities is not enough, and we have to do what we previously considered beyond capacity of human beings* (FB); buoyancy: *I am an optimist. It does not seem too much use being anything else; Success is the ability to move from failure to failure without losing enthusiasm; An optimist is a person who buys a wallet for the last money; A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty* (FB).

3. Meaning-making and motivational component related to reflection, self-examination and structuring of perceptual experience. Posts, which reflect the meaning-making and motivational component of personal identity highlight the most important aspects for an individual, which could be objects, subjects or phenomena of environment or inner world of human, and set guidelines for behavior and individual development. Given examples emphasize self-belief:

Be a light for yourself, be a pillar for yourself, stick to your own truth as the only light; How good it is when the switch of your light is in your own hands (FB); ambition for self-development and self-actualization: To improve means to change, to be perfect means to change often (FB); persistence, perseverance: If the wind will not serve, take to the oars (FB); steadfastness: When we long for life without difficulties, remind us that oaks grow strong in contrary winds and diamonds are made under pressure (FB); decisiveness: You can never cross the ocean unless you have the courage to lose sight of the shore (FB); rebelliousness: Twenty years from now you will be more disappointed by the things that you didn't do than by the ones you did do. So throw off the bowlines. Sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream. Discover (FB); adventurism: I'd rather die of passion than boredom; History will be kind to me, for I intend to write it (FB).

4. Moral component. Presented examples evince individual's attitude to the moral values, norms, ideals of society, which in the process of interiorization turn into internal motives and personal meanings. The posts emphasize humanity: *Remember, if you ever need a helping hand, you'll find one at the end of your arm. As you grow older, you will discover that you have two hands: one for helping yourself, the other for helping others (FB); couth: There is overwhelming evidence that the higher the level of self-esteem, the more likely one will be to treat others with respect, kindness, and generosity (FB); kindness: Weakness is not a lack of strength. Weakness is a lack of kindness (FB).*

3.3. *Personal identity from the perspective of social roles.* In the second case, when identification occurs through social roles, an individual answers the question "Who am I?". The study has revealed social roles the Ukrainian social network users are strongly attracted by, namely:

1. Gender roles. They are represented as the normative varieties of behavior expected from an individual as a person of a particular gender: "real man": *An ideal man is an initiator of events, not a consumer of them; The criterion of a real man is not the suffering he has endured. It is the lessons he has learned from suffering; A man of dignity and intelligence can never be ugly; "strong woman": If you regard women as the fair sex, try to drag a blanket at night onto you side (FB).*

2. Episodic situation roles, namely "powerful man": *Power is a drug. Who tried it at least once is poisoned forever; When eagles are silent, parrots begin to chatter; The Prime Minister of Great Britain has nothing to hide from the President of the United States (FB); "celebrity": My reputation grows with every failure (FB); "maverick", "rebel": There's still time, so run away from the prison you've imprisoned yourself in! A little courage, a little risk is only required. And remember: you have nothing to lose. You can only lose your chains, you can lose your boredom, you can lose that constant feeling inside you that something is missing (FB); "learner": If you don't make a mistake, you cannot learn; In chess you can become a great master only if you realize your own mistakes and weaknesses. Exactly like in life (FB); "cynic": Reading the biography, remember that the truth is never suitable for publication; martyrdom: The only way a man can become famous without ability (FB); "expert-adviser": When you long for something, do your best to achieve it. Even if it doesn't work out, you'll know you have tried your best (FB); "nihilist": Only by denying all views of the public of what you're supposed to be you will learn who you truly are. Only by learning who you are you will foresee who you can become (FB); "sage": Fortune knocks once at every man's door, but a person at this time is often in the nearest pub and does not hear any knock (FB); "leader": If you want to build a ship, you need not gather people, plan, distribute the work, provide an effective tool. It is necessary to fill people with a passion for the nondescript sea. Then they will build a ship themselves (FB); "hedonist": I have taken more out of alcohol than alcohol has taken out of me (FB).*

4. Conclusions

In the construction real or projected identity in Ukrainian sector of Facebook social network through the prism of the defense mechanism “overcompensation” the most desirable characteristics and character traits for an individual are hardline attitude, self-confidence, self-control, persistence, buoyancy, ambition for self-development and self-actualization, steadfastness, rebelliousness, adventurism, humanity, kindness. The Ukrainian social network users are strongly attracted by such gender roles as “real man” and “strong woman” as well as such situational social roles as “powerful man”, “rebel”, “learner”, “cynic”, “expert-adviser”, “nihilist”, “sage”, “leader”, “hedonist”. These results prompt the conclusion that an individual who constructs his/her personal identity through the defense mechanism “overcompensation” has clearly demonstrated need for power, he/she is convinced of the moral righteousness of what he/she believes in. The need for power motivates an individual in quest for leadership. In this case, an individual is focused on charismatic leadership, that is, he/she positions himself/herself as a person who, by virtue of his personal abilities and qualities, is able to have a profound and extraordinary influence on the people around him/her. The preferable psychological types of leader are “hero leader” (a person who sacrifices himself for others, has ability to lead people in times of trial, whose courage unites people. People regard hero leader as the standard of justice); “leader-standard” (a person who is loved, idealized and idolized. Leader-standard attracts, charges his/her followers with positive energy); “erudite leader” (a person who is distinguished by the breadth of knowledge). It should be emphasized that the charismatic leadership is only an immanent orientation of consciousness toward a desired identity, no matter it is real or only imagined, but this orientation certainly affects the real identity construction.

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FORMATION OF TECHNICAL AND TECHNOLOGICAL COMPETENCIES IN ELECTRICAL ENGINEERING AND ELECTRONICS IN TRAINING TEACHERS

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Summary

The article analyzes the knowledge of electrical engineering and electronics in the context of the competency approach in terms of remote mode and personal routine of the student. The ability to apply the acquired cognitive experience in the created experimental situations is revealed. It is shown that the monitoring determined the ability of students to build their own knowledge system with the involvement of the latest information technologies. The expediency of using innovative methods and technologies at different stages of forming the quality of training of future specialists in electrical engineering and electronics in the conditions of distance learning is determined. The main types, functions and modes of using computer support in the distance learning process are presented. Emphasis is placed on the need to make the right correction, to develop individual approaches and programs, to take into account psychological and pedagogical indicators and criteria for the effectiveness of distance learning. It is noted that the use of computers allows you to find the best ways to solve problems, while improving the learning process. The requirements of the experiment, the unity of experimental and theoretical methods of cognition are analyzed. The basic ways of motivation of activity of students and features of formation and development of competence-worldview professional qualities of the future teacher of technological educational branch are opened. It is determined that the process of professional training should solve the problem of forming a competent specialist who is fluent in modern innovative technologies and ready for constant professional growth, social and professional mobility.

Keywords: monitoring, distance learning, technical and technological competence, virtual environment, cloud technologies.

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1. Introduction

In the extreme conditions of today in Ukraine, issues related to the formation of technical and technological competencies in electrical engineering and electronics have become extremely important. For teachers of vocational training, the problem of their professional training of students in this discipline occupies one of the leading places in the educational process. Distance learning has made its adjustments in the educational information space, encouraging students to better acquire knowledge. And this is natural. After all, the labor market is making more and more demanding requests to future specialists – masters of their craft, erudite, highly

qualified, capable of introducing innovative technologies into their work. And this significantly affects the social order. Tireless research and studies in the field of electrical engineering and electronics in any case lead to new ideas, to a new vision of solving the problem in the field of education.

The aim of research is to study the problem of formation of technical and technological competencies. By monitoring to investigate the level of formation of electrical engineering and electronics in future teachers of vocational education in distance learning.

2. Presentation main research material

The information influx of new educational technologies has led to the revision of the methods of teaching electrical engineering and electronics in technical educational institutions and in the system of training teachers in vocational training in particular. In the process of studying electrical engineering and electronics, this went unnoticed and became especially relevant after Ukraine's accession to the Bologna Agreement, where the main emphasis is on independent work. All this highlighted a number of issues regarding the revision of the structure and content of electrical engineering and electronics in the context of distance learning.

The use of modern computer-aided learning technologies (CTT) allows a deeper understanding of the processes that take place in complex electrical systems as a whole. Currently, technological education of students should be focused on the study of new production processes, modernization of production relations, which include information and communication and other modernized means of production (automation, robotics, circuitry, laser technology, etc.) (Osadchy, 2012).

Creating something original that has not yet been tested in the teaching of any discipline is now problematic. Cloud technologies offer such a variety of methods that it is enough to demand everything wisely and wisely. You need, as always, a persistent search. Therefore, each teacher must choose for themselves those methods that give the maximum result for the development of creative personality.

The level of education should provide students with the ability in the future to create and implement innovative technologies, the theoretical basis of which probably has not yet been developed during their studies at the university. Information technology has a great impact on young people. It forms a new style of information processing, a new style of thinking – “mosaic-clip” (ie not book images, but video clips of the global computer network), and this requires updating the didactic system, developing adaptive methods and learning technologies.

The phenomenon of “clip thinking” has been talked about recently. This problem is considered in more detail in the works of leading foreign sociologists, such as the American futurist E. Toffler. In his monograph “Third Wave” he writes that “... instead of obtaining spatial” bands “of ideas, collected and systematized, which relate to each other, we are increasingly crammed with short modular flashes of information – advertising, teams, theories, snippets of news, somehow circumscribed, truncated, which do not fit into our former mental concepts” (Toffler, 2010).

Prominent British scientist James Martin, who predicted the advent of the Internet, conventionally divided people into two types:

– “people-books” (receive information from books, have figurative, logical thinking, steady attention, ability to analyze). This is the older generation (educators, teachers);

– “screen people” (receive information from cyberspace, have mosaic-clip thinking, perceive the world through the prism of “pictures”, TV and video images). These are young people, students, pupils (*Martin, 2012*).

With this thinking, the student seems to live in virtual reality, which is filled with a mosaic of disparate, unrelated facts, parts, fragments of information. He somehow imperceptibly gets used to this kaleidoscope: exciting music, chatting, playing online games, dating and more.

Today, ICT provides the opportunity to conduct distance lectures, seminars, demonstration of video and animation materials on various educational servers, work on educational telecommunications projects, the organization of distance competitions in electrical engineering and electronics, etc. At the same time, distance learning servers create reliable conditions for interactive communication with students via the Internet, including in real time.

The introduction of innovative technologies has significantly improved the quality of the educational process, has a positive impact on the development of independent and individual work of students. Given the unforeseen circumstances, distance education has been widely used. Practically, it is created on virtual learning tools. Its importance is difficult to overestimate, especially for those who have undergone inclusive schooling.

Remote technologies are educational technologies that are created in a virtual space for interaction “student – teacher”, “teacher – student” online. For example, an online lab (virtual lab) is an important segment of the educational environment through which a “remote experiment” can be performed.

Distance education is unique, because in its essence it combines elements of full-time, part-time, distance and evening learning based on information technology and multimedia systems. It is characterized by flexibility, modularity, cost-effectiveness, maximum use of information technology.

Distance education, like the traditional learning process, uses the following didactic teaching methods adapted for cyberspace: informational, virtual, reproductive, problem-based, research, heuristic, design, individual, gamification (game elements). Therefore, virtually performed experiments and experiments in artificial laboratory conditions complement the full-scale laboratory work. This is an example of empirical knowledge of objective reality, but at the same time an effective method of scientific knowledge. The effectiveness of the virtual application of research and experimental work is undeniable. This indicates the positive dynamics of the process of training future teachers of vocational education in electrical engineering and electronics, which is implemented on the integration of theoretical and practical experience and virtual-experimental work. First of all, this is facilitated by a well-constructed learning space on the Internet and around the student.

If distance education is considered in terms of competence, then learning is in line with the interaction of aspects: educational, professional and social. However, this form has some disadvantages: the service server can be underloaded or overloaded depending on the number of listeners. An innovative solution to this was the use of cloud technologies (Internet technologies). Cloud technology is a model for providing exciting and convenient network access at any time. You can easily find relevant information, share it with other users from anywhere in cyberspace.

Cloud Computing is a system that allows remote processing and storage of data. Cloud servers provide unlimited opportunities to build a variety of learning situations in which students gain experience. They are indispensable in the work of the teacher. The use of cloud technologies is increasing rapidly. This makes knowledge even more accessible. Now you can get the information you need not only indoors but also outdoors.

Thus, cloud technologies and the virtual educational space created on their basis are an innovative alternative to the traditional educational process. The cloud network opens up incredible opportunities for those who are learning to communicate with a wide range of participants, regardless of their location (*Bikov, 2010*).

Cloud technologies for distance e-learning provide its high level: increase the efficiency of students' learning activities, increase interest in learning the discipline, the development of logical thinking, memory, save time. Creating blogs, the use of art scribing (the method of visualizing complex text is simple and accessible by sketching images simply while receiving information) promotes better learning of complex material. The teacher's inclination to virtualization, to involve cloud servers in their activities inspires great hope that online technologies will continue to create positive conditions for student self-realization, development of his creative abilities, leadership skills, worldviews.

The current situation under duress has reduced classroom activities, but instead has incredibly increased access to online information. And this promotes active cooperation of students with teachers and with each other, as evidenced by the results of monitoring. There is complete confidence that in the future, virtual laboratories will operate at full capacity.

Monitoring (a system of constant monitoring of phenomena and processes in education and society) is one of the powerful levers for increasing the quality of professional training of students. It provides a direct answer to the question "Why such a level of knowledge and how to improve its effectiveness?"

Monitoring research in electrical engineering and electronics, which aimed to obtain reliable information about the state of acquisition of theoretical knowledge and practical skills in the virtual environment, was conducted on the following parameters: cognitive aspect (auditory and visual memory, attention, professional thinking, intelligence); creative abilities (talent, skill); personal qualities (motivation to choose a profession, incentive to study, sociability, honesty, diligence, interests, views, beliefs).

The main content of monitoring was to obtain accurate data on the implementation of effective independent learning activities using ICT in distance education, which became the technological basis of the system of knowledge in electrical engineering and electronics. This made it possible to accumulate and process a huge amount of various information, which proved to be a solid basis for making important management decisions.

As a result, it can be argued that the formation of professional skills and abilities of the future specialist depends not only on intellectual abilities, but also on personal attitude to professional activity and awareness of its significance, social value. In essence, self-knowledge cannot stand still: the future employee must adequately perceive himself and others, think critically and creatively, manage stress and successfully solve problems. It is monitoring that allows us to delve into the essence of the educational problem, the identification of which is the first step towards overcoming it. For the purpose of independent search of the necessary information in a network to replace classroom employment with a traditional technique it is expedient:

- create a site of virtual access to lectures online;
- develop and download tasks for individual training, which will form the professional competence of future professionals;
- to introduce blended (hybrid) learning technology, which allows to create virtual groups that will be able to use cloud technologies.

Monitoring confirmed four levels of experience in the process of teaching a student in a particular subject, differentiated as follows (*Atamanchuk, 2006*):

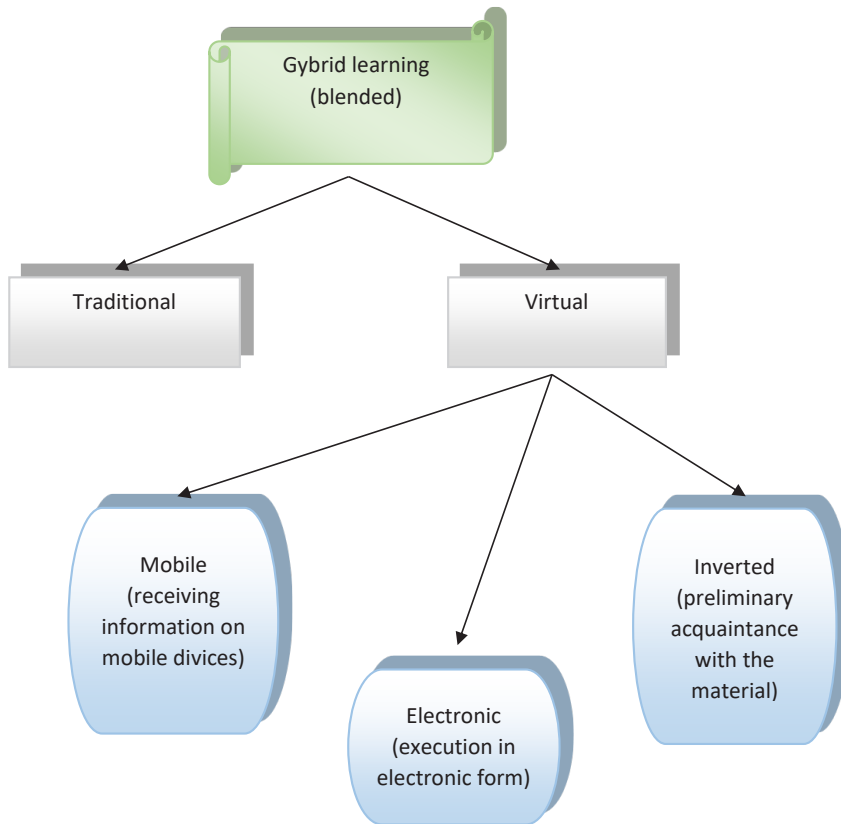


Fig. 1. Types of learning in the information environment

The first level. If the task contains the purpose, situation, actions concerning its decision, and the student should draw a conclusion on conformity of all components in structure of the task, it is activity on recognition (the student only distinguishes object or actions from their analogues, showing superficial acquaintance with object or process of cognition, with their external characteristics).

The second level. If there is a goal and a situation, and the student applies pre-learned actions to solve it, then it is a reproductive activity. He is able not only to choose from a number of features a particular object or phenomenon, but also to understand the meaning of the concept, to reproduce the meaning.

The third level. If there is a goal in the task, but the situation in which this goal can be solved is not completely clear, then the student must find out the situation and take appropriate action. This is a heuristic method. The heuristic action does not occur according to this algorithm, but according to the created or redesigned one.

The fourth level. If the task has only the purpose of activity, and the situation needs to be found, and actions are directed on achievement of the purpose, it is a productive creative action. In the process of such creativity the necessary information is received.

To assess the performance of each task V. P. Bespalko proposes to determine the number of significant operations leading to the solution of the test (p). Comparing the student's answer with the standard (p) by the number of correctly performed test operations (a) makes it

possible to determine the coefficient of assimilation (K_j), which is calculated by the formula (Bespalko, 1989):

$$K_j = \frac{a}{p};$$

Determining the number of significant transactions, including for the tasks of the second, third and fourth levels it turns out to be somewhat problematic for some reasons:

- subjective statement of the fact of significance of this or that operation (the number of operations performed in the tests will change, and this will affect the calculated coefficient of assimilation in one direction or another);
- the process of selecting tests and calculating its results is complicated;
- the basis of operations may be different (in fact, the wrong solution of the least significant of the operations is equated either to incorrect execution of the task, in one case, or to incomplete or inaccurate, in another case).

You can use a scale from 0 to 2 points to evaluate each of the tasks of the experiment. The second and third level of mastering: 2 points – for correct and final performance; 1 point – for correct but partial, sometimes for inaccurate performance; 0 points – for erroneous performance of the task. For the tasks of the first level of mastering the scale of two grades: 1 point – correct; 0 points – incorrect.

The coefficient of assimilation introduced by V. Bespalkom, adapts to certain conditions and is calculated for a single level of learning according to the following formula:

$$K_i = \frac{N_i}{L_i},$$

where K_i is the coefficient of the i – th level of assimilation;

N_i – the number of points received by the student for completing the tasks of the i -th level of mastery;

L_i – the maximum number of points that can be obtained for the tasks of the i -th level of mastery.

Table 1 and Table 2 show a comparison of the coefficients of knowledge acquisition in the control and experimental groups in the process of studying the course “Electrical Engineering” and “Electronics”.

Table 1

Distribution of coefficients of knowledge acquisition in electrical engineering

Type control	Group	Levels assimilation			Generalized Coefficient of knowledge acquisition
		I level	II level	III level	
molding		0,92	0,75	0,51	0,62
ascertaining	control	0,83	0,61	0,42	0,52
	experimental	0,88	0,65	0,46	0,56
final	control	0,80	0,64	0,53	0,59
	experimental	0,78	0,73	0,62	0,67

To study the formation of technical and technological competence, we conducted an experiment with the participation of 232 students 2, 3, 4, courses, studying at the bachelor’s degree in “Professional Education (by specialization)” in various higher education institutions. At the same time, they were tested, their current and resulting success in the studied discipline

“Electrical Engineering” and “Electronics” was taken into account and the generalized coefficient of formation of technical and technological competence was determined. They studied in the control group according to the classical program and the experimental group according to the experimental program.

Table 2

Distribution of coefficients of knowledge acquisition in electronics

Type control	Group	Levels assimilation			Generalized Coefficient of knowledge acquisition
		I level	II level	III level	
molding		0,92	0,73	0,50	0,61
ascertaining	control	0,82	0,59	0,41	0,50
	experimental	0,88	0,63	0,45	0,55
final	control	0,79	0,62	0,52	0,57
	experimental	0,76	0,72	0,61	0,66

From table 1 and table 2 it follows that in the experimental groups the generalized coefficient of knowledge on the results of the final control is 0.67 (compared with 0.59 in the control groups) in electrical engineering and 0.66 (compared with 0.57 in control groups) in electronics. This is reflected in the increase in the coefficient of assimilation of the II and III levels in the experimental groups in comparison with the control groups.

3. Conclusions

Thus, the ways of formation of technical and technological competencies by future teachers of professional training in the process of studying electrical engineering and electronics are outlined. The monitoring of the formation showed the results of the experiment. The structure of the information-learning environment allows each student to determine their own trajectory in the acquisition of theoretical and practical knowledge. The use of distance learning methods has raised the importance of individual abilities in acquiring knowledge.

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LEARNING GOOD PHARMACEUTICAL PRACTICES AS A COMPONENT OF PROFESSIONAL TRAINING OF PHARMACY SPECIALISTS

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Summary

The article presents the results of the analysis of alternative methods of studying the Good Pharmaceutical Practice complex, introduced at the Lviv Polytechnic National University. The optimal structure of the curriculum for student's education by the specialty 226 "Pharmacy, Industrial Pharmacy" was determined to improve the system of training of specialists, who need understand the current pharmaceutical legislation of Ukraine and prospects for its development.

Structural-and-logical schemas based on the Guidelines of Good Pharmaceutical Practices that greatly facilitate students' perception and assimilation of all the needed information have been elaborated.

The development of such schemes by students with teacher assistance allows to improve the perception of the material and strengthen skills for independently analyzing. While performing the task, students to learn and understand certain aspects, such as the fact that the quality of the medicines is "incorporated" into the drug at the stage of pharmaceutical development, and then confirmed during preclinical and clinical research. Further, the medicine receives a "permit to life", when passing state registration. After that, the specified quality is reproduced for each series at the stage of full-scale pharmaceutical manufacturing, it is maintained unchanged at the stages of storage and distribution and, finally, it is delivered to patients in pharmacies.

The study of the possibility of mastering the discipline “Good Practices in Pharmaceutics” by students of specialty 226 “Pharmacy, Industrial Pharmacy” during the practice at the existing pharmaceutical enterprises can be considered perspective.

Keywords: pharmaceutical education, Guidelines structure, introspection.

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1. Introduction

Adaptation of Ukrainian legislation to the *acquis communautaire* of the European Union is one of the main components of the European integration policy of Ukraine. Accordingly, the regulatory systems of the EU, Member States of EU and Ukraine should be harmonized (or compatible) concerning the pharmaceutical sector as a whole and pharmaceutical education in particular. The legislation of Ukraine and the EU should include the same terminology and implement common standards. For example, the decision to register medicines or other medical product occurs in different legislative environments, using different procedures. To resolve this issue, national legislation should include references to EU law. Ukraine is not an EU member state and this creates problems for approximation of the Ukrainian legislation to the EU law. However, the European integration processes taking place in Ukraine encourage both scientists and practitioners to implement EU legislation in all fields of the national economy.

The set of Good Pharmaceutical Practices rules, especially Good Manufacturing Practice is one of the fundamental elements of quality assurance of the process of production and turnover of medicines and other medicinal products (Pittenger, Chapman, Frail, Moon, Undeberg, Orzoff, 2016; Patel, Chotai, 2008). Implementation of rules of the Good Pharmaceutical Practices into the field of medicines turnover allows to guarantee their quality, to satisfy needs of the national health care system and each patient in quality medicines (Abdellah, Noordin, Ismail, 2015; Mitroka, Harrington, DellaVecchia, 2020). Many leading Ukrainian scientists investigate the possibility of elaboration of the Good Pharmaceutical Practices complex and structuration of the relevant legal document: Gromovyk B., Gubin Yu., Lebedynets V., Hudz N., Kalynyuk T. and others (Hromovyk, Horilyk, 2013; Lebedynets, Tkachenko, Gubin, Zborovskaya, Romelashvili, Spiridonov, 2017; Hudz, Kalynyuk, Bilous, Smetanina, 2013). However, the possibility of step-by-step teaching at the various levels of specialist training for pharmaceutical branch and the gradual study by students of the specialty 226 “Pharmacy, Industrial Pharmacy” the whole complex of Good Pharmaceutical Practices were not studied.

The research aimed involving student audience to analyze the alternative methods of studying the complex of Good Pharmaceutical Practices, introduced for educational process at the Lviv Polytechnic National University and to determine the optimal structure of curriculum for the student’s education by the specialty 226 “Pharmacy, Industrial Pharmacy” to improve the system of training of specialists, who need understanding the current pharmaceutical legislation of Ukraine and the prospects for its development.

2. Results and discussion

The object of study involves the legislation concerning whole Good Pharmaceutical Practices complex, curriculums of medical and technical higher educational establishments in Ukraine.

According to the order of the Ministry of Health care of Ukraine, the learning of the discipline “Good Practices in Pharmaceutics” is conducted by the credit-modular system for students at the fifth course of medical universities since 2013 (*Krychkovs'ka, Zayarnyuk, Bolibrukh, 2017*). The main objective of this discipline is setting in students the basic concepts of Good Pharmaceutical Practices, focusing on the main requirements of Good Practices and features of each step of the medicine life cycle: pharmaceutical development, preclinical research, clinical trials, registration (re-registration) and amendments to the registration documents, mass production, storage, wholesale and retail sale of medicines (*Koster, Schalekamp, Meijerman, 2017; Pearson, Hubball, 2012; Meijerman, Nab, Koster, 2016*).

The Good Pharmaceutical Practices complex and the list of legislative documents that regulate them in Ukraine are given in Table 1.

Table 1

Guidelines governing the Good Pharmaceutical Practices complex in Ukraine

The part of Good Pharmaceutical Practices complex	Guidelines governing the Good Practices	Definition of the certain Good Practices
Good Laboratory Practice	<i>Medicines. Good Laboratory Practice. Guidelines. 42-6.0:2008</i>	Principles and rules of the organizational processes and the conditions, under which preclinical studies of safety for people's health and environment are planned, performed, inspected recorded and reported as a report and archived.
Good Clinical Practice	<i>Medicines. Good Clinical Practice. Guidelines. 42-7.0:2008</i>	Principles and rules for designing, conducting, performing, monitoring, auditing, recording of clinical trials that provides assurance that the data and reported results are credible and accurate, and that the rights, integrity, and confidentiality of trial subjects are protected.
Good Manufacturing Practice	<i>Medicines. Good Manufacturing Practice. Guidelines. 42-4.0:2015</i>	Set of rules for the organization of medicines manufacturing and quality control, which is an element of the quality assurance system that provides the stable production of medicines according to the requirements of technological regulatory documentation and performance the quality control by a certain method.
Good Storage practice	<i>Medicines. Good Storage practice. Guidelines. 42-5.1:2011</i>	Set of rules and requirements, that ensure the quality of medicines and other medicinal products during storage and transportation at all stages of their turnover.
Good Distribution Practice	<i>Medicines. Good Distribution Practice. Guidelines. 42-5.0:2014</i>	Set of rules and requirements, that ensures the quality of medicines during management and organization of their wholesale distribution at all stages.
Good Pharmacy Practice	<i>On approval of the Guidelines “Good Pharmacy Practice. Pharmacy service quality standards”. Order Ministry of Health care of Ukraine, No 455, 30.05.2013</i>	Set of rules and requirements for pharmacy professional's activity to promote public health and prevent disease, dispense and use of prescribed medicines, self-medication, as well as recommendations concerning medicines prescribing and administration.

Lviv Polytechnic National University according to the Law of Ukraine “On Education” provides the specialists training by the three-cycle system: bachelor – master – Ph.D. student. Students training occurs by the educational-and-qualification characteristics (EQC) and educational-and-professional (EPP) and educational-and-scientific (ESP) programs, which provide theoretical, practical and scientific training, including independent research activity under the supervision of a scientific advisor and consultants from research institutes or industrial laboratories by mutual agreement on scientific cooperation and student’s practical training (Hromovyk, Horilyk, 2013). The educational process of future pharmacists is carried out by the curriculum for the specialty 226 “Pharmacy, Industrial Pharmacy” approved by Lviv Polytechnic National University and provides three-cycle training, namely: 240 ECTS credits for education at the first (bachelor) cycle, 90 ECTS credits at the second (master’s) cycle and 60 ECTS credits at the third (educational-scientific) cycle for the degree of Doctor of Philosophy.

The result of the conducted analysis of our curriculum showed that considerable attention is paid to the study Good Pharmaceutical Practices complex throughout the training period of future specialists for pharmacy and industrial pharmacy. Primarily, at the first (bachelor) cycle of higher education, the problems of regulatory pharmaceutical practice and distribution are considered in such disciplines as “*Pharmacy Drug’s Technology*” (issues of Good Pharmacy Practice and Good Storage Practice), “*Management and Marketing in Pharmacy*” and “*Legal Regulation of Pharmaceutical Companies Activity*”. Disciplines “*Clinical Pharmacy*” and “*Laboratory and Functional Diagnostics*”, “*Quality Control of Medicines*”, accordingly, address issues of Good Clinical Practice and Good Laboratory Practice. The questions on Good Manufacturing Practice have an important place when learning such disciplines as “*Designing Chemical-and-Pharmaceutical Manufactures*”, “*Industrial Pharmaceutical Technology*” and “*Modeling and Design of Chemical-and-Pharmaceutical Enterprises in GMP System*”. The various types of practices (technological, pre-degree, research) at domestic enterprises where Good Manufacturing Practice rules are implemented (“*Arterium*” Corporation, a pharmaceutical company “*Darnytsia*”, PJSC “*Pharmak*”, Ltd. “*Ternopharm*”, etc.) are important for the professional and practical training of pharmacists.

However, the curriculum exactly for the third (educational-and-scientific) cycle includes a complex professional-and-oriented discipline “*Good Practices in Pharmaceutics*”, which aims to form an integrated view on the conception of Good Practices in quality assurance of medicines; pharmaceutical development; medicines preclinical and clinical investigation; medicines registration in Ukraine; drugs manufacturing in accordance with the requirements of Good Manufacturing Practice; storage and distribution of medicines by the requirements of Good Storage Practice and Good Distribution Practice; retail trade by the requirements of Good Pharmacy Practice, etc. Consequently, the graduate of the Lviv Polytechnic National University of the third (educational-and-scientific) cycle has sufficient knowledge concerning Guidelines of Good Practices.

However, first and second cycle students need an awareness of the generalized structure. A teacher assistance in modeling approximate fundamentals for further mastering of educational materials a huge information field such as separate issues, guidelines, orders of the Ministry of Health care of Ukraine, reference book, etc. is important especially for them.

Often, the authors of the educational literature suggest to students such a principle of material presentation as simulation and scaling material, diagrams and structures for better discipline perception. Typically, each scientist offers its structure a more accessible material submission.

In Lviv Polytechnic National University, students when studying the discipline “*Good Practices in Pharmaceutics*”, independently elaborate schemes of current regulatory documents that establish certain Good Practices. Fig. 1-3 show examples of Guidelines structures developed by students of specialty 226 “Pharmacy, Industrial Pharmacy” of the second cycle higher education program.

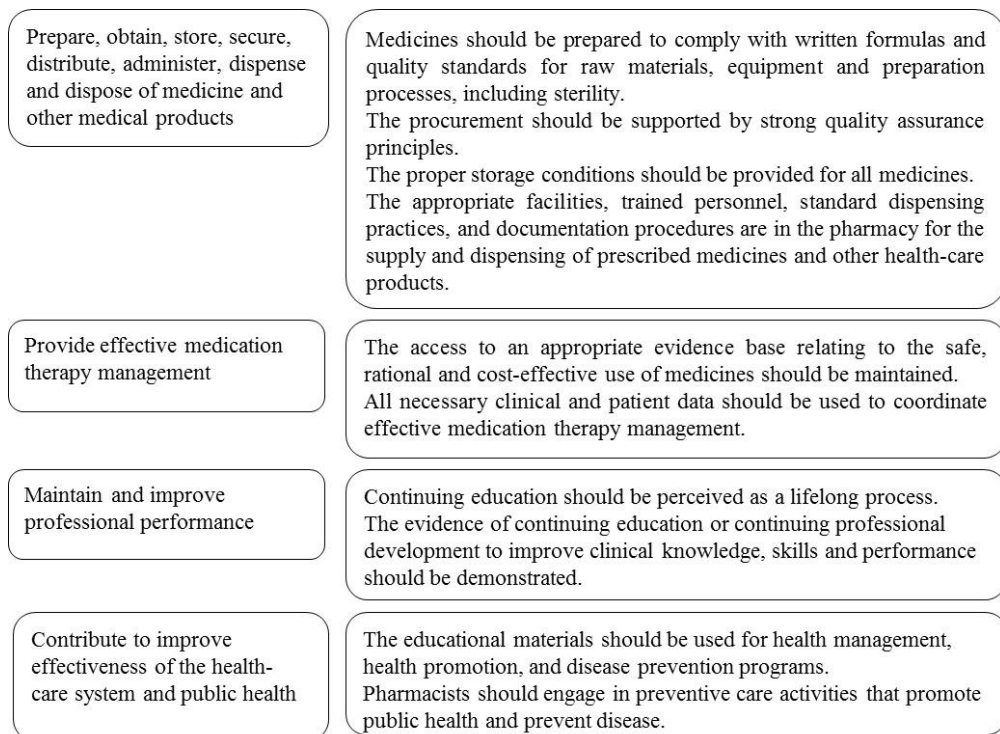


Fig. 1. Structure of Guidelines “Good Pharmacy Practice” developed by a student of second cycle of education program Rak H.

The development of such schemes by students with teacher assistance allows to improve the perception of the material and strengthen skills for independently analyzing, determining the essential elements and formulating conclusions about the necessary (possible) information, which is fundamental for the performance of the professional activity. While performing the task, students to learn and understand certain aspects, such as the fact that the quality of the medicines is “incorporated” into the drug at the stage of pharmaceutical development, and then confirmed during preclinical and clinical research. Further, the medicine receives a “permit to life”, when passing state registration. After that, the specified quality is reproduced for each series at the stage of full-scale pharmaceutical manufacturing, it is maintained unchanged at the stages of storage and distribution and, finally, it is delivered to patients in pharmacies. Appropriate Good Practices are obligated for implementation to maintain the quality of medicines at all specified stages of drug turnover (*Law, Bader, Uzman, Williams, Bates, 2019; Ten Cate, Scheele, 2007*).

The pharmaceutical manufacturing requires Good Manufacturing Practice compliance, which enables the achievement of appropriate quality, efficacy, and safety of the medicines, that laid down during pharmaceutical development and proven in preclinical and clinical trials.

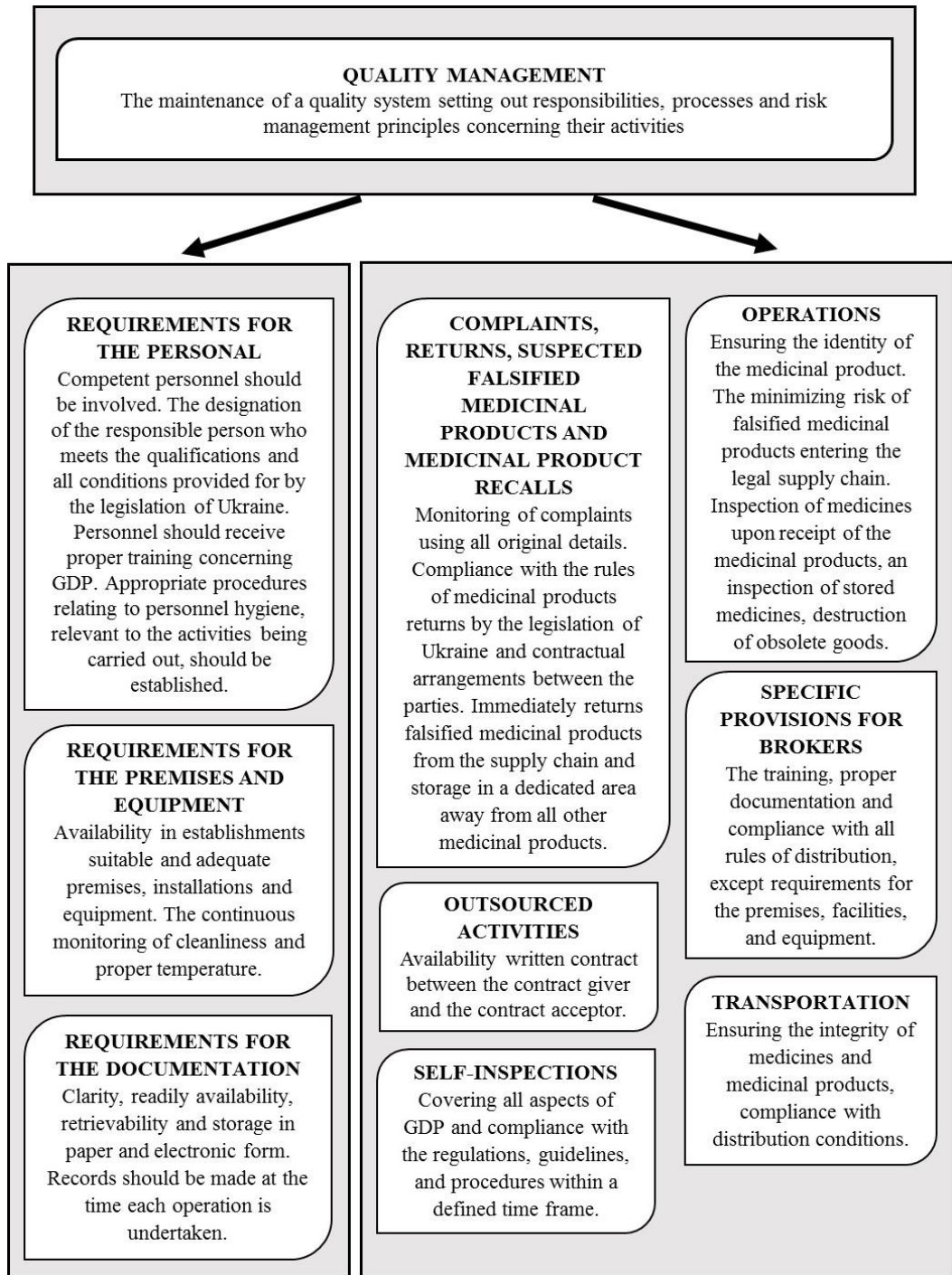


Fig. 2. Structure of Guidelines “Medicines. Good Distribution Practice. 42-5.0:2014”, developed by a student of second cycle of education program *Dedyk L.*

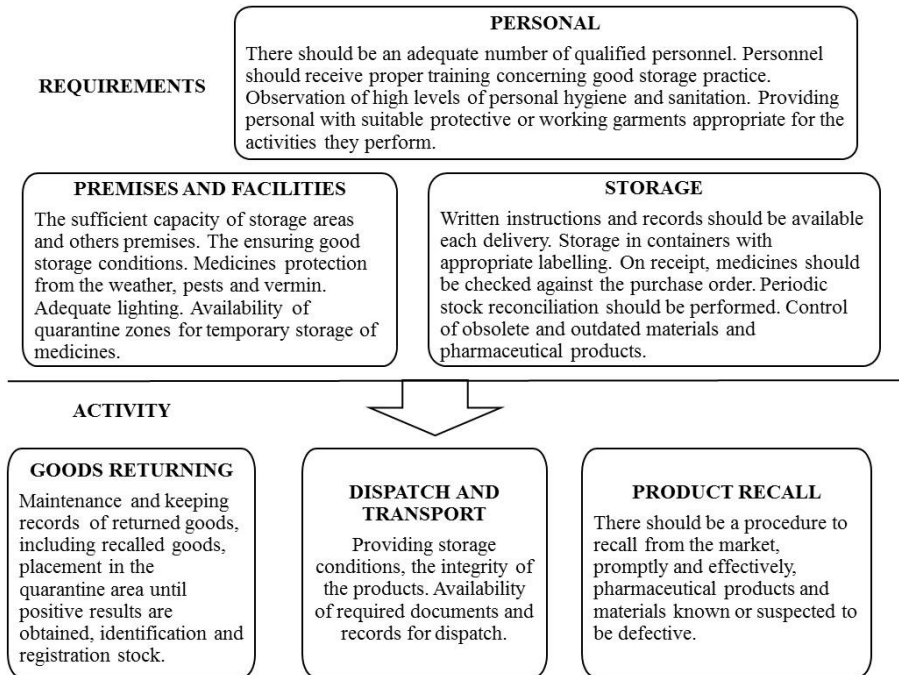


Fig. 3. Structure of Guidelines “Medicines. Good Storage Practice. 42-5.1:2011”, developed by a student of second cycle of education program *Nos N.*

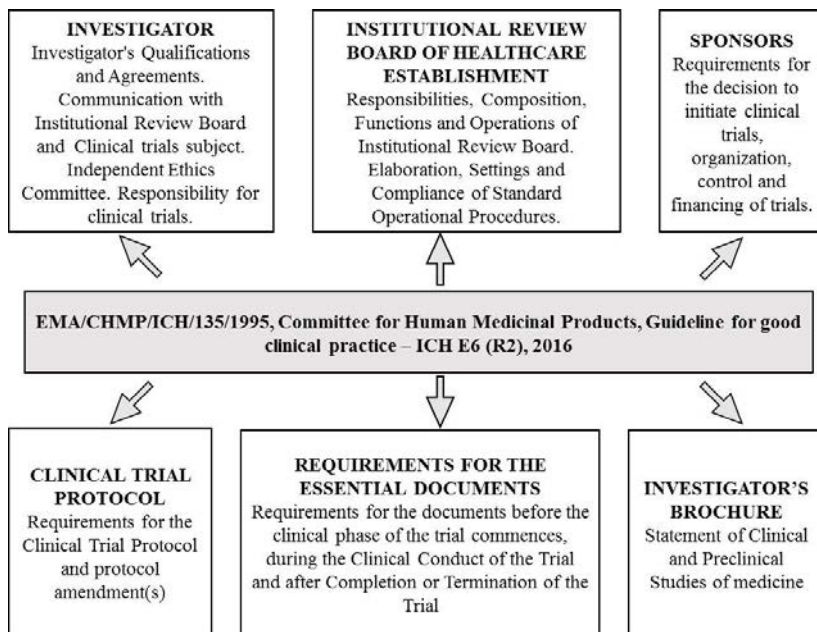


Fig. 4. Structure of Guidelines “Medicines. Good Clinical Practice. 42-7.0:2008”, developed by a student of second cycle of education program *Spreys D.*

3. Conclusion and suggestions

1. A retrospective review of the curriculum has been carried out; the current educational process for specialty 226 “Pharmacy, Industrial Pharmacy”, which takes place at the Lviv Polytechnic National University, has been analyzed.

2. The discipline “Good Practices in Pharmaceutics” includes the whole range of practices, so it is proposed at the Lviv Polytechnic National University for study at the third (educational-scientific) level.

3. Structural-and-logical schemas based on the Guidelines of Good Pharmaceutical Practices that greatly facilitate students’ perception and assimilation of all the needed information have been elaborated.

4. The study of the possibility of mastering the discipline “Good Practices in Pharmaceutics” by students of specialty 226 “Pharmacy, Industrial Pharmacy” during the practice at the existing pharmaceutical enterprises can be considered perspective.

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THEORETICAL ASPECTS OF MONITORING MARITIME STUDENTS' LEARNING ABILITIES IN 1960-1980 YEARS

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Summary

The article deals with theoretical aspects of monitoring cadets' learning abilities in 1960-1980 years. The author states that in this period the traditional system of control was characterized by the lack of objectivity. The reasons for the subjectivity of the assessment system in the publications of those years were not associated with the lack of standardized control means, but with the ambiguity of learning objectives and the requirements for the levels of knowledge acquisition. Scientists proposed various ways to improve control, based on the introduction of learning outcomes, typology of knowledge, special performance indicators, usually too subjective and contrived to be really useful in the learning process. Basically, these approaches were suitable only for testing the simplest levels of educational activities and did not affect the creative levels of its implementation. Depending on the type of training programs the special methods of checking and correction of learning outcomes were used in the programmed training. Since there were no effective methods of using pedagogical tests and skills in their development in programmed control, the simplest types of learning abilities were tested, the tasks were simplified and involved the choice of one or more ready-made answers, and hidden psychological components of learning, understanding the material, logic of cadets, communicative abilities remained outside the scope of tests.

Keywords: assessment, pedagogical testing, educational standards, students' skills, programmed control.

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1. Introduction

One of the leading trends in improving the quality management systems of higher maritime education in Ukraine is the implementation of state educational standards which increased attention to assessing the level of students' professional mastery. Focusing on this trend requires not only scientifically sound tools for continuous measurement, analysis and improvement of results, but also a new view of their content, which is expressed in determining maritime students' learning abilities as a decomposition of professional and personal competence at all stages of training. In this context, monitoring the students' learning abilities in maritime educational institutions in the late twentieth century is an important tool for determining effective methods of monitoring the vocational training at the present stage.

2. Analysis of scientific works in 1990-1980 years

Analysis of quality monitoring systems for maritime training in 1960-1980 leads to the understanding that the intermediate control of student achievement in the form of tests and exams does not meet the requirements for measurement, does not cover all educational

outcomes and more largely focused on the cognitive component of student's achievement. Such control is not informative enough, which does not allow students and teachers to effectively manage the quality of professional training in the implementation of the competence model of education (A.G. Bermus, G.A. Bordovsky, E.I. Sakharchuk, etc.). In this regard, there is a need to develop monitoring of learning abilities, which will monitor the process of mastering professional and personal competence, which serves as an integrative criterion for the quality of cadets' professional training, and ensure a high level of student involvement in assessing the quality of learning abilities. This will allow students of the maritime university to acquire appropriate reflective experience in assessing their own achievements for their professional development and further professional tasks to study opportunities, needs, achievements and design based on the results of individual routes of their education, upbringing, development.

In pedagogical science so far there are theoretical prerequisites for the study of the role of monitoring student's learning abilities in the quality management system of maritime training. The first group consists of research related to general issues of student's learning abilities and the specifics of education. These include the works of V. Andreev, A. Belkin, E. Bondarevskaya, G. Bordovskaya, L. Vygotsky, I. Zimova, N. Kuzmina, A. Maslow, K. Rogers, N. Sergeev, etc., which create a basis for identifying the essential characteristics of students' learning abilities.

The second group of studies is devoted to the monitoring of quality during the training period based on the use of various mechanisms (A. Bermus, G. Bordovsky, L. Davydova, E. Sakharchuk, S. Trapicin, P. Tretyakov, etc.). The conclusions of these studies allow to theoretically substantiate the role of monitoring student achievement in the quality monitoring system of maritime training and to clarify its structural and functional characteristics. The third group of studies reveals the technological aspects of the implementation of monitoring in the field of education (V. Gorb, V. Kalney, A. Mayorov, A. Pulbere, I. Trubina, M. Chandra, S. Shishov, etc.). The conclusions of researchers about the systemic nature of monitoring, the role of subjects in the organization of monitoring allows to justify the technology of its implementation, which is based on the involvement of all stakeholders, and especially students, in all evaluation procedures of monitoring. The fourth group is connected with efficiency of students' learning abilities and their monitoring process (Sh. Amonashvili, E. Volkova, I. Zimnya, E. Kazakova, N. Radionova, E. Sakharchuk, A. Tryapitsyna, etc.) that gives the chance to substantiate the conditions for effective monitoring of cadets' learning abilities.

3. Official documents which influenced on monitoring of students' learning abilities in 1960–1980 years

During this period (1960 – 1980 years) one of the important normative documents that had an impact on maritime education in general and the monitoring of student's learning abilities were the normative documents issued by the Soviet Union. Thus, the "Program for Building Communism," adopted by the XXII Congress of the Soviet Union (1961), outlined the prospects for the development of the Soviet school and pedagogical science for the next decade. Among them such grandiose educational tasks as the implementation of compulsory secondary education, the transition of secondary school to a new content of education, the corresponding improvement of the methodology of the educational process were presented. To solve these problems, a broad program of school construction, opening of professional schools and groups of extended day, extracurricular cultural and educational institutions, creation of classrooms, workshops, laboratories, application of technical appliances, etc. was developed (*Nakazy ta postanovy: 1987: 56*).

During these years, a number of Union Soviet resolutions and the government on educational institutions were adopted, defining specific goals and measures to achieve them: “On measures to further improve the work of secondary schools” (1966); “On the completion of the transition to general secondary education for young people and the further development of secondary school” (1972); “On further improvement of education, upbringing of secondary school students and their preparation for work” (1977); “On the transition to free use of textbooks for secondary school students” (1977); “On measures to strengthen state support for families raising children” (1981) and others.

The political, socio-economic and cultural development of the Union Soviet took place in the light of the so-called five-year plans (centralized state plans aimed at the development of the economy, technology, science, education and culture in the USSR for 5 years). For example, at a meeting of the pedagogical council of the Kherson Maritime Academy. Lieutenant Schmidt on February 23, 1980, it was decided: “The entire command and teaching staff of the school will focus their efforts on the unconditional fulfillment of the planned tasks of the last year of the X Five-Year Plan. To develop a socialist competition aimed at further improving the efficiency and quality of work on the training of technicians for the maritime, taking into account the prospects for the development of the industry” (Terentieva, 2014: 112).

In 1969, the Resolutions of the Council of Ministers of the USSR “On Approval of the Regulations on Secondary Special Educational Institutions of the USSR” of January 22 1969 № 65 and “On Approval of the Regulations on Higher Educational Institutions of the USSR” of January 22, 1969 № 64 were adopted.

According to the Resolution “On Approval of the Regulations on Secondary Special Educational Institutions of the USSR”, secondary special education in the USSR was carried out through a network of technical schools, colleges, schools and other secondary special educational institutions. The main tasks to be implemented by educational institutions of this type were to train qualified specialists with secondary special education who had the necessary theoretical knowledge and practical skills in their specialty; possessed knowledge in the amount of secondary school and more. The educational process in secondary special educational institutions was to contribute to the continuous improvement of the quality of training, taking into account the requirements of the production, science, technology, culture and further prospects for their development. Training of specialists in secondary special educational institutions was carried out in specialties that were approved by the Ministry of Higher and Secondary Special Education in the USSR (Terentieva, 2014: 113).

In accordance with the Resolution “On Approval of the Regulations on Higher Educational Institutions of the USSR” of January 22, 1969, 64 higher educational institutions carried out their activities under the direct supervision of the ministry or department to which they are subjected. Ministries and departments managed the educational, upbringing, methodological and scientific work of their subordinate higher education institutions on the basis of general provisions developed and approved by the Ministry of Higher and Secondary Special Education of the USSR (Nakazy ta postanovy, 1980: 67).

At the level of republican legislation, the Law of the Ukrainian Soviet Socialist Republic “On Public Education” of June 28, 1974, which defined not only the purpose of public education, but also emphasized the close connection of education with the development of sectors of the economy. Thus, Article 13 of the Law of the USSR “On Public Education” stated that state enterprises, institutions and organizations take an active part in the development of public education and industrial training (Kairov, 1961: 58).

4. Main features of assessment and control in maritime educational institutions

The analysis of normative documents showed that in the period 1960–1980 years the formal nature of the traditional control system, fetishization of marks, lack of objectivity of digital scores and interest mania, characteristic of reports on their work (*Zvit, 1980: 4*).

The reasons for the subjectivity of the scoring system in the publications of those years were usually associated not with the lack of standardized means of control, but with the ambiguity of the description of learning objectives and requirements for the levels of knowledge acquisition. Scientists proposed various ways to improve control, based on the introduction of scientifically sound standards of learning outcomes, typology of knowledge, special performance indicators, usually too subjective and contrived to be really useful in the learning process. Basically, these approaches were suitable only for testing the simplest levels of educational activities and did not affect the creative levels of its implementation (*Khodakovskiy, 2007: 113*).

In the 60's of XX century the desire to objectify assessments of student readiness to some extent contributed to the spread of programmed control. Depending on the type of training programs in the programmed training special methods of checking and correction of learning abilities were used [*Vidomosti obliku, 1982: 6*]. Since there were no effective methods of using pedagogical tests and skills in their development in programmed control, the simplest types of learning activities were tested, the tasks were simplified and involved the choice of one or more ready answers, and the hidden psychological components of learning, understanding the material, logic of cadets, communicative abilities remained outside the scope of tests (*Protokoly zasidan, 19: 4*).

Despite the shortcomings, in general, programmed control was a step forward in standardizing the requirements for the results of the educational process. However, by the end of the 80's of XX century it came to naught, which was due to the appearance in many universities of the first personal computers (PCs) and the unofficial ban on testing (*Khodakovskiy, 2007: 113*).

I. Kairov notes in his publication for the journal that the peculiarity of test questions and tasks is that they are designed to identify knowledge of the whole topic, to establish links with knowledge of previous topics, interdisciplinary links, the ability to transfer knowledge to another material to find conclusions of a generalizing nature. Final control is carried out as an assessment of learning outcomes for a certain, fairly long period of study time – a quarter, half a year, a year. Thus, the final tests are conducted four times a year: for I, II, III academic quarters and at the end of the year. When setting transfer marks (in the next quarter, in the next class) higher is preferred (*Kairov, 1961: 47*).

Scientists singled out tests as a separate method of monitoring. In maritime institutions, testing methods to monitor student's learning abilities began to be used in the 1980s. Teachers of certain disciplines took tests to check the intermediate result of educational activities. It should be noted that these tests were simplified, closed-ended and had only two or three possible answers. The organization of the test results was also complex and sometimes fictitious. The monitoring system began to change best in the late 1990s, with the adoption of new laws on educational activities and the improvement of the testing system.

5. Conclusions

Analysis of the functioning quality management systems for training leads to the understanding that the existing in the late twentieth century, the practice of current and intermediate control of maritime student's learning abilities in the form of tests and exams did not meet

measurement requirements, did not cover all educational outcomes and is more focused on the cognitive component of students' learning abilities in maritime educational institutions. Such control is not informative enough, which does not allow students and teachers to effectively manage the quality of training and monitoring.

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POLSKO-UKRAIŃSKA KONFRONTACJA PODCZAS POLSKO-UKRAIŃSKIEJ WOJNY 1918-1919

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Streszczenie

W artykule analizowane polsko-ukraińską konfrontację podczas polsko-ukraińskiej wojny 1918 – 1919 r. Stwierdzono, że okres rekonwalescencji państw narodowych Ukrainy i Polski, to opis generowany w czasie Pierwszej wojny światowej i Ukraińskiej rewolucji, zajmuje znaczące miejsce w losie Polaków zachodnio-ukraińskich ziem. Rozwiązanie “ukraińskiego” i “polskiego” pytań, tworzenie niepodległych państw sąsiednich narodów słowiańskich odkrywał szansę do budowania nowej architektury Europy Środkowo-Wschodniej, jednak ono natknęło się na stereotypy imperialnej polityki Rosji i państw zachodnich, długotrwałe sprzeczności między Ukraińcami i Polakami, w centrum których znaleźli się rozszereżenia terytorialnych Polski na Wschodnią Galicję i Zachodnią Wołyń.

Polityka URL (Ukraińska Republika Ludowa) stosunkowo polskiego etnosu w dużej mierze zależy od stosunków międzypaństwowych z przywróconym jesienią 1918 r. Polskim państwem. Skomplikowane, a czasami i wrogie stosunki między Polską i URL negatywnie odbijały się na sytuacji polskich mieszkańców Wołynia i Podola. Ponadto wśród ukraińskich partii politycznych i organizacji wojskowych nie było jednolitego stanowiska w odniesieniu do ludności polskiej.

Słowa kluczowe: Polska, URL, ZURL (Zachodnioukraińska Republika Ludowa), UGA (Ukraińska Halicka Armia), konfrontacja, Polsko-ukraińska wojna, URN (Ukraińska Rada Narodowa).

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1. Wprowadzenie

Dzisiaj, biorąc pod uwagę doświadczenia z przeszłości, Polska jest zainteresowana w istnieniu niepodległej Ukrainy, która jest gwarantem tego, że polskie wschodnie granice, a to oznacza, że wschodnia granica Unii Europejskiej nie zamieni się w strefę niepewności. Z kolei Ukraina widzi w tym przyjaznym kraju sąsiada najbliższego oddziały partnera, związek z którymi jest traktowany jako regionalny czynnik stabilności.

Niemniej jednak, pomimo dużych zmian na poziomie stosunków międzypaństwowych, ukraińsko-polskie stosunki środkami poziomu pozostają na bardzo ograniczonym poziomie. Do tego czasu zarówno w polskim, jak i w społeczeństwie ukraińskim, żyją wzajemne historyczne stereotypy w stosunku do siebie. I nie jest to zaskakujące, ponieważ wspólna historia zawsze rodzi stereotypy i mity, zarówno pozytywne, jak i negatywne. Główną przyczyną zakorzenienia tych stereotypów, zdaniem wielu badaczy, jest wyraźne i głośne przegub nacjonalistów obu państw na historycznych krzywd, że zadali przedstawiciele innego. I jeśli dziś zarówno w ukraińskiej, jak i polskiej historiografii dużo się pisze o wzajemnych stereotypach, odbywają się liczne międzynarodowe konferencje, gdzie mówi się również o wzajemne przeprosiny, jednak te stereotypy pozostają na poziomie socjologicznym bardzo odporne.

2. Okres odbudowy państw narodowych

Podsumowanie materiału podstawowego badania. Obalenie caratu w wyniku rewolucji Lutowej 1917 r. i początek demokratyzacji państwa Rosyjskiego został pozytywnie przyjęty zdecydowaną większością Polaków. Przychylnie odniosła się polska społeczność Ukrainy do tworzenia i pierwszych kroków działalności Centralnej Rady Ukraińskiej (CRU). Ogłaszając w pierwszych zamówieniach prawo Ukraińców być gospodarzami na swojej ziemi, CRU zgłosiła jednocześnie prawo do zatrudnienia warstw nieukraińskiej (polskiego, żydowskiego...) ludności na zaspokojenie swoich narodowo-kulturowych potrzeb. Przywódcy najważniejszych ukraińskich partii politycznych podzielali popularne w Europie Zachodniej idee narodowo-osobistej autonomii. Właśnie CRU i jej prezes głowa M. Gruszewski po raz pierwszy w ukraińskim życiu społeczno-politycznym ruchu wypracowali program zapewnienia praw politycznych wszystkim etnicznonarodowej społeczności w URL, zaspokojenia ich kulturowo-narodowych, religijnych i innych potrzeb (*Reient, 2016: 257*).

Głoszenie ZURL w wymiarze czasowym zbiegło się z odzyskaniem niepodległości państwowej Polski, rząd który ogłosił na powrót do granic Pierwszą Rzeczpospolitą 1772 r. To głównie spowodowało ostry międzyetniczny konflikt, który przerodził się w polsko-ukraińską wojnę listopada 1918 r. – czerwca 1919 r., znacząco wpłynął na funkcjonowanie miejscowych Polaków, z których znaczna część dołączyła do zasilanego rozdzielenia etnicznoterytorialnych problemów (*Vasiuta, 2006: 15*).

Za cztery wieki pobytu Galicji w składzie Polski, a później Austrii i Austro-Węgierskiej imperiów, skład etniczny ludności krawędzi przeszedł duże zmiany, ale Ukraińcy jak autochtoni i dalej pozostawali największej grupy etnicznej. Przypomnijmy, że nawet przy daleko stronicze według austriackiego spisu ludności z 1900 r., w Galicji Wschodniej mieszkało 3,6 mln. greko-katolików (głównie Polacy – 22,7%), 614 tys. Żydów (13%). Za język komunikacji wydana ludność wynosiła 2,9 mln osób, polskojęzyczny – 1,5 mln. niemieckojęzyczny – 175 tys. (*Makarchuk, 1997: 14–16*). Nawet w tej statystyce co najmniej dwie trzecie mieszkańców krawędzi stanowili Ukraińcy. Ponadto należy mieć na uwadze, że sporo Ukraińców pod naciskiem okoliczności zmieniły rodzica, pochodzenie etniczne i wiarę w polską i kościół rzymsko-katolicki, czyli ich ukraińska tożsamość mogła być aktualizowana. Inaczej mówiąc, na początku XX wieku. Galicja pozostała ukraińskim krawędzią, a centrami idei narodowej, ukraińskiego życia kulturalnego i politycznego były miasta, przede wszystkim Lwów, chociaż Ukraińcy stanowili w nim mniejszość.

Należy jednak pamiętać, że na przestrzeni wieków polska propaganda starała się kształtować w społeczeństwie opinie o Zachodniej Ukrainie jako odwieczne ziemie polskie lub Małopolska. Ten pomysł broniła większość przywódców polskiego ruchu narodowo-wyzwoleńczego po znanych rozbiórach Polski, uruchamiania z niej odrodzenia państwa Polskiego w tzw. “historycznych granicach” z włączeniem “polskiego Lwowa” i “południowo-wschodniej Małopolski”. Jeśli liderzy polskich narodowych demokratów w ogóle nie uznawali za Ukraińcami publiczno-twórczych potencjałów, to Polacy socjaliści J. Piłsudskiego mówili o możliwości federacji z Ukrainą, ale nie wyraził swoje stanowisko w sprawie jej statusu i granic.

Bezpośrednim impulsem do procesów tworzenia na terenie Galicji i nawiewów konfrontacji Ukraińców i Polaków stał się Manifest cesarza Niemiec Wilhelma II i Austro-Węgier Franciszka Józefa od 5 listopada 1916 r., w którym zadeklarowany tworzenie na podrosyjskich ziemiach Polski i Ukrainy Królestwa Polskiego jako “samodzielne” państwo z dziedziczną monarchią, konstytucyjnym ustrojem i armią. Przez 10 dni rząd Rosji przyznał ten manifest nieważny, ale obiecał Polakom autonomię w ramach imperium. W styczniu 1917 r. w Warszawie powstała

Tymczasowa rada państwa, na którą zostało ogłoszony formowanie sił zbrojnych Królestwa, które miały wystąpić na jego ochronę (*Zashkilniak, Krykun, 2002: 439*).

Kontrowersyjna była reakcja polskich czynników na tajne warunki Brześkich umów 1918 r., za którymi Austro-Węgry zobowiązała się włączyć do końca lipca 1918 r. Galicją Wschodnią i południową Bukowinę na jedyny krawędź korony, a Chełmszczyzna i Podlasie zostały odejść do URL. Niestety, hetmańskim przewrót zerwał się na ten plan, a austro-węgierski rząd wycofał się ze swoich zobowiązań, ponieważ przedstawicielom Ententy ukraiński pytanie został złożony jako "austro-węgierska intryga". W tak trudnej sytuacji jesienią 1918 r. zaktywizowali krajowe jazdy za stworzenie ukraińskiej i polskiej państwowości, co wynikało z manifestu cesarza austriackiego Karola od 16 października 1918 r., w którym przetrzymywany jest wezwanie do narodów monarchii założyć własne państwa i wejść w nowy federalny stan. Wspólne dla obu ruchów było dążenie ukraińców i polaków do samodzielnego narodowo-kulturalnego rozwoju, odbudowy państw narodowych, do oderwania Galicji od Austro-Węgier, ale dalszy jej rozwój był diametralnie przeciwny. Jeśli czołowe ukraińskie partie polityczne mącił perspektywy Galicji jako części przyszłego samodzielnego państwa Ukraińskiego, to większość polskich politycznych, stowarzyszeń traktowali ją jak "kresy wschodnie" odnawialnej Rzeczy Rzeczypospolitej.

3. Nowa faza konfrontacji polsko-ukraińskiej

Nowa faza polsko-ukraińskiej konfrontacji rozgrywała się na tle zmiany paradygmatu i głębokich pęknięć zarówno w polskim, jak i ukraińskim krajowych ruchach, gdzie oglądano przeciwne cele. Wraz ze zwolennikami sojuszu z Austrią było nie mniej modulatorów i sympatycy idei autonomii w składzie demokratycznej Rosji. Coraz częściej mówili o sobie zwolennicy ruchu wyzwolenczego, siłowej walki o pełną niepodległość Ukrainy i Polski, tworzenie podziemnych oddziałów zbrojnych, które w warunkach wojny odgrywały kluczową rolę w odbudowie narodowej państwowości (*Lypovetskyi, 2018: 180*).

Na związek ukraińców i polaków negatywnie wpływały stare urazy i zniewagi, odziedziczone z czasów polskiej kolonizacji ukraińskich ziem i wojny Wyzwolenczej narodu ukraińskiego środkiem XVII wieku, ambitne stereotypy wyższości polskiej szlachty w stosunku do ludności ukraińskiej, która, ze swej strony, zakłada niesprawiedliwe naruszenia krajowych praw. Jednak w świadomości części wiodącego warstwy polaków i ukraińców wykielkowane zrozumienie, że tylko wspólnym wysiłkiem można złamać imperialne kajdany, osiągnąć wolność i niezależność i przywrócić państwa narodowe. Jednak w polskiej społeczności Galicji i Wołyni górę brali szowinistyczne i konfrontacyjne nastroje, wzmocnione w warunkach narastania narodowo-wyzwolenczych zawodów, zdetonowane Pierwszej wojny światowej i kryzysu cesarskich trybów.

Polacy, w przeciwieństwie do ukraińców Galicji, bardzo chłodno przyjęli utworzenie CRU, jej III i IV Uniwersale o ogłoszeniu URL i jej samodzielności. Z entuzjazmem powitali galicyjskie ukraińcy udział delegacji z Ukrainy w obwodzie Brześkiej konferencji pokojowej, jej definicja o włączeniu Podlasia i Chełmszczyzna w skład URL, czego nie można powiedzieć o reakcji polskich шовинистических kręgów, które deklarowały, że Brzeńska umowa narusza wschodnie granice Królestwa Polskiego i jest "czwartym rozbiorem Polski".

Starając się osłabić ukraińskie i polskie krajowy ruch, wbić klin w stosunki jego przywódców, Tymczasowy rząd w Petersburgu przyznał prawo narodu polskiego do niepodległego państwa, którego pomysł poparły rządy Stanów Zjednoczonych, Francji, Anglii i Włoch. Później prawo polskich robotników do niepodległej państwowości zostało ogłoszone przez rząd

bolszewickiej Rosji. Propolskie oświadczenia rządów Rosji i krajów zachodnich stały się swoistą kartą Rady Regentów, utworzoną we wrześniu 1917 r., w celu zwołania wyborów do Sejmu, a tym samym powołania w Krakowie Polskiej Komisji Likwidacyjnej w celu oddzielenia Polski od Rosji i przejęcia władzy od Austro-Węgier w Galicji. W takich warunkach Polacy regionu znaleźli się w epicentrum polsko-ukraińskiego sprzeciwu, która stała się konfrontacyjna. Główną przyczyną była próba przywódców polskiego ruchu państwowego włączenia Ukrainy Galicji i Wołynia Zachodniego do Polski.

Jednocześnie ignorowano naturalne prawo Ukraińców regionu do samostanowienia, tworzenia własnej państwowości i kroki podejmowane w tym kierunku, ponieważ 18 października 1918 r. Ukraińska Reprezentacja parlamentarna zwołała Zgromadzenie Konstytucyjne we Lwowie i ogłosiła powstanie własnej państwowości. Następnego dnia URN (Ukraińska Rada Narodowa) ogłosiła utworzenie państwa ukraińskiego we Wschodniej Galicji, Bukowinie i Zakarpaciu. Należy podkreślić, że URN gwarantowała zapewnienie praw politycznych i narodowo-kulturalnych mniejszości w państwie ukraińskim – Polakom, Żydom, Niemcom, Węgom, Czechom i innym (*Lytvyn, 2015: 69*).

Polska Komisja Likwidacyjna pod przewodnictwem V. Vitasa, któremu tymczasowo powierzono funkcje władzy w Galicji, planowała przybycie do Lwowa w dniach 1–2 listopada 1918 r. Biorąc pod uwagę tę okoliczność, a także fakt, że generalny gubernator Galicji K. Guin odmówił przekazania władzy na Ukrainę reprezentacja, w nocy 1 listopada ukraińskie jednostki lwowskiego garnizonu armii austriackiej i legion ukraińskich strzelców pod dowództwem D. Witowskiego w objął instytucje rządowe, przejął stację kolejową, pocztę, magistrat i inne. Rano niebiesko-żółta flaga została podniesiona nad lwowskim ratuszem, a apele URN naklejone na ścianach domów zapowiadały narodziny państwa ukraińskiego na ukraińskich ziemiach etnicznych byłych Austro-Węgier.

Sytuacja we Lwowie skomplikowane tym, że ponad 62% jego mieszkańców stanowili polacy, 20% – żydzi i tylko 18% – ukraińcy (*Kalakura, 2007: 137*). Do tego brakowało jedności ukraińskich narodowo-demokratycznych sił w podejściu do ukraińskiej państwowości, z których część była na Wiedeń, kursy rewolucyjnych deklaracjami, zwlekała z formowaniem rządu ZURL, nie zadbała o wzmocnienie Ukraińskiej Galicyjskiej Armii (UGA), utworzonej w listopadzie 1918 r., co było na rękę Polsce. Tylko 9 listopada URN utworzyła Tymczasowy sekretariat stanu, a 10 listopada wypowiedziała się na spotkanie z państwem Ukraińskim na Wschodzie i kazała zacząć odpowiednie negocjacje. Choć oficjalne przekazanie władzy od cesarskiego namiestnika do Ukraińskiej narodowej rady odbyła się, ale jej prawdziwy rozwój natknąć się na opór miejscowych polaków, kupując szczególną ostrość w Lwowie i na zachodniej granicy, w szczególności w Przemyślu, wokół którego wybuchł prawdziwy ogień polsko-ukraińskiej wojny. Na początku listopada 1918 r. w Lublinie rozpoczęło się formowanie rządu Tymczasowego Polskiej Republiki Ludowej, który w swoim manifeście zadeklarowała polską władzę na wszystkich “historycznych ziemiach”, w tym Galicja. Natomiast 13 listopada UNRada ogłosiła Tymczasowe podstawowe prawo, które oficjalnie ogłaszała Zachodnio-Ukraińska Republika Ludowa (ZURL). I do tego czasu polskie polityczne i wojskowe organizacje już udało się zorganizować i przejść do ofensywy, aby uniemożliwić zatwierdzenie ZURL, zapewnić przyłączenie Lwowa i Galicji Wschodniej, a następnie i Zachodniego Wołynia odzyskanej Polski.

Chociaż roszczenia polskich polityków do Galicji Wschodniej były sprzeczne z “14 punktami” pokoju w Europie, ogłoszonymi przez prezydenta USA W. Wilsona, zgodnie z trzynastym punktem, państwo polskie miało się zregenerować w populacji polskiej, a także w Galicji Wschodniej, Hełmskiej, Podlaskiej, na Wołyniu Zachodnim Ukraińcy znaleźli szerokie poparcie ze strony lokalnych Polaków. Ponadto polskim władzom udało się szybko utworzyć jednostki

wojskowe z miejscowych Polaków, przenieść dodatkowe siły z Krakowa, Warszawy i innych miast oraz rozpocząć krwawe bitwy o Lwów. Wojna z ukraińcami o Lwów była postrzegana jako przejaw polskiej tradycji narodowej, jako symbol patriotyzmu. Podstawą polskich formacji wojskowych były oddziały Polskiej Organizacji Wojskowej, Polski Korpus Pomocniczy oraz polski personel wojskowy, którego generalnym kierownictwem był Cz. Monczyński. W zażartych bitwach o Lwów, które rozpoczęły się 1 listopada 1918 r. i trwały z różnym powodzeniem do 21 listopada 1918 r., obie strony, w tym ludność cywilna, poniosły ogromne straty. Tylko dzięki przywódcom kościołów ukraińskiego i polskiego rozlew krwi został na chwilę zawieszony.

Pomimo udziału miejscowych Polaków w wojskowo-politycznej konfrontacji i poszukiwaniu dróg pojednania Polski i ZURL, wskazane jest, aby więcej się zatrzymać na tych wydarzeniach, aby dać odpowiedź na pytanie, dlaczego wygrali szowinistyczne siły, które udało się osiedlić we Lwowie, a następnie obalić ZURL. Dokumenty archiwalne, wspomnienia uczestników wydarzeń świadczą, że Polacy na długo przed listopadowego zerwania prowadzili przygotowania do zasilanego zatwierdzeniu przez władze pod kierownictwem sztabu Generalnego Wojska Polskiego, kierowanego kadrowych generała T. Rozwadowskiego. Tworzył specjalną polską armię w Galicji pod dowództwem generała W. Sikorskiego, przypisane do wojskowego komendanta Lwowa A. Kamiński (*Kuzma, 1931*). Oprócz Lwowa, znaczne siły zbrojne polska władza koncentruje się w Stanisławie, Przemyślu, Kołomyży, Zoloczevi, Drohobyczu i innych miastach, równolegle prowadząc mobilizację cywilnej ludności polskiej. Należy podkreślić, że ukraiński przewód kontynuował poszukiwanie pokojowego rozwiązania konfliktu, zainicjował utworzenie wspólnego ukraińsko-polskiego komitetu, który w orędziu do Polaków Lwowa tłumaczy prawo siłę proklamowania niepodległości państwa Ukraińskiego i gwarancji pełnego bezpieczeństwa polskiej miejski samorządu. URN zapewniła Polaków i innych mniejszości narodowych "wolność używania w mowie, jak i w listach ich ojczysty mowy w rządowych stosunków z władzami państwowymi". W swojej polityce wobec mniejszości narodowych ZURL nadała demokratyczne tradycje URL, poparła ją Ustawa o narodowo-osobistej autonomii. Takimi działaniami władza ukraińska nadzieję osiągnąć lojalny stosunek ludności polskiej do Republiki, ale nie znajdował właściwego zrozumienia z jego strony. Zdecydowana większość polskich nauczycieli, na przykład, nie złożyli przysięgi na wierność ZURL, ponieważ byli zwolennikami doktryny, według której "od wieków była i jest polska ziemia".

Ukraińcy i Polacy przywódcy próbowali rozwiązać kwestię przynależności Lwowa poprzez dwustronny kongres pokojowy lub porozumienie międzyrządowe. Niestety społeczność polska zignorowała tę ofertę i nie okazała dobrej woli ustępstw i zrozumienia, preferowała siłę zbrojną i wznowiła działania wojenne. Każda ze stron próbowała wykorzystać krótkotrwały rozejm, aby uzupełnić swoje siły, aby kontynuować walkę.

21 listopada, po otrzymaniu potężnej pomocy od grupy "Odsecz" z Przemyśla, składającej się z 660 oficerów i 4900 żołnierzy, a także pociągu pancernego, oddziału powietrznego i broni, Polacy złamali zawieszenie broni, rozpoczęli ofensywę i zdołali przejść centrum. Lwów i przejście kontroli nad niektórymi instytucjami. Następnie polskie jednostki wojskowe, opierając się na wsparciu miejscowej ludności polskiej, podjęły szereg prób umocnienia swojej władzy w innych miastach, w tym w Przemyślu, Samborze, Borysławie i Drohobycze, ale spotkały się z opozycją ukraińskich strzelców i miejscowej ludności.

Tak zakończyła się pierwsza faza polsko-ukraińskiej wojny. Obie strony poniosły duże straty: 300 zabitych i około tysiąca rannych ukraińców i prawie 1200 zabitych, rannych i jeńców Polaków (*Lytvyn, Naumenko, 1995: 68*). Zwycięstwo Polaków była spowodowana tym, że zregenerowana nimi państwo udać się szybciej konsoliduje się, utworzyć siły zbrojne, otrzymała realną pomoc państw Ententy.

Polsko-ukraińska wojna, utrata Lwowa stały się jednym z czynników wyszukiwania przewodnikami ZUNR wsparcia ze strony Państwa Ukraińskiego P. Skoropadsky'ego. Jednak przeciw hetmanowi powstanie, podczas którego Dyrektoriat URL znalazła się w stanie wojny z bolszewicka Rosją i Białej armii, pozbawiony URL możliwości zaoferować praktyczną pomoc ZURL, którego rząd w końcu listopada został zmuszony przenieść się w Tarnopolu, a później do Stanisławowa. W takich warunkach stał bardziej złożony ukraiński soborniy proces, stłumiony działaniami wojennymi, które prowadziły obie ukraińskie państwa do konfrontacji: URL przeciw bolszewików i A. Denikina, ZURL – przeciw polskiej agresji. Podręcznik ZUNR położył wielką nadzieję na połączenie z URL, ale nie wziął pod uwagę tę krytyczną sytuację, która rozwinęła się do Dyrektoriatu. W obliczu agresji bolszewickiej S. Petlura był zmuszony szukać pomocy u polskiego podręcznika, a znajdowało się w stanie wojny z ZURL.

W tym samym czasie 15 listopada 1918 r. zaczęło się pod wodzą Dyrektoriatu URL powstania przeciw hetmana P. Skoropadsky'ego. Dyrektoriat zgłosił swoją chęć przywrócenia zasady polityki Ukraińskiej Centralnej rady dotyczące mniejszości narodowych. 10 grudnia 1918 r. zatwierdziła uchwałę – przywrócić działanie prawa Centralnej rady z dnia 9 stycznia 1918 r. o narodowo-indywidualną autonomię. W tej uchwale, podjętej w Winnicy, było powiedziane, że “tymczasowo do odzyskiwania odpowiednich ministerstw należy ustanowić w Dyrektoriatu dział praw mniejszości narodowych”, który miał stanąć na czele były członek CRU, jeden z przywódców żydowskiej partii Poalei Syjonu S. Goldelman.

Według słów S. Goldelmana, ówczesny szef Dyrektoriatu W. Winnichenko siole miał duże wątpliwości, będzie pasował prawdziwe okoliczności czasu odzyskiwania ministerstw dla rosyjskiego i polskiego mniejszości, w wyniku czego ministrowie polacy lub rosjanie zajęli miejsca pełnoprawnych członków rządu URL. Istnienie tych stanowisk było widziane przewodniczącemu Dyrektoriatu przedwczesne. Rosjanie, jego zdaniem, nie czują się lojalni wobec URL, a uważali się raczej obywatelami Rosji. W odniesieniu do przywrócenia polskiej autonomii – należało poczekać do uregulowania kwestii praw mniejszości ukraińskiej w Polsce. Żydowska sam mniejszość, zdaniem przewodniczącego Dyrektoriatu, nie znajdowała się pod protektoratem ani jednego sąsiedniego państwa, dlatego list do hebrajczyków pozostało jedno – skupić się na niepodległą Ukrainę (*Ukrainska politychna emihratsia 1919–1945, 2008: 37*).

Naszym zdaniem, niechęć do Dyrektoriatu przywrócić narodowo-osobistej autonomii dla ludności polskiej URL można wyjaśnić następującymi głównymi przyczynami. Po pierwsze, w tym czasie, jak już wspomniano, rozpoczęła się walka pomiędzy armii UNR i polskiej armii za Zachodnią Wołyń. Ponadto, na terenie Galicji trwały działania wojenne między UGA i sił zbrojnych państwa Polskiego. Po drugie, część polskiej społeczności Prawobrzeżnej Ukrainy aktywnie włączyła się w proces odbudowy państwowości polskiej, a niektóre już nadzieję na przyłączeniu Podola i Wołynia do państwa Polskiego. Tak, w styczniu 1919 r. we wsiach Felshtyn, Kuriivka Proskurivskiego powiatu zbrojna miejscowa ludność polska wystąpiło przeciwko URL. Prawda, wysłanego oddział karabinów maszynowych szybko i bez rozlewu zneutralizować to występek (*Robitnycha hazeta, 1919*).

Zbrojna konfrontacja towarzyszył wciągania miejscowej ludności polskiej na dużą skalę antyukraińskich akcji: udział w pogromach, masowe grabieże, aresztach, wyszukiwania, w zakazie ukraińskiej prasy, co wywoływało moje antypolskie nastroje. Odnotowano wiele świadectw o tym, że znaczna część ludności polskiej chwyciła za broń i faktycznie dołączyła do gwałtownych działań, nie traktowała apeli społeczności ukraińskiej do zrozumienia, prowokowała siłowej sposób rozwiązania konfliktu, który nabył etniczną barwę. Tymczasowe porażki ukraińców nie pokonało ich duch, ona tylko zaostrzyło długotrwały konflikt, przekonała się w potrzeby kontynuować walkę o narodowe prawa i własną państwowość.

Polskie kręgi postawili przed sobą zadanie – postawić pod znakiem zapytania prawo narodu ukraińskiego na Prawobrzeżną Ukrainę. Przy tym ukraińcy byli traktowani tylko jak dzikusy i gajdamaci. Wśród miejscowego chłopstwa za darmo rozprzestrzeniała się literatura, która “uzasadnione” prawa Polski na Wołyń i Podole. Charakterystyczne jest, że taka postawa dzieliła nie tylko konserwatywnych polskimi działaczami, ale i demokratycznymi w kółko. Niektóre z nich w swoim czasie wspierał URL, ale po przywróceniu polskiej niepodległości zmienił swoje stanowisko w sprawie niepodległości Ukrainy. Naprawdę, tworzenie w tych warunkach polskiego ministerstwa mogło być legalne przykrywką do prowadzenia antyukraińskiej działalności. Po trzeciej, Dyrektoriat i inne ukraińskie państwowe instytucje, musiał liczyć się z nastrojami ukraińskich partii politycznych i społeczeństwa, w którym panowały w tym czasie antypolski poglądy.

W tym samym czasie na ziemiach zachodnioukraińskich obok UGA przez cały powstały bojowe oddziały Strzelców Siczowych, kozackiej kawalerii, toczyła się prawdziwa wojna partyzancka. W ciągu grudnia 1918 r. do stycznia 1919 r. działania wojenne były noszone głównie pozycyjny charakter: polacy próbowali za wszelką cenę utrzymać się we Lwowie, Naczelna Komanda UGA starała się go odeprzeć.

Pomimo działań wojennych, na kontrolowane terytorium ZUNR odbywało się szereg środków gwarantujących prawa mniejszości narodowych, w tym Polaków, zaspokojenia ich potrzeb kulturalnych. Tak, w Ustawie o podstawach edukacji, przyjętej w dniu 13 lutego 1919 r., było: “mniejszości narodowe mianowany prawo na szkoły w ojczystym języku”. W maju Sekretariat stanu edukacji i wyznania przyznał “prawo do ujawnienia” dowodów za wszystkie klasy Stanisławowskiej kobiecej gimnazjum z polskim językiem nauczania (Kalakura, 2007: 141).

Reakcja J. Piłsudskiego, w którego rękach skupiała się wojskową władzę, na działania zachodnich ukraińców była bardzo negatywna. On nie traktował państwowych inicjatyw ukraińców Galicji, ponieważ nie wyobrażał sobie odnawialnej w Polsce bez tego terytorium. Polskie ludowe demokraci występowali z tak zwanej “program inkorporacyjny”, która opierała się na idei “wybranyimi” Polaków, odnosiła ukraińców i Białorusinów do “ludzi niższego gatunku”, które, jak mówią, nie mają tradycji państwowych. W przemówieniu na posiedzeniu Rady Najwyższej Ententy w końcu stycznia 1919 r. przedstawiciel Polski R. Dmowski mówił o intelektualną ukraińców i ich niezdolność utworzyć własne państwo, twierdził, że nie ma podstaw, aby wyjść Galicji Wschodniej.

Nawet gdy część polskiej polityki była świadoma niebezpieczeństwa bolszewizmu i celowości sojuszu z URL, który toczył wojnę z bolszewicką Rosją, ograniczając jej ekspansję na zachód, reakcję Polaków na walkę narodu ukraińskiego i przygotowanie traktatu jednoczącego ZURL. 3 stycznia 1919 r. w Stanisławowie URN zatwierdziła tekst „Traktatu przedakcesyjnego” i przyjęła rezolucję „W sprawie zjednoczenia Zachodnioukraińskiej Republiki Ludowej z Ukrainą Republiką Ludową” (*Visnyk derzhavnykh zakoniv, 1919: 1*). W odpowiedzi Dyrektoriat wydał Uniwersal URL w sprawie Unii z ZURL. Uroczysta proklamacja Aktu Zjednoczenia 22 stycznia 1919 r. na zatłoczonej radzie na placu Zofii w Kijowie stała się ważnym czynnikiem moralnym w obronie sprawy ukraińskiej, ale została negatywnie odebrana przez ludność polską nie tylko w Galicji, ale także w regionie Dniepru. Jednocześnie niepokoiły go hasła socjalistyczne niektórych przywódców URL i ich gotowość do federalnego sojuszu z bolszewicką Rosją.

Mając Akt Zjednoczenia z URL, przywództwo ZURL w praktyce nie mogło uzyskać realne wsparcie Wielkiej Ukrainy, która sama potrzebowała pomocy wojskowej dla ochrony przed polsko-bolszewickiej agresji. Pojedynek Galicji z Polską przekształcił się w daleko w

nierównej siły na wojnę z Ententą. Straty, które poniosła URL ze strony armii Czerwonej, pociągnęły za sobą i porażka UGA na polskim froncie. Wkrótce po Akcie Zjednoczenia działania wojenne zostały wznowione, rozpoczął nową ofensywę UGA, znany pod nazwą "Wołczuchowska operacja", po której ukraińcy umocniły się na dogodnych pozycjach w pobliżu wsi Wołczuchy, zaznaczając kontrolę nad kolejną na odcinku Gródok Jagielloński – Sądowa wisznia i przerwał połączenie polakom ze Lwowem. W czasie, gdy ukraińcy byli bliżej do sukcesu, do Galicji przyjechała misja Entente, którą dowodził francuski generał Joseph Barthelemy. Sojusznicza misja miała zadanie rozwiązać polsko-ukraiński konflikt i przetłumaczyć sprawę przynależności państwowej Galicji na rozwiązanie Paryskiej konferencji pokojowej. Ceną pojednania musi być terytorialnego kompromis z obu stron (*Hrytsak, 1996: 256*). Na wniosek misji, oddziały ukraińskie powinny wycofać się za linię rzeki Bug do Kamionki Strumiłowej, dalej do Bóbrki i Nikołajewa, czyli tak zwaną "linię Barthelemy" (*Kalakura, 2007: 143*). Polsce odstąpił jedną trzecią terytorium Galicji Wschodniej, w tym Lwów i zagłębie naftowe. Nawiasem mówiąc, w tych negocjacjach z союзнической misji brał udział i Naczelný wódz URL S. Petlura, który znajdował się wówczas w Galicji Wschodniej. On skłaniał do wniosku J. Barthelemy, mając nadzieję, że Ententa uznaje URL-ZURL, a ukraińskie siły zbrojne po zawarciu rozejmu można użyć do wojny z bolszewicka Rosją. Jednak kierownictwo ZOURL (Zachodnia Obszar URL) rozważał proponowane warunki poniżające i odrzuciła plan Barthelemy (*Stakhiv, 1959: 37*). Taką jego reakcją można zrozumieć, ponieważ ani Polska, ani misja J. Barthelemy nie uznawali ZURL ignorowali interesy narodowe ukraińców. Wszystko to doprowadziło do tego, że tymczasowe zawieszenie broni na polsko-ukraińskim froncie (od 25 lutego do 1 marca 1919 r.) zostało przerwane. Chociaż, ukraiński historyk Iwan Lysiak-Rudnicki uważał, że propozycja Barthelemy była prawdziwym wyzwaniem dla rozwiązania polsko-ukraińskiego konfliktu. Przecież z jej przyjęciem ликвидировался front wschodni URL i główny ciężar walki tolerowany na Wschód, gdzie wojska Dyrektoriatu prowadzili zacięte walki z bolszewickiej Rosji.

Rozpoczął się nowy etap walki zbrojnej UGA za ukraińską ziemię. Był strzał szereg dzielnic Lwowa, zajęte jego okolicy. Szczególnie zacięte walki toczyły się w pobliżu k. Rawy Ruskiej i Żółkwi. Jednak, nie mając źródeł uzupełnienia sił, amunicji, ponosząc duże straty, zbrojne oddziały UGA wziąć Lwów nie udało się. Właśnie w tym czasie na pomoc lwówszemu garnizonu przybyła trzy tysiące operacyjny grupa z Poznania pod dowództwem D. Konashevskiego, a także bataliony z Krakowa i Rzeszowa. Na żądanie Najwyższej Rady państw Ententy zostały wznowione negocjacje pokojowe, utworzona specjalna komisja pod przewodnictwem L. Boty do pojednania między ZUNR i Polską, ale polska delegacja celowo zwlekała z rozpoczęciem procesu negocjacyjnego, konsultacji dokumentów, aby wykorzystać czas na przygotowanie ostatecznej ofensywy wojskowej.

W kwietniu 1919 r. na polsko-ukraiński front było wywrócony dobrze uzbrojonych 80-tysięczną armię generała J. Galler, że znacznie zmienił się stosunek sił na korzyść Polski.

Najbardziej heroiczną próbą UGA chronić swoją Republikę stała się Czortkowska ofensywna operacja, która rozpoczęła się nieoczekiwanie dla polaków 7 czerwca 1919 r. Podczas niej była zniszczona, pancerna pod dowództwem W. Sikorskiego, zaczerpnięte Buczac, Monastyrsk, Opłat, Berszad, Podgajcy, Tarnopol. Pojawiła się realna szansa, aby uwolnić całą ziemię Galicji i opanować Lwowem. Polacy stracili 156 żołnierzy, 1743 osób został ranny, 222 osób dostało się do niewoli (*Krasivskiyi, 2000: 137*). Będąc w krytycznych warunkach, polacy ponownie zwrócili się o pomoc do armii J. Heller. Na front przybył J. Piłsudski i osobiście poprowadził kontratak, po otrzymaniu uprawnień Rady Najwyższej państw Ententy kontynuować operacje wojskowe w celu wyjścia na rzekę Zbrucz, co oznaczałoby okupacji

Galicji. Opierając się na przewagę w sile militarnej i technice, polacy udało się zatrzymać ofensywę UGA, przejąć inicjatywę i już 15 lipca odeprzeć Tarnopol, wyjść na brzeg Zbrucza. Warto zauważyć, że w trakcie walk podczas Czortkowskiej ofensywnej operacji delegacja URL, na czele generał-przez Siergiejem Delwigem, bez gruntownych konsultacji z kierownictwem ZOURNAL zawarła z Polską 16 czerwca 1919 r. "Umowa o czasowym wstrzymaniu ognia". Ale biorąc pod uwagę sukcesy na froncie, dowództwo UGA wstrzymało tu "Umowę" i kontynuował operację.

Pozostawiając z walkami Galicję Wschodniej, siły zbrojne UGA i dalej zadawały wymierne straty armii polskiej. 16 lipca 1919 r. UGA i przywództwo ZOURNAL przeniósł się do Kamieńca Podolskiego, gdzie był rząd URL i armia S. Petlury, nie tracąc nadzieję na powrót do Galicję. Na tej stronie kończyła się polsko-ukraińska wojna i działalność rządu ZURL na ukraińskiej ziemi, a dalej zaczynał się smutna strona jego екзильної historii i polityki dyplomatycznej. Jednak państwa zachodnie i USA w swoich podejściach do polskiego i ukraińskiego pytań na podstawie własnych interesów geopolitycznych, wykazywały sekciarstwo i niespójność. Wystąpienia poszczególnych западноукраїнського państwa, polsko-ukraińska wojna wywołały u nich obawy co do stabilności powojennej Europy Środkowo-Wschodniej. Są one tendencją do idei "Wielkiej Polski", która miała powstrzymać ekspansję bolszewickiej Rosji. W tym samym czasie każda z państw zachodnich w polityce w odniesieniu do Galicji Wschodniej broniła własnych, przede wszystkim geopolityczne i gospodarcze interesy, które w większości nie pokrywają się z interesami ukraińców.

4. Próby zrozumienia S. Petlury i J. Piłsudskiego

Z końcem polsko-ukraińskiej wojny nastąpiła pewna stabilność, która miała miejsce w czasach tak zwanej Kamenets era (czerwiec–listopad 1919 r.), kiedy Kamieniec-Podolski na jakiś czas stał się głównym partnerstwa publiczno-centrum administracyjnym URL. Wtedy wydano szereg przepisów. Jednak autonomia dla ludności polskiej z Ukrainy i nie został przywrócony. Dzienniki URL i dalej kontynuowali drukować antypolski materiały. Tak, w rządowym "Biuletynie UNR" od 17 lipca 1919 r. została umieszczona adnotacja "Polski imperializm i Ukraina". Jest w niej mowa o tym, że Polska nigdy nie odnosiła się przychylnie do Ukrainy, twierdził, że polska społeczność marzy o "Wielką Polskę" od "morza do morza", a ktoś z polaków opowiadał się za koniecznością przystąpienia Kamieńca-Podolskiego do Polski.

Wkrótce jednak zawartość ukraińskich gazet nieco się zmienił. Naszym zdaniem było to związane z tym, że od sierpnia 1919 r. Naczelnny wódz wojska URL i przewodniczący Dyrektoriat S. Petlura wraz ze swoimi najbliższymi współpracownikami pod wpływem politycznych niepowodzeń próbuje porozumieć się z kierownictwem Polski. Zwrócił się z osobistym listem do J. Piłsudskiego, w którym uzasadnił ideę konieczności wspólnej walki URL i Polski przeciw bolszewizmowi.

27 sierpnia 1919 r. Naczelnny wódz URL w przemówieniu przed ukraińskim wojskiem podkreślił: "Zjednoczenie wszystkich sił demokratycznych wszystkich narodowości, które stały na głębi samodzielności naszej Republiki i udział ich w państwowym budownictwie będzie kluczem do naszego zwycięstwa nad wrogami i zadatkiem naszego samodzielnego i od nikogo niezależną życia" (*Peliura, 1993: 143*). Stąd można stwierdzić, że głowa Dyrektoriatu proponował i społeczeństwie polskim Prawobrzeżnej Ukrainy wziąć czynny udział w walce o niepodległą URL, gwarantując przy tym jej zaspokojenie krajowych potrzeb.

Członkowie rządu byli częściej słuchać lokalnych polskich organizacji. Tak, 26 sierpnia 1919 r. w Mohylewie Podolskim minister pracy URL W. Bezpalko podczas spotkania z

przedstawicielami związków zawodowych, wśród których byli polacy, opowiedział się za koniecznością rozszerzenia zasad demokracji i narodowej autonomii (*Robitnycha hazeta*, 1919). Tym samym on zasugerował możliwość odzyskania danych z polskiej autonomii.

O stosunku ówczesnego rządu ukraińskiego socjal-demokraty I. Mazepy w polskiej społeczności można dowiedzieć się z artykułów wstępnych “Ukraina i Polska”, opublikowanym oficjalnym czasopiśmie USDRP. W niej otrzymał wiele różni się od poprzednich charakterystyka polskiej społeczności Ukrainy. W szczególności podkreślano, że “wśród polskiego панства jest zobowiązanie do A. Denikina, bo program społeczny tego generała przyjemne dla polskich magnatów. Ale masy polskiej demokracji bez wątplenia odnoszą się wrogo do jednej Rosji”. Zdaniem kierownictwa USDRP, całkiem możliwy był związek polskich polityków z ziemiaństwem-rosjanami do obalenia ukraińskiej państwowości. W tym momencie zauważyła gazeta, byłoby całkowitym szaleństwem próbować odzyskać Galicję. To by doprowadziło do wojny na trzech frontach: z bolszewikami, z Denikinym z Polską. “Naszym zdaniem, należy znaleźć wspólny język z Polską. Z uwzględnieniem politycznego momentu niedopuszczalne jest “zadzieranie” Polski...”, – taki wniosek sprawia, że redakcja rządowej ukraińskiej partii (*Robitnycha hazeta*, 1919).

Późniejsze wydarzenia pokazały, że S. Petlura i J. Piłsudski nie udało się przekonać do celowości europejskiej swoich rodaków i współpraca ukraińsko-polska akcja nie stała się konsolidacją czynnikiem, ani na Ukrainie, ani w Polsce. Brak wzajemnie uzgodnionej pozycji w ukraińskiej kwestii pokazała Paryska konferencja pokojowa. Zniekształcanie informacji o skład etniczny ludności i charakter wydarzeń w Galicji, przewodniczący polskiej delegacji R. Dmowski próbował przekonać uczestników forum w nierozsądny uznania państwowości ZURL, interpretowane jej terytorium jak polski (*Ripetskyi*, 1963: 10). Stworzony konferencją specjalna komisja z polskich pytań poszła naprzeciw polakom i wypowiadała się za militarną presję na stronę ukraińską w celu zawarcia rozejmu i uznanie przyłączenia Lwowa do Polski.

Wspólna delegacja URL i ZOURNAL, ze swojej strony, protestowała przeciwko agresji Polski, wojskowej pomocy polakom, broniła uznania ZURL, interesów narodowych Ukrainy, zażądała wycofania obcych wojsk z terytorium Ukrainy, ale nie było jej słuha, ponieważ Polska, działając metodą “dokonanych faktów”, już prawie była w posiadaniu terytorium Galicji. 25 czerwca 1919 r. Rada ministrów spraw zagranicznych Ententy uznał za Polską prawo do tymczasowego przeniesienia Galicji pod polskie zarządzanie w celu ochrony ludności cywilnej od bolszewików, pod warunkiem zapewnienia jej autonomii. Choć przedstawiciele wielkich mocarstw deklaratywnie twierdzili, że polacy nie mają prawa wprowadzać swoją władzę w Galicji Zachodniej i Wołynia, w rzeczywistości Polska konsekwentnie realizowała inkorporacji krawędzi. Ryski umowa zawarta pomiędzy Polską i trzech republik radzieckich – ZSRR, USRR i BSRR, nie położył kres ukraińsko-polskiej konfrontacji, ponieważ za jego warunków zachodnioukraiński ziemi w r. Zbrucz i Dniestr pozostawały poza Polską. On stał się dla polaków prawnym powodem dążąc do międzynarodowego uznania praw na Wschodnią Galicja i Zachodnią Wołyn.

5. Wnioski

W ten sposób, polsko-ukraińska konfrontacja 1918–1919 rr. miała wszystkie objawy wojny i zostawiła głębokie blizny na ciele obu narodów. Było to uwarunkowane procesem narodowego samostanowienia i utworzenia samodzielnych państw, w jej centrum znalazł się konflikt wokół niepodległości państwowej terenie Galicji Wschodniej i Zachodniej Wołyniu.

Polacy i ukraińcy, przywracając swoje państwa, nie udało się porozumieć w sprawie roszczeń terytorialnych, uciekają się do mocy ich decyzji, co doprowadziło do polsko-ukraińskiej wojny, wielkich ludzkich, moralnych i materialnych strat z obu stron. Edukacja ZURL, łączenie jej z URL, sam Akt Zjednoczenia były negatywnie postrzegane polskimi wytycznymi w kółko i większością ludności polskiej, które nie mogły przewyciężyć historyczne stereotypy w rodzaju “ukraińskiego zamachu” na ziemię polskie, “polskości Lwowa”, wieczności “kresów wschodnich Polski” itp. Jak pokazuje doświadczenie historyczne, wojskowe zwycięstwo Polski nie miała perspektywy, ona jeszcze bardziej oddalony społeczeństwo polskie od zrozumienia praw i dążeń narodu ukraińskiego do samostanowienia i utworzenia państwa narodowego, wzmocniła szowinistyczny nastroje w środowisku polaków i spowodował odpowiedni protest ukraińców. Do starych skarg dodano nowe, które siały nieufność, pogłębiały napięcia międzyetniczne, zaprzeczały perspektywicznym interesom obu sąsiednich narodów, przyćmiły ich stosunki i znajdowały się w rękach sił trzecich. Polscy i ukraińscy historycy zgadzają się, że główną przyczyną konfliktu, w którym zginęło około 25 000 Polaków i Ukraińców, był brak dobrej woli stron i ich zgody na ustanowienie uczciwych granic. Gorzkie doświadczenia z przeszłości pokazują, że stosunki między Polakami a Ukraińcami jako sąsiadującymi ludami słowiańskimi powinny opierać się nie na reanimacji wzajemnych krzywd, ale na szlachetnym hasle z 1920 r. „Za naszu i waszu wolność!”

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ACTIVITIES OF UKRAINIAN COMMUNITY IN LITHUANIA

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Summary

The study is devoted to a comprehensive analysis of the Ukrainian diaspora's life in Lithuania. The Ukrainian community in this country has deep historical roots, but as in other countries of the former Soviet Union, it became more active in the late 1980s. From that time community organizations began to be formed, and become important centers of diaspora. They conduct powerful cultural-educational work. They have been spreading and popularizing our cultural traditions for quite some time. Ethnic Ukrainians constantly help their homeland and maintain a positive image of Ukraine in the world. It should also be noted that Ukrainian communities in Lithuania actively influence the transparent coverage of events in Ukraine. But Ukrainians in Lithuania are quickly assimilated and lose their identity. One of the reasons for this is that in the Republic of Lithuania after the restoration of independence, almost all Ukrainians received the citizenship of this state, in contrast to other Baltic countries. Also, the integration of newly arrived Ukrainians into the previously larger Russian community in the country. And according to the latest data, there is a much larger influx of Ukrainians over the last few years, even compared to the Russians. This gives hope that the development of the Ukrainian community will not be pretended. Currently, there is no single research that would compare the life of the Ukrainian community in Lithuania in the modern period. Thus, the systematization and analysis of information about the activities of the Ukrainian community in Lithuania are incredibly relevant.

Keywords: community organization, diaspora, Ukrainians, Ukrainian community, culture, Lithuania.

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1. Introduction

With the events of 2014 winter, a large portion of the Ukrainian population chose to look for a safer place to live, with a lot of them looking towards the Baltics. In particular, the Baltic countries are a very popular direction of emigration. Every year the Ukrainian community in Lithuania grows. Foreign Ukrainians have an active life position, trying to preserve and promote their culture.

The topic of the activities of Ukrainians in the Baltic States is best covered in the Ukrainian research. The study of sociopolitical activities of Ukrainians starts from the beginning of the formation of community organizations in these countries, from the late 1980s. But mostly they are part of works about Ukrainians in the world, as examples in the work of researchers – Troshchinsky and Shevchenko. It is also important to understand the statistical data which were researched by our scholars, this subject was put in attention in the Ph.D. theses of geography scientist – Zubyk, and any others. An important source for the study of foreign Ukrainians is a review of the official websites of community organizations operating in Lithuania and Internet resources that cover the news of our diaspora. The source base of further research consists of

testimonies of participants of community and cultural associations of Lithuania, reporting work of community organizations of these countries, and the World Congress of Ukrainians.

The purpose of the article is to show the community and cultural activities of the Ukrainian diaspora in Lithuania by conducting a systematic analysis of all available material.

2. Organization of the Ukrainian community

The Ukrainian national minority in Lithuania has quite deep historical roots. The first Ukrainian community centers were established in the country in the 1930s. In particular, the first Ukrainian community was officially registered in Lithuania in 1933. And in 1934, the cultural and educational society of Ukrainians in Lithuania was founded in Kaunas. However, at that time the part of ethnic Ukrainians in the country was not so significant. Some process of migration of ethnic Ukrainians to Lithuania was noticed only after the end of World War II, and then it was accelerated rapidly, a similar growth could be observed until 1989. From the late 1980s, Ukrainian community organizations in Lithuania became more prominent.

During this period, most countries in the post-Soviet space were characterized by a growing trend of activity of nationalist movements. Because at the time there were issues of restructuring the system and restoring independence. These issues were also relevant for Lithuania. A number of national minority societies were established in the country. Ukrainians were among the first who create their ethnic organization.

Thus, on December 8, 1988, the Community of Ukrainians of Vilnius was established at the Lithuanian Cultural Foundation, which was officially registered with the city administration on February 2, 1989. They saw their main goal in organizing Ukrainians in cultural and educational activities, concerts, debates, exhibitions, development of national cultural traditions, and preservation of the national consciousness of Ukrainians. The aim of the Community of Ukrainians of Vilnius was to unite Ukrainians from other Lithuanian cities. Thus, centers appeared in other cities: in Jonava, Klaipeda, Visaginas, Mazeikiai, and Kaunas.

In order to better coordinate the activities of all branches of Lithuania, it was decided to unite into one structure, so was formed – The Community of Ukrainians of Lithuania. Its creation was announced at the first constituent conference of the diaspora, which took place in Vilnius, October 28-29, 1989 (*Vusyk, 2013: 8*). At this conference was approved the confederate form of the Community activity. The council of representatives provided full autonomy and coordination to the parts of the community (*Troshchynskyi, 1999: 295*). As one of the main tasks of The Community of Ukrainians of Lithuania was the preservation and development of the Ukrainian ethnic group on the territory of Lithuania, the members of the Community established the first Ukrainian Sunday school in the Soviet Union outside the territory of Ukraine. It was located in Vilnius and started to work in the spring of 1989. The initiator of its creation and the first director was Oleksandr Avramenko, who united not only children but also adults. Later, Ukrainian Sunday schools appeared in Klaipeda, Visaginas, Jonava, and Mazeikiai. Initially, teachers worked on programs and textbooks from Canada and the United States, and only after the proclamation of Ukrainian independence – on textbooks from Ukraine.

3. Ukrainian community after the Soviet Union period

It should be noted, that during the period of the Soviet Union, the Ukrainian community had limited conditions for its development. But the situation began to change in the 1990s.

Thus, after Lithuania gained independence, a new stage of development began for the Ukrainian community.

The independence of the Lithuanian Soviet Socialist Republic proclaimed on March 11, 1990, choosing the European path of development.

The Ukrainian community actively assisted the country in the struggle for independence, in particular during the January 1991 events in Vilnius. For active assistance to the Lithuanian people, some Ukrainians were awarded the «January 13» medal (*Vusyk, 2013: 8*).

Despite the fact that the Community focused on cultural and educational activities, its members actively expressed themselves in politics. They worked closely with the Lithuanian authorities. Representatives of the community were even members of some bodies of the Reform Movement of Lithuania.

In addition, our community in Lithuania was not averse to the situation in Ukraine. At that time, the community worked closely with the People's Movement of Ukraine, the Ukrainian Helsinki Union, Prosvita, the State Independence of Ukraine, the Lion Society, and others. Thanks to the community, numerous historical, religious, and nationalist publications were published, which at that time could not be published in Ukraine. The printing of the independent press, which was banned in Ukraine, was also organized.

After the initial issues were solved the Community of Ukrainians of Lithuania began work on the establishment of a religious center. In particular, Oleksander Avramenko found important information in archival sources. It turned out that during the Polish–Lithuanian–Teutonic War, Kostiantyn Ostrozky made a vow to build two churches in Vilnius. One of them was the Church of the Holy Trinity, built on the site of the wooden monastery of the same name. The Ukrainian church tradition in Lithuania is connected with this church. This information allowed the Community to start negotiations on the donation of this church for the restoration of the Ukrainian church. Thus, given the historical path of the Holy Trinity Church, on February 18, 1991, the religious community was registered as a «Catholic community of the Eastern Rite», and on July 4, 1991, the Vilnius City Council transferred the church building and bell tower to the religious community (*Vusyk, 2013: 18*).

At the same time, the community took care of amateur creative team's development in the country. Since September 1991, Tetyana Morhun has organized a children's ensemble of Ukrainian song and dance «Veselka» in the Vilnius club «Meteoras». This ensemble presented Ukrainian songs and dances on various stages of Lithuania and Ukraine. Subsequently, amateur Ukrainian groups began to form in other Lithuanian cities – Visaginas, Mazeikiai, and Jonava (*Vusyk, 2013: 8*).

The adoption of the Constitution of the Republic of Lithuania was an important stage not only for the country itself but also for our community. It took place more than two years after the country gained independence, namely, October 1, 1992. As in many other European countries, The Constitution of the Republic of Lithuania consists of a fundamental articles that protects the rights and freedoms of citizens (*Troshchynskyi, 1999: 295*). According to the constitution, before the law, the court, and other state institutions, all people are equal, regardless of race, nationality, language, origin, etc. In Article 29. It is important to note that any discrimination in the country is condemned, as referred to in Article 25 – «The freedom to express convictions and to impart information shall be incompatible with criminal actions – incitement to national, racial, religious, or social hatred, incitement to violence or to discrimination, as well as defamation and disinformation». Fundamental to our community is Article 37 of The Constitution of the Republic of Lithuania, which states that citizens who belong to national communities have the right to develop their language, culture, and customs. And Article 45, which states – «Ethnic

communities of citizens shall independently manage the affairs of their ethnic culture, education, charity, and mutual assistance. Ethnic communities shall be provided support by the State» (*Konstitucija...*). That is, based on this, we see that the state has undertaken to promote the rights and freedoms of national minorities to preserve and develop their identity, as well as to support the activities of ethnic organizations, including Ukrainian.

It should be added that after the restoration of Lithuania's independence, almost all ethnic Ukrainians living in the country became citizens of the republic, they have the same rights and responsibilities as other citizens (*Ukrainci...*). It is this remarkable fact that distinguishes the state of the Ukrainian diaspora in Lithuania, in comparison with other Baltic countries. Although it has certain disadvantages, as it affects the rapid assimilation of Ukrainians into Lithuanian society.

Later, other community organizations began to be established in the country, which actively carried out their activities, establishing Ukrainian-Lithuanian ties. In particular, some of Ukrainian community organizations included not only ethnic Ukrainians but ethnic Lithuanians. As an example – Aldona Vasiliauskiene, Head of the «Association of Lithuanian and Ukrainian historians». The Association held an international conference «Lithuania – Ukraine: History, Political Science, Cultural Studies» in Vilnius. Then organizations began to form in other cities of the country. Thus, the Ukrainian National Cultural Center «Barvinok» opened in Visaginas (*Troshchynskiy, 1999: 296*). But despite the activities of the community, it should be noted that there are some problems. For example, the crisis of Ukrainian school education in Lithuania, which is caused by the lack of modern methods and qualified teachers. More and more schools are closing. This, in turn, accelerates the assimilation of Ukrainians, who are increasingly beginning to consider themselves the bearers of only Lithuanian culture, rather than the culture of Ukrainians or Ukrainians in Lithuania, or Lithuanian-Ukrainian culture.

Another important achievement of the Ukrainian community in Lithuania is the unveiling of the monument to Taras Shevchenko in 2010. Also, every year the Community celebrates the memory of the poet, who lived for some time in Vilnius (*Zvit..., 2005*).

It was important for Ukraine that Lithuania recognize Holodomor as a carefully planned genocide of the Ukrainian people, which took place precisely due to the active educational work of the diaspora. This was stated in the statement of the Seimas of Lithuania of November 24, 2005 – «On honoring the victims of political repression and famine in Ukraine in 1932-1933» (*IX Svitovyi..., 2008*). Later, thanks to the educational work of the diaspora, the Holodomor was recognized as a genocide by other countries (*Protokol..., 2008*).

Lithuania pays close attention to the opinions of national minorities in the country and supports their initiatives. For example, during the V International Festival of Ukrainian Art and Information «Baltic Trembita», which took place in Vilnius, about 300.000 people had the opportunity to join the event through a television broadcast on Lithuania's first national television channel and national radio.

For many years, significant educational work has been going on in absolutely all Ukrainian organizations in Lithuania. Furthermore, thanks to special partnerships with community organizations in Trakai, Alytus, Siauliai, Druskininkai, and Basilionai, Ukrainian events are constantly taking place in these cities. In addition to ethnic Ukrainians, Lithuanians, Germans, Karaites, Greeks, Romanians, Russians, Latvians, and Estonians began to join the ranks of our community in Lithuania. Which join events taking place in the community. In particular, citizens of different nationalities took part in the actions that are dedicated to the Holodomor. As a great success – information support not only from the Lithuanians but also from the Belarusian

and Russian communities of Lithuania, who used to be quite cautious about the Holodomor (*Zvit..., 2007*).

Representatives of the Ukrainian community have been repeatedly awarded honorary prizes. Victor Chernyshuk, Irena Petrulyonene, Natalia Shertvitene, received the medal of St. Vladimir the Great, the highest award of the World Congress of Ukrainians (*Protokol..., 2008*).

The following years were also marked by various important events for the community. In particular, the conference «Eugene Konovalets – a patriot of Ukraine, a citizen of Lithuania. 120 years since his birth». Which took place on June 17, 2011, in Vilnius. It was initiated by Lithuanian Ukrainians and co-organized by the Center for Liberation Movement Studies in Lviv. Among the nearly 60 participants were Ukrainian and Lithuanian scholars, former Lithuanian dissidents, journalists, representatives of Ukrainian and Lithuanian community organizations, and the Ukrainian community in Lithuania (*X Svitovyi..., 2013*).

Local Ukrainians are quite active in defending their political position and expressing their support for Ukraine. They organize protests and pickets, tell about the situation in their homeland. In particular, in November 2018, protests against the actions of Russian border guards in the Kerch Strait took place near the Russian Embassy in Vilnius. One of the protests was organized by the League of Young Conservatives, about 15 young people with Ukrainian and NATO flags chanted a slogan dedicated to Ukrainian heroes (*U Vilniusi..., 2018*).

It is important to note that in recent years the number of Ukrainians in Lithuania has started to increase. The Lithuanian Migration Department has released information according to which, as of the beginning of 2019, Ukrainians have become the largest foreign community in Lithuania, even ahead of Russians. According to information, there are almost 42% more Ukrainians living in Lithuania than in the previous years, which is about 17 thousand people. At the same time, the community of Russians in Lithuania is almost 12.5 thousand people (*Ukraincy..., 2019*). If we compare with the previous censuses – where we see that as of 2001 there were already 22.488 Ukrainians living in the country, and according to the 2011 census – 16.423 people. In 2011, the share of Ukrainians in the population of Lithuania was 0.6%, the fifth largest ethnic group in the country (after Lithuanians, Belarusians, Poles, and Russians) (*Zubyk, 2016: 82*).

4. Survey methodology and its results

According to a survey I conducted on the social network Facebook, 136 respondents from Lithuania took part. 50% of respondents consider themselves carriers of a purely Ukrainian ethnic group. 25% identify themselves as Ukrainian-Lithuanian, 8.3% of Ukrainian-Russians and the same number of respondents consider themselves to be Russian-Lithuanian. Interestingly, none of the respondents identifies themselves with a purely Russian ethnic group.

It was also interesting that 83.3% of respondents see themselves living in Lithuania in 5 years. In other words, we can conclude from this that the majority of Ukrainians do not consider Lithuania as a platform for further emigration to other countries, such as the United States or Canada. So they want to stay in Lithuania, which shows their desire to integrate with the local ethnic group. However, only 38.9% stated that they wanted to obtain Lithuanian citizenship in the future and 47.2% answered that they did not want to obtain Lithuanian citizenship.

Very interesting situation with Ukrainian churches in Lithuania. Only 1 respondent answered that he goes to the Ukrainian church. If we touch on the issues of community organizations, 63.9% of respondents said they did not know Ukrainian organizations operating in Lithuania. 75% of respondents said they had no contact with the community at all. Neither

Ukrainian nor Russian. Also, 63.9% of Ukrainians do not attend events of Ukrainian organizations at all. 2.8% regularly attend events of Ukrainian organizations, 33.3% attend, but rarely.

Most of the respondents said that they learn about the community's activities from Facebook. And they believe that the community in Lithuania does not hold enough events. Therefore, 83.3% stated that they would like to take part in the events of the Ukrainian community, and 16.7% answered that they were not interested. All respondents, who have children answered that they have never attended Ukrainian-language schools.

Quite interesting that – 55.6% of respondents answered that they would stay in Lithuania even if there will be stable economic and political conditions in Ukraine, 38.9% would return to Ukraine in that case, 5.6% would go to another country.

5. Conclusions

Thus, the Ukrainian community in Lithuania is quite active. Thanks to its activities, not only ethnic Ukrainians join the local community of Ukrainians, but also other residents of this country who are not indifferent to the fate of Ukraine. It should also be added that, unlike other Baltic countries, in the Republic of Lithuania after the restoration of independence, almost all Ukrainians that lived here at that moment received the citizenship of this state. This is one of the factors that influences the fact that Ukrainians quickly assimilate in Lithuania and often begin to consider themselves the bearers of purely Lithuanian culture, not Ukrainian. Another sad factor is the integration of local ethnic Ukrainians into the Russian diaspora. During the research, a survey was conducted, which gave an understanding of the current state of life of the Ukrainian community and will be a good ground for further analysis. This makes the study of the history and activities of the Ukrainian community in Lithuania extremely important and relevant.

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Summary

The life of the Ukrainian nation developed in such a way that due to unfavorable historical circumstances there were few long-term phenomena in it. But in the pages of the history of each nation there is imprinted its image – intelligence, spirituality, dignity, the ability to build or destroy, consume or create, act or contemplate. National identity is considered to be a fundamental feature of the nation, that is the most comprehensive combination of mind and spirit, which are acquired and transmitted from generation to generation. One prominent personality of I. Vyhovsky is pointed out as a glorious figure in the history of the Ukrainian Cossack state.

During his life I. Vyhovsky had a number of followers mainly among the gentry who supported him after collapse of relations with Moscow in 1657. The opposing forces which operated against I. Vyhovsky were not only from pro-Moscow adherents but from the senior Cossacks as well as peasants. Those ones were talented at gossiping, slandering. After I. Vyhovsky's death the oponents simmered down, however, the facts related to his political and statebuilding activities have been preserved since that period.

Keywords: the Vyhovsky, gentry, Polish-Lithuanian Commonwealth, Bohdan Khmelnytsky, hetman, Cossack council.

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1. Introduction

Currently, the knowledge of the genealogies of Ukrainian hetmans has been systematized and supplemented, consequently, seven new synods of the Vyhovsky family have been introduced into scientific circulation (*V.V. Krivosheya, Yu.S. Stepanchuk, 2007: 338*). Exploring the social foundations of the Cossacks, found the share of families of noble origin. According to V. Lypynsky, there were 3.3% of nobles in the Cossack environment. At the present stage of research, the percentage reaches 12.6%. It was the Cossacks history that impacted drastically these results of modern scholars. Data related to the Vyhovskies nobility group have been thoroughly investigated in frames of Cossack officers.

2. Historiography

In general, it is known that dozens of colonel's families gave the Cossacks from 1 to 5 representatives of the officers, the existence of 153 centurion dynasties according to the register of centurions during 1648-1782 is attested. The objective of the search is to summarize some

biographical data and create a holistic biography of the then unique Vyhovsky family, that composed the high authority, taking an active part in the events of the national liberation war of the mid-seventeenth century. Moreover, a group of people who are representatives of one generation, also united on the basis of common views, activities, interests. Each geneology has its own figures of the primary magnitude, which are not able to be covered by the dust of the ages, refuted evidence of pseudoscience, as far as the actual content of their activities and the result of life are subsequent generations (*Vladimir Irzhitsky, Natalia Titarenko, 2018: 52*).

3. The origin of the genus

Biography of the spiritual leader of his family and a bright figure of the national cultural renaissance of Ukraine in the late XVI – early XVII centuries. originates from the ancient boyar family Luchychiv Vyhovsky Ovruch county, which had a noble coat of arms “Abdank”. “Vygovsky came from a small Russian nobility. There were several boyar villages in the Ovruch district of the Kyiv voivodeship, recognized as gentry. In one of these villages, Vyhov, lived a large family of Luchiches, who in their place of origin were called the Luchichi Vyhovskies, later simply the Vyhovskies. Vyhovsky Ostap (Evstafiy) Hnatovych (year and place of the birth are unknown – 1663, place of death unknown) was the governor of the Kiev castle, a member of the Kiev brotherhood. He possessed the estates of Vyhiv in the Ovruch region as well as Hoholiv in the Kyiv region (now it is a village in the Brovary district of the Kyiv region). He served in the Kiev voivode A. Kisel, served the Metropolitan of Kiev, Galicia and all of Little Russia Peter Mohyla. As a member of the Kyiv Brotherhood, on December 31, 1631, he signed an act given by the brothers of P. Mohyla regarding the unification of the schools of the Kyiv Pechersk Lavra and the Kyiv Brotherhood (Vyhovsky and his son Fedor signed the documents not in Polish but in Ukrainian). With the beginning of the national liberation war of the Ukrainian people in 1648–1658, Ostap Vyhovsky, “leaving his innate noble virtue,” joined the insurgent people. Together with his son Danylo Vyhovsky, S. Muzhilovsky, Stepan Mazepa (father of the future Hetman I. Mazepa) and others led a delegation of the Ukrainian Orthodox nobility, which on January 11, 1654 took the oath to the Tsar of Moscow and negotiated with the Russian Embassy Vasily Buturlin to confirm the status and property rights of the Ukrainian Orthodox nobility (*Vladimir Irzhitsky, Natalia Titarenko, 2018: 53*). Ostap Vyhovsky’s political activity increased especially after his eldest son Ivan came to power. In particular, he took part in the Pereyaslav council (January 1658), where the issue of recognition of the hetman’s power of I. Vyhovsky was resolved. In March 1659, on behalf of the hetman, he visited the voivode of Kyiv, Vasyly Borysovyeh Sheremetev, on an important mission, and convinced him of the danger from the tsarist government’s support for forces opposed to the Ukrainian hetman.

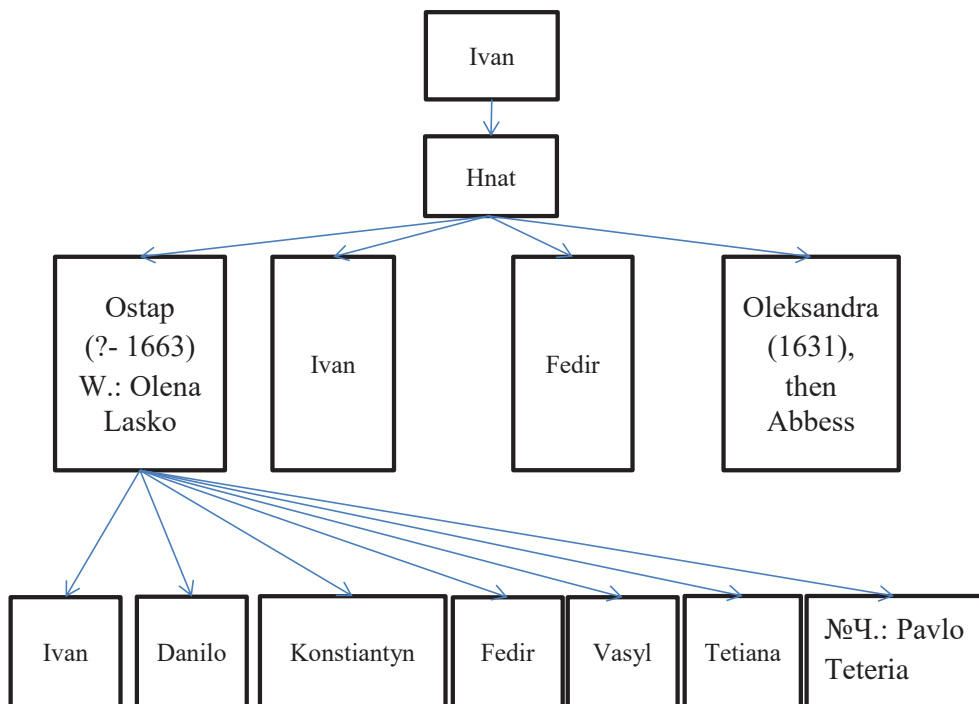
To the cohort of national heroes we include one of the famous and close mates of Bohdan Khmelnytsky – Secretary General Ivan Vyhovsky. It has already happened that his descendants know him as a fighter for the liberation of the Ukrainian people from the oppression of the Moscow state, and almost nothing – about his life before the national liberation war. It is made an attempt to partially fill this gap, as well as consider in more detail the activities of Vyhovsky-Hetman in the paper.

The Vyhovskies were in the perspective of research by many genealogists: N. Yakovenko (*N. Yakovenko, 1993*), Y. Mytsyk (*Y. Mytsyk, 1994; 2004*), V. Senyutovych Berezhny (*V. Senyutovych Berezhny, 1970*), V. Kryvoshei (*V. Kryvoshei, 2004*), M. Pasichnyk (*M. Pasichnyk, 2006*), V. Shevchuk (*V. Shevchuk, 1966*). From our prospective the researcher of V. Antonovich should be confirmed despite he did not quite accurately try to describe the environment of I. Vyhovsky’s

relatives: brothers: Daniel, Constantine and Fyodor; his uncle Vasily, a colonel from Ovruch, and his nephew Ilya, who were his zealous assistants” (*V. Antonovich, 1990:37*). Unfortunately, such a statement cannot be considered credible, because the testimony of well-known experts discussed above stated the opposite. The following investigation of V. Kryvosheya, who presents the Vyhovsky family tree in this way (*V. Krivosheya, 2004: 137*), serves as a confirmation of the materials. Dmytro Doroshenko’s mention of Ostap’s five brothers and children is in line with the opinion of most researchers: “Vyhovsky demonstrated brilliant diplomatic abilities, however, at the same time a sincere commitment to building and consolidating the Ukrainian state. He joined the Ukrainian service together with his four brothers: Danylo, Konstantin, Fedor and Vasyl. All of them gave their native land great services in the field of military and diplomatic activities, and two of them, Cossack colonels Danilo and Vasyl paid with their heads for loyalty to Ukraine, being tortured in Moscow captivity” (*D. Doroshenko, 1991: 53*).

The author of one of the articles in the encyclopedic edition, Olena Apanovych, claims that O. Vyhovsky had four sons and two daughters.

Among the publications of the author’s team of the same edition, the investigations of V.M. Horobets deserve particular attention. The historian, in addition to the hetman, mentioned among the students of the Kyiv Mohyla Academy the names of Ivan Vyhovsky’s brothers: Konstantin, Fedor, Danylo, as well as his father Ostap, as a person who was tied with an educational institution.



Genealogy of the Vyhovskies

Regarding Vasyl Vyhovsky, we find unknown information about the years of birth and death of “Hetman I. Vyhovsky’s cousin”, who since 1658 was a colonel from Ovruch

“(Kyiv-Mohyla Academy in the names of the XVII-XVIII centuries, 2001: 113). The chronological biography of Vasyl, presented in the study, refutes the data, which is identical to the biographical one of Hetman Vyhovsky’s brother: “Active participant in the National Liberation War of the Ukrainian people 1648–1658. During 1655–1658 he was in Tatar captivity ... In August 1658 he took part in the march of Hetman D. Vyhovsky to Kyiv. In a battle with Russian troops near Vasilkov in late September 1658 he was captured. After long interrogations he was sent to Moscow, and from there to Siberia, where he arrived on May 24, 1660. He died, apparently, in exile.”

Due to the comparative analysis of works on the historiography of the mentioned historians, a real vision of Ostap Hnatovych Vyhovsky’s family tree is quite blurry. V. Senyutovych Berezhny in the second lineage of the couple Ostap Vyhovsky and Olena Lasko, mentions the names of their three sons: Ivan, Danylo, Konstantin, as well as the unknown name of the daughter who was the wife of Pavel Teteria. Yu. Mytsyk completes the list with the names of another son Fedor and daughter Tatiana, married to Ivan Bohlevsky, without mentioning the nameless daughter. V. Lypynsky’s opinion about five Ostafy’s sons: Ivan, Danylo, Konstantin, Fedor, Vasyl is documented by N. Yakovenko. Biographer V. Shevchuk also adheres to the historical intelligence of his predecessors, supplementing the testimony of O. Vyhovsky’s five sons with factual material: “Ivan’s brothers also went to serve the Cossack state: In 1655 he captured Lublin; Konstantin – Colonel of Pinsk-Turiv, from 1658 – general oboznyi; Vasily – Colonel Ovruch; Brother Fedor and a nephew Elijah also served in the Cossack army.” What facts are we able to operate? There is no preliminary information regarding the Vyhovskies than from the middle of the 16th century and the beginnings of the family. But in the “Ukrainian historian” published a paper by V. Senyutovych-Berezhny about the Vyhovskies, where the author refers to the Polish encyclopedia in which there is an interesting message for us, (*V. Senyutovych-Berezhny 1970: 149*) In the middle of the sixteenth century. The Vyhovskies were well known because they received the right to own land from the Polish king. The Vyhovskies family tradition tells that their ancestor was Luka, a boyar from Ovruch, who lived at the beginning and in the first quarter of the 16th century, his 5 sons from the Luchyches: Grishko, Stepan, Ivan and Kirik 25.08. In 1541 they received from the Polish king Sigismund I lands in the Kyiv region, near Vyhov, which were previously used by Stanislaw Podolianin and after his death these lands were free.

From their side, the Luchyches brothers committed to carry out the zemstvo service for the use of these lands. In 1546, they received royal confirmation of that grant “forever”, after which they began to call themselves the Vyhovskies. We know about the eldest of the brothers, Hryshko, that he, at the hands of the Kyiv voivode, Prince F. Pronsky, was titled to be his governor in the town of Zaush in the Vyhovshchyna.

The Vyhovskies brothers had sons, “noble owners of Kyiv lands”, namely: Ivan, or Jan in Hryshko, Gordiy and Ivan in Stepan, Oleksandr in Ivan, Hnat and Jacko in Semyon.

At the sejm (parliament session) of 1611, the Vyhovskies were granted a new privilege on their lands from King Sigismund III. All family acts, including the letter of King Sigismund I (from 1541) to the Kyiv voivode A. Koshyrsky with the order to introduce the Luchyches brothers into the possession of the lands given to them, the future hetman Ivan Vyhovsky permitted to inscribe on May 7, 1631 in the court city books of Lutsk and thus preserved them for posterity and history.

There is no information left about the life and activity of the above-mentioned younger generation of “noble lands of the land of Kyiv”, except for Hnat Vyhovsky, who had a son Ostap (Ostafy), who left a noticeable mark. The last brothers had offspring, because we find in the acts the names of other Vyhovskys, which were related to Hetman Ivan’s relatives.

Vyhovsky Fedor Ostapovich (years, place of birth and death unknown). During the National Liberation War of the Ukrainian people (1648–1658) he carried out important diplomatic assignments of the Hetman's government. In particular, in the middle of 1657, on behalf of B. Khmelnytsky, he visited Moscow together with P. Teterei. After 1657 he was a close associate of I. Vyhovsky, performing mainly tasks related to diplomatic activities. He took an active part in the development and adoption of the Treaty of Hadiach in 1698 with the Polish-Lithuanian Commonwealth.

For example, Fedor was the governor of Kyiv voivode and a member of the Kyiv fraternity (1631). It is known that in 1656 he went to his estate in Vyhovshchyna. In 1657 he went to Moscow as the hetman's ambassador, and according to V. Lypynsky, he was also the ambassador to Poland. His signature is under the Treaty of Hadiach of 1659. He received from the Poles the town of Stebliv in 1659.

Ivan Vyhovsky, according to genealogist V. Modzalevsky, led his activity in Lutsk. Jan Vyhovsky "Kryvyi" was a member of the Lutsk fraternity in 1619-1638. Mentioned in 1658 by Samylo Vyhovsky, Colonel Bykhovsky captured by the Moscow army 4.XII. 1659 in St. Bykhov.

Vasyl Vyhovsky, Colonel Ovrutsky, whom V. Lypynsky mistakenly called the hetman's brother. In 1659 he was arrested by Chernihiv Colonel A. Silich. In Siberia, in exile, he stated to be an uncle of the hetman but not a relative, because Ostap (the hetman's father) was his cousin. He called himself the acting ataman of Danylo Vyhovsky across the Dnieper on the Polish border of Ovruch.

Yuriy and Ilya Vyhovsky. They both served in the crown army, and then with Hetman Pavlo Sapiha, until they joined the Cossacks. In exile in Siberia, they proved that Yuri Hetman is a cousin, and Ilya's uncle. In the Cossack army, Yuri was a colonel (Vyhovsky), and Ilya was a private.

Vasily, Yuri and Ilya were arrested at the same time and were in shackles in the "disgraced prison" in Moscow, and then exiled to Siberia on the "great river Lena in the Yakut prison" where they arrived on 24.05.1661 (*A.A. Vostokov, 1890: 35-46*).



The Vyhovskies' coat of arms
(*M. Pasichnyk, 2006*)

Roman Vyhovsky, official representative of the Greek Catholic bishop in Kyiv.

Krzysztof Wygowski, centurion. He was the leader of the uprising in Polissya and married to Marina Lasskaya.

Hnat Ivanovych Vyhovsky had a son Ostap, the heir of the town of Hoholev in the Kyiv region and the governor of the Kyiv castle to the voivode A. Kysil. He also owned his own court in Kyiv and was a member of the Kyiv Brotherhood.

Ostap Hnatovych was married to Olena Lasko, the coat of arms of "Leliva", who came from an ancient landowner of Ovruch County in Volyn. In addition to his son Ostap, he had Hnat Ivanovych and a daughter, about whom we only know that she became a nun under the name of Alexandra and later became the abbess of the St. Michael's Convent.

In 1654 Ostap Hnatovych received a royal charter for his estates. He died in 1663, and his wife, Elena, lived for several more years.

According to genealogists, the couple had three sons:

Ivan Ostapovych, the future hetman, Danylo and Konstantin, who had to play a significant role in the history of Ukraine, and a daughter whose name has not survived. She married Pavlo Ivanovich Teteria-Morzhkovsky. She died in 1657 in Kyiv.

V. Lypynsky writes in his work that Ostap Hnatovych had two more sons, Fedor and Vasyl. There is no evidence about Fedor to consider him the hetman's brother, and as for Vasyl, we know that he was the hetman's cousin's uncle.

Ivan Ostapovych Vyhovsky, the future hetman, was to study at the Kyiv Collegium and begin his service at the Kyiv City Court. Examining the question of the class affiliation of the Cossack sergeant, the famous Polish and Ukrainian researcher V. Lypynsky found out that a significant part of the Ukrainian colonels came from the nobility, as did Bohdan Khmelnytsky himself. Meanwhile, V. Lypynsky claims in his work that he was a "lawyer at the Lutsk castle." It is further believed that the future hetman held the position of governor of the Lutsk eldership, was a member of the Lutsk fraternity, participated in the Lutsk Sejm in 1637. Lypynsky came to the conclusion: Vyhovsky had a noble origin (*V. Lypynsky, 1920: 158*). In addition, the testimonies of contemporaries have been preserved, who call the hetman a man of "extraordinary courage and intelligence, as well as very rich."

Modzalevsky points out that there were two Ivans Vyhovskys, and the activity of one of them was connected with Lutsk. If Ivan Ostapovych was at the Kyiv city court at the beginning of his career, which is quite probable because his father lived in Kyiv, then obviously another Ivan Vyhovsky was a lawyer at the Lutsk city, but he wasn't a parliamentary of the Lutsk Sejm in 1637. It is quite possible that the future hetman was related to Lutsk and was a member of the Lutsk Brotherhood.

On the eve of the national liberation war under the leadership of B. Khmelnytsky, Ivan Vyhovsky was a clerk under one of the Polish commissars in Ukraine, and at the beginning of hostilities was in the crown army of S. Potocki.

By his first marriage Ivan Vyhovsky was married to Yablonska with the coat of arms "Yasenchyk", but nothing more is known about this marriage.

4. The Vyhovskies' Life Path

Vyhovsky Ivan Ostapovych (1616, Vyhiv village, Ovruch district, Kyiv voivodeship, now Korosten district, Zhytomyr region – March 9, 1664, Colonel M. Korsun, now the city of Korsun Shevchenkivsky, district center of Cherkasy region) started his military career by serving in the royal army. During the Battle of Zhovti Vody (1648), while in the rank of company

commander in the Polish avant-garde army, he was taken a prisoner of war by the Tatars, from where he fled twice, for which he was chained to a cannon by order of Khan Islam Giray III. Bohdan Khmelnytsky saved the prisoner. Vyhovsky joined the Cossack service and in a few months became general secretary, that is, minister of foreign affairs, or chancellor. He later headed the General Military Chancellery, carried out important state assignments, and trained Ukrainian government officials and diplomats, the total number of whom under B. Khmelnytsky was about a hundred people. 1649 Vyhovsky personally compiled the “Register of the entire Zaporozhian Army” (apart from two regiments). The brilliant diplomat turned out to be a reformer of the Ukrainian orthography and the founder of the national Ukrainian dialectology who introduced and approved phonetic writing. At that time, it was an innovation in the East Slavic language environment. During the Battle of Brest (1651) and the capture of B. Khmelnytsky by the Crimean Khan, Vyhovsky tried to persuade and persuade Islam Giray III to return the horde to the battlefield, but failed. Simultaneously, the ultimate threat to defeat the Horde forces at the crossings forced the khan to release Khmelnytsky (*Volodymyr Irzhysky, Natalia Titarenko, 2018: 55*).

On September 28, 1651, an agreement was concluded in Bila Tserkva, which was also signed by Ivan Vyhovsky. He also took part in the Battle of Batoz (1652). Together with P. Teteri and T. Nosach, Vyhovsky led a 6,000-strong detachment that accompanied Khmelnytsky’s son Timosh to the Moldavian master V. Lupul, where he successfully negotiated the consolidation of the Ukrainian-Moldavian union. The Secretary General also headed a group of hetman’s envoys (Colonels I. Bohun, H. Hulyanytsky, G. Lisnytsky, F. Dzhedzhalia, and M. Pushkar, as well as Judge General S. Zarudny) at the talks in Kamianets-Podilskyi, as a result of which Zboriv peace agreement. From 1657, as a hetman, he relied on the foreman and the Ukrainian Cossack gentry in state affairs (*Volodymyr Irzhysky, Natalia Titarenko, 2018: 55*).

During one of the campaigns, Ivan Vyhovsky met the daughter of B. Stetkevych, a castellan, Olena. Perhaps Ivan and Olena did not expect their parents to agree to their marriage, because Vyhovsky abducted Olena and married her. But despite this, Ivan Vyhovsky was on good terms with the Stetkeviches and Olena’s mother’s relatives. The couple was quite happy. In 1660 I. Vyhovsky received the title of count from the Pope.

The Vyhovskys had a son named after his grandfather Ostafy.

Ivan Vyhovsky’s brothers:

Danylo Ostapovych, the second son of Ostap Hnatovych.

Danylo Ostapovych Vyhovsky (year and place of birth unknown to the house – November 30, 1659, Kaluga, now the Russian Federation) – Colonel Bykhovsky. – took an active part in the National Liberation War of the Ukrainian people (1648-1658). He welcomed the Pereyaslav-Moscow Treaty of 1654. In 1655, together with the tsar’s troops (under the command of P. Potemkin), he captured Lublin as an acting hetman. He was categorically against the intentions of the tsarist voivode to destroy the city and destroy its inhabitants. He supported his older brother Ivan in the struggle for the hetman’s mace. He received the title of acting hetman. By order of the hetman in the second half of August 1658 at the head of the Cossack regiments made an unsuccessful attempt to capture Kiev, to drive out the tsarist troops under the command of Governor P. Sheremetev. He actively supported the Treaty of Hadiach of 1658 with the Polish-Lithuanian Commonwealth. In the early 1650s, Danylo Vyhovsky tied his destiny with Olena, the daughter of B. Khmelnytsky. After the martyrdom of Khmelnytsky’s son-in-law, the family estates were confiscated by the Polish authorities. Danylo Vyhovsky’s widow Olena married P. Teterya in 1660. Thus, B. Khmelnytsky’s daughter Olena, later Danylo Ostapovych Vyhovsky’s wife, Bohdan’s son-in-law, his widow, and later P. Teteri’s wife, is the

“N” pedigree of Vyhovsky, who is considered to be Ostap Hnatovych’s daughter. In one of the synods, a memorial series of the family of Ivan Vyhovsky was studied, where the name Olena was mentioned twice. Researcher V. Kryvoshei, analyzing the sources of the Cossack officers’ genealogy, suggests: “... two Olenas may be the mother of Hetman Olena Lasko, the second wife of Hetman Olena Statkevych or the wife of Danylo Olena Khmelnytska.”

Danylo was married to the daughter of Hetman B. Khmelnytsky, Olena. On October 26, 1659, Colonel Ya. Petrenko of Korsun arrested Danylo Vyhovsky in Lysyany and handed him over to the Moscow army. The then Hetman Yu. Khmelnytsky asked the Moscow tsar to release Danylo, but he was late. He died on the way to Moscow due to illness. Buried in the village of Horn. After some time, the body was transferred by order of Tsar Yuri Khmelnytsky.

Danylo’s wife, Olena, was arrested by V. Zolotareenko and sent to Subotiv under supervision (*V. Grinchenko, 1909: 29*).

Poland, as V. Senyutovych-Berezhny notes, treated Danylo’s widow more nobly, although she was the daughter of her worst enemy B. Khmelnytsky. In 1661 the privileges and land grants previously granted to her husband were again approved by the Diet for the widow to “Danylo Vyhovsky and his wife Helena Khmelnytska”. The text of the statement, in which Olena’s name is fully mentioned, dispelled the opinion of some historians, including M. Hrushevsky, that Danylo Vyhovsky’s wife was Kateryna Khmelnytska (*V. Senyutovych-Berezhny, 1970: 155*).

After the death of Danylo Ostapovych, their uncle Ivan Vyhovsky became a custodian of his sons from the marriage with Olena Khmelnytska, Yuri and Vasyl.

She soon remarried P. Teteria, who was married for the first time to Vyhovsky’s sister, who died in 1657.



Wife of hetman Ivan Vyhovsky Olena
(*Xerox. Velichko, 1991*)

It is known about the fate of those sons : Yuri died young near Khotyn in 1673, and there are no facts of his brother Vasily.

Vyhovsky Konstantin Ostapovich (years, place of birth and death unknown) – Colonel, General of the convoy. He began his service at the court of Kyiv voivode A. Kisel. He was involved in the National Liberation War of the Ukrainian people (1648–1658). In the Zaporozhian Army he held the post of colonel of Turov and Pinsk.

In the hetman’s government of his brother in 1658 he was a general convoy. Together with Danylo Vyhovsky, he stormed Kyiv in the second half of August 1658. He supported the Treaty of Hadiach signed by I. Vyhovsky.

Konstantin Ostapovich Vyhovsky, the third son of Ostap Hnatovych, was, like his father, a servant of the Kyiv voivode A. Kysil, later Colonel Turivsko-Pinsky, and finally a general oboznyi. He was married to Regina Ivanivna, Princess Mishcherska, coat of arms “Pohonia”, Smolensk, and left 7 sons and one daughter. In 1654 he was granted a diploma from the Moscow tsar in Kozara and Kobyzh. He received the Lysyanka of the Kyiv Voivodeship from the Poles, and also held the position of a Kyiv castellan. He fought in the battle of Chudnov in result he was wounded.



Crown metrics.
(P. Kulakovsky, 2002: 233–36)

As mentioned above, I. Vyhovsky and Olena Stetkevych gave birth to their son Ostafiy who was married three times:

with Anna Cholganska of “the Sas” coat of arms of Jan Glowinski, who had three children from her first marriage;

with Teresa Ludytsyanka Gedzinska, "Pravdych" coat of arms, widow of Mykola Didushytsky, Podolsk cornet ;

with Ursula-Teresa Zavadska, the coat of arms "Lys", a widow of Stefan Gedzinski, who had 4 children from him. On the occasion of his last marriage, Ostafy converted to the Roman Catholic faith.

From his marriage to Chalganskaya Ostafy had sons:

Jan, the mayor of Zhydachiv (1707);

Constantine, count on Vyhov, mayor of Minsk, colonel of the crown troops, hooded judge of Lviv and cornet Bydgosky.

The brothers began their service together at a young age, as comrades of the Hussar banner of the king.

In the marriage with Gedzinska there were children:

Stepan, the mayor Bratslavsky (1732), cornet Bydhovsky, who married Kateryna Hlovatska;

Olena-Anelya, who was married twice:

with Joseph Rzhovsky, the headman of Olkhovytsia (1695), from whom she had a son Vikenty with Mykola Kurdvanovsky, a castellan from Halicia and the headman Baranovsky.

We have already mentioned the brother of Hetman Konstantin Ostapovich Vyhovsky, who was married to Regina Meshcherskaya. The couple had 7 sons and one daughter:

Alexander, who was born in 1649. He was a well-educated man and traveled to many lands. He visited Germany, England, Sweden, Spain, Portugal and France. He lived in Paris for three years. He made a spiritual and secular career: he was a Catholic bishop of Lutsk (1703), then a bishop of Smolensk (1703-1714), a referendary of the Kingdom of Lithuania and the senator;

Danylo, castellan of Minsk (1713-1740), Neborovsky and Reklinsky headman, a stableman of the Kingdom of Lithuania and senator. He died in 1740. He was married to Princess Teresa Drutska-Lyubetska.

Yuri, Podolsk podchashovo. In 1699 he received the Domanytsky key from 5 villages from Grabowski, Luberacki and Potocki. The Vyhovskies' archive was also preserved in Domanytsia. He was married twice:

with Bogushova from Zemblits, and the second time,

with Elena Chernyavskaya.

Jan Vyhovsky, son of Constantine, was the mayor of Kyiv.

Peter was also the mayor of Kiev and the groom of Queen Maria Casimir. He died during the reign of the kings in Gdańsk and was buried in the Dominican monastery.

Nothing is known about Havril Konstantinovich.

Stefan, a nobleman of King Jan Sobieski.

The above-mentioned Yuri Vyhovsky, Podchash Podilsky, had a son Joseph and a daughter Apollonia (married to Joseph Ohinsky). Joseph, the son of Yuri Konstantinovich, was the head of Velatitsky. He married Anna Ledokhovska, the coat of arms of "Shalava", the daughter of the Drogitsy podstole. From this marriage he had two daughters and a son Thaddeus, who died in 1767 young and unmarried.

This fact distracted the line of the Vyhovsky family, descended from Hetman Ivan and his brothers.

Daughters of Yosyp Vyhovsky, head of Velytytsky:

Olena, the first marriage according to Radetsky's coat of arms "Hodzemba", and the second after Mykola Polyanovsky, the coat of arms "Pobog", the mayor Dombrovtsky.

Maryana, the second daughter, married Voynarovsky, the Streme emblem.

After Thaddeus' death, the keys to Lubomlsky and Domanytsky passed to his sisters, who sold Luboml for PLN 300,000 to Franciszek Branicki, the crown hunter.

The coat of arms of the Vyhovskys was similar to the Polish coat of arms "Abdank", but it was not. Like most of our ancient coats of arms, it originated from a family mark, which originally served as a property sign.

The title of the Vyhovsky coat of arms resembles the Latin letter "W", on the middle of which there is a sign similar to the letter "T".

According to the scholars O. Haletsky, and Senyutovych-Berezhny, the title of Vyhovsky is more reminiscent of one of the Russian distinctions "Syrokomli".

This is the original sign of the Vyhovskies in the work of the heraldists Wittig and Dzjadulevich. There is also an image of Ivan Vyhovsky's seal during the Hadiach agreement. A coat of arms was then made for the Grand Duchy of Rus': a white eagle in a red field, and on its chest the coat of arms title "Abdank" (*V. Senyutovich-Berezhny, 1970: 165*).

The coat of arms of the Vyhovskies has a silver field and a black titlo (cyrillic heraldic). "Abdank" has a silver titlo in the red field. Later, Vyhovsky began to apply the emblem "Abdank" with its colors.

5. Conclusions

A myriad of reasons contributed to the creation of a complete biography of extraordinary figures of the Vyhovsky brothers, descendants of Ostap: – all the sons of O. Vyhovsky studied at the Kyiv Brotherhood School; – a high level of education contributed to a further successful career; – Father Ostap and older brother Ivan, Hetman of the Ukrainian Cossack State, were role models for following the best traditions of Cossack victorious deeds; – the Vyhovskies – representatives of the elite of the Ukrainian nation became active participants in the national liberation war of the Ukrainian people, leaders of its national and spiritual renaissance.

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STYLISTIC PECULIARITIES OF REPRESENTATION OF POLITICAL PHENOMENA IN BRITISH NEWSPAPERS

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Summary

The presented paper highlights the results of a study of the usage of different expressive means and stylistic devices for the description of Brexit as a political phenomenon in English newspaper texts. Our analysis has proved that a political discourse proliferates with the language means, which clearly realize opposition FOR – AGAINST Brexit. It has been proved that stylistic means employed in the media are determined by the conditions of communication. If the desire of the speaker is to rouse the audience and to keep it in suspense, he will use various tropes and figures of speech. Furthermore, stylistic means are closely interwoven and mutually complementary thus building up an intricate pattern. It is stressed that the sign of evaluation in the media may be conditioned by various sociocultural factors, among which are the specifics of the sociocultural space, type of publication, genre specificity of the text, individual features of communicants' worldview. Accounting for these factors, contributes not only to a deep study of the stylistic phenomena, but also to effective communication and the creation of balanced journalistic texts, which, in its turn, will determine information and psychological comfort in society.

Keywords: Brexit, sociocultural, expressive means, stylistic devices, media, worldview.

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1. Introduction

The role of media is very important in a modern society. At present with the introduction of Internet-services, even a common man is being exposed to international knowledge. There is no doubt that media is becoming more and more essential in our life (*Happer & Philo, 2013: 321-336; Vivian, 2012; Wimmer & Dominick, 2013*). Society is influenced by media in different ways. It is the media for the masses that helps them to receive information about a lot of things and also to form views and make conclusions regarding various issues. It is the media, which keeps the people updated and informed them about current affairs and the business world. Thus, mass media can be considered tools for the transfer of information, concepts, and ideas to the readers, listeners, or the viewers.

It is common knowledge that the most widespread platforms for mass media are newspapers, magazines, radio, television, and the Internet. The newspaper enlarges the general knowledge of the people (*Manovich, 2001*). Newspapers are considered to be a source of information,

which is highly genuine and successful in the providing of timely information to the audience. Another attractive quality of the newspaper is that it presents wide-ranging information, which is not available on any other resource of media.

It must be noted that newspapers have been scrupulously studied from different angles: structure and composition (Wodak & Busch, 2004: 105-123), typology (Kazak, 2014: 65-76), concepts and categories (Dobrosklonskaya, 2008; Volodina, 2003), and language means (Konyushkevich, 2016: 93-104).

In this respect the role of context and functioning of stylistic means in the creation, realization, and interpretation of different social phenomena in media texts should be mentioned.

The **subject** of the discussion is the study of stylistic means of expression of phenomenon Brexit in British newspaper texts. The **aim** of this paper is to establish the role of different stylistic means in the description of Brexit as a political phenomenon in British newspapers.

2. Data and methodology

The **methodology** applied in the study is based on the fundamental points of the theory of expressive means and stylistic devices and the theory of Context, which presents fundamental notions for linguistic analysis. This research involves a variety of methods. A descriptive method, by which we mean a set of research techniques that allow one to move from particular observations to generalizations and conclusions is widely used; contextual and presuppositional analysis, allowing to detect the influence of the role structure of the communication situation, social factors on the communicative semantics, and functional features of utterances with stylistic means (van Dijk, 1977: 19; Kachru, 2008; Kecskes, 2013).

The **material** under analysis was a selection of approximately 400 fragments of texts from the English media portals (www.reuters.com, www.theguardian.com). The criterion of the selection was the existence of expressive means and stylistic devices in the fragments.

3. Historical and social context of Brexit

Brexit means the withdrawal of the United Kingdom from the European Union and the political process connected with it (Brexit, 2017). It represented and characterized the peak of many fundamental narratives within the United Kingdom that ended in a referendum and the exit from the European Union.

The process of UK withdrawal from the European Union, called Brexit (from fusion of the English words Britain and exit), is one of the most highlighted and discussed events over the past few years. We are witnessing the formation of a new stage of international relations between the UK and other countries of Europe. No wonder the analytics and experts in various fields of economic, socio-political, and cultural life make their predictions on how Brexit will affect the lives of inhabitants of the UK, Europe, and the rest of the world and how this process changes the role of the United Kingdom on the world arena.

The Leave campaigns were aimed at the identification of Britishness as individuality and in regaining independence from the European Union. They appealed to the public through pathos and outline the European Union negatively and unconstructively. In stark contrast to the Leave campaign, the Remain campaign, led by Prime Minister David Cameron, sought to unify a divided conservative party as well as to convince the British people that remaining in the European Union was the right move for Britain (Shing, 2016).

The study of the socio-historic narrative is an interesting topic as the United Kingdom has had an ambivalent relationship with the European Union. The Leave campaign was able to confirm victory in the referendum due to their employment and appellation to sorrow in the voters. They were able to do this by gaining the public opinion of the European Union and related issues of dissatisfaction and solely frame the European Union as the performer of their problems. This was based on an ambivalent historical relationship with the European Union and a feeling of national identity that was controlled by the Leave sides to persuade the voters to break free of the binds of the European Union (*Brexit, 2017*).

The Leave campaign focused on reactivating the underlying cultural narrative of Euroscepticism, which has been reinforced in the United Kingdom through decades of political rhetoric and public discourse. They activated emotions within the voters by appealing to national pride as well as the danger of losing their independence and used rhetoric, which consisted of “native vs foreign” as scare tactics when addressing the community (*Veltri et al., 2019: 18-31*).

They posed a complicated problem to the public asking them whether they wanted Britain to have its own set of laws and control over the country and if they did not act in response by voting Leave, then they were considered to be enemies of Britain. Leave outlined the European Union as a whipping boy for the difficulties of the country because of immigration and lack of sovereignty and presented exit from the European Union as the solution to the crisis (*Shing, 2016*).

The above mentioned confirms the urgent necessity to study the phenomenon of Brexit in broad perspective, because such researches fully reveal not only the social but also the linguistic significance of this notion (*Morozova, 2017: 250-256*).

4. Specific features of the stylistic means of depiction of Brexit in the British newspapers

This part presents a general overview of the stylistic means of illustration of Brexit as described in British newspapers.

It should be noted that the British media traditionally elucidates events in the most objective manner. However, with regard to events unfolding in their own country, having a national scale, it is difficult to talk about objectivity, as such. On the one hand, the media makes every effort to provide reliable, objective information, and on the other hand, it transmits certain values. Thus, the information presented in the media is rarely neutral; it always carries a definite appraisal, which is expressed by the usage of various expressive means and stylistic devices.

The study of the stylistic peculiarities of description of Brexit is carried out on the traditionally distinguished quality press in Britain: “The Guardian.com” and “Reuters.com”.

The reason for choosing “The Guardian.com” is its left-centre political and value orientation. Its readers are left-thinking UK citizens who have a negative attitude towards Brexit. It is therefore interesting to interpret the political situation on the part of this media after the UK’s withdrawal from the European Union.

The motive for choosing “Reuters news agency” is its conservative right-wing political and value orientation. Although the Agency endorses the values of objectivity, it is known that its management and editors have a right-wing perception and evaluation of events. We assume that Reuters has never openly criticized the UK’s withdrawal from the European Union. It retains the objectivity status of a news agency. That is why the analysis and interpretation of the UK’s withdrawal with the help of different stylistic means will be interesting.

According to many researchers (Hood, 2010; Maliarchuk-Proshina, 2015: 89-94), one of the main features of the language of the media is the presence of social appraisal. This is due to the pragmatic function of media texts, designed primarily to influence the addressees. The language of journalism reflects the urgent problems of the life of modern society with the help of a wide range of tools. The active use of a range of means in the language of the media is determined by various factors, including the removal of censorship and the search for new expressive means for newspaper texts.

The vivid characteristic of media texts determines the existence of special language means for the implementation of the society's attitude to Brexit. Such means, providing the pragmatic effect of a journalistic text, are manifested at the lexical and syntactic levels.

The most frequently used tropes in the British media are to be mentioned. In analysed English newspapers the epithet is often used:

(1) *"The prime minister toasted the moment with English Sparkling wine in Downing Street, which was illuminated by a red and blue light show, as were government departments along Whitehall, and parliament square was decked with union flags for the historic day; but Big Ben did not bong, contrary to the hopes of ardent Brexiters".* ("Boris Johnson promises Brexit will lead to national revival"). January 31, 2020. (<https://www.theguardian.com/politics/2020/jan/31/boris-johnson-promises-brexit-will-lead-to-national-revival>)

The adjective **ardent**, which performs the function of the epithet, reveals the ironical characterization of opponents of the withdrawal from the European Union. Moreover, negative attitude to opponents is emphasized by the derivative **Brexiters** from the neologism **Brexit** that has a negative connotation.

Often epithets are used to portray positive emotional descriptions of a certain object or event as in the following fragment:

(2) *"Happy Brexit Day! ... At last the day comes when we break free. A massive victory for the people against the establishment...11 pm tonight marks the point of no return. Once we Leave, we will never rejoin the European Union. Time to celebrate".* ("Joy and sadness: How the world is reacting on Brexit Day"). January 31, 2020. (<https://www.reuters.com/article/us-britain-eu-reaction/joy-and-sadness-how-the-world-is-reacting-on-brexit-day-idUSKB-N1ZU0YZ>)

Hopefulness and delight about leaving the European Union are emphasized by epithets with the positive meanings **happy** and **massive**. In addition, an exclamatory nominative sentence **Happy Brexit Day!** is also involved in the creation of a positive nature of the statement.

The simile, which acts as a means of likening one object to another according to a certain attribute in order to establish resemblances or differences between them, is also quite frequently met in British newspapers:

(3) *"Boris Johnson now faced a challenge of colossal dimensions: to recover the unity of a country divided between those who see Brexit as a liberation, and those who consider it a tragedy and a historical error".* ("Britain is retrenched on its island': Europe's papers react to Brexit day"). February 1, 2020. (<https://www.theguardian.com/politics/2020/feb/01/britain-retrenched-island-europe-papers-react-to-brexit-day>)

Here we observe the functioning of similes, which demonstrate the contradictory approaches to Brexit.

This trope is used to express feelings of anxiety and apprehension about the future of Europe:

(4) *"Now the future of the Eurostar is uncertain. The service was seen as a symbol of a Europe without borders, but it has failed to meet expectations – especially in terms of*

passenger numbers". ("Last train to Europe: All aboard the Eurostar as Britain bids goodbye"). February 1, 2020. (<https://www.reuters.com/article/uk-britain-eu-tunnel/last-train-to-europe-all-aboard-the-eurostar-as-britain-bids-goodbye-idUSKBN1ZU36U>)

The most important technique in journalism is a metaphor, the essence of which is to transfer the name and properties of one object to another according to the principle of their similarity.

Based on the analysis of the articles, we can conclude that the particular expressiveness, accuracy, and emotionality are given by sustained metaphors, in which the metaphorical image is realized in several phrases or sentences:

(5) "*Nearly four years after the Brexit vote, Britain has left the European Union, closing a rancorous chapter in the country's history and beginning another viewed by some with optimism and others with dismay*". ("Boris Johnson promises Brexit will lead to national revival"). January 31, 2020. (<https://www.theguardian.com/politics/2020/jan/31/boris-johnson-promises-brexit-will-lead-to-national-revival>)

In this statement metaphor is created due to the implicit comparison of exit with hostile enemy. The negative meaning is strengthened by the antithesis *by some with optimism and others with dismay*, which conveys the people's stance to Brexit.

It goes without saying that metaphors also belong to productive means of expressing the situation of the split of British society into "friends" and "strangers" in analytical articles. The actualization of the conceptual metaphor (FAMILY=DIVORCE) is significant. The authors of Brexit publications regularly refer to such images as family disorder or divorce:

(6) "*So on "Brexit Day", some will celebrate and some will weep – but many Britons will do neither. Many are simply happy that more than three years of tortuous political wrangling over the divorce are over*". ("Brexit day: Britain quits EU, steps into transition twilight zone"). January 31, 2020. (<https://www.reuters.com/article/uk-britain-eu-union/brexit-day-britain-quits-eu-steps-into-transition-twilight-zone-idUSKBN1ZU003>)

The parallel drawn between a family facing divorce and the situation, in which Great Britain exit from the European Union, is intended to emphasize such implicit meanings as the existence of close relations between the European Union and the United Kingdom and the pain of their separation, as well as the inevitability of terrible consequences.

Thus, analysis of newspaper articles on Brexit reveals a number of stylistic tools that are used in British political discourse during the period of aggravation of social relations.

The analysis of British newspapers shows that as far as the stylistic syntax is concerned the most frequently met are: parallel constructions, inversion, enumeration, rhetoric questions, and antithesis.

Parallel constructions may be viewed as a purely syntactical type of repetition for here we deal with the reiteration of the structure of several successive sentences (clauses), and not always of their lexical "flesh" (Markhasev & Zajtseva 2010: 25):

(7) "*In Parliament Square, site of hoarse slanging matches for the past four years, the crowds on both sides were thinner on Friday night, at least before the Farage rally got going. The leavers were beaming, proud in their sweatshirts bearing the slogan: Job Done. They believe spring is coming. The remainers were wrapped up against the cold, braced against a January night, which, to them, felt like the bleakest midwinter*". ("That was Brexit: The mad energy of A Midsummer Night's Dream, but lasting three and a half years"). January 31, 2020. (<https://www.theguardian.com/commentisfree/2020/jan/31/brexit-midsummer-nights-dream-politicians>)

Certainly, parallel constructions illustrate the different position of the British to Brexit. The usage of antithesis (*the leavers, the remainers*) makes it more vivid.

Linguists also draw attention to such a stylistic figure of speech as inversion, typical of the media, which is known as emphatic construction. Inversion is aimed at attaching logical stress and additional emotional colouring to the surface meaning of the utterance:

(8) *"In our diplomacy, in our fight against climate change, in our campaigns for human rights or female education or free trade we will rediscover muscles that we have not used for decades. The power of independent thought and action," he said.* ("Boris Johnson promises Brexit will lead to national revival"). January 31, 2020. (<https://www.theguardian.com/politics/2020/jan/31/boris-johnson-promises-brexit-will-lead-to-national-revival>)

Inversion presupposes a reply with more certainty than the normative sentence. It is the assuredness of the speaker of the positivity concerning the exit from the European Union that constitutes additional information, which is brought into the statement by the inverted word order. Enumeration and nominative sentence provide the intensification of the speaker's belief in the appropriateness of his actions.

No less common is the use of a rhetorical question. This figure of speech stands out among narrative sentences both intonationally and structurally, introducing an element of surprise into the speech and thereby enhancing the expressiveness of the utterance:

(9) *"Reflecting on the lessons of Brexit, European Commission President von der Leyen told broadcaster ARD: "We must stand up for Europe, otherwise at some point we won't have it any more". "Europe must deliver on the biggest questions – that's what we need the European level for," she added. "How will we address climate change? That is the 'European Green Deal' issue. How will we deal with digitalisation? I want us to have a concept for migration that is sustainable, effective but also human".* ("Now EU must deliver, Commission chief says on Brexit day"). January 31, 2020. (<https://www.reuters.com/article/us-britain-eu-vonderleyen/now-eu-must-deliver-commission-chief-says-on-brexit-day-idUSKBN1ZU2V3>)

Rhetorical questions express here anxiety and apprehension regarding the future of Europe. The change of intonation breaks the monotony of the intonation pattern and revives the attention of the listeners.

5. Conclusions

The results of this study show that expressive means and stylistic devices as a sociocultural attribute of a journalistic text turn out to be a multifaceted category.

Analysis of publications on the Brexit referendum reveals a number of language tools that are used in English newspaper texts within the period of exacerbated social relations and differences. In general, it can be concluded that a political discourse abounds with language means that explicitly realize opposition FOR – AGAINST Brexit.

The examination of stylistic means employed in Slovak and English media texts is determined by the conditions of communication. If the desire of the author is to rouse the audience and to keep it in suspense, he will use special tropes and figures of speech. The most frequently met are: epithets, similes, metaphors, parallel constructions, inversion, enumeration, rhetoric questions, and antithesis. Furthermore, stylistic means are closely interwoven and mutually complementary thus building up an intricate pattern.

It must be noted that the function of these stylistic means in the depiction of Brexit is very significant. In British media these stylistic means demonstrate the ambivalent attitude of the British towards Brexit, which is primarily conditioned by the political orientation of the analysed newspapers.

As a concluding remark, further research connected with the stylistic means of description of other political and social phenomena would have great potential.

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PALACES IN VINNYTSIA REGION: PROBLEMS OF PRESERVATION AND INVOLVEMENT INTO MODERN CULTURAL LIFE

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Summary

Nowadays the issue of preservation and actualization of historical and architectural heritage in Ukraine is acute. It is important not only to preserve some sights but also to promote their development and adaptation to modern requirements. The palaces of Vinnytsia region, which began to be actively built at the end of the 18th century, have significant potential in this process. Throughout their existence, many palaces had different owners, who were modifying the appearance of the buildings. During the nineteenth century, there was a variety of architectural styles, the dominant of which was classicism. In the process of political and socio-economic changes in society, palace complexes acquired a new meaning and functions. From the beginning of the twentieth century, palaces were used not for their original purpose, which caused their decline today. There are about forty venues of various degrees of preservation on the territory of the region. The irrational use of palaces remains a problem. The integration of historical and architectural landmarks into the life of society involves a comprehensive approach. An effective method to restore and preserve palaces is revitalization, which is to return lost functions or provide new ones to the venues.

Keywords: tourism, monuments, historical and architectural heritage, use of monuments, actualization, revitalization, ruins.

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1. Introduction

Relevance of the study. The palaces and park complexes of Vinnytsia region are a part of the historical and architectural heritage of our country and its tourist resource. Landmarks continue to be destroyed and are not involved in tourism and the cultural life of the community. This often applies to sites that have the status of a monument of national importance and are included in the state register. For example, the palaces in Serebryntsi, Bilichyn, Napadivka, Andrushivka. The realization of the historical and cultural potential of these venues is an important factor not only for tourism development but also for their further preservation.

The purpose of the article is to investigate the methods of actualization of damaged palaces with the prospect of their involvement in tourism and adaptation to new socio-economic conditions. **The task is** to outline the history of the construction and development of palaces and park complexes in the region. To determine the ways to solve the problems of preservation of historical and architectural monuments. To consider approaches that would contribute to the actualization of the landmark, its inclusion in the cultural life of the community. The study is based on the use of general scientific **methods** (analysis and synthesis, analogy and modelling, historical and logical).

Scientific novelty. Most palaces and park complexes in Vinnytsia region, due to careless treatment or adaptation to other functional uses, lose their authenticity. That is why it is urgent

to use new methods that are designed to promote the restoration and preservation of historical and cultural monuments. One such approach is revitalization, which has not yet been covered in the works of researchers in relation to the palace complexes of Vinnytsia region.

2. History and development of palace complexes

Palace complexes of Vinnytsia region are directly related to the history of the region, they witnessed a complicated and eventful period of the late 18th – early 20th century. The palaces and parks preserved until now reflect the heyday of magnate residences in the territory of Eastern Podillya (modern Vinnytsia region). At different stages of their existence, these sites have been changing the owners, who modified the appearance of the buildings. With the shift of the political and social structure of society, palace complexes acquired new functions.

Due to the concentration of a large amount of land in the hands of Polish magnates on the territory of Eastern Podillya, luxurious palaces and park complexes appeared in small towns and villages (Voronovitsa, Serebryntsi, Tulchin, Severinovka, etc.) (*Malakov, 1988: 12*). Active construction of palace complexes lasted from the end of the 18th to the beginning of the 20th century.

In the middle of the 18th century, the architectural style of classicism was widespread in Europe. It was an imitation of forms of ancient classics as a counterbalance to rich and decorative baroque. Eastern Podillya hasn't missed this trend either (*Sichyns'kyj, 1956: 140*). Palaces of the Classicism style are the most numerous group of monuments that were built during this period. Classicism became the last "great style" that for almost a century determined the appearance of buildings from royal palaces to small estates far outside the capital (*Leont'iev, 2010: 167*).

Among the monuments there are such styles as Neo-Renaissance (Palace in Kotyuzhany), Baroque (Palace in Spychintsy), Neo-Baroque (Palace in Honorivka), Gothic (Palace in Mytky), Neo-Gothic (Palace in Chernyatyn). Landscape and regular parks are no less important than a large number of magnate palaces on the territory of Eastern Podillya. They reflected the wealth of their owners, the tastes, and the spirit of the era. A large part of the parks was created by a talented master of landscape art Dionysius Mikler.

After the partition of the Polish-Lithuanian Commonwealth and the annexation of the territory of Eastern Podillya to the Russian Empire, the tsarist government, trying to reduce the influence of the Polish nobility in the region, began to settle these lands with Russians (*Temirova, 2003: 76*). The property of the Polish nobility who refused to swear allegiance to Catherine II or participated in the uprisings of 1830–1831 and 1863–1864 was confiscated and handed over to Russian landowners. After the establishment of the Russian Empire's authority, the construction of palaces continued. However, it became more and more difficult for landowners to control large landholdings. As a result, the palaces became more modest.

With the Bolsheviks coming to power, many palace complexes were destroyed. The surviving venues have been adapted for use as orphanages, sanatoriums, community centres, etc. As a result of careless treatment, monuments continued to be destroyed during the 20th century (*Tomilovych, 2011: 5*).

3. Practices of monuments revitalization

Palace complexes of Vinnytsia region are a component of the country's national wealth and can potentially be used for the development of cultural tourism. However, a number of

factors do not allow to reveal their tourist potential in full. The use of estates remains a big problem. Unused buildings decline and collapse. Physical destruction is also caused by use not for the original purpose or in an inappropriate for the aesthetic function and material and technical structure way (*Plamenyts'ka et al., 2019: 37*).

There are a number of methods designed to promote the restoration and preservation of historical and cultural monuments. One of them is revitalization – “increasing the functional significance of the complex, a fragment of the environment, the city centre by reproducing their lost social functions or giving them new ones that do not violate the traditional nature of the environment” (*Vechers'kyj, 2003: 67*). Any work with monuments of cultural and historical significance brings many challenges. Revitalization involves preserving the authentic appearance of the building and, at the same time, adapting to new conditions (*Penica et al., 2015: 890*).

More than 150 palace and park complexes were built in Vinnytsia region from the end of the 18th to the beginning of the 20th century. Only less than a third have survived to the present day with varying degrees of preservation (*Khorosha, 2020: 23*). A significant part of the venues that had exceptional historical and cultural significance was lost. Of those that have survived until now, about 16 have been turned into ruins and continue to decline.

Such objects include the Chatsky Palace – an architectural monument of early classicism. The palace is a monument of national importance. Until the end of the 1980s, the interiors of the palace were partially preserved: the stucco decoration of the ceiling that was unique in each room; patterned parquet; Marble Hall (*Malakov, 1988: 77*). Nowadays, only a few rooms of the palace are used for the needs of the village council and the library. The rest is gradually collapsing. There is nothing left of the park, founded in the 19th century by the famous master of landscape art Dionysius Mikler.

The palace and park complex in Serebryntsi has all the typical problems for monuments of this kind in Ukraine. This is a location in the countryside, adaptation for economic needs without regard to artistic and architectural value in Soviet times, the lack of any restoration work. Today the monument is not involved in modern socio-cultural activities.

Researchers involved in the development of measures for tourist sites revitalization identify the following types of revitalization: spatial, social, cultural, economic. Revitalization is defined as complex technical, social and economic actions aimed at restoring the lost function of the monument and providing redevelopment of some premises for modern needs (*Bernats'ka et al., 2017: 58–59*).

Analyzing the experience of the successful revitalization of abandoned monuments of palace art, the following steps can be identified that help to actualize and create cultural space around the venue:

- activation of the local community, drawing attention to the preservation of cultural heritage, cooperation with local authorities, media;
- cleaning the territory and its reorganization by volunteers;
- development of social, cultural and tourist infrastructure, organization of excursions on the territory of the monument.

As a result of revitalization, the monument acquires new functions and meanings. The palace can host themed evenings related to historical figures of the palace owners and their guests, an exhibition of works by local artists, festivals, concerts and much more (*Zhukova, 2019: 108–109*).

Sources of funding can be different: funds from regional, city, village budgets, funds of local entrepreneurs and residents, grant funds of the European Union. Carrying out revitalization

anyway helps to preserve the historical and architectural monument from destruction since restoration, first, is not always possible. Secondly, monuments often disappear before being restored. (*Plamenyts'ka et al., 2019: 53*).

4. Current conservation issues

Nevertheless, it is necessary to carry out comprehensive restoration works for the effective preservation and use of palaces in the future. In this study we will try to consider the prospects for the restoration of the palaces in Vinnytsia region on the basis of the “International Charter for the Protection and Restoration of Immovable Monuments and Sites” (*Venice Charter, 1964*). According to the document, the restoration is a protection measure, the main purpose of which is to preserve and reveal the artistic and historical significance of the monument (*Venetian Charter, 1964*).

Of the 38 studied palaces of the region, 22 are in a relatively well-preserved condition, 16 are in a state of ruin or require significant restoration work. In cases when the condition of the monuments is so bad that collapse or complete destruction are possible, a restoration method of strengthening is necessary. These are actions, first of all, of engineering and technical character, the purpose of which is to increase the bearing capacity of the building and preserve the authentic material structure (*Prybieha, 2017: 400*). Among the palaces of Vinnytsia region, for example, strengthening is needed for the half-ruined Lange Palace in the village of Napadivka or the Kogan Palace in the village of Vysheolchedaiv.

For almost a hundred years the palaces of Vinnytsia region were used as educational institutions, medical institutions or even food warehouses. As a result, the elements of many buildings still have specific Soviet aesthetics. These details include whitewashed walls and ceilings, painted stairs and railings, tiling, etc. Restoration revealing helps to cope with such influences. It involves the removal of later layers and aims to identify the authentic surface of the monument (*Prybieha, 2017: 401*).

The Venice Charter states the need to preserve the layers of different epochs, as unity of style is not the aim of a restoration, and the revealing of the underlying state can only be justified in exceptional circumstances. Revealing is recommended when the removed elements are of little interest (*Venetian Charter, 1964*), but the layers of the Soviet period are economic in nature and often dissonant with the architecture of the monument. Of course, each building is special in its own way and requires an individual approach.

As most of the palaces have lost their authentic appearance nowadays, the method of replacement is becoming relevant in restoration. The new elements must be different from the original fragments and at the same time harmoniously complement the overall shape of the building (*Venetian Charter, 1964*). The replacement technique was used in the process of restoring the Grokholsky-Mozhaysky palace in Voronovitsa. Part of the stucco was removed from the facade. Damaged parts were replaced with copies. Replacement requires significant costs and professional performance. Therefore, in the realities of restoration with a very limited budget, it may be rational to refuse to return the monument to its original form.

Inclusion in social processes and functional adaptation of cultural heritage sites is an important factor in their preservation. Successfully integrated into the life of society, monuments (palaces) will play an important role in the process of historical cognition and contribute to the formation of national and cultural consciousness among the population (*Prybieha, 2017: 413*).

5. Conclusions

The way palace and park complexes are used today does not allow to fully reveal their historical and cultural potential and threatens their preservation. Nowadays, researchers have already developed a number of approaches and methods that allow to renovate monuments and create a full-value tourist and excursion product based on them.

One of the successful measures, although not yet very common in Ukraine, is revitalization. It provides a comprehensive approach and actions in the technical, social and economic spheres, focused on the restoration and development of the monument. The inclusion of palaces in socio-cultural life involves restoration work. There are a number of restoration techniques that can be used in relation to the objects studied: strengthening, revealing, replacement. At the same time, the restoration of each monument should be approached individually, trying to preserve its authenticity and originality.

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POLYCULTURAL TRENDS OF UKRAINIAN ETHNO POP FOLK MUSIC OF THE 21st CENTURY

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Summary

The article highlights the actualization of the cultural and national identification issue in the contemporary world. According to scientists, the preservation of the cultural and national identification in the global environment is the most successful when a polycultural approach is implemented to intercultural communication. The aim of the article is to demonstrate, using a polycultural approach for analysis, how Ukrainian national culture is displayed and popularized through the musical content of the 21st century. Reactions of video bloggers from YouTube platform became a marker of the popularity of such a cultural product. Using the method of structural analysis, the selected music videos were considered at a verbal level (usage of folk songs lyrics), a visual level (filming the videos in Ukrainian locations, usage of elements of national life, national costumes, etc.) and at an intonational one (usage of national instruments, singing in a national style, etc.). Due to this, it has become possible to highlight polycultural markers in the music content itself and then track the reaction of foreign video bloggers to the polycultural combination of modern music trends with Ukrainian national elements. The presence of such video reactions confirms the demand for polycultural products, transferring it to the category of a trend – what is on time and what is of most interest to a mass consumer. This proves the relevance of further development of the polycultural approach, expanding the scope of its application, as well as the natural perception of polycultural mass consumption products.

Keywords: polyculturalism, cultural identification, national identification, polycultural approach, music video reactions, popular music.

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1. Introduction

Since the second half of the 20th century intercultural communication has increased significantly due to mass movements, distribution of the unified and publicly accessible “network of networks” – the Internet, improvement and availability of technologies, etc. As a result, a new wave of strengthening intercultural interactions has started, which, in turn, contributed to actualization of sociocultural issues of self-identification, preservation of national traditions, overcoming intercultural and interclass tensions. The latter ones have attained some speed over the past 10 years. To address the issues of reducing tensions in communication and perception of the Other in intercultural communication in the 21st century, three main approaches were identified – cultural colorblindness, multiculturalism and polyculturalism. Unlike the first two approaches, the latter one is just beginning to be studied and applied in scientific environment. Meanwhile, it seems to be the most optimal for solving contemporary issues of intercultural interactions. Due to significant actualization of intercultural communication and issues of natural existence in the global world of many cultures, polyculturalism has become a kind of trend. A combination of cultural uniqueness and gained experience of past cultural interactions and

common synergetic cultural products is used today to create an entertainment product both in trendy genres, such as cinematography, animation and music, and by video bloggers on YouTube, TikTok, etc.

The aim of the article is to demonstrate the ongoing polycultural trend in the entertainment sector and how it can help both to preserve the national traditions and cultural uniqueness and to incorporate them into the modern globalizing world. It can be reached by generalization of main scientific studies of polyculturalism, adjustment of its main characteristics to the pop-music industry and analyzing examples from a polycultural perspective.

The novelty of the study lies in application not only of modern samples of Ukrainian ethno-pop and pop-folk music in the study, but also of a perspective of foreign listeners and viewers on unique national and popular world music mix, in order to demonstrate the polycultural trend and its popularity.

The main methods for the study were structural analysis, systemic and polycultural approaches.

2. Polycultural approach for the consideration of cultures and their self-identification

The term of polyculturalism was described in 2010 by the researchers Lisa Rosenthal and Sheri R. Levy. In their research they define polyculturalism as an approach that regulates mutual relationships of different cultures in the modern environment. Considering it along with cultural colorblindness and multiculturalism, the researchers conclude that it is the polycultural approach that is the most inclusive for further cultural interactions: “Polyculturalism emphasizes the interconnectedness rather than the separateness of racial and ethnic groups, helping to blur boundaries and allowing people to feel more connected to each other; yet, it does not require ignoring one’s racial or ethnic identity or assimilating into or adopting a dominant or common cultural identity in place of one’s own identity. <...> Polyculturalism studied in its “neutral” form relates to greater interest in, appreciation for, and comfort with diversity and people from different backgrounds, less support for social dominance or inequality, greater willingness to have contact with people from different racial and ethnic groups, and greater support for related policy attitudes” (Rosenthal & Levy, 2010: 224-235).

Also, in 2012 the researchers noted how exactly people perceive other cultures in terms of polyculturalism: “People who endorse polyculturalism focus their attention on how cultures have interacted, influenced, and shared ideas and practices with each other throughout history, and how they continue to do so today. Thus, individuals who endorse polyculturalism view people of all racial and ethnic groups as deeply connected to one another through their past and current interactions and mutual influences on each other’s cultures. individuals who endorse polyculturalism are focused on the ways that the cultures of all racial and ethnic groups around the world have always been and continue to be influenced by each other and are not, by definition or by extension, focused on developing a superordinate identity or common goals with other groups” (Rosenthal & Levy, 2012: 2-3).

And the researchers Michael Morris, Chi Yue Chiu and Zhi Liu later mentioned that “Polyculturalism: a network conception of culture in which cultural influence on individuals is partial and plural and cultural traditions interact and change each other” (Morris, Chi Yue Chiu & Zhi Liu, 2015: 634).

So, polyculturalism has absorbed some positive features of cultural colorblindness and multiculturalism, adding to them similarity of different cultures over time. Thus, the cultures, existing in a multicultural environment (and they are the majority), not only actively interact

with each other, adopting their experience, but are also able to clearly demonstrate their uniqueness. This becomes the possibility of identification in today's global world.

The topic of cultural identity was arisen for society long before globalization, but before the danger of unification, which was seen (and still is seen) in modern processes, the topic of identity and identification became relevant again. According to scientists, "One of the main aspects that defines the nature of globalization – repressive or liberative – is whether we are allowed to imagine ourselves with multiple identities: flexible, modulated, sometimes superimposed on each other, that in turn creates the cases to conceptualize legitimate and compatible, but not just competitive and threatening, different identities or (even better) different cultures" (*Canclini, 2016: 126*). Both external, economic and political factors of the present world and the immersion into cyber environment, where everyone can acquire the identity he or she creates, increased the number of "identities" of a person.

That is why, in the contemporary global context and economic, political and corporate confrontations, the issue of the self-identification of cultures and individuals is quite acute. Ukraine, particularly, has been actively implementing a policy of popularization of Ukrainian culture for the last 7 years.

3. Analysis of Ukrainian popular music

With polycultural trends of the contemporary world, Ukraine has an opportunity to promote its culture not only in a refined, "museum", format, but also through the inclusion of national traditions in a general multicultural environment. One of the most common methods used for such promotion is popular music. It is important to mention here that "music has always played an important role in human society. If we consider today simply the world of pop music, the manner in which it is effortlessly transcending global barriers and even otherwise extremely difficult linguistic barriers, if we consider the number of people who consume it in some way and millions of economic units consumed in its production and consumption, we are not simply talking about a very big business enterprise" (*Garfias, 2004: 1*). So, music is a quite universal phenomenon, because it can be enjoyed and appreciated without even understanding principles of its creation or a language which song is created in. Music has become the tool which different cultures can transmit their uniqueness through to the whole world, because it easily absorbs all the changes, correlating with the demands of the contemporary world. "The movement of migrants, refugees, expatriates, nomads, and diasporic people – and the consequent movement of their cultural rituals and expressions alongside with them – as well as the increased flows of culture due to the more advanced communication technologies now available have contributed to changing the meanings of time and space, and thus to the formation of a heterophonic global musical scene in which pastiche, irony, and contradictions are the norm rather than the exception. Music, thanks to the potential for fluid cross-cultural communication its sonorous qualities offer, opens up spaces where authentic experiences may occur even when its production and distribution dynamics are enacted in spite of that possibility" (*Kotarba & Vannini, 2009: 136-137*). Therefore, it is the music where it is possible to trace a combination of trends common to different cultures, to observe natural synergy in united product of national past and present universal, which are markers of polycultural. Polycultural in popular music can manifest itself on several levels:

– at a text level

A variety of combination of different cultures is possible at this level. When referring to American or European pop music, a direct reference or a hint of a certain culture is usually

included in a title of a song or is simply mentioned in lyrics (for example, Rihanna feat. Cold Play “Princess of China”, Jain “Makeba”, Nicki Minaj “Chun-Li”, etc.).

Ukrainian performers also use these techniques, but most often they use texts of folk songs, completely or partially. There are also options when performers slightly modify an original text by adding their own phrases; they replace words of a folk song in such a way that it can still be recognized, or they arrange lyrics in such a way that it resembles a folk song structurally. Also, performers sometimes use certain Ukrainian dialects instead of literary language, so that a song is immediately identified with a certain region of Ukraine.

For example, Ukrainian singer Alina Pash uses all these techniques in her works. In the songs “Oinagori” and “Oigaigai” the singer took the texts of two Ukrainian folk songs “Ой, на горі два дубки” (“Oh There are Two Oaks on the Hill”) and “Очерет-осока” (“Reed, Sedge”) as bases. In addition to directly quoting the text, Alina Pash has partially modified it, adding modern allusions, such as “Вечоронька – годнота, там музики і братва” (“The party is awesome, there are musicians and mates”). The songs also become contemporary due to music styles which these lyrics are applied to. For example, the lyrics of “Oinagori” were put onto reggae music. In her music track “BOSORKANYA” (“A Carpathian Witch”) Alina Pash has stylized the lyrics in such a way that it resembled a folk song, using the Transcarpathian dialect in the text and adding mysticism and religiosity to the plot. Similarly, the song “Bitanga” is written exclusively in the Transcarpathian dialect combined with reggae style.

The singer КHAYAT has created his song “OSOKA” (“Sedge”) in a similar way. The performer has used many repetitions and short phrases in the lyrics that are inherent in folk songs. The plot of the song is also close to the folk ones – it is about infidelity of a beloved woman and her comparison with the sedge – a symbol of infidelity.

TNMK band (“Tanok Na Maidani Kongo” = “Dance at the Congo Square”) has used the Bervy project’s recording of singing of the Western Polissia resident – Nadiia Chekun, in one of their newest songs “Янголи” (“Angels”). She is performing a folk lullaby. To be mentioned, the original recording is used only once for the entire song, using its electronic processing for the rest of the music track. The singer’s voice was artificially lowered to create more mystic and darker atmosphere, which corresponds to the song theme and its visual images.

The electro-folk Go_A band has totally created their newest music track “SHUM” (“Noise”) on a basis of folk spring song. The text refers to the mythological forest deity Shum and calls for the arrival of spring and the flowering of trees.

And here’s the singer Jerri Heil, who is in the duet with Morphom “Xo Xo Xo #несеГаляВалю” (“Ho ho ho #AGirlHaliaIsCarryingAGirlValia”) has left only rhyme and rhythm from a folk song, completely changing its lyrics. Meanwhile, the popularity of the folk song and the proximity of the musical design help to unmistakably identify the original, even with a complete text change.

– at a visual level

This broadest level involves using both strongly marked elements of different cultures (such as elements of national clothing, architecture, way of life) and elements of subcultures (for example, the appearance of the singer Melanie Martinez is the personification of Japanese style Lolita, and the appearance of the performer Ashnikko vividly broadcasts the anime style) in music videos. This level also includes filming locations, thus representing certain areas of the country as possible tourist attractions (as happened with the Fjaðrargljúfur canyon after Justin Bieber’s video “I’ll Show You” was shot there).

Ukrainian show business most often uses folk costumes, picturesque locations of Ukraine, implements elements of life and national traditions or mythical images in music videos.

For example, the duet of alyona alyona and KALUSH “Gory” (“Mountains”) was shot in the Ukrainian Carpathians with a demonstration of national architecture, as well as folk patterns used in traditional carpet-making. Alina Pash appears in a video for the song “Bitanga” in folk costumes of the Carpathian region. Somewhat stylized costumes and traditions of Ukrainian Easter are reflected in the duet of the performers alyona alyona and Alina Pash “Padlo” (“A Dirtbag”).

Instead, KHAYAT uses images of the East national costume in the OSOKA music video, which, combined with lyrics similar to Ukrainian folk songs and the manner of the performance, makes this song polycultural on several levels.

ONUKA band demonstrates even more cultural diversity in their work “ZENIT”. Traditional Ukrainian, Japanese, Tibetan and Mexican costumes were used to create the video sequence. According to the soloist Nata Zhyzhchenko, they aimed to reflect the ideas of cosmopolitanism, demonstrating the similarity of elements of Hutsul and Tibetan wedding dress (*Butsko, 2019*).

– at an intonational level (usage of melodic intonations of folk singing; folk instruments, etc.)

This type of polycultural representation is perhaps the most common among Ukrainian pop singers. Among foreign performers national intonations and folk instruments are used by ones of a certain genre only, whilst in Ukraine it is a common phenomenon used by world-class artists.

In addition to the fact that artists often give concerts accompanied by the National Orchestra of Folk Instruments (for example, Oleg Skrypka from Vopli Vidopliasoiva band, or ONUKA band), some folk instruments are also interspersed into a musical score quite regularly. Just like in the music tracks of TNMK band “Янголи” (“Angels”) and of ONUKA band “ZENIT”: a trembita sounds here – a Transcarpathian folk instrument with a length of 2 to 8 meters, which was used by shepherds as a means of communication.

The usage of such instruments as a drymba (a reed plucked folk instrument) and a domra (plucked folk instrument of the lute family) is rare. KHAYAT used a domra to create an oriental ambience, despite the fact the instrument is Ukrainian. Go_A band, in turn, used a drymba both to emphasize the folk spirit of the song and to make the sound of the instrument being fit well into the club-trance style of the music track.

Nevertheless, a sopilka remains the most popular Ukrainian folk instrument among local performers. It is used in their music tracks by Kazka band (“Острів” (Sounds of Chornobyl)), KALUSH feat. alyona alyona (“Mountains”), ONUKA (“ZENIT”), and the sopilka has become a kind of Go_A band’s calling card, which foreigners are waiting for in their songs.

Also, some performers, such as KHAYAT and Go_A, perform their songs with folk laryngeal singing that clearly accentuates their belonging to Ukrainian culture. In addition, Go_A in their music track “SHUM” used whooping, calling – sounds that are usually included in the folk songs of spring period to call for spring.

4. Reaction of foreign listeners (not native speakers) to modern Ukrainian hits

This polycultural approach to the process of creating a song radically changes presentation of national Ukrainian culture at the world level. If earlier the situation was the following: “Not only American cars, but also films, pop singers, movie stars seem to be the “best” for modern Ukrainian youth... The problem of Ukraine, as well as some other countries, is that cultural and commodity exchange with other countries of the world, unfortunately, has a largely

one-sided direction” (*Sheiko & Aleksandrova, 2009: 203*), now we can see that Ukrainian culture, music particularly, is positively perceived and consumed all over the world.

For example, the song “Cry” by Ukrainian band Kazka was not only broadcasted on radio stations around the world, but also was entered the TOP-10 of the world chart Shazam (*Podoliak, 2018*). The world-famous fashion designer Elie Saab has chosen the music of DahaBrakha band for his Prêt-à-porter Spring-Summer 2021 fashion show. There are many more examples of positive experiences of Ukrainian performers in the world music environment, but we will focus on the video reactions of listeners posted on YouTube.

So, German video blogger Stephan Boyyy, for the first time reacting to the work of the singer alyona alyona, has differently replied to the artist’s two songs. In his video review he evaluated the songs “Завтра” (“Tomorrow”) and “Gory”. To be mentioned, the second music track “Gory” with visual images of the Ukrainian Carpathians and the involvement of Ukrainian sopilka in the music layer has impressed the blogger much more and has affected him in a positive way – Stephan Boyyy noted the beautiful views, deep message of the lyrics, melody, etc. (*Stephen Boyyy, 2020*).

Another video blogger from Denmark under the nickname MUSA LOVE LIFE went directly to the duet of alyona alyona and KALUSH “Gori” (“Gory”) for his reaction. He noted the pleasant song flow, returned several times to listen to the sopilka, mentioning its originality and accurate application to the music. The most impressive part of the song for MUSA LOVE LIFE was a rap couplet from KALUSH, which he performs in one of the Carpathian Ukrainian dialects (*MUSA LOVE LIFE, 2020*). Meanwhile, blogger MUSIC TIME from the United States drew attention to all these features of the song as well, moreover mentioning that alyona alyona is one of his favorite artists (*MUSIC TIME, 2020*). He was also the only YouTuber to listen to the song without subtitles.

The British video blogger MetalHead Reacts, reacting to the song “ZENIT” by ONUKA band has directly pointed up the combination of electronic music with folk instruments and has noticed deep message of the song about the unity of the world, and the visual combination of different cultural images (*MetalHead Reacts, 2020*). Korean rock singer Jundoy together with YouTuber song wonsub 송원섭 have also recorded a video reaction to the song of the Ukrainian band. They spotlighted the beauty of Ukrainian nature, aesthetic costumes, uniqueness and quality of visual and musical content. Some masks were associated with Korean folk masks. Jundoy and song wonsub 송원섭, previously unfamiliar with the band’s work, have noticed its fusion direction, as well as “If it’s folk music, they made it popular” (*song wonsub 송원섭, 2021*).

Due to the presentation of the song “SHUM” as a new song for Eurovision-2021 by Go_A, the reactions to their video are almost the most numerous on YouTube. A video blogger from Greece under the nickname Esc Mike has noted the uniqueness of the whole song due to the combination of electronic music and folk instruments. He also pointed out that Ukrainian language sounds very organic with this music. As a result, he has defined this music track as one of the best contenders not only from Ukraine this year, but also in the history of his reviews of Eurovision songs (*Esc Mike, 2021*).

Serbian blogger stefanttt also drew attention to the explosive combination of folk and electronic beat in the first version of the Go_A’s song. Despite the fact, that the blogger himself was familiar to the folk source of this song and the folklore beginning, he remarked that the musical design, together with folk instruments, is ideal for rave, trance parties. In his review, he emphasized this for his viewers – a combination of “two opposite kingdoms – folklore and electronic, trance music” (*stefanttt, 2021*).

All bloggers involved in the Eurovision Hub reactions, representing countries such as the United States, Ireland, Northern Macedonia, Australia, Norway, Spain and Armenia, have also pointed up the novelty of the Go_A's music track, a combination of folk and trance and electronics. Also, everyone noted the originality of sopilka and drymba sounds, and in their opinion, the sopilka complements the musical text very well (*Eurovision Hub*, 2021).

5. Conclusions

After listening to all video reactions from all over the world, it can be observed that Ukrainian culture currently both absorbs all external influences and gradually starts to conquer the world market with its cultural product. It is also clearly demonstrates the establishment of global music environment, where polycultural music, combining both universal musical elements and elements of national culture (at intonation, text and visual levels), successfully exists and is being popularized, becoming a part of the world trend. It makes a positive impression to the Others, those who are not the native ones for a culture (in our case, for Ukrainian one). With the globalization of the world, listeners are able to pick identification markers of a culture out, while perceiving them not as "museumness", but as a bright uniqueness that fits naturally into the world environment, and that is an indication of the polyculturalism.

Application of a polycultural approach to the wider topics like cinematic world or fashion aesthetics with integration of Ukrainian culture and multiple cultural connections to them can be prospective for further research.

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TERMS OF THE MENTAL LEXICON IN THE PROFESSIONAL AVIATION LANGUAGE TRANSLATORS

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Summary

The present paper establishes the possibility of presenting the mental lexicon of a technical translator in the form of a classification frame that structures the terminological composition of scientific and technical language in the translation consciousness during the cognition of aviation reality. It is stated that the terms, which are the main means of fixation, accumulation and transfer of scientific knowledge, become the object of cognitive activity of the translator, who performs cognitive work on their accumulation and structuring in their own mental space to operate them during translation, which emphasizes the heuristic nature translation activities.

At the same time, the linguistic component of the mental lexicon allows us to consider its structure, starting from the language itself. The paper attempts to present a mental lexicon within the framework of scientific and technical translation in the form of a set of frames that arrange the terminological structure of language in the mind of the translator as they learn the aviation reality. It is noted that in this case the main task is to show the possibilities of the frame in terms of accumulating and structuring the verbal knowledge about a particular aviation phenomenon or process, in English and Ukrainian with simultaneous identification of interlanguage equivalents.

Keywords: aviation terminology, translation activity, mental lexicon, classification frame, situational frame.

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1. Introduction

The postulate that the language is a means of fixing and preserving the accumulated knowledge and its transfer in the scientific and technical sphere acquires a specific meaning. In scientific and technical cognition, the leading role is given to terms, which in our case are considered within the limits of their epistemological functions. S.V. Grinev identifies three functions of the term with the corresponding subgroups: fixation of knowledge (instrumental function), knowledge transfer (didactic and information functions) and the discovery of new knowledge (heuristic function). The function of fixing knowledge is that, naming the concept, the term makes it possible to manipulate it; the cognitive image becomes the subject of thought as a result of its consolidation by the corresponding term. Due to the function of knowledge transfer, the set of terms in the text allows us to get an idea of the information contained in it. Finally, the heuristic nature of terminology is created by its structural organization on the basis of semantic relations (Grinev, 1993: 218).

All specified functions of the term are directly related to the cognitive activity of the translator, the essential point of which is the accumulation, structuring and operation of terms of scientific and technical language. Terms, which are the main means of fixation, accumulation and transfer of scientific knowledge, become the object of cognitive activity of the translator, who carries out cognitive work on their accumulation and structuring in their own mental space to operate them during translation, emphasizing the heuristic nature of translation. Considering the mental lexicon, which is often referred to as an individual thesaurus, it should be borne in mind that this area belongs to the sphere of human consciousness; therefore, any ideas expressed in this aspect are hypothetical in advance. At the same time, the linguistic component of the mental lexicon allows us to consider its structure, starting from the language itself.

Thus, within the translation of ICAO normative and technical documentation we see it possible to present a mental lexicon in the form of a set of frames that arrange the terminological structure of language in the mind of the translator as they learn the aviation reality. In this case, the main task is to show the possibilities of the frame in terms of accumulation and structuring of verbal knowledge about a particular aviation phenomenon or process in English and Ukrainian with the simultaneous identification of interlanguage correspondences.

2. The body of the article

Unlike the information thesaurus, which denotes a special type of dictionary, which “nominates special vocabulary within a particular information system” and “is conducted” by clarification and replenishment at certain intervals [Grinev, 1993: 255], the “individual thesaurus” of the translator is formed throughout the entire translation activity, absorbing only the most significant and correcting the available information on the arrival of new data. Such an on-going on-line process requires the translator to constantly concentrate and perform complex mental operations.

A thesaurus allows us to clearly structure the conceptual framework of a particular subject area. Under such conditions, each concept in the thesaurus has a clearly defined place in its matrix, which is determined by analyzing a group of features. The search for terms that reflect each of the concepts in the thesaurus matrix is conducted by referring to lexicographic sources or to special scientific and technical literature. Moreover, it is important to fix paradigmatic relationships in the thesaurus, that is, the relationship between concepts within a subject field.

Unlike the thesaurus, the mental lexicon is not a static but a dynamic structural formation. It is a system that is generally open to periodic replenishment and possible changes, as it actively responds to the constant development of the terminology of a particular special language. This is especially true of the Ukrainian technical language, which, compared to English, is constantly absorbing new terminology in response to the development of Western technologies.

A formal representation of such openness is possible through the use of frameworks whose hierarchical structure allows, in addition to clearly delineated vertex levels, the presence of slots that can remain empty and be filled in as information becomes available, expanding the mental vocabulary of the technical translator (*Remkhe, 2007: 126*).

The translator, working in the field of aviation, is undoubtedly obliged to have thesaurus knowledge, i.e. to possess the basic conceptual framework of this subject area. At the same time, the imposition of this conceptual framework on narrow situational areas leads to the identification of a number of features. In particular, it highlights the fact that the component composition of a linguistic term is usually wider than that in the thesaurus due to the higher

level of detail and disclosure of additional features when describing a technical phenomenon in the texts of a special language.

As we know, the most productive way of replenishing lexical terms is syntactic, which implies the conversion of ordinary free words into complex “word equivalents” (Grinev, 1993: 141). The focus of attention now is on grammatical expression of the nominative and attributive nature of terminological word combinations, which is usually presented in the form of specific models of distribution of their components, which allow to distinguish the terminological word combinations from the text and fix them in a certain way.

The terminological units scope of the classification frame in the process of cognitive activity of the translator may be presented, in our opinion, based on the syntactic method of term formation, if we resort to the distribution of the component composition of terms, in the form of slots, given the specifics of communicative organization of term elements.

The concept of classification frame is chosen in the paper taking into account that intra-frame classification is a necessary condition for structuring the terminological units that are part of it. The defining classifier of terminological units are certain denotative components, which indicate a particular aspect of a particular aviation phenomenon. The analysis of aviation terminology in general and ICAO terminology in particular showed that the classifier should be understood as the central slot, which is the core of the terminological phrase. It coincides in this case with the block. The lexical items that fill the slots reveal the idea of each node to the extent that it is stored in the translator’s memory. In this sense, the scope of slots is individual for each translator in the field of aviation, as it is the result of his cognitive experience, reflected in the mental lexicon in the form of verbal representations.

The above-mentioned possibilities of the classification frame can be illustrated by the example of structuring the knowledge of multicomponent terms within the description of a particular concept of **flight PATH**, which is attached to this series of terms implicitly and explicitly is referred to as “Aircraft flight.” *Path* (from the Latin *trajectorius* – one relating to movement) is a line described by a point (material body) in space during movement, the *flight path (trajectory)* serves as a given direction in which the aircraft flies or intends to fly (*English-Russian-Ukrainian explanatory dictionary, 2007: 103*).

In order to provide a frame representation of linguistic knowledge of the **flight PATH**, the authors made a comparative analysis of technical translations performed at a professional level, based on the fact that such material contains updated terminological units of a special language, represented mainly by multicomponent terminological phrases.

Multicomponent terms are known to denote a complex “object of reality” by distinct and direct focus on different sides and features (Golovin, 1987: 46). The selection of one of the features in the form of a classifier, denoting the central slot of the frame, allowed to make logic and clarity to the structuring of a particular concept of **flight PATH** in ICAO terminology.

In order to illustrate the “complexity” of the terminological phrases used in the language, compared to thesaurus units, we presented them on the basis of the same selected classifier, which takes the place of the central slot. Thus, Figure 1 shows the two-component terms according to the conditional scheme **object+its sign**, where the sign acts as a block in the **flight PATH** frame. In Figure 2 the highlighted sign is supplemented by a number of clarifying details, which occupy the position of prepositional slots in accordance with the specificities of term formation of the Ukrainian and English languages.

The frame representation of terminological units of aviation language allowed to state the specificities of syntactic term formation in the English and Ukrainian languages. Given the fact that the accumulation of knowledge of terminology by the translator occurs simultaneously

within the two language systems, we consider it appropriate to present variants of classification frames in both languages in order to identify the basic patterns. For qualitative comparative analysis of terminological phrases in the working pair of the English-Ukrainian language it is necessary to take into account the communicative organization of terminological phrases.

When translated into Ukrainian, the nuclear element of the Ukrainian term occupies a central or initial place, while the dependent elements can be both prepositive and postpositive. This is due to the fact that the Ukrainian language tends to a mixed type. The Ukrainian language is characterized by two variants of the location of the nuclear element: the prepositional location of the nuclear element is observed if the dependent elements are also nouns and are joined to the nuclear element by prepositions or case inflections; the central position of the nuclear word, if one of the dependent elements is expressed by an adjective.

The multicomponent composition of terminological phrases and the inadmissibility of their literal relationship necessitate the implementation of various permutations in the translation process in order to preserve the communicative core and compliance with the norms of linguistic compatibility.

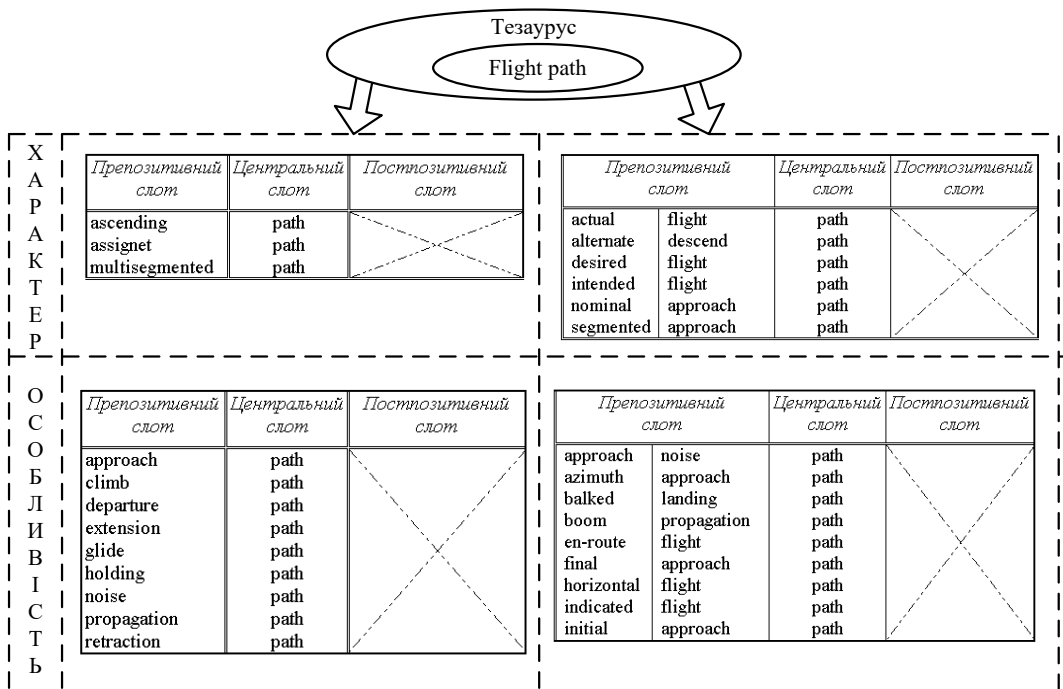


Fig. 1. Frame representation of English terms within the flight PATH concept

In general, the frame distribution of terms used in the description of the **flight PATH** concept is the result of the accumulation of cognitive translation experience in the aviation industry, which is considered as part of the mental lexicon of a technical translator. By schematically representing frame structures, we aim to show that the scope of the mental lexicon occurs in accordance with certain types of relations into which the terms of a special language enter. Due to the objectivity of technical language, the relations of denotative and structural character are decisive.

In addition to intraframe, we should consider interframe relations, which include: the interaction between the classification and situational frames (background knowledge) belonging to the same thematic area; and the interaction between different classification frames, thematically related.

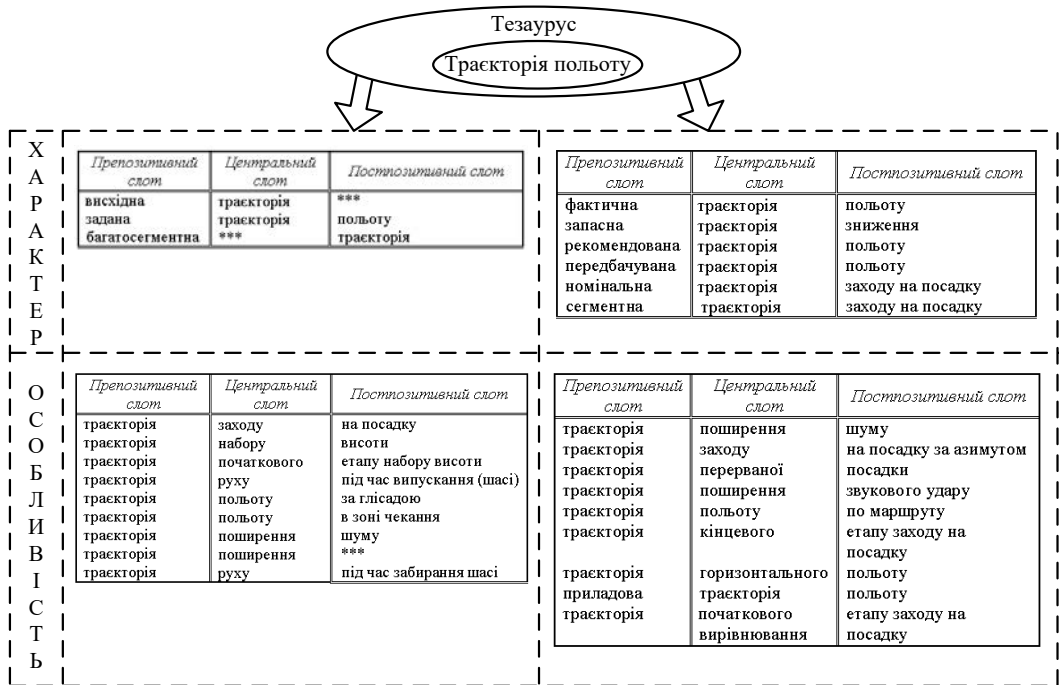
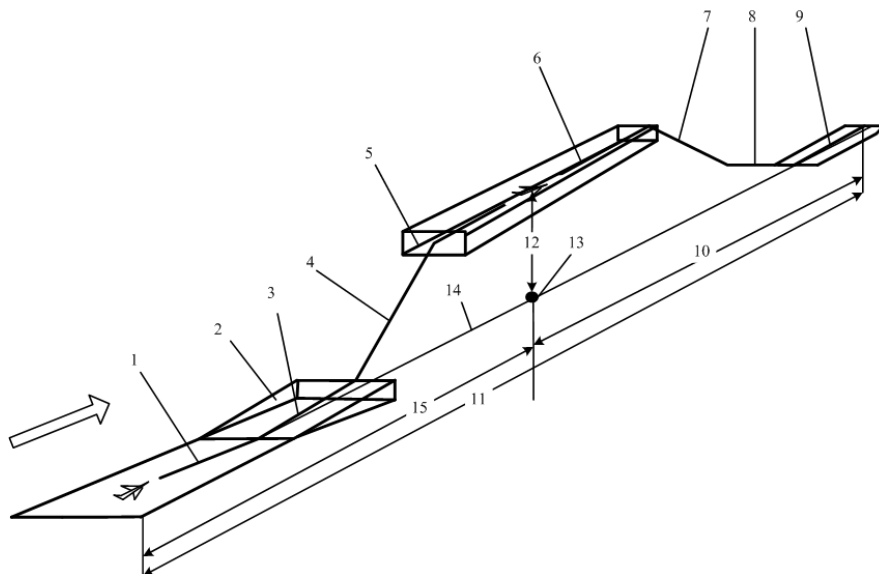


Fig. 2. Frame representation of Ukrainian terms within the flight PATH concept

The distribution of representation structures of the technical translator’s knowledge into situational and classification frames is determined to some extent by the fact that terms possess two semantic aspects: ideal and visual. Ideally, technical terms contain visual images of objects of technology, their parts and technological processes. A clear example of technical terms are objects of technology, their parts and methods of manufacture (Tatarinov, 2007: 301). In this circumstance, the distribution of situational and classification frames is an important factor within the study area.

Regarding the situational frame, we believe that its content can be represented only in the form of distribution of visual information on a visual-thematic basis. A more detailed classification is unlikely, as this type of information is sought through associative connections that cannot be structured. Naturally, the memory of a technical translator contains a huge number of mental “pictures” that relate to a certain phenomenon of the surrounding reality. It is likely that this is where the process of finding translation matches in translation begins, as the translations analyzed relate mainly to the description of aviation concepts and the discussion of related issues. Therefore, when translating, an image of a technical model or various situations related to its functioning or a schematic representation involuntarily appears in the memory in the form of a drawing.

Thus, each of the vertex levels of the **flight PATH** frame gives an idea of the line described by the aircraft in space while moving.



1) *takeoff run* – ділянка розбігу під час злітання; 2) *clearway* – смуга, вільна від перешкод; 3) *takeoff segment* – ділянка взлітання; 4) *climb segment* – ділянка набирання висоти; 5) *flight level* – ешелон польоту; 6) *cruising segment* – ділянка крейсерського польоту; 7) *descent segment* – ділянка зниження; 8) *approach segment* – ділянка заходження на посадку; 9) *landing distance* – посадкова дистанція; 10) *distance to go* – дистанція до посадки; 11) *flight distance* – дистанція польоту; 12) *flight altitude* – висота польоту; 13) *aircraft fix* – місцеперебування повітряного судна (відносно землі); 14) *flight profile* – профіль польоту; 15) *passed flight distance* – пройдена частина шляху польоту.

Fig. 3. Flight path of the aircraft

Examples of the second type of interframe relationship are the correlation of frames such as “Flight speed”, “Flight time”, “Flight mode”, “Flight profile” and “Flight altitude”.

The relationship between the frames mentioned above is the match of some terminal nodes, which expands the boundaries of understanding of certain phenomena and can cause confusion or “misunderstanding” due to the shift of concepts.

3. Conclusions

It is worth noting that the frame distribution of the terminological system in the translator’s mental lexicon represents individual fragments of the general scientific picture and allows to mentally structure a separate aviation field of knowledge. As an example, we have chosen one of the fragments that belong to the flight of the aircraft, and present the classification frames that structure the terminological units of this field of knowledge. A translator “enters” the frame through the naming unit/lexical unit or a collocation that is fixed in their mind. The nuclear position of the frame is occupied by a block sign, which contains the nuclear meaning, which is directly related to the imaginary situation. Terminal nodes/slots provide an opportunity to fill them with less vivid terminological phrases, the specification of which requires an assessment of a particular situation.

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POETIC DISCOURSE AS AN ACT OF COMMUNICATIVE INTERACTIONS BETWEEN ADDRESSER AND ADDRESSEE

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Summary

The author substantiates the idea of the anthropocentric nature of the poetic text, in which the addresser and the addressee form an interactive communicative chain, and artistic-poetic communication in the aspect of discursive approach is considered as a process in which the subject of verbal interaction between its participants is encoded in poetic form. Poetic verbal goals act as the source for this research, from which a selection of units that manifest the text category «anthropocentrism» is done in a way of accurate and complete inventory. The research method is descriptive. The author considers the poetic text as an intermediate link in the paradigm, which presupposes certain communicative roles of the addresser (author) and the addressee (reader). This triadic structure of speech interaction is caused by the tactical and strategic repertoire of the speaker, their intention, functional parameters of the text and pragmatic effect. The prospect of the research is the description of the text category «anthropocentrism» and its components (addresser / addressee) in semantic, pragmatic, communicative aspects.

Keywords: text, text category «anthropocentrism», addresser, addressee.

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1. Introduction

Problem statement. The study of the communicative position of the speaker was mainly carried out from the perspective of the analysis of the image of the author in the literary text (V. Vovk, V. Drozdovsky, V. Vinogradov). However, the development of linguistics in the XXI century has made possible linguistic research in terms of communicative and pragmatic study of literary text and discourse, because poetic discourse is a kind of *communicative event*, the distinguishing features of which are the representation of information that has no pragmatic embodiment. This feature is embodied in the fact that all names in a fiction text do not have real denotations, and the context and extralinguistic conditions of existence of objects in the discourse are created by the author-addresser themselves, and its purpose is to emotionally affect the reader.

The aim of the article is to describe poetic discourse as an act of communicative interaction between the addresser and the addressee.

Sources and methods. Poetic verbal goals act as the source for this research, from which a selection of units that manifest the text category «anthropocentrism» is done in a way of accurate and complete inventory. The research method is *descriptive*.

2. Main statements presentation

The addresser and the addressee are individuals who, on the one hand, have generalized typed features of the native speaker, national culture, and on the other hand – excellent

epistemological experience (knowledge, preferences, judgments and attitudes to the environment). Both participants of communicative interaction are characterized by a dynamic position, but it is the addresser who has a significant role in stimulating figurative and poetic communication, encouraging the addressee to creative reading and interpretation of the text, interpretation of subtexts and occasional meanings of artistic figures. Since in a poetical work, the factor of the addresser unfolds and is represented first of all through artistic figures (images). The use of tactical repertoire (tactics of presentation, reaction, etc.) is currently aimed at implementing the communication strategy chosen by the poet-speaker and ensuring the harmonious flow of artistic and figurative communication. The anthropocentric orientation of modern linguistics is precisely that the starting position in it is occupied by the addresser.

We consider addresser as one of the main components of the communicative act and as **a key text-forming category**.

The effect of creating a verbal whole resides in such features of metaphorical information as versatility of reflections of reality, panoramic and stereoscopic occasional-artistic image, subconscious motives in the structure of the text, where the poet-addresser combines in themselves all text categories; appears as the organizing force of the arrangement of its components into a single whole, fills it with a single worldview, determines the compositional and structural form. Precisely in the text category «addresser» artistic and figurative areas acquire their completeness – in worlds, emotions, thoughts, associations, existential meanings. We agree with the views of Tetyana Radzievska, a specialist in the theory of language communication, who states: «Text creation, which is a kind of language activity, is characterized by a high degree of complexity and can be considered as a functional system.

We agree with the views of Tetyana Radzievska, a specialist in the theory of language communication, who states: «Text creation, which is a kind of language activity, is characterized by a high degree of complexity and can be considered as a functional system which consists of some sub-systems, created by elements of communicative-pragmatic situation of text creation. These include the subject, object, addressee, purpose (intention) of communication, as well as some other components, the essence of which depends on the type of text» (*Radzievska, 2010 : 244*). The creation of communicative-pragmatic situations (say, poetic discourse) is determined by the human factor. On the one hand – by the addresser, who realizes the intentions and uses the right to choose associative connections in contexts, encoding the relevant information in this way, on the other hand – by the addressee, who, guided by his life and language experience, must decode it. «Modern linguistics has a solid pragmatic orientation. In this regard, the concepts of «linguistic personality», «linguistic community», «linguistic ability», «linguistic consciousness», «linguistic and communicative competences», «emotional and culturological competence», «linguo-creative activity» have become especially relevant, which is not a novelty in science, but requires fresh understanding, projections on specific objects. This applies to the representation of both a separate language community and individual language features which are prominent representatives of this linguistic and cultural community» (*Kosmeda, 2012: 17*). The individual and social essence of the addresser's linguistic personality is most fully manifested in textual and communicative activity. Each time the author expresses his position differently: explicitly, through words, or implicitly (hidden), through conceptual-semantic or subtextual information, figuratively-metaphorically, compare: «*Коли душа ридає і розривається / На шматочки болю, / Сміється йому в душу, / Сміється йому прямицько в його / життя*» (*Kruk, 1995: 51*). At present, poetic texts should be considered as a verbal realization of fragments poets worldview, linguistic and literary generations, which reflects individual and social (collective, ethnospecific) worldview in their inseparable unity,

such an realization that allows interpreting not only explicit but also verbal the personality of the addresser and their world view. The concept of «addresser» in poetic communication correlates with related concepts such as: «author» (we do not mean the image of the author, but the author himself as a person in the aggregate of his views on certain situations, aspirations, life positions, tastes, personal qualities etc.), «subject of speech», «communicator», «linguistic personality», «author's personality», «speaker». When creating a poetic text, the addresser primarily considers the effectiveness of the poetic message. Artistic figure (image) is the realization of the communicative behavior of writers, representatives of certain literary groups (associations, groups), lexical and semantic expression of the factor of the addressor. After all, lexical content, grammatical and syntactic structures are chosen by the poets and writers depending on the purpose and objectives of poetic communication. The addresser in artistic discourse is an active subject of creating a functionally oriented linguistic phenomenon as a certain type of artistic semantic subtextual message, a kind of executor of a certain informative program through the reflection of correlations in defining the components of poetic and figurative picture of the world and their embodiment in verbal and artistic figures. We can for sure say that «addressability is represented by the transformation in the text of worldviews, values, emotions of the real author in the form of author-function, which is interpreted by the real reader as a figure of the addresser» (*Selivanova, 2006: 511*). The addresser of the poetic discourse verbally creates a special kind of reality – poetic and metaphorical, becoming both the author of the verbal whole and the subject of artistic speech, an active participant in the communicative act. They produce artistic speech, fill it with figurative meaning, set the intensity of communicative correlation. The dominance of the addresser factor is traced in poetry, where the writer determines the form of presentation of artistic and figurative information and its content, and as we know, the creation of communicative and pragmatic situations in poetic and metaphorical discourse is determined by human factors. On the one hand, by a poet who realizes intentions and chooses associative connections in contexts, a way of coding relevant information, on the other hand, by reader who, based on his life and linguistic and cultural experience, must know it (information). The addresser of the text stimulates the addressee-reader (listener) to mental-intellectual operations, creates a basis for a reference act, establishes correspondence with extralinguistic reality. And it is the addresser-reader who is entrusted with the difficult role of recognizing the metaphorical idea of the author, giving semantic formations new meanings, and assessing the individual-creative competence of the poet-addresser. Currently, social and linguistic experience helps the recipient to recognize the referent and make sense of what is presented in the text. Thus, poetic communication is addresser- targeted, and scientific comprehension of the author's intention is impossible without taking into account the conditions of communication. Thus, poetic communication is addresser-targeted, and scientific comprehension of the author's intention is impossible without taking into account the conditions of communication. At the same time, it is extremely important to take into account both the cultural context and the set of personal, historical, and national circumstances of the formation of poetic discourse. Currently, the text is an active continuum of the formation of mental objects with the help of artistic images. The author, as a mandatory participant in the communicative-cognitive process, is the initiator, creator and sender of important, in his opinion, information. In the text, it is represented by a system of various means, each of which takes an active part in creating a network of diverse relations between the participants. What is the uniqueness of the communicative interaction between the addressee and the addresser in poetic discourse? First of all, the addressee seeks to find such communicative parameters that would allow not only to exchange information, but also to influence the feelings of the addressee, to evoke appropriate emotions,

to form aesthetic ideals and so on. Since the creator of his own poetic world (with its lyrical heroes, poetic laws, artistic and figurative situations) in the poetic text is the addressee, he represents thoughts and emotions through the text, mentally runs ahead to determine the impact of what is written on the addressee-reader. The form of communication now comes to the fore, and its substantive part – in the background. The author-addressee of poetic-metaphorical discourse in his desire to know and explain the surrounding world absorbs it through the prism of his own feeling, integrates the verbal whole, functions in semantic innovations, in authorial artistic images, in superficial and deep text structures. Communicative and pragmatic situations represent speech priorities in the choice of certain figurative and artistic means, individual-creative ability of the speaker at the level of the text through individual-author metaphors. These are the creative beginnings of «language in action». ***The artistic text appears as an act of communicative interaction between the author-addresser and the reader-addressee.*** During such interaction, communicators use the whole arsenal of language and speech tools to achieve the goal, and if it is achieved, the communication process is considered successful. The effectiveness of the communicative process depends on how the cognitive style of the addresser and the addressee (recipients) coincides. In a specific pragmatic situation, the addresser-addressee vector of directing the discourse involves the manifestation of individual skills of poets in the realization of linguistic and creative potentials and influence on readers. Since when creating communicative-pragmatic situations for the realization of the author's intentions, the addressers often go beyond the already systematically fixed units and create new modifications, offering new semantic meanings. While the addressee factor encourages the author to uniquely convey the content and form of the verbal whole, so that they ensure the optimal impact of communication on speakers. Therefore, writers are faced with the task of bringing the artistic message as close as possible (both in terms of content and in terms of expression) to the level of education, training and character of their audience in general. The contexts can contain such unexcepted marginal units as dialectisms, slang expressions, everyday words; also the transformation of widely-used expressions known in mass culture can happen. E.g.: «*Будда відпустив оселедця по плечі, / Читав барокові євангельські мантри, / Водив за собою зграї малечі, / В корчмі заливаючи про власні мандри*» (Zhadan, 1995: 11); «*Так виникають міста і дефініції / Хтось пропонував Гомера на мера / Історія фіксувала фікції / З точністю провінційного репортера*» (Haleta, 1999: 21). The addresser seeks to bring their speech as close as possible to the usual, ordinary language of streets, a kind of adaptation of literary language to the new conditions of his era. Associations and created linguistic units appear partly on the verge of paradoxical and extremely unexpected artistic images. Compare: «*Птахами плаче небо восени / і падають на дно очей краплини*» (Dnistroyvi, 30). The lexical-semantic representation of the addresser of poetic texts as a central pragmatic unit is their reflection as an anthropo-ethnocultural phenomenon, a tradition of transmitting figurative and artistic information. Identifying the intentional binary of the text and its address allows to fully understand the potential autosuggestive effect of the artistic image, which happens partially due to the strategic decisions of the addresser, who is a key figure in the communicative process, whose main purpose is to form a metaphorical image. Behind each poetic text we can recognize a linguistic personality. Therefore, the image of the author-addresser is present in the literary text and is much easier to reconstruct than the addressee, because the text is an objectification of the author's thought and language, and, consequently, mainly an expression of their personality. The peculiarity of the addresser of a poetic text is that they always coincide with the real author, who at the same time appears as an in-text subject of speech and an out-of-text subject as a real author. The addressee may have different ways of presentation in the text – from the explication

of the position of the subject of speech to generalization with the recipients, but they are a holistic communicator. Each speech genre creates its own concept of the addressee. In particular, poetic discourse is characterized by expressiveness of addressee.

3. Conclusions and prospects for further research

Thus, in poetry the author-speaker (addresser) plays a special communicative role: he interacts with the reader-addressee through the text, influences its perception, directs the vector of development of the reader's perception. In this way, the communicative function of the author-speaker is expanded, whose role is not limited to the creation of a verbal and artistic whole, but can determine the linguistic-mental basis of the behavior of subjects of discourse and their representation. Behind each literary text, behind each metaphor, the «Ego» of the speaker is recognized, which in poetry appears mostly as a subject of evaluation, *an identifying sign (linguopersonema)* of the image of both the individual addresser and the linguistic and literary generation.

The prospect of the research is the description of the text category «anthropocentrism» and its components (addresser / addressee) in semantic, pragmatic, communicative aspects.

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LINGUISTIC REPRESENTATION OF POWER IN JUDICIAL DISCOURSE

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Summary

This study sheds light on the terms discourse of power and power of discourse. The two concepts are closely intertwined and interdependent as manifested in the influence of power on discourse, on the selection of the linguistic means expressing that power. Such linguistic means of conveying power relations are cratologemes. Accordingly, the approach used to study cratologemes is thought to be linguocratological. From the perspective of the linguocratological approach discourse has become a vigorous resource of power. Therefore, language of discourse is of great interest an instrument of manipulation, which gives grounds to study it as an object, a process, and as a tool. During the process of investigation, the following research methods have been used: linguistic observation and analysis as well as cognitive method, pragmatic analysis method, critical discourse analysis method. These methods have allowed us to establish some of the cratologemes that are characteristic of judicial discourse. Such cratologemes have been singled out at different language levels: at the morphological level, at the lexical-semantic level, at the syntactic level.

Keywords: language means, discourse of power, power of discourse, linguistic observation, pragmatic analysis method, critical discourse analysis method, cratologemes, linguocratological approach, language levels.

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1. Introduction

The cratological approach to discourse is heterogeneous and should be divided into two strands – the cratological approach itself as analysis of discourse of power and the linguocratological approach as analysis of power in discourse. Thus, for example, Norman Fairclough (1995) refers to this phenomenon as «power behind discourse» and «power in discourse», explaining the discourse of power through asymmetries of the roles of litigants and the inability to control the texts of the law in terms of their production, distribution and use; and power in discourse involves analyzing language itself and how power manifests itself through language. For example, if one person in communication uses formal means of communication (for example, «sir»), and the other one does not, then this demonstrates a relationship of power through language (Fairclough, 1995). His thoughts are developed by modern scholars: in the compendium edited by Anne Wagner and Le Cheng «Exploring Courtroom Discourse the language of power and control» (2011), there is also a distinction between power and control in the language from power and control outside the language: «Power and Control in Language» and «Power and Control behind Language» (Wagner, Cheng, 2011). The authors point out that power and its control are reflected in statements in the courtroom: «Mapping the contours of power and control in the courtroom equals an interpretation of linguistic utterances and their uses and abuses» (Wagner, Cheng, 2011, 2). The authors refer to the discourse of power from the point of view of the parties to the proceedings: being a party to the proceedings in a given status, it must abide by the rules established by the authorities, the discourse of power becomes effective: «After the

explorations of courtroom discourse analyses, we can admit that law is a *discourse of power*, and that formula opens new dimensions. Once citizens become aware of the fact that they are speakers of a specific discourse, they are indeed empowered *to speak differently* – to each other as well as to their respective social institutions» (Wagner, Cheng, 2011, 8).

The problem of the discourse of power seems to us worthy of mentioning because of its influence on its participants, although, in the opinion of the discursologists, this aspect should be considered in the course of political sciences, philosophy, sociology, etc. as the discourse of power manifests itself in the system of established rules in court, the distribution of roles, the consistency of answers to questions posed, the limitation of the possibility to express one's opinion in a way convenient for the party: «Legal discourse, in this context the “rules” that allow the attorney to select the topics of questions and allow the same attorney to choose not to pursue the topic even if the witness wishes to continue on that topic...» (Stygall, 1994, 20). The discourse of power thus establishes a behavioral framework for the participants of litigation, becoming a discourse for internal, narrowly limited, elitist use: «Legal language then is a wholly intra-community defined and internally determined instrument, developed, offered, and used as an instrument of its own community's power» (Stygall, 1994, 23). It being not a linguistic prerogative, the discourse of power is certainly of interest to linguists from the perspective of communicative strategies and tactics, that are chosen by participants according to their purposes and communicative intentions within the framework of the institutional judicial discourse. This is what we are going to analyze in the article, based on the scheme proposed by W. O'Barr in his book «Linguistic Evidence: Language, Power, and Strategy in the Courtroom» (1982), in which he confronts the speech of authority and the speech of no authority: «“powerful” versus “powerless” speech» (O'Barr, 1982).

During the process of investigation, the following research methods have been used: linguistic observation and analysis as well as cognitive method, pragmatic analysis method, critical discourse analysis method. In the first place, we'd like to emphasise the method of discourse analysis as it helps to investigate the language not merely as a way to convey meaning of words, but a way of achieving a certain effect.

The factual material for this article was taken from the trial transcript of the Jodi Arias case (October, 2014).

2. Linguocratological approach notion

The discourse of power, on the one hand, and especially the political discourse, on the other, have long been the subject of intense scientific attention. In contrast to the discourse of power, the power of discourse is, in our view, a less explored concept, as well as the legal discourse unlike political discourse, for instance. So, we consider it appropriate to elaborate on this aspect, focusing on the linguocratological approach.

According to researchers in the field of cratology, «The 21st century will be the century of humanities... Superiority in humanitarian knowledge is a way of victory in the XXI century» (Cherdantsev, Glasunov, 2015). Michel Foucault in his research *The indivisibility of power and knowledge* was also mentioned by Michelle Foucault in the work «Discipline and Punish. The Birth of the Prison» (1995) we mentioned earlier highlighted the indivisibility of power and knowledge. Generally speaking, the very appearance and development of the cratological interpretation of the discourse is connected with his name. The incoming power must counterbalance the achievements, the experience, the system of previous authorities for its further development, that also results in creating a discursive space for the new authority. With the linguocratological approach in mind, discourse is a powerful resource through which social actors

and institutions are legitimised, identified and positioned. Discourse, becoming a collective speech act, «...offers certain standards of communicative-verbal behavior of individuals...» providing them with «opportunity of broad social manipulation» (*Cherniavskaya, 2006, 79-80*), that is, the discourse, the language of discourse, becomes a tool of manipulation, which gives grounds to study it not only as an object, a process, but also an instrument. Almost simultaneously, many discourse researchers declare it. Mention should be made of Yon Maley's article «The Language of the Law» (2013) in which he characterises the language as a way, process and product: «Language is medium, process and product in the various arenas of the law where legal texts, spoken or written, are generated in the service of regulating social behavior» (*Maley, 2013, 11*), together with an American Professor G. Stygall who in her fundamental research «Trial Language. Differential discourse processing and discursive formation» (1994) deals with the discourse language as an object, process and tool: «Legal Language-As-Object, Legal Language-As-Process, Legal Language-As-Instrument» (*Stygall, 1994*).

In our view, a timely understanding of the discourse as a phenomenon that directly affects the essence of what is happening gives us reason to consider the discourse not only as an object, a process and an instrument, but also as a phenomenon that creates and controls reality, performing a reality-forming function.

The term biopolitics emerges from this as a modern form of crowd control, exercised through control of the individual, his body and his spirit, inevitably passing through the control of discourse: «Biopolitics, the modern form of crowd control, takes place through the control of the individual, of his body and spirit, passing therefore necessarily by discourse control» (*Achselrad, 2014, 319*), when a person has to consume in order to be different; produce in order to survive, acquire in order to have the illusion that he is free in his actions: «You must consume in order to be different; produce in order to survive, acquire to have the illusion of not being acquired» (*Achselrad, 2014, 331*). The reality of our time is that, without exaggeration, linguistics is said to be the science of science that defines and influences the way people think, the way they act. This influence of the Word even took the name of logophile, behind which the logophobia is hidden: «Behind this logofilia, which seems to prevail in our Western globalized civilization, lies an actual logofobia, represented by the institutional network that takes hold of a discourse as soon as it arises, labeling, classifying, explaining (*Achselrad, 2014, 325*).

Let us give some examples of the names of activities that were taken mainly from different vacancy sites: regional director for business development (approximately, but not only, director of translation agency), evangelist of native advertising (approximately, but not only, marketer), a visual artist (approximately, but not only a photographer), and so on. Under the names not just obsolete names are hidden, but a completely new look at the changed types of activities is presented, that is to say, a word changes everything.

3. The relationship between discourse of power and the power of discourse

The problem of the power of discourse is even how a person thinks about power and how a person talks about it. In the tradition of Western scholars, Shi-xu (2005; 2007) argues that power implies conflict or competition between individuals, so it is associated with competition, and at worst even with domination or coercion, which is reflected in both thinking and language. Significantly, individualistic consciousness prevails. In the Eastern tradition, power is also linked to coercion, but it is the duty of the ruler to protect and paternalistically care for his subordinates, for whom he is accountable to the divine forces. In line with this, he is entrusted with the function of maintaining the divine order, monitoring the implementation of norms and

regulations. All actions must be in accordance with universal divine law and must be fully and strictly obeyed. Subordinates are encouraged to have a collectivist consciousness.

Psychologists have long proven that the way people think and talk affects the way they think about the subject. That has given rise to emerging a separate term in Western linguistics – «Damaging discourses» (*Sunderland, 2004*). Such discourses distort the essence of power as phenomenon, which has played a significant role in human history and must continue doing so if people are to learn to live peacefully together in an increasingly interdependent world. Human beings, as social beings, cannot fully live outside society, which, in turn, must be structured, which is achieved, inter alia, by the power expressed in laws that allow for the coordination of social life and the order of it. It is the most powerful instrument for the realization of human plans, the protection of interests, the resolution of conflict situations and the settlement of contradictions. Even the implementation of the principles of equality in society should be monitored by authorised bodies. Thus, power is present wherever there are steady associations of people: power exists in the State, in institutions, and even in the family. In the former case, it has a political function and enormous potential, constituting a powerful tool for social transformation and transformation, so that it is neither appropriate nor possible to deny power as an institution. Power, expressed in discourse and with the help of discourse, is both influential and is influenced, allowing scientists to talk about so-called interference or mediation of discourse to create a positive image of power at the level of mental representation. It is for this reason that the proponents of the peace-building and peace-keeping theory are trying to formulate alternative ways of representing power at the level of consciousness and verbal representation. These efforts are seen as an attempt to intervene or mediate a discourse, that is, to intervene in a discourse to change social reality by changing the discourses that help to construe this reality: «These efforts can be understood as a project of discourse intervention – an effort to change our social reality by altering the discourses that help constitute that reality. To date, this project is still in a nascent stage and thus remains an important yet incomplete intervention in the Western liberal culture of conflict» (*Karlberg, 2005, 1*).

With the help of language and in language, philosophers, sociologists, historians, psychologists, politicians and, of course, lawyers whose activities are limited to legal techniques, the so-called language game, which represents both the very rules of the game and the art of wielding those rules. According to lawyers, meaning without text does not exist, it appears after reading the text, in other words, meaning is «created by the interpreter of legal text» (*Alexandrov, 2007*). Various types of legal discourse can coexist or oppose in litigation, and then the judge is to resolve the conflict of interpretations, assigning to one of them the status of the true, in other words, «...legal is the linguistic, textual plus powerful» as was fairly noted by A. S. Alexandrov (2007), a discursive. A lawyer takes a direct participation in this process, so he is to know words and techniques, helping to bring these words to the judge. By and large, he is as successful as he is with his words. It is obvious that a lawyer must possess a «powerful speech», which causes respect and influences the recipients, especially the members of the jury, since the English-speaking countries have an adversarial court system. and even less the judges, whose decision must be valid and enforceable. And even more so for judges, whose decisions must be weighty and achievable.

The discourse of power, intertwined with the power of discourse, exhibits signs of coerciveness that lead to the use of certain language means (cratologemes).

4. Cratologemes in court discourse

Based on the American Heritage Dictionary, we understand coerciveness in this research as «to dominate, restrain, or control by force». So, let's analyse the language means

that express coerciveness in English courtroom discourse on the example of the Jodi Arias` Trial (2014).

The defense lawyer Ms. J. Willmott together with the prosecutor Mr. J. Martinez conducts her direct examination. The judge Sherry K. Stephens plays a supervisory role in the process.

It may be observed that the prosecutor uses nouns:

- (1) *Objection. Relevance (Jodi Arias` Trial, 6)*
- (2) *Objection. Lack of foundation. Which time? (ibid, 7)*
- (3) *Objection. Speculation. Lack of foundation (ibid, 25)*
- (4) *Lack of foundation, dates (ibid, 47)*
- (5) *Objection. Speculation. Lack of foundation. How? (ibid, 63)*
- (6) *Objection. Lack of foundation to my understanding (ibid, 78)*
- (7) *Same objection. Lack of foundation (ibid, 79)*
- (8) *Objection. Foundation. They went to Bobbie`s house (ibid, 79)*
- (9) *Objection. Leading (ibid, 102).*

Such a linguistic device as nominalisation is widely used by the prosecutor. Nominalisation realises both persuasive and oppressive functions as the information due to nominalisation appears more objective and factual (*Thompson, 2014, 250*), and, as a result, more influential. When it becomes clear that such strategy is insufficient he engages other means that extend nominalisation:

- (1) *Judge, she keeps trailing off and I am **having difficulty hearing** her (Jodi Arias` Trial, 48)*
- (2) *I have no objection. I am really **having a hard time hearing** her (ibid, 105).*
- (3) *Well, I respectfully disagree. We **have a right to know** when these photographs were taken and if we do not know, then the foundation has not been laid (ibid, 125).*

The judge takes a different tactic to create coercive discourse. He exploits fully the potential of elliptical sentences. While from a grammatical point of view they may be seen as structurally incomplete, from the point of view of the pragmatic function, they fully fulfil it, as they acquire additional expressive power due to their shortened structure:

- (1) *Overruled (Jodi Arias` Trial, 6, 63, 99, 100, 102, 113, 128, 130)*
- (2) *Sustained (ibid, 7, 26, 63, 79, 98, 113, 124)*

The brevity of the utterances helps the judge to be impersonal, more objective and impartial in contrast to the prosecutor, consequently.

Finally, as catologeme we can distinguish the modal verb *may* that expresses more formal permission:

- (1) *You **may** proceed (Jodi Arias` Trial, 4)*
- (2) *The defense **may** call its first witness (ibid, 4)*
- (3) *You **may** (ibid, 18)*
- (4) *Yes, you **may** step down (ibid, 81)*
- (5) *Miss Willmott, you **may** continue (ibid, 81)*

Also, we should like to stress that the verb «*may*» helps to avoid ambiguity unlike the modal verb «*can*».

5. Conclusions

To sum up, we`d like to emphasise that from the perspective of the linguocratological approach discourse has become a vigorous resource of power. Therefore, language of discourse is of great interest an instrument of manipulation, which gives grounds to study it as an object,

a process, and as a tool. However, in our opinion, discourse is not only a tool that influences reality, but it also creates and controls that reality. We can observe a two-way process whereby discourse of power determines and influences the way of thinking and speech behaviour of individuals and at the same time discourse power manifests itself in the existence of specific linguistic means – cratologems.

As the study of the factual material has shown, the modal verb *may* acts as a cratologem in judicial discourse at the morphological level, nominalisation – at the lexical-semantic level, elliptical sentences – at the syntactic level.

The topic of the article seems forward-looking, as it would be interesting to investigate cratologemes and their linguistic expression in different types of judicial discourse.

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INNOVATION, WORK, SOCIETY

VOLUNTEER ACTIVITIES IN THE SPHERE
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Summary

The article is devoted to the volunteer movement in the sphere of human rights protection and cooperation of volunteers with non-governmental human rights organizations. It is pointed out that due to the activization of civil society and the growing number of violations of human rights on the international arena, this issue needs to be studied in more detail. In order to study the nature of volunteer organizations, a retrospective historical analysis of the phenomenon of volunteering since its appearance has been conducted. Several directions of historical development of the volunteer movement are compared.

In order to understand the role of volunteer movements in the protection of human rights, the definition of the concept is proposed and explained, their functions and features as well as the main directions of activity are singled out. The comparison of concepts, functions and roles of volunteer and non-governmental human rights organizations is made. Also, the definition of the concept of “non-governmental human rights organizations” is given, on the base of which the common features of the above elements of civil society are defined.

Examples of state regulation of volunteering activities in European countries, as well as the activities of volunteers in the sphere of human rights protection and cooperation of the latter with non-governmental human rights organizations are analyzed. The importance of cooperation between volunteer organizations and NGOs is also emphasized, as well as the mutual benefit for these organizations.

Keywords: volunteer movement, volunteers, non-governmental human rights organizations, human rights.

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1. Introduction

In order to understand the expediency or, more precisely, the needs of activities of volunteers, in particular, in the sphere of human rights, it is necessary to find out in exactly what way and for which issues they provide assistance. According to Article 3 of the Constitution of Ukraine, “A human being, his or her life and health, honor and dignity, inviolability and security are recognized in Ukraine as the highest social values.”

In addition, the Basic Law enshrines the thesis that the content and direction of the state activity determine the rights and freedoms of man and their guarantees, and the main duty of the state is to establish and ensure them. Based on the above, we can say that in the process of realization of rights and freedoms between the state and civil society there are certain relations, which, unfortunately, are not always harmonious. This is due to the expansion (and in some cases even transformation) of the worldview of citizens and their awareness that in the modern world they have significant opportunities (moreover, certain levers) to influence developments in the world community in general and the state in particular. This is confirmed by the fact that since the beginning of the XXI century, citizens have been able to force the state to make certain political decisions, or to abandon them, and the rights of a human as an individual became more important than the interests of the state.

Today, one of the institutions that allows to control the activities of the state in order to promote and ensure human rights is non-governmental organizations, including human rights organizations (hereinafter – NGOs). For example, in present conditions, the role of NGOs in strengthening the legal culture of society and restoring social justice by means of combating violations of legal rights of citizens by government officials has increased significantly, which, of course, is litmus paper and an important indicator of democratization. These organizations provide public control over the activities of both public authorities, their officials and private law entities and this, in its turn, strengthens the position of civil society in the state.

Despite the expansion of influence and powers, NGOs still have fewer opportunities than the state apparatus, and therefore need the support of citizens, which may be manifested primarily in the participation of citizens in NGO activities on a gratuitous basis (unselfish). In this case, we mean volunteers – people who are willing to spend their energy, time and talent for the benefit of society or a particular person, without waiting for any reward.

Continuing the consideration of the issue, we emphasize the fact that that NGOs and volunteer movements are quite similar. In today's conditions, it has become quite clear that their activities are useful and necessary, and therefore, they need to interact, find ways and means to coordinate actions that will be useful for both institutions of civil society. However, in order to offer the possible ways, first it is necessary to explore their concepts and identify common features, as well as to find out the pros and cons of their interaction.

Taking into account the above, the purpose of the scientific article is to identify common features of NGOs and volunteer movements, as well as to study the positive aspects of their interaction.

The theoretical basis for the study of the outlined topic were the works of Bondarenko Z.P., Matvienko G.M., Ignatusha A.L., Pavlyuk K.S.

2. The history and formation of the volunteer movement

As we know from history, the volunteer movement originated in 1859. It was during this period, known for the bloody pictures of the Battle of Solferino, that the French writer and journalist Henri Duman proposed the idea of creating an organization that would work on a volunteer basis and provide first aid to wounded soldiers. This organisation received the name 'The Red Cross'.

It is noteworthy that, despite the fact that in Ukraine the concept of "a volunteer" was not used till the end of XX century, certain forms of volunteer activity existed for a long time in the Ukrainian lands. First of all, it is worth mentioning that the first domestic volunteers – the

representatives of the Red Cross – during the world wars organized a free admission to hospitals where Sisters of Mercy worked, for the sick and wounded.

However, in the late 20th and early 21st centuries, the volunteer movement became very popular. This is due to the fact that the events that took place in the world over the last decade have forced people who wanted to influence social development to unite in certain movements. This is often connected with the common ideology. At the same time, public organizations operating at the time were forced to deal with both personnel and financial issues. Of course, under such conditions, organizations involve volunteers in their work and participation in their own activities, thanks to which some issues were removed from the agenda, because the volunteers themselves found a way out of the situation (either through sponsorship or otherwise). Thus, volunteering has contributed and, in some cases, even stimulated the involvement of citizens in change in almost all spheres of life.

Based on this, the world community is gradually recognizing the volunteer movement as a way to preserve and strengthen universal values, to realize the rights and responsibilities of citizens and their personal growth through awareness of human potential. As a result, international programs and documents started to highlight the benefits of volunteering. Finally, in 1985, the celebration of the International Volunteer Day was initiated on December 5, and the UN General Assembly called on governments to promote the dissemination of information about the work of volunteers to involve more and more people from different fields in the volunteer movement.

In 1994, the Council of Europe expressed its position on this issue in the Recommendations of the Committee of Ministers for the Promotion of Volunteering, which, in particular, called for the status of volunteering to be defined at the national level. Subsequently, the world community went further. It is about declaring the year of 2001 the International Year of Volunteers. In connection with this initiative, it was decided to conduct a study, based on which the UN in its resolutions recommended that all states include volunteering in their national strategies for socio-economic development, find and eliminate from their own laws all barriers and obstacles that directly or indirectly hinder people engaged in volunteer activities and relieve tax pressure, which puts the volunteer at disadvantage. Moreover, the UN called on the world community to give volunteers legal status and adequate social protection with full respect for their independence. It is worth noting that there were also national initiatives in this regard: in 2005 the Year of the Volunteer was held in Great Britain.

It is also worth mentioning that the United Nations recognizes the importance of volunteering and its public utility. It is firmly believed by the world community that it is carried out on a voluntary basis, which should be an important part of any strategy developed to address many issues, especially in areas such as poverty alleviation, sustainable development and health, social integration, overcoming social inequality and discrimination, etc. In accordance with the provisions of the UN Resolution and the recommendations on the support of the volunteer movement, the governments of all states were invited to include volunteering in their national plans as a component of achieving the goals of sustainable development.

In January 2001, the XVI World Conference of Volunteers was held in Amsterdam (Netherlands), during which the International Board of Directors of the International Association of Volunteer Efforts adopted the Universal Declaration on Volunteering. This act enshrines the principles of activity: recognition of the right to volunteer for all men, women and children, regardless of their race, religion, physical characteristics, social and material status; respect for the dignity and culture of all people; providing assistance, free services personally or organized in the spirit of partnership and brotherhood; recognition of the equal importance of personal and

collective needs, promoting their collective provision; transformation of volunteering into an element of acquiring new knowledge and skills, improving abilities, stimulating the initiative and creativity of people and giving everyone the opportunity to be a creator, not a user and an observer. In addition, the Universal Declaration on Volunteering states that volunteering is the foundation of civil society bringing to people the need for peace, freedom, security and justice.

Based on the above provisions, it can be stated that the above document characterizes volunteering as a way of:

- upholding and strengthening human values such as caring for and helping members of the community;
- using their own rights and responsibilities by each person as a member of a certain community in the process of lifelong learning and development, and realizing all their human potential;
- providing interaction between people, despite all the differences, in order to live together in a healthy stable society and to develop new ways of solving problems that arise (UN, 2001).

It is not accidental and rightly so that Pavlyuk K.S. considers volunteering to be a global process of uniting people who seek to contribute to improving the well-being of their own and of the world community, and volunteers – as people of different ages and professions from various fields and walks of life who give part of their strength, time, knowledge for the benefit of others and society as a whole. The governments of most countries, including the most developed countries in the world, have recognized and promoted the spread of the national volunteer movement in their countries, considering it an effective tool for the development of society (Pavlyuk, 2015).

3. Volunteering today

Today, using common terminology, volunteering can be considered in a sense synonymous with the term “charity”, as citizens donate money and spend their time to implement ideas that coincide with theirs. Some people make efforts to do so, creating or producing something themselves, some do it passively,

i.e. through financial assistance.

As already noted, the volunteer movement permeates all spheres of a person’s life, and has certain features which include, in particular, the fact that it is based on the principles of voluntariness. Considering volunteering within the domestic policy of Ukraine, such a conclusion can be made by referring to the Constitution of Ukraine, which declares that no one may be forced to join any association of citizens or restricted in rights for belonging or not belonging to political parties or public organizations (*Constitution of Ukraine, 1996*). In Germany, as well as in our country, volunteering has certain features, which is reflected in legislative initiatives. Thus, since 1964 there has been implemented the state program “Volunteers’ Social Year” (Freiwilliges Soziales Jahr (FSJ) or Freiwilliges Ökologisches Jahr (FÖJ)), which allows German youth to carry out practical activities in the social or environmental spheres during the year and since 2002, volunteering has been accepted as an alternative to military service.

At the same time, in the Czech Republic, volunteering has long been recognized as compulsory, free and obligatory. As we can see, approaches to this activity, vision of its essence and meanings differ.

Native scientist Bondarenko Z.P., while analyzing the views of home and foreign scientists on the definition of “volunteering”, notes that it is mostly identified with the concept of

“voluntary activity”, emphasizing the fact that researchers interpret the essence of this phenomenon in the following ways: charity carried out by individuals on a non-profit basis, without wages or promotion for the sake of the welfare and prosperity of communities and society as a whole; voluntary activity based on the ideas of selfless service to the humane ideals of mankind and without pursuing the goal of making a profit, receiving a salary or career growth; obtaining comprehensive fulfillment of personal and social needs by providing assistance to other people. Taking into account all the above, Bondarenko Z.P. concludes that volunteering is a form of civic activity of the population; the national idea of charity and philanthropy, and a volunteer is a citizen who participates in solving socially significant problems on a free basis. In addition, they promote the functioning of public organizations (*Minenko et al., 2017*).

This gives us grounds to claim that another sign of volunteering is gratuitousness. In addition, the volunteer movement is usually common in those areas of life in which the state is unable to provide assistance, and sometimes in those that embody the opposite ideas of the state in a particular matter.

4. The ratio of the volunteer movement and non-governmental human rights organizations

Having understood what exactly is volunteering, let's move on to non-governmental human rights organizations (hereinafter – NGOs) and their similarities with the volunteer movement. First of all, we emphasize the point that according to the classification of public organizations proposed by Slinko T.M. and Kushnarenko O.G., volunteer organizations and NGOs belong to the same group – human rights organizations. In addition, through their activities, NGOs implement the ideas which mostly contribute to the emergence of the volunteer movement (*Slinko, Kushnarenko, 1998*). After carefully reading the common definition, one can find a lot in common between them. Thus, a non-governmental human rights organization is a non-political, officially registered, internally organized, voluntary association of individuals and / or legal entities based on private funds, not subordinated to the executive authorities and not endowed with power, which operates both free of charge and on a paid basis and aims to protect the rights of all subjects.

Agreeing with the thesis that the volunteer movement has a social focus, but at the same time remembering the topic of this study, we pay attention to volunteer organizations in the sphere of human rights.

First of all, we note that the analysis of the above definition allows us to deduce the main features of NGOs:

- voluntariness;
- non-political organization;
- not subordinated to public authorities;
- activities are carried out both free of charge and on a paid basis.

Thus, non-governmental human rights organizations are built on the same principles as the volunteer movement, which means that the cooperation of these organizations is most widely spread phenomena.

There are several explanations to this.

First, funding. Non-governmental human rights organizations focus on the protection of human rights, which are violated primarily due to inaction or improper activities of law enforcement officials and public authorities, lack of funds and ineffective mechanisms that the state has in its arsenal, etc. In addition, they are devoid of public funding and are therefore

forced to find sources of funding. Of course, there are state-supported human rights organizations, but we only consider non-governmental human rights organizations.

Most NGOs operate at the expense of membership fees or financial assistance from citizens who do not participate in the organization's activities but support them. This is the first similar feature of NGOs and the volunteer movement, because financial assistance and support (so to speak, raising funds) is a manifestation of volunteering.

Secondly, given that human rights violations are quite common, NGOs are not able to know about each case because their own information sources and resources are limited, and therefore in order to increase and expand opportunities to protect violated rights, they use the services of volunteer organizations that conduct analytical work and bring to the attention of NGOs information and statistics on this issue. This allows them to respond more quickly to violations of rights and freedoms and to cover more cases.

Thirdly, some non-governmental human rights organizations are funded by volunteers, i.e. volunteers participate passively in the organization's activities. However, they can also take an active part (physical participation) in the protection of human rights. Volunteers conduct educational activities, analytical work, protect individuals in court, cover the facts of violations in order to attract public attention. Fourthly, NGOs and volunteer organizations have the same position in civil society.

They are independent of the state and other organizations, and act as independent subjects in civil society. NGOs work in three directions:

- 1) protection of human rights in specific cases (this assistance should be free of charge for the applicant), public investigations into human rights violations by public authorities;
- 2) dissemination of information on human rights and legal education;
- 3) analysis of the situation with human rights (*Zakharov, 2004*).

In each of these activities, volunteer movements have an opportunity to participate and help increase the effectiveness of NGOs and the level of human rights protection.

The events taking place in the East of Ukraine in the area of the anti-terrorist operation will best of all allow to study the interaction of volunteers and NGOs on a practical level. It is said, in particular, that the number of cases of human rights violations in the context of an armed conflict has increased significantly, which, in turn, is explained by the fact that the territory of Operation Allied Forces is not under the control of Ukraine. Based on this, it is clear that the main non-military activities are carried out by volunteer movements, and therefore they are involved in NGOs in case of significant human rights violations. For example, the Ukrainian Helsinki Group operates on the territory of the Environmental Protection Agency, which every month recruits volunteers who are ready to join the activities of NGOs. Thus, realizing a human rights direction of activity, they focused their efforts on protection of the rights of those people who got into difficult life situations. It is said that volunteer lawyers monitored and tried to counteract illegal actions of the authorities in the legal field. Today, they help IDPs draw up the necessary documents and are part of negotiating groups that work to release hostages and mitigate the conditions of their detention. It should be added that the Ukrainian Helsinki Union, in addition to the above, provides volunteers with an opportunity to undergo trainings and seminars.

In addition, volunteering is an integral part of the activities of the human rights organization "Peace Brigades International" (hereinafter – PBI), the main focus of which is to provide human rights defenders at risk with observers. This is because volunteers are able to attract the attention of the community in case of imminent danger, i.e. their activities bring the greatest effect. Besides, they use their own family and friends, as well as previously acquired activists' connections, which allows a better monitoring performance.

The next well-known international non-governmental human rights organization, which is very active in involving volunteers, is Amnesty International. As you know, they participate in the translation of information materials, analytical work and promotions (by the way, they often become its participants).

However, not only do NGOs need volunteers, but volunteer movements are also interested in working with non-governmental human rights organizations. Citizens benefit from this because they receive assistance from more knowledgeable legal professionals and qualified professionals, which reduces the level of human rights violations. This is confirmed by Berchenko G. V., who emphasizes that NGOs and volunteer movements operate in a single plane (*Berchenko, 2014*), and based on this, he includes non-governmental human rights organizations and volunteer movements among the elements of civil society.

5. Conclusion

Thus, in recent years, the volunteer movement has gained considerable popularity, and its intensification and expansion of spheres of activity is due to two main factors: internal political crisis, which led to the imbalance of public administration, lack of quality management decisions, lack of resource opportunities, and external aggression, which deepened the imbalance between the state's ability to effectively perform its functions and meet the basic needs of citizens.

As practice shows, NGOs cooperate with more volunteers every year. One of the reasons for this was the growing number of human rights violations, especially by the state.

In addition, the cooperation between the volunteer movement and NGOs is quite effective, given the identity of the features, which is primarily manifested in the following ways: free basis of activity; independence from state bodies; voluntary association.

However, not only NGOs need volunteers, but also volunteers participating in the activities of non-governmental human rights organizations benefit in the form of participation in trainings, seminars, actions that expand the legal awareness of citizens.

Cooperation between NGOs and volunteer organizations makes exceptional sense if we consider the above movements through the prism of "the state is the highest body". And it is in this sense that civil society should play a crucial role in protecting the rights and interests of citizens, because, as Rechytsky V.V. notes, civil society is a phenomenon that is a set of social relations which are relatively independent and autonomous from the state, that is, it is the economic, social, and ideological sphere of society (*Rechytsky, 1999*). With mutual assistance, NGOs and volunteer organizations gain independence not only from public funding but also from government influence.

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LIFELONG LEARNING AS A PRIORITY OF DEVELOPMENT OF EUROPEAN EDUCATIONAL PARTNERSHIP

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Summary

The article explores the phenomenon of lifelong learning as one of the key priorities for the development of a European educational partnership. The importance of lifelong learning as a recognized theory and practice of the concept, which is the benchmark of broad modernization processes in the European Higher Education Area, is demonstrated. The main interrelated areas of action (defining strategic priorities for development, outlining key competencies of lifelong learning, identifying forms of lifelong learning, funding and investment efficiency) are considered. The potential of lifelong learning as a mechanism for promoting social stability and cultural convergence at the beginning of the third millennium is conceptualized. Productive links between lifelong learning and the processes of building a knowledge economy have been demonstrated. The methodological basis of the study was the analysis of the European Commission's educational policy (conceptual, regulatory and programmatic documents) in the field of lifelong learning. The results obtained in the study may be useful to both domestic researchers and practitioners in the field of public administration of higher education, university staff, involved in international cooperation.

Keywords: lifelong learning, educational policy, European Higher Education Area, knowledge economy, strategic partnership.

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1. Introduction

Lifelong learning as a priority for the development of European partnership is a popular and widely debated issue in the academic and political circles of Europe and the world in recent decades, the conceptualization of which is the subject of discussion and research of European educational officials, theorists and practitioners. The relevance of the development of the concept of lifelong learning is caused by the procedural and contextual features of the development of modern society.

The rapid progress of transformational socio-political and economic trends and structural changes in recent decades (digitalization, globalization, intensification of intercultural communication, migration, etc.) have had a decisive impact on the foundations of social systems and practices, led to profound changes in social institutions and mechanisms. These transformations

lead to the formation and development of a new infrastructure of social relations, provoke new challenges to the development of the European Union to build a developed knowledge-based economy.

In the outlined transformational conditions, lifelong learning appears not only as a source of development of personal qualities of each person, but also acts as a powerful catalyst of economic and social potential of each state, a factor in the development of European partnership. After all, as modern researchers point out, the European Union still remains a political formation, which currently cannot be considered a «union» at both the economic and socio-cultural levels (*Panitsides & Anastasiadou, 2015*). In addition, linguistic and cultural pluralism within the European Union complicates the emergence and development of a «European identity» that allows people to identify themselves as EU citizens.

The purpose of the article is to explore the phenomenon of lifelong learning as one of the priorities for the development of a European educational partnership and to carry out an overview of the «agenda» of key documents in the field of adult educational policy. Therefore, the methodological basis of the study is the content analysis of the European Commission's conceptual, regulatory and programmatic documents.

2. The socio-economic value of lifelong learning

Based on the indicated socio-cultural situation, the development of educational programs for lifelong learning is considered as a mechanism for promoting social stability and cultural convergence. Political discourse constantly emphasizes the socio-economic value of lifelong learning as a strategy, determines the modernization steps in the field of education in the domestic and European spaces, while its role in the knowledge-based economy lies in the effective implementation of three interrelated functions in practice: distribution, stabilization and development functions.

The distribution function of lifelong learning is to ensure equal learning opportunities for all citizens, regardless of socio-economic status and previous educational level. The function of stabilization of lifelong learning is realized through the acquisition of the necessary skills and knowledge by citizens, both for integration and for leaving in the profession, as well as for ensuring constant adaptation to socio-economic transformations. The development function is implemented by providing effective opportunities for continuous professional development, mastering new skills and knowledge to meet the dynamic needs of the labor market, increasing the efficiency of human resources (*Panitsidou et al., 2012; Savenkova & Svyrydenko, 2018*).

Due to the strengthening of cooperation between EU member states, in recent decades the European Commission has issued a significant number of normative, regulatory and program documents aimed at setting goals and priorities, as well as a coherent framework for action within the common European educational policy. In particular, we are talking about the following key documents on lifelong education:

- «*Adult learning: It is never too late to learn*» (*Commission of the European Communities, 2006a*);
- «*Efficiency and equity in European education and training systems*» (*Commission of the European Communities, 2006b*);
- «*Establishing an action programme in the field of lifelong learning. COM467*» (*Commission of the European Communities, 2006c*);

- «A coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training» (*Commission of the European Communities, 2007a*);
- «Action plan on adult learning: It is always a good time to learn» (*Commission of the European Communities, 2007b*);
- «Commission consultation on the future “EU 2020” Strategy» (*Commission of the European Communities, 2009*);
- «A new impetus for European cooperation in vocational education and training to support the Europe 2020 strategy» (*Commission of the European Communities, 2010a*);
- «An agenda for new skills and jobs: A European contribution towards full employment» (*Commission of the European Communities, 2010b*);
- «Lisbon Strategy evaluation document» (*Commission of the European Communities, 2010c*);
- «European Council Conclusions on Europe 2020: a new European strategy for jobs and growth» (*Council of the European Union, 2010*);
- «Supporting vocational education and training in Europe: the Bruges Communiqué» (*Commission of the European Communities, 2011*);
- «Partnership and flexible pathways for lifelong skills development» (*Commission of the European Communities, 2012*);
- «Council Recommendation on key competences for lifelong learning» (*Council of the European Union, 2018*) etc.

The political rhetoric of the European Union emphasizes that education is a prerequisite for a harmonious life in a prosperous economy and a priority for the development of the European partnership. European Union policy documents recognize education as a key factor in fruitful progress towards integration, social stability and economic prosperity in the EU. However, this education appears in a modified form, compared to the traditional education of the twentieth century – it appears flexible and dynamic in content, effective, accessible and lifelong, responding to socio-cultural and economic transformations of society.

In particular, the program documents of the European Union emphasize that the development of lifelong learning actively contributes to the European Union’s goals of market growth and efficiency, ensuring a high level of education and training in entering the labor market and active participation of citizens in the knowledge-based economy. In addition, it is noted that lifelong learning can and should significantly strengthen social cohesion and facilitate the overcoming of new challenges that logically arise in the context of European enlargement (issues of national identity, social justice, tolerance, multiculturalism, inalienable human rights and freedoms, all forms of equality, etc.).

Achieving the outlined tasks is focused on two closely interrelated parameters of meeting the needs of general development and economic growth: the restoration of full employment; strengthening social cohesion (*Panitsidou et al., 2012*). However, both parameters are mediated by the third variable – the availability of lifelong learning and the openness of educational systems. As part of this effective approach to lifelong learning, the European Union has initiated and supported three areas of strategic development aimed at ensuring the transparency of qualifications; promotion and development of new key competencies – especially in the field of information technology; development of local training centers (*Panitsidou et al., 2012*).

Strategies for the development of lifelong learning as a priority of the European Partnership provide for the implementation of several interrelated areas of action: defining strategic

priorities for development, outlining key competencies of lifelong learning, identifying forms of lifelong learning, funding and investment efficiency. Let us consider each of the above areas of lifelong learning as a priority for the development of the European Education Partnership in more detail.

3. Strategic development priorities

The European Union's policy documents on the development of educational policy determine the further promotion of education, teaching and learning in order to ensure personal and professional development of all citizens, economic prosperity and further employment as the main purpose of the renewed structure of cooperation, promoting democratic values, social cohesion, active citizenship and intercultural dialogue (*National Institute for Strategic Studies 2010; Council of the European Union, 2010, 2018; Nijhof, 2005*).

The decisive factor is that these documents identify four indicators that are called «European benchmarks» to ensure the assessment of the effectiveness of the member states in achieving the strategic goals of European education policy. These benchmarks are aimed at promoting lifelong learning; improving the quality and efficiency of education; increasing social cohesion and active citizenship; promoting innovation, creativity and entrepreneurship (*Commission of the European Communities, 2011; Nijhof, 2005*).

The role assigned to lifelong learning in the European Union's education policy development strategy is based on the assumption that new jobs that require new skills will be created. Moreover, given the economic recession, according to some expert estimates, new trends of multiple entry and exit from the labor market will prevail over the traditional sequence (classic linear scenario: education, employment and retirement). The predominance of these trends requires the development of a new institutional and regulatory framework for organizing and supporting these transitions, for example, part-time employment together with periods of training and retraining (*Commission of the European Communities, 2006b; Council of the European Union, 2010, 2018*).

In line with this “more flexible” employment scheme at different levels of discussion and in the language of documents there is an increasing emphasis on the need to ensure greater access to lifelong learning in order to organize and support a smooth transition between jobs and other activities, minimizing the risk of human capital losses due to potential long-term unemployment.

Thus, the growing role of lifelong learning is closely linked to raising the general level of qualifications and ensuring the acquisition of basic skills by all citizens; helping to respond to demographic change, such as Europe's aging population and migration issues; strengthening social inclusion, which is crucial as low levels of primary school education, high unemployment, rural isolation and reduced educational, social and economic opportunities can marginalize large numbers of citizens, and new forms of illiteracy provoked by restricting access to and use of modern information computer technologies, exacerbate the phenomena of social exclusion (*Commission of the European Communities, 2006b; Council of the European Union, 2010, 2018*).

4. Key lifelong learning competencies

The European Commission works with EU Member States to support and strengthen the development of basic competencies and basic skills for all, from an early age and throughout

life. Key competencies include the knowledge, skills and attitudes needed by people for personal fulfilment and development, employment, social inclusion and active citizenship. This approach is to promote key competencies by:

- providing quality education, retraining and lifelong learning for all;
- supporting teachers in the implementation of teaching methods based on competencies;
- involving a variety of approaches and contexts for further learning;
- exploring approaches to assess and validate key competencies.

In 2018, the European Council adopted a Recommendation on key competences for lifelong learning, based on proposals from the European Commission. The Recommendation identifies eight key competencies needed for personal fulfilment, healthy and sustainable lifestyles, employment, active citizenship and social inclusion: literacy; multilingualism; mathematical, scientific and engineering skills; competence in the use of digital technologies; interpersonal skills and the ability to accept new competencies; active citizenship; entrepreneurship; cultural awareness and self-expression (*Nijhof, 2005*).

This Recommendation of the European Council offers a common European reference framework on key competencies for policy makers, educational and research institutions, social partners and lifelong learning participants themselves. Also, the Recommendation presents successful ways to promote the development of competencies through innovative approaches to learning, assessment methods and support for teachers.

5. Forms of organization of lifelong learning

Emphasizing that learning is not limited to one specific life phase, school education, but also takes place in different contexts throughout life, the Strategic Framework for European Cooperation in Education and Training (ET 2020) supports the concept of lifelong learning by coordinating cooperation between Member States as for education, formal, non-formal and informal learning.

Among the many forms of lifelong learning that are set and implemented in the system of lifelong education, the authors of the analytical note «Lifelong learning: world experience and Ukrainian practice» propose to identify the following three components:

1. Additional professional education – contributes to the formation of the professional basis of human resources of the modern high-tech economy. The consumers of this part of the system of lifelong learning are the socially adapted part of the population, receiving education consistently at all levels.

2. Component that provides various groups with the opportunity to adapt to changing living conditions; provides education aimed at adaptation and rehabilitation of social and professional groups, unable to adapt independently to the rapidly changing social environment. Citizens who do not have access to the formal vocational education system for various reasons are involved in this system.

3. A component of the system of adult education, which tries to meet the various individual educational needs of citizens: language training, psychological, cultural and other knowledge, communication skills, special skills and more. The formalized structures of additional vocational education are joined by various informal structures (training groups, training and retraining in enterprises, etc.), which sometimes operate on the basis of formalized structures, and are often created informally, usually for a short time. Also adjacent to this system is open education in its various forms as well as distance learning (*Commission of the European Communities, 2006*).

6. Issues of financing lifelong learning and investment efficiency

The issue of funding and efficiency of investment in lifelong learning is widely discussed by the European Commission. In particular, it is noted that investments in education and training have a significant cost, but high personal, socio-economic, medium and long-term returns exceed the initial costs. In addition, in the context of the spread of neoliberalism and the decline in welfare, for the first time in European Union policy documents it is necessary to place the cost of lifelong learning on the citizens themselves, urging Member States to encourage citizens to invest in their own learning for both personal development and employment (*Commission of the European Communities, 2010a, 2007*).

To achieve the necessary social consensus, the European Commission calls on the Member States of the European Union to pursue a better policy of informing all citizens about the need to increase participation in lifelong learning, by launching broad communication campaigns involving individuals with national, regional and local social partners (*Panitsidou et al., 2012*).

It should be noted that a significant progress in the development of European lifelong learning policy in recent years has been the approach to a coherent framework policy implemented through technocratic tools that allow comparisons between member states (introduction of «indicators» and «benchmarks») while emphasizing on increasing investment in lifelong learning. As a result, there was a gradual transition to a supranational educational policy, which was legitimized under the threat of socio-economic losses in the event of non-implementation of the Lisbon Strategy. Similar «evolutionary» processes do not play any significant role in the European Higher Education Area and, in a specific way, in Ukraine, in the process of developing academic mobility practices (*Commission of the European Communities, 2006a; Tuparevska, 2019*).

7. Conclusions

Over the past decades, lifelong learning has remained a priority area in the development of the educational policy of the European Union, aimed at increasing the participation of adults, especially the unskilled, in various educational programs of formal, non-formal and informal education. It acts as a powerful catalyst for the economic and social potential of each member state, and a factor in the development of European partnership. Also, within the framework of the article, an overview of the «agenda» of key documents in the field of educational policy of the European Higher Education Area was carried out, and this review itself can be useful both for domestic researchers and practitioners in the field of public administration in higher education, university staff, involved in international cooperation and the like.

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MEDIA ARRANGEMENT AS A FACTOR OF EXTERNAL INFLUENCE IN SOCIOLOGICAL REFLECTION: THEORETICAL ASPECT

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Summary

The article provides a descriptive characteristics and classification of media support theories as a factor of external influence in conflict situations. In accordance with this goal, groups of neo-Marxist, poststructuralist, and socio-behavioral theories are identified. It is determined that the set of general theoretical postulates of the first group is, firstly, the postulate on the usurpation of media power by political and economic elites who are behind the financing and social patronage of cultural industries. Secondly, the postulate of information distortion, which consists in the fact that monopolizing classes are interested in forming a distorted picture of social reality. Thirdly, the postulate of forming a unified strategy of influence in the media space by power and economic elites, in respect of which media actors are considered mainly as repeaters of discourses.

It is determined that a set of general theoretical postulates of the second group is the recognition of linguistic (rhetorical and linguistic) factors of media support as the key ones. Secondly, the consideration of media actors as relatively independent producers of discourses, which have an independent meaning in the sphere of influence in comparison with social groups and institutions. Thirdly, the postulate regarding the positioning of supranational identities through language and the use of a specific (globalistic) vocabulary is of great importance for poststructuralism.

Keywords: external influence, media arrangement, neo-Marxism, post-structuralism, social behaviorism, mass media, media discourses, ideologies, favoritism, marginalization.

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1. Introduction

Mass media are tools for achieving two basic states: social consensus and social discontent (dissensus). At the same time, both the first and second social states serve as the basis for legitimizing mass discontent, or vice versa, mass satisfaction about certain problems and restrictions.

One of the primary mechanisms of domination and colonization in certain societies is cognitive mechanisms such as categorization and stereotyping. At the media level, these mechanisms are applied through the spread of various prejudices that serve as the basis for the formation of social ideas. Thus, in media discourse, polar social ideas can be represented, reflecting the typical division into “we” and “they”. At the same time, “we” in categorization can, for example, be associated with signs of progressiveness, development, social dynamism, whereas “they” – with backwardness, inertia, corruption.

Such categorizations are sometimes part of the media discourse of Western and Euro-Atlantic societies in relation to Eastern societies. Therefore, Western societies in appropriate categorizations sometimes occupy the pole of a positive image, and Eastern societies – the pole of a negative image with corresponding characteristics (for example, primitive, dictatorial, violent and terrorist Islam, arabs or fundamentalism; hostile, secretive, insidious China in the American Media).

The role of media support in the implementation of various forms of external influence in modern conditions is difficult to underestimate. This is due to the fact that any act of external influence, as a rule, is preceded by media arrangement, which should prepare civil society for consolidated reactions with the state authorities. At the same time, the media become important and independent actors of such influence, and their activity, respectively, becomes the subject of sociological and interdisciplinary understanding in various theories. This article deals with the problem of constructing descriptive characteristics of such theories and their classification.

The purpose and objectives of the study. The purpose of the article is to give a descriptive characteristic and classification of media support theories as a factor of external influence in conflict situations. The objectives of the article, in accordance with the set goal, are: 1) construction of descriptive characteristics of media support theories; 2) construction of classification of media support theories; 3) determination of ideological mechanisms of media support in external influence.

Analysis of previous research on the selected topic. Media arrangements as a factor of external influence are part of mass communications, which became the subject of independent research at the beginning of the XX century. The methodological basis for media research was the understanding sociology of M. Weber, which justified the scope of mass media research, primarily in the aspect of connection of printed publications with various target audiences (*Weber, 1990*).

The evolution of theories took place in the direction of spreading theories of mass media influence on various components of mass consciousness and behavior. At the same time, there is reason to single out a group of theories that investigated, in particular, the possibilities and ways of media influence on people's attitudes, value orientations and behavior.

The genesis of theories of media influence on society includes two phases, namely, classical and post-classical (*Dyakova, 1990, 20-60*). This circumstance is primarily due to the difference in media research paradigms. At the classical stage, mainly logical and theoretical methods were used to study the influence of mass media on society and the main empirical methods were developed. At the present (postclassic) stage, researchers have made appropriate generalizations of media research materials.

The classical phase can, in turn, be divided into the interwar, post-war periods, the Cold War and bipolar world period, and the postmodern period.

Within the second phase (40-60s of the twentieth century), methodological skepticism spread, the discourse of which was initiated by P. Lazarsfeld and B. Berelson (*Berelson, 1952*). The researchers emphasized the importance of empirical methods of media research, in particular, content analysis, intent analysis and event analysis. In sociology, at this stage, within the framework of the phenomenological direction, the study of symbolic universes and conditions of relevance of everyday worlds takes place, which is presented in the works of A. Schutz (*Shyuc, 2003*).

As part of the third phase (the period of the Cold War and the bipolar world, 60-80-ies of the twentieth century), researchers moved on to generalize the results of empirical research, primarily to research on media policy and socio-cultural basics of media formation. In sociological discourse, the basics of these theories were formed by the works of P. Bourdieu in line

with post-structuralist-neo-Marxist studies of symbolic violence, political fetishism, competence, monopolism based on delegation, etc. Significant for this period can also be considered the works of researchers of the Freud-Marxist direction (T. Adorno), that were devoted to the industries of culture and the formation of symbolic hegemony (*Adorno, 1972*).

The postmodern phase is characterized, first of all, by the lack of a unified paradigm for understanding the influence of mass media on public consciousness. At this stage, a number of theories have been developed, many of which are relevant for understanding the media support of external influence and all forms of interference. We are talking, in particular, about the theory of priming, the cultivation theory, the priority-setting theory, the uses and gratifications theory, the agenda-setting and news priority theories, etc. (A. Bandura, G. Gerbner, D. Domke, R. Morgan, R. Kaplan, J.-B. Thomson et al.). One of the most promising methods in modern conditions is the meta-analysis method, which allows you to generalize a large amount of empirical data and form a new generation of macrotheories.

2. Presenting the main material

Theories of media support of external influence, according to the criterion of peculiarities of the methodology used by the authors, can be divided into three groups: neo-Marxist, post-structuralist and socio-behaviorist (symbolic-interactionist).

A group of neo-Marxist theories. A set of common theoretical postulates of this group is, firstly, the postulate on the usurpation of media power by political and economic elites who are behind the financing and social patronage of cultural industries. Secondly, the postulate of information distortion, which consists in the fact that monopolizing classes are interested in forming a distorted picture of social reality. Thirdly, the postulate of forming a unified strategy of influence in the media space by power and economic elites, in respect of which media actors are considered mainly as repeaters of discourses.

The content of propaganda theory, or imposition theory, is the idea of controlling the media and military-administrative lobbies through economic power. At the same time, it is the latter that allows you to create social attachment to political decisions through the media. The theory of propaganda is based on the neo-Marxist methodology of A. Gramsci, P. Bourdieu, whose logic of studying the society allows the establishment of an indirect connection between the production of discourses, power and property.

The key focus of the theory is to understand the media as a lever of the state and economic elites, which allows both the former and the latter to make “the existing non-existent, and the non-existent to be existing”. In fact, it is about getting into the space of discourse of only those topics that are beneficial to power circles. Mass media create favorable reference frames for these circles, from which the understanding of a particular society by another society begins (*Herman, 1988, 25*).

The analysis of media support is also implemented within the framework of the theories of media diplomacy as a new paradigm of foreign political influence. The very term “telediplomacy” was coined by R. Ammon. The author uses partly the methodology of the W. Beck’s risk society, attributing telediplomacy to the external influence of society in the era of global risks (*Ammon, 2001, 152*).

The author justifies this by saying that a sign of TV diplomacy, unlike traditional diplomacy, is its unprecedented openness and transparency in relation to the media. This circumstance changes the paradigm of communication in the direction of creating new technologies for forming the agenda and the foreign and political influence of the media on foreign policy

itself. Mass media through TV diplomacy acquire the status of an autonomous actor, that begins to determine both the strategy of foreign policy and individual foreign political decisions (Ammon, 2001, 152).

Thus, after the Cold War period, as a confrontation between the communist and capitalist worlds, there was a need for the image of a new enemy. Islamic fundamentalism has become such an enemy, which allegedly threatens the south pole of NATO. The relevant media and social networks carried out ideological and rhetorical preparation of social representations in the information space. Because of these widespread social beliefs, statements about Islamic fundamentalism as the main enemy of the West and the Euro-Atlantic have become plausible, if not universally accepted, in official discourse. In the cultural field, hysterical rhetoric was being whipped up against the Iron Curtain and the spread of Western-style freedom of speech. The political and military establishment has created waves in terms of focusing on terrorism, aggression, and fundamentalist threats.

Media concerns are considered within the framework of this theory as supporters of conservative political circles, which through media discourse justify their right to invade other countries. Thus, E. Herman and R. Peterson applied the theory of created consent to the crisis in Kosovo. This theory was based on neo-Marxist argumentation, which was dominated by indirect evidence. For lack of empiricism, planting theories often use guesswork about the possible causes of intervention and escalation of conflicts that precede military-humanitarian interventions (Herman, 2000).

The group of neo-Marxist theories can also include comparative political science studies, which, nevertheless, are important for the sociology of external influence. One of the comparative political science models was created by E. Herman. In constructing the model, the author proceeds from the typology of totalitarian, authoritarian, and liberal democratic political systems. At the same time, he analyzes a variant of the media policy strategy inherent in each type of political system (Jakobsen, 1996).

The theory focuses on a comparative analysis of the media policy of European and American societies. However, it lacks interest in Asian societies, which may also have their own media policies. The researcher identified four groups of factors for the success of media policy, namely: the presence of a developed media infrastructure; a significant volume of media recipients; media-active politicians and civil society, which influences media policy (Herman, 1988, 60-63).

A group of poststructuralist theories. The key postulates of poststructuralist theories are meaningfully focused, firstly, on the recognition of linguistic (rhetorical and linguistic) factors of media support as the key ones. Secondly, media actors are seen as relatively independent producers of discourses that have an independent meaning in the sphere of influence compared to social groups and institutions. Thirdly, the postulate regarding the positioning of supranational identities through language and the use of a specific (globalistic) vocabulary is of great importance for poststructuralism.

In this aspect, we are talking about media interventions of external influence, which become the subject of research for both general theories and empirical research. It is about agenda theory, framing theory, as well as empirical studies of the relations of political elites with the media. Examples of empirical research are the so-called "indexing theory" and the "consent theory" (Reese, 2001).

Empirical research in the framework of indexing theory proves the commitment of media actors to aggregating the ideas of the political establishment, which actually presents the media as a simple tool in the hands of military and administrative elites. The theory of indexing was

tested on the material of 42 foreign political crises in the period from the beginning of the Cold War to the Kosovo crisis of 1999 (Zaller, 2000, 61-84).

The same theory has also been applied by other researchers to assess the US-Vietnam conflict. At the same time, it is said that in these repeated applications of indexing theory, the results obtained for the post-Cold War period were less convincing. This was due to the fact that there was a disappearance of geopolitical blocs and a decrease in the level of polarization of the world. That is why the results obtained by Zaller and Chiu regarding relations with media governments in the United States after the Cold War are more mixed.

The difference between the research results of the theory is attributed to the use of different content-analytical matrices. In some schemes, all political news (both positive and negative) were calculated. In other studies, only negative messages were counted. One part of the researchers conducted a content analysis of negative messages during interventions, including their placement, implementation, costs, and political support, while the other studied mostly negative news coverage of a policy in which its impact was denied. This methodological discussion reveals the weakness of the “indexing hypothesis” (Zaller, 2000, 61-84).

The analysis of media support is also implemented within the framework of theories of media diplomacy as a new paradigm of foreign political influence. The very term “telediplomacy” was coined by R. Ammon (Ammon, 2001).

Unlike traditional diplomacy, the author considers its unprecedented openness and transparency in relation to the media to be a sign of TV diplomacy. This circumstance changes the paradigm of communication in the direction of creating new technologies for forming the agenda and the foreign and political influence of the media on foreign policy itself. The media, through telediplomacy, acquire the status of an autonomous actor, that begins to determine both the strategy of foreign policy and individual foreign policy decisions (Ammon, 2001).

Shaw and Miller’s poststructuralist theories are quite interesting. The authors applied correlation-factor analysis to study the Iraqi-Kurdish conflict. At the same time, the authors methodologically used the paradigm of “global civil society”, in which communities without a clearly defined national and ethnic identity have ambitions to represent victims of national or international oppression and violence (Miller, 2002).

The authors focused on the policy-making process through rhetorical cliches. The author’s methodology was to identify the relevant verbal figures and the accompanying sequence of political decisions with their coverage in the media. At the same time, both the relevant PR divisions of the government and the mass media used various means of putting pressure on their interlocutors in rhetorical cliches. Miller tested the “positioning hypothesis” by analyzing inter-institutional verbal communication between the media and government. The author’s empirical material was video recordings and printed minutes of press conferences. It is about questions from journalists and answers from officials (Miller, 2002).

The authors’ key statement about the media was attributing to them representative subjectivity and the characteristics of an institution that has a mandate to articulate the needs and interests of victims of violence and war. The authors also defended the circular model of media influence on politics, as well as vice versa, through public opinion. That is why the empirical basis for them was the secondary analysis of public opinion polls.

A group of socio-behavioral theories. In this group, preference is given to empirical studies of individual factors, mainly in the framework of quantitative studies. The latest behavioral research is focused on the topic of agency and cognitive certainty/uncertainty of political groups regarding the position of the media and the media support of a particular event by external influence.

In the substitution theory, the subject of the author's analysis was military intervention, which the author evaluated, among other things, by the amount of attention paid in the media. His theory is based on quantitative data and is based on the reflection of political events in the media with concomitant changes in foreign policy strategies, both regarding the facts of US intervention in civil conflicts of other countries, and regarding specific methods of this intervention (economic sanctions, military interventions, media and cultural diplomacy, etc.) (Regan, 2000, 90-106).

In the theory of substitution of P. Regan, the importance of media coverage as a factor in the transformation of the corresponding strategies of external influence was revealed. However, the author made a number of methodological inaccuracies, deciding to narrow the field of research by print media and measuring purely extensive indicators of attention. The author actually equated the number of articles and reports to the level of significance of the event. That is why the reaction to the theory immediately became a series of critical comments that concerned its weaknesses.

The first weakness of the theory was the exaggerated importance of print media as a key source of information. After all, most people get information from the internet and from television, and not from the press. Secondly, the amount of media attention is not a mandatory indicator of the level of social significance of an event, since it is often just the opposite. Third, simple calculations of media attention are clearly insufficient. After all, in these volumes, various areas of lighting can be represented, positive, negative or neutral.

R. Jacobsen investigated a number of factors of humanitarian intervention as a technology of external influence, to which the author attributed legal factors (existing judicial or administrative resolutions on the facts); the presence/absence of national interests; assessment of risks and opportunities for successful implementation of the scenario of humanitarian intervention; the presence/absence of certain support groups within society. These factors were considered based on the Kuwait, North Iraq, Somali, Rwandan and Haitian crises.

The study of media arrangement as an auxiliary means of external influence was carried out within the framework of the Livingston-Eachus theory of agency. The authors created a three-component scheme of acting participation in humanitarian operations. Three groups of agents were identified in this model: decision-making agents; interference agents as for decision-making agents; and agenda-setting agents (including media and social media, both formal and informal). Accordingly, the authors also classified media effects into three groups: acceleration effects, interference effects, and agenda definition effects.

The researchers demonstrated manifestations of three groups of effects in three groups of actors in eight types of external intervention and influence: conventional wars, strategic and tactical deterrence campaigns, special operations and low-intensity conflicts, peacekeeping activities and peacekeeping operations combined with humanitarian operations and interventions. The empirical case for researchers was the peacekeeping interventions of NATO military contingents in Kosovo.

Among the behavioral studies, there is also P. Elliott's so-called theory of political uncertainty. The author correlates the level of influence of the media and the state of the politicum, stating that their influence will be the highest given the lowest certainty of the political elites' position on a conflict's situation and the necessary intervention. The researcher observes the highest influence of mass media also with specific content, which implies a critical attitude to the event and empathic coverage of it in the relevant media (Elliott, 1974, 249-268).

According to the logic of the author's reasoning, if the political community is confident in assessing the event and situation of the conflict, the level of media influence is most likely

be low and insignificant. The analytical model was tested on the materials of the Bosnian and Kosovo conflicts.

3. Conclusions

To build a media support strategy for any conflict that involves or assumes the external influence of one society on another (through ordinary wars, humanitarian interventions, information special operations, etc.), three basic components are necessary: ideological and value, rhetorical, organizational and effective. All of them are combined in dominant discourses and can become the subject of research of three groups of theories, the authors of which prefer power and economic structures, the logosphere and language, political decisions and media actions. These aspects of external influence can become the subject of research in neo-Marxist, poststructuralist, and socio-behavioral theories. Despite all the differences in the discourses that accompany external influence, they are constructed from categorizations as separate elements.

Therefore, in the dominant discourse in the structure of categorization, there is a pole of well-being, peace, security, and a pole of poverty, randomness, and threat. The rich, intellectually developed, urban, information-competent are becoming the pole of calmness in favor of the poor, uneducated and underdeveloped, rural (provincial-peripheral) and agrarian-archaic. The leitmotif of pressure through media discourse is humanization within the framework of constructed social representations and dehumanization of others. Whoever these others are (ethnic minorities, migrants, gender groups, etc.), they are subject to negativization. To these groups, the media bring negative social ideas that express a state of dissatisfaction with them. In such circumstances, dividing the field of media categorization into images of higher and lower groups means using the ideology of open or hidden advantages both in politics and in the media. The ideology of superiority and inferiority, therefore, has a stable intellectual succession.

Social representations created by the media should both confirm the ideology and receive value legitimacy from it. At the same time, in any categorization, there are manifestations of double standards. All facts that are proposed to fit into its positive or negative poles must pass through the conveyor of double accounting: favoritism and discrimination. Group favoritism is accompanied by the formation of an image of a prestigious society, an example for worthy imitation of other societies. Its problems are either not considered in the media at all, or they are presented as transient and situational difficulties and must be solved.

Group discrimination is accompanied in the media by a negative agenda and news emphasis on negative events for those communities in respect of which certain forms of symbolic and cultural violence should be justified. The media form the main blocks of news, programs and films from facts or fantasies about real or alleged crimes of representatives of a hostile ethnic (national) community in the city center or in ethnically biased stories about drug addiction, mass riots and cultural deviations.

Discourses and narratives of parallel stories about hostile others there correspond to these vectors of marginalization of hostile others here. So, the dominant components of the media discourse that precedes certain colonization interventions against communities (societies, states) in modern conditions are crime, violence, terrorism and ethnic conflicts, fundamentalism, corruption and other forms of uncivilized backwardness.

Ideologies are the most powerful tools of colonization when identified with rationality and self-evidence. They justify the different values of certain social groups by appealing to humanity against violence, strengthening state security against terrorism, national equality

against ethnic cleansing, genocide, relativism and tolerance against fundamentalism. Ideologies form a value superstructure for the implementation of any colonization projects. But in the modern world, these colonization projects are not limited to spreading among the elites and masses. They involve creating consensus in public discourses and public opinion through the mass media.

Media imperialism is becoming an ideology with discourses of attack as components of more powerful societies on less powerful societies, which are waging wars of meanings, market economies, political democracies with culturally marginalized societies. To do this, media factories use agendas, news headlines, articles, topics, images and narratives, which become a means of legitimizing and accustoming ethnic and social inequality on a macro-regional and global scale. This is facilitated by the focus on sensational topics presented in the media as part of the daily lives of those who are to be marginalized, repressed and further colonized. Such topics include corruption scandals, military coups, earthquakes, drug trafficking, clashes between mafia groups, inter-ethnic conflicts, and more.

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INTERNATIONAL ORGANIZATIONS AS SUBJECTS OF INTERNATIONAL LAW RULES INTERPRETATION

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Summary

This paper aims to analyze an interpretive activity of international organizations as a means to solve the problem of paramount importance for ensuring updating of international law rules and the whole mechanism of international law action in the process of rules implementation. The methodology is based on a comprehensive approach to the analysis of the object and subject of research, which covers philosophical and legal methods – dialectical method of scientific knowledge, system-structural method, empirical method, hermeneutic method, synergic and formal-legal methods of scientific research.

As a result, the growing role of international organizations as subjects of interpretation, which do not only play an essential role in international law-making and the implementation of international law but also take an active part in their interpretation, was proved. In interpreting their charters, international bodies and organizations certainly influence the content of other international norms. At the current stage, it is necessary to define international organizations' interpretive activity as a particular type of international law-making, which consists in the official interpretation of international legal rules contained in the relevant acts. Nevertheless, they do not acquire the status of law-making bodies, and their decisions and conclusions are of a recommendatory nature.

Keywords: interpretation of international law, United Nations General Assembly, United Nations Security Council, law-making, soft law.

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1. Introduction

At the current stage, international organizations' interpretive activity is a distinct type of international law-making, which consists in the official interpretation of international legal rules contained in the relevant acts. In carrying out the interpretive function, international bodies and organizations also influence the content of other international rules, a practical example of which is the United Nations activities. Interpretation of the UN Charter's goals and principles directly affects international law as a whole, which goals and principles of which they also are. Thus, any interpretation is carried out in the light of goals and principles of the Charter of United Nations as a universal international intergovernmental organization of general competence.

This article aims to study the process of international law interpretation by international organizations, to determine the role of international bodies and organizations as subjects of interpretation, in particular, to characterize the activities of the UN General Assembly and the UN Security Council in international law interpretation.

The methodology is based on a comprehensive approach to analyzing the object and subject of research, which covers philosophical and legal methods. The methodological basis is the dialectical method of scientific cognition, which provided the study of the connection between doctrine and practice. Particularly vital among interdisciplinary methods is the system-structural method, on the basis of which the systemic relations in the international organizations system were studied and substantiated. The author's conclusions are grounded on scientific analysis results, carried out using the empirical method of the research of international organizations' law enforcement practice. As a critical methodological principle, the hermeneutic method was used, which allowed studying international organizations' legal interpretation. The synergetic method, being a qualitatively new approach in scientific cognition, allowed to determine basic principles and patterns of functioning of international organizations as interpretation subjects and the formation of organizations' interpretive methodology. The article also used the formal-legal method for treaty analysis.

The concept, international organizations' legal nature, organizational structure and functions of international organizations, forms of law-making are the subject of Ukrainian scholars' active research (M. Baimuratov, S. Bilotsky, M. Buromensky, V. Butkevych, O. Butkevych, V. Vasylenko, Yu. Voloshin, M. Hnatovsky, T. Danilchenko, V. Denisov, O. Kyivets, I. Lukashuk, V. Mytsyk, L. Tymchenko, O. Tragnyuk, O. Shpakovych, etc.). In the foreign doctrine of international law, certain aspects of this issue have been studied in one way or another by such scholars as G. Ab-Saab, D. Ancilotti, A. Aust, O. Elias, M. Fitzmaurice, M. Lennard, U. Linderfalk, P. Merkouris, J. Pauwelyn, G. Schwazenberg, P. Van den Bossche, I. Van Damme, G. White.

However, the problem of international organizations' interpretive activity remains debatable, especially in the context of distinguishing between legal interpretation's content and law-making of international organizations' activities. Based on the above, T. Danilchenko (2017) proposes to consider international organizations' law-making in two dialectically combined dimensions – imperative (“hard”) and recommendatory (political-legal or “soft”). The latter, as noted by K. Smirnova (2012), is a field for discussion in international law theory. The “soft” law concept is a kind of tension point for different ideas and views, being sometimes contradictory, even though “soft” law received a particular vision in European Union law (*Smirnova, 2012, (3): 74*). The study of prof. Shpakovich O. M. (*Shpakovich, 2016: 175*) has convincingly developed this idea. According to the author, “soft” law rules are contained in international organizations' resolutions of being not mandatory and not formally binding member states. However, as the researcher emphasizes, these rules are respected by the states and are implemented in the national law by similar meaning norms similar. The author gives a reasoned explanation, noting that “soft” law rules, having great political and moral importance, are usually created by organizations with considerable authority.

Illustrating the role that international intergovernmental organizations can play in the law-making process, D. Skrynka (*Skrynka, 2019 (1): 255*) cites, as an example, the General Agreement on Tariffs and Trade (GATT), and since 1995 – the World Trade Organization (WTO). The author claims that within multilateral negotiations framework of the Uruguay Round (1986-1993), almost two dozen texts of treaties, determining both the foreign and domestic policies of most modern states, were prepared.

2. Interpretive and law-making functions of international organizations: main discussions

One should note that scholars' positions on international organizations' law-making functions can be grouped into two categories: 1) denial of international organizations' ability to make binding decisions not directly provided by the charter; 2) recognition of the binding nature of international organizations' decisions, issued for the execution of its functions. Most international law professionals are interested in such a phenomenon as the decision of an international organizations' decisions as "soft" law. O. Shpakovych (*Shpakovych, 2013: 34-47, 34-47*) believes that, based on modern international organizations practice, one should pay attention to the resolutions of many regional organizations, especially to European human rights protection mechanisms, which, being by their legal nature the norms of "soft law," are "hard" by its international legal consequences.

It is necessary to distinguish between interpretation possibilities of interpretation: 1) universal organizations (e.g., UN) and 2) organizations with a limited number of participants, such as regional organizations. Universal organizations represent the international community as a whole and can, through interpretation, make significant changes to general international law, including its mandatory rules. According to the Vienna Convention on the Law of Treaties, such rules are created and changed by the international community as a whole (*Karvatska, 2019 (1): 187-190*). Interpretation, carried out by organizations with a limited number of participants, may not lead to the repeal or modification of general international law.

Several Council of Europe agreements provide for the possibility of settling their application or interpretation in Council of Europe bodies. In particular, the European Committee on Legal Cooperation of the Council of Europe may, by agreement of States, settle disputes concerning the interpretation or application of the Civil and Criminal Law Conventions on Corruption, 1999 (Article 21), The European Committee on Crime Problems of the Council of Europe is empowered to consider, by agreement of States, disputes concerning the interpretation or application of the Convention on Laundering, Search, Seizure and Confiscation of the Proceeds from Crime, 1990 (Article 42), and to promote the amicable settlement of any difficulties, which may arise in connection with the application of the Convention on the Transfer of Sentenced Persons, 1983 (Article 23), the European Convention on the International Validity of Criminal Sentences of 1970 (Article 65), the European Convention on the Suppression of Terrorism of 1977 (Article 9), the European Convention on the Transfer of Proceedings in Criminal Matters of 1972 (Article 44).

Decisions, resolutions, and other international organizations' practices can in themselves be attributed to treaty interpretation. This principle, for example, is stated in Art. 2 (j) of the Vienna Convention of 1986, which mentions "established practice of organization" as a form of "rules of the organization". International organizations' practice in applying their constituent documents relates to paragraph 3 of the Draft Conclusion 12 of the International Law Commission. Reports from international organizations prepared on the basis of a mandate to gather information on States' practices in specific areas can be critical in assessing such practices.

Paragraph 4 of the draft conclusions of the International Law Commission, adopted at the Seventieth Session of the UN General Assembly, stipulates that the "case-related rules of interpretation" contained in the constituent act of an international organization may prevail over general interpretation rules according to the VCLT (*Dörr, Schmalenbach, 2018: 576-577*). If, for example, the constituent act contains a reservation, such as a paragraph 2 of Art. IX of the

Agreement Establishing the World Trade Organization (commonly known as the “Marrakesh Agreement”), according to which a particular procedure carries out the interpretation of the act, it should be assumed that parties, having reached an agreement after the treaty conclusion, do not want to circumvent this procedure according to paragraph 3 (a) of Art. 31. Such a particular process under the treaty and the subsequent agreement under paragraph 3 (a) of Art. 31 may, however, be compatible if they “perform different functions and have different legal consequences” (*World Trade Organization, 2012. United States – Measures Affecting the Production and Sale of Clove Cigarettes, Paras 252–257*). Only in rare cases do constituent acts contain positive procedural or substantive rules concerning their interpretation (*Dörr, Schmälgenbach, 2018: 577*). In its commentary to Art. 2 (j) of the 1986 Vienna Convention, International Law Commission noted that the significance of a particular organization’s practice might depend on specific rules and characteristics of an organization expressed in its founding act: “Indeed, most international organizations in a few years establish a practice, which becomes an inalienable part of their rules.” However, mention of practice does not mean that it has the same status in all organizations; on the contrary, each organization has certain peculiarities in this matter”.

International organizations’ decisions arising from multilateral contractual law (i.e., constituent documents) or its application may affect the interpretation of a multilateral contractual rule (or customary law), an unappealable nature of which is recognized and accepted per Art. 53. However, the question of whether the decision itself is mandatory in terms of recognizing the invalidity of conflicting contractual obligations of the Member States is not resolved (*Wolfke, 1974 (6): 154*). One should determine this possible effect solely based on the constituent act.

In the context of the documents’ interpretation effectiveness of international organizations, the question of their correlation with the mandatory norms of *jus cogens* is essential. International organizations’ decisions, contradicting *jus cogens*, are invalid for two reasons. Firstly, international organizations’ decisions’ follow from the constituent act of the organization, i.e., the agreement on the establishment of the organization. In order to prevent the invalidity of the latter under Art. 53, the constitutive act should be interpreted as not allowing decision-making or action-taking contrary to *jus cogens* by international bodies. Secondly, as international legal entities, international organizations have rights and obligations arising not only from their constituent acts but also from general international law rules, including inalienable *jus cogens*. In this respect, international organizations’ legal position is very similar to the states’ stance: *jus cogens*’ force of validity affects international organizations’ contractual relations (Article 53) and their unilateral legal acts. Even the UN Security Council, acting in accordance with Chapter VII, has no particular political or legal position in the area of *jus cogens* obligations (*Reinisch, 2001 (95), 4: 859*).

European Court (now the General Court of European Union), in its well-known judgment “*Kadi and Barakat v Council and Commission*,” repealing the appeal, ruled: “The Court is empowered to review, indirectly, the legality of resolutions referred to in the Security Council in relation to *jus cogens*, what is understood as a set of public international law higher rules binding for all subjects of international law, including United Nations bodies, and from which derogation is impossible.

In this regard, acts of international organizations’ bodies created to promote the development of a particular international law area are of special interest. For example, the United Nations Commission on International Trade Law (UNCITRAL) was established as a subsidiary body of the United Nations General Assembly to promote the progressive harmonization and unification of international trade law. The Commission develops conventions, model laws, rules, legal and legislative guidelines, and recommendations and carries out other activities to

realize its goals. The Commission is a specialized body in the field of international trade law and international commercial turnover. It is obvious that practice generalization, conducted by UNCITRAL, in this area is a particular legal analysis, based on which conclusions are drawn about the understanding and implementation of specific rules. These conclusions can be qualified as a competent international legal interpretation of international law rules, by which national courts should be guided (despite the recommendatory nature of UNCITRAL acts). Such a normativity stems precisely from the competence in a particular area of this body, from the fact that conclusions about interpretation are made based on the established state practice and aim to ensure the uniform application of treaty rules.

3. Activities of the UN General Assembly in the process of international law interpretation: features and innovations

UN activities are especially relevant in the context of international law interpretation's problem. On the other hand, any interpretation is carried out in the light of UN Charter goals and principles. The most convincing confirmation of this statement is the Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations, adopted by the UN General Assembly in 1970. A detailed analysis of the document, including the expressiveness of its title, proves that this Declaration does not only enumerate principles, explaining their content but to a large extent carries out their in-depth interpretation.

The problem of international organizations' constituent acts interpretation, first of all, of the UN Charter, has acquired important practical significance today. Acts of this kind – Charters by their legal nature – are treaties. However, they have significant specifics, which is reflected in Vienna Conventions. The International Court of Justice also assumes that treaty interpretation's general principles and rules can be applied to the UN Charter, as the Charter is a multilateral treaty, which, however, has certain specifics. Bodies and organizations should interpret the Charter in the part that relates to their competence and regulates their activities. During the UN Charter development, it was determined that "each body will interpret Charter parts relating to its specific functions." Such an interpretation becomes mandatory if the states recognize it. This is how constituent acts' content of international organizations develops. As Declaration's name suggests, Declaration covers principles of the Charter, the presentation of their content, in other words, mainly about their interpretation. Moreover, the Declaration has become an act of progressive development of fundamental principles' content. Declaration's provisions were in themselves of a recommendatory nature. However, the further recognition by states of their content's legal force gave it the status of universal customary law rules. Analyzing the Resolutions of the UN General Assembly, T.S. Danilchenko notes that they, firstly, most often cover issues that are not addressed by contractual regulations; secondly, they are more operational than agreements, which is essential for the interpretation effectiveness (*Danilchenko, 2016: 161-163*).

One should note that international organizations have the right to interpret the Charter, but such interpretation is binding only for the organization itself and its bodies. Such interpretive activities also significantly affect the rights and responsibilities of UN member states. An example of a critical resolution for Ukraine is the Resolution of the UN General Assembly (hereinafter – the UN General Assembly) on the territorial integrity of Ukraine № 68/262. It was adopted on March 27, 2014, at the 68th session of the UN General Assembly by an open vote of UN member states, 100 of which voted in favor, 11 against, and 58 countries abstained.

This meeting of the UN General Assembly was convened specifically to consider the issue of Russia's armed occupation of Ukrainian territory, namely the Crimean Peninsula. There are no provisions in the resolute part condemning Russia's actions, and there is not even a clear phrase in the text that Crimea is an integral part of Ukraine. However, the Resolution reaffirmed the recognition of Ukraine's territorial integrity "within internationally recognized borders". The UN General Assembly resolution stated that the Crimean referendum would not be recognized. The UN General Assembly called on all states and international organizations not to recognize any changes in the status of the Autonomous Republic of Crimea and the city of Sevastopol based on the aforementioned referendum and to refrain from any actions or behavior that could be interpreted as recognition of any status change (Resolution adopted by the General Assembly on March 27, 2014, 68/262, Territorial integrity of Ukraine). The UN General Assembly's role is crucial in this regard, but this does not give grounds to recognize its status as a legislative body.

Interpretation question of international organizations' constituent, and first of all the UN Charter, has acquired great practical significance. Such acts – charters by their legal nature are treaties. However, they have significant specifics defined in Vienna Conventions. The International Court of Justice also assumes that the general principles and rules of treaty interpretation apply to the UN Charter, as the Charter is a multilateral treaty.

This statement does not deny the right of the organization's bodies to interpret its charters. Applying its provisions, they naturally interpret the charters and act in accordance with interpretation results. Such an interpretation is obligatory only for the organization itself and its inferior bodies. Organization members may or may not agree with this interpretation. However, in practice, these activities also affect the rights and responsibilities of Member States. Due to organization's authority, its understanding of specific rules is taken into account by states.

Organization bodies should carry out a charter interpretation in the part that belongs to their competence and regulates their activities. During the UN Charter development, it was determined that each body would interpret the parts of the Charter that relate to its specific functions. Such an interpretation becomes mandatory if recognized by the states. In this way, constituent acts' content of international organizations is developed.

Officials of international organizations emphasize the importance of dynamic interpretation of constituent acts. A report by the UN Secretary-General to the General Assembly in 1999 stated that the Charter was a "living document." The tendency to improve the Charter's content by interpreting its provisions has been further developed. UN bodies are increasingly interpreting their powers under the Charter, and such an interpretation has legal effect as a result of its tacit recognition by States. The Security Council also broadly interprets its powers. Thus, in accordance with Chapter VII of the UN Charter, the Council has the right to take action in case of acts of aggression, threats to the international world (Chapter VII of the UN Charter), in other words, acts of aggression by some states against others. However, the Council considered it possible to decide on actions to eliminate internal conflicts in many countries, interpreting them as a threat to the world (*Danilchenko, 2016 (12): 137-142*).

In interpreting their charters, international bodies and organizations also influence the content of other international rules. UN activities are critical in this regard. Foremost the interpretation of UN Charter goals and principles, being an integral part of International law, affects international law itself. One should not forget that any interpretation is carried out in the light of these UN Charter's goals and principles. The most convincing confirmation of this is the Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations, adopted by the UN General

Assembly in 1970. One should recognize that the acts of interpretation of such subjects, indeed, are of a recommendatory nature.

4. UN Security Council in the process of interpretation

The Resolutions of the United Nations Security Council (UNSC) addressed specific issues of interpretation, as since their adoption, following Chapter VII of the UN Charter, they have been binding on all UN member states (according to Articles 25 and 48 of UN Charter). Does this mean that the UNSC, in accordance with some of its functions in support of international peace and security, is authorized to interpret the Charter in a binding manner, and therefore whether its resolutions are binding on member states and other UN bodies? The text and the Charter's concept obviously do not confirm this understanding, as the Security Council is only empowered to take "binding decisions," i.e., measures in individual cases or situations, and not interpretative guidelines of a binding nature. The Security Council's mandate does not cover the authoritative interpretation of treaties other than the UN Charter. However, the interpretation that invariably underlies every decision taken under Chapter VII will always play a unique role in understanding the Charter via those decisions' binding force.

UNSC resolutions, in addition to their interpretive value, are in themselves very important objects of interpretation. Although in legal doctrine, as a rule, it is considered convenient to interpret these resolutions mainly in accordance with VCLT provisions (*Gardiner, 2015, 128*), international practice in this matter is quite diverse. Thus, the ICJ in its judgement on Kosovo (Kosovo opinion) acknowledged that Articles 31, 32 of the VCLT "may be useful" in this regard, but at the same time pointed out the strong differences between UN Security Council resolutions and treaties, which, according to the Court, mean that the interpretation of these resolutions "requires consideration of other factors". In particular, the Court ruled that "the interpretation of NSC resolutions may require analysis of statements made by UNSC members' representatives during their adoption, other UNSC rulings on the same issue, as well as further practice of relevant UN bodies and states affected by these resolutions". Based on the fact that the UNSC has defined such declarations as "invalid", it is safe to say that unilateral declarations of independence (and other unilateral acts) conflict with jus cogens if they are related to jus cogens violations (*Rubin, 1977: 1–30*). Other practical examples of UNSC resolutions, being objects of interpretations, are, of course, the ICTY (International Criminal Tribunal for the former Yugoslavia) and ICTR (International Criminal Tribunal for Rwanda) Charters; both are contained in the annexes to the UNSC resolution and are interpreted by the courts with reference to Art. 31 of the VCLT (*Prosecutor v. Zlatko Aleksovski, Para 98*).

Daniel Costelloe, Doctor in Law, a lawyer in the Department of Litigation, specializing in International Arbitration (London), and Malgosia Fitzmaurice, a public international law professor (Warsaw), point out another problem. It relates to the development of a unified system of interpretive principles. Such a system does not reflect political, technical, and other contexts, which may unreasonably limit interpretation or even lead to conclusions that run counter to the international body's true intent (*Costelloe, Fitzmaurice, 2015 (35): 47–82*). For example, UNSC resolutions, being of a sui generis nature, can be politicized. This fact is important because these resolutions cause external legal consequences. D. Costello and M. Fitzmaurice (*Costello, Fitzmaurice, 2015 (35): 47–82*) propose to develop a particular system of interpretation principles by each contractual body, international organization or to create such system in the practice of courts and tribunals.

However, interpretive activities of international organizations are diverse and not limited to resolutions. Therefore, it is worth agreeing with T. S. Danilchenko (*Danilchenko, 2016: 161-163*), who emphasizes that this activity occurs during the discussion in resolving specific issues of law application. The author proposes to consider the interpretive activity as a means of solving a problem of paramount importance for ensuring the international law rules actualization and the whole mechanism of international law's action in the process of rules implementation.

5. Conclusions

Thus, international law's important subjects are international bodies and organizations, whose role in treaty interpretation is steadily growing. International organizations have the right to interpret, but such interpretation is binding only on the organization and its bodies. The UN General Assembly's role is critical in this context, but this does not give grounds for recognizing Assembly's status neither as a legislative body nor as a body with interpretative powers. In this aspect, it should be noted that drawing the line between this kind of interpretation and law-making is a difficult task. In interpreting their charters, international bodies and organizations influence the content of other international rules. However, they do not acquire law-making bodies' status, and their decisions and conclusions are of a recommendatory nature. Law-making acts of international organizations are always created via coordination of political and legal will of sovereign states among themselves. Therefore, it is inadmissible and illegal to apply any forms of pressure and coercion in modern international law sources' creation process. After all, the principle of sovereign equality of states is a fundamental rule of formation of legal positions in creating international legal rules of any level and content.

That is why it is worth noting the growing role of international bodies and organizations as subjects of interpretation, which not only play an essential role in international law-making and international law implementation but also take an active part in their interpretation.

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IDENTIFICATION DATA MANAGEMENT: LEGAL REGULATION AND CLASSIFICATION

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Summary

The scale, speed and multi-vector development of science and technology are extremely effective in influencing legal, economic, political, spiritual, professional and other social relations. The development of information and communication technologies, the use of the Internet, the creation, storage, transmission, processing and management of information became the driving forces of the new scientific and technological revolution.

This facilitates the introduction of technologies for the transmission and use of information in digital form in almost all spheres of public life, namely text data, photo, audio, video images, which are transmitted in various ways via the Internet and other systems and means of communication.

One of the key elements of data transmission technologies and systems is the availability of information by which it is possible to identify their subjects and objects by their inherent identification attributes. In Ukrainian legislation, in particular in the Law of Ukraine «On Personal Data Protection», information or a set of information about an individual who is or can be identified specifically is defined as personal data. However, despite its modernity, this law still contains a number of shortcomings and uncertainties, both in terminology and in the legal mechanisms for working with data by which a person can be identified, i.e. identification data.

Keywords: IoT devices, identification systems, identification data management, identification, identification data, technical standards, artificial intelligence, electronic trust services.

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1. Introduction

At this stage of development of public relations, the issues of solving the problem of protection of identification data are highly sought. At the same time, the issue of creating a unified identification system with transparent and effective technical and legal rules for the management of identification data has not been comprehensively considered and is currently extremely relevant.

The article is aimed at the development of proposals and recommendations for the creation of a unified classifier of identification data, criteria and mechanisms for their application, the formation of new definitions for the development of conceptual and categorical apparatus in the field of identification data management (identity management, IDM) and improvement of existing ones.

Theoretical and methodological basis of the article are scientific developments of domestic and foreign scientists on current issues in the fields of information and law, which are mostly

devoted to regulating the use of personal data, Internet of Things, information security management systems, artificial intelligence, electronic trust services.

Among the domestic works are: A. Anisimov, I. Aristova, O. Baranov, Y. Baturyn, I. Bachylo, K. Belyakov, V. Bryzhko, N. Hrytsyak, I. Gorbenko, V. Pylypchuk, O. Radutny, A. Semenchenko, Y. Tikhomirova.

Research on legal issues of implementation and use of digital technologies in the field of identification data management and their legal regulation is carried out by researchers from different countries, but both the formulation of legal problems and ways to solve them are still at an early stage. In particular, similar research in the field of regulation of identity management is carried out by such scientists as: S. Bouzeffrane, K. Cameron, K. Tracy, M. Hansen, E. Kosta, Simone Fischer-Hübner, Elias Pimenidis, J. Loo, M. Aiash, C. Thompson, A. Cavoukian.

The works of these and many other authors, of course, have scientific and practical significance, but they do not give a holistic view of the modern unified system of identity management. Among Ukrainian scientific organizations, the issues of the proposed research have not been explored before, and Ukrainian scientists have not yet published the results of such research.

2. Problems of identity management

Modern society has entered the stage of scientific and technological revolution 4.0, economic globalization and the creation of the innovative planetary communication infrastructure.

Today, the Internet as an information and communication environment every minute gives the opportunity to generate new ways of communication and knowledge creation, data exchange, transactions between users. In fact, the Internet contributes to the creation of modern social structures and social relations, which are not yet subject to legal regulation in everyday life.

As we know, the Internet consists of millions of interconnected local and global private, public, academic, business and government networks, and is based on the principle of lack of centralized management, rules of use or access. Only the rules for using the Internet Protocol address space and the Domain Name System are centrally defined.

Human identification was initially based on the format of e-mail addresses. However, such a system did not meet the emerging needs of society for reliable user identification, which led to the creation of a variety of systems and types of identifiers, policies and identification schemes. This kaleidoscope of identification technologies and schemes constantly creates legal problems in society related to the legal regulation of identification processes, both at the national and transnational levels.

The general result of these multi-vector decisions is that citizens, organizations, government agencies can not freely and quickly identify their communication partners at the individual level (*Pimenidis, 2014: 2*).

Due to the lack of a single identification structure, legal entities often have to use a wide range of personal data as identification data (*Cavoukian, 2006: 1*).

Today, the identification data of the subjects is an important information asset that directly affects public relations in many areas of human life. Also of public importance are the processes of managing the identification data of IoT devices and information technology products with artificial intelligence.

Identification requirements are everywhere and growing rapidly (*Lytvynenko, 2020: 161*). Users of different systems have various sets of identification data that need to be managed and identified with a specific individual or legal entity. Accumulation of personal and identification data by third parties increases the risks of their illegal use. In fact, identification data

has become a strategic resource of any state and requires appropriate physical, technical, legal regulation and protection.

However, the lack of unified technical and legal provisions for the management of identification data hinders the development of the infrastructure of the planetary identity metasystem to replace the existing inefficient set of isolated, incompatible, selective solutions.

It should be noted that the introduction of a single planetary metasystem of a digital identification should not be expected in the near future. This is evidenced by the results of the fourth UNCITRAL working group. Many countries see the creation of an identification metasystem as a repressive measure that could lead to the creation of an authoritarian regime. However, the operation of separate interoperable identification systems is considered more appropriate, which will make the Internet a safer environment and increase its potential to accelerate e-commerce and other digital identity problems.

3. Legal aspects of identification data management

Digital identity management in the electronic world does not have clearly defined legal criteria. At the same time, technological and legal regulation of identification management in a broad sense can be carried out in relation to the specified attributes of identification data of individuals and legal entities, IoT devices and information technology products with artificial intelligence (*Cameron, 2005: 2; Tracy, 2008: 3*).

However, this can only partially minimize the set of legal issues under the dome of the general problem of identity management. That is, the legal problem of identification data management is the existence of different identification systems and different legal approaches and decisions, both at national and transnational levels.

The development of modern public relations in such areas as e-education, e-commerce, e-medicine, e-banking, etc. is actually constrained by the lack of reliable legal mechanisms for managing identification data that can provide real-time online confirmation of the subject's compliance with attributes presented, to provide access to information resources.

National information legislation contains more than 4 thousand legal acts that regulate public relations in the information sphere. At the same time, the issues of legal support of public relations based on the use of digital technologies, including the management of identification data, and related to their implementation, are only partially regulated and require further systematic elaboration.

Like most countries in the world, Ukraine needs large-scale reengineering of all electronic resources of the state, modernization of information and communication systems and administrative processes. Ukraine is making some efforts in the direction of technical organization and development of electronic identification processes aimed at purely technical methods of identification. At the same time, the modern national legal framework does not fully reflect the real state of the state's response to social transformation.

A situation has arisen in Ukraine when modern information and communication technologies are rapidly introduced in all spheres of public life in the actual absence of legal institutions for the management of identification and personal data, biometrics (*Bouzefrane, Garri, Thoniel, 2011: 3*), IoT devices and artificial intelligence.

It is proposed to solve legal problems in the field of identification data management in the following areas.

Develop a unified model of public relations in the field of identity management taking into account the management of identity not only for individuals and legal entities, but also IoT

devices and information technology products with artificial intelligence. Lay the foundation for the formation of a legal space of trust – the national domain of trust.

Apply the principle of one of the three main mechanisms of object-oriented programming – encapsulation – in order to develop and create modern legal structures to regulate the field of identity management. That is, to develop modular legal constructions that would have unified legal norms and algorithms for their application in the field of identification data management. Such modular legal constructions are designed to regulate social relations that arise during the application of identification data at different hierarchical levels of legal relations, from conventional to cross-border. The application of such a scheme will allow each organization, government body, state to build a vertically integrated own module, which, regardless of implementation technologies, will ensure the transit of identification data created and legally significant according to national law in a cross-border environment of trust.

It is necessary to formulate the paradigm of identification data management in the context of theoretical and legal principles, namely to present the legal regulation of identification data management processes as self-regulation of complex hierarchical identification systems in conditions of legal uncertainty, with consistent creation and functioning of legal space to a stable stage of development of the sphere of identification data management.

The proposed approaches require large-scale joint work of specialists in the field of information technology, information and other areas of law. In fact, it is necessary to create a new glossary of definitions and norms in the field of identification data management by translating and modernizing technical norms into technical and legal ones. This will provide a logical link between the technical and legal components of the regulatory framework in the field of identity management.

4. Development of a unified classifier of identification data

The first step in this direction will be the development of a unified classifier of identification data. It should be noted that credentials (identification data) are personal data (attributes) of individuals and legal entities that are used for authentication and identification processes in information and communication systems. The class of identification data should also include the attributes of identification of IoT devices and information technology products with artificial intelligence.

Of course, the classification of attributes of identification data should be based on the analysis of methods of identification of subjects and objects, including IoT devices and artificial intelligence, problems and solutions of legal regulation of their application. In our opinion, it is impractical to apply the generally accepted gradations of personal data. Thus, international law recognizes the conditional division of personal data into two groups: data of «general content» and special categories of information, which are defined as «vulnerable» or «sensitive» data (*Romanov, 2010: 42*).

However, the concept of «sensitive» personal data, which is often used in European Union law and in many decisions of national and international courts (in particular, this term is used in more than ten decisions of the European Court of Human Rights), has not been unambiguously interpreted and doesn't have a comprehensive explanation: why exactly the data of an individual are considered «sensitive». It is extremely rare to ask which categories of data should be classified as «sensitive» and, finally, why they should be given a higher level of protection than other data (*Rizak, 2013: 93*).

Given the uncertainty with the specific content of «vulnerable», «sensitive» or «hyper-sensitive» personal data and given that they are used as identification data in information and

communication systems, we consider it appropriate to apply their classification on the basis of a colour-coded common hazard classifier.

First, it will allow a clear distinction between data by attribute classes and security levels, as well as levels of threats and consequences in the event of their illegal use.

Secondly, in case of danger a person's imagination intuitively matches certain colors with the level of threat to life – red, orange, yellow, green. Accordingly, it is proposed to divide the attributes of identification data into four groups according to the importance of data for human life, the direction of use and the value of this information resource for the state (Kostenko, 2021: 22).

So the attributes of the identification data of the «red» group, in our opinion, should include the following:

Identification biometric attributes of an individual:

– Static attributes: DNA, skeleton shape, 2D-3D image and facial thermogram, blood type, retina and iris patterns, capillary patterns of palms, fingerprints, ears, characteristics of individual organs, etc.

– Dynamic attributes: voice characteristics, biomechanical characteristics of movements, physiological features of motility, spatial elements (postures, positions, simple joint movements, simultaneous or consecutive movements), information structure of movements (sensory, psychological, reflex, behavioral).

Identification attributes of information technology products with artificial intelligence, cyberphysical systems, ASI class III android robots, super AI: quantum digital signature, control and blocking codes, other identification technologies that will be used to identify AI.

Identification attributes of IoT devices used in neuro / cardio medical devices, military equipment and weapons, in critical infrastructure facilities, the disablement or malfunction of which may pose a critical (fatal) threat to human life and health: Identifier (OID), Electronic Product Code (EPC), Universally Unique Identifier (UUID), International Mobile Equipment Identity Identifier (IMEI), ID Key, Qualified Digital Key, Quantum Key.

The attributes of the identification data of an «orange» group should include:

Documentary attributes of a natural person: Name and surname, tax code, passport of a citizen of Ukraine, passport of a citizen of Ukraine for travel abroad, diplomatic passport of Ukraine, service passport of Ukraine, ID-card, seaman's identity card, crew member's identity card, return certificate to Ukraine, temporary identity card of a citizen of Ukraine, driver's license, stateless person's certificate for travel abroad, permanent residence certificate, temporary residence permit, migrant card, refugee certificate, refugee travel document, identity card of an individual in need of additional protection, travel document of a person, which is provided with additional protection.

Identification attributes of a legal entity operating in the field of medicine, defense, state protection and critical infrastructure: name of the legal entity according to the Unified State Register of Enterprises and Organizations of Ukraine, identification code of the legal entity according to the Unified State Register, registration number taxpayer cards or series (if available) and passport number.

Identification attributes of information technology products with artificial intelligence, robots and class AAI, AAI android robots: program codes, external control and blocking codes, other identification technologies.

Identification attributes of IoT devices used in neuro / cardiomedical devices, military equipment and weapons, critical infrastructure facilities, the decommissioning or malfunctioning of which may pose a potential threat to human life and health: Object Identifier (OID),

electronic product code (EPC), universally unique Identifier (UUID), international mobile equipment identifier (IMEI), ID key, qualified digital key, quantum key.

The following attributes of identification data are proposed to include in the «yellow» and «green» groups: certificates and identification documents issued by non-governmental organizations, any information disseminated by a person of his/her own free will, as well as the legal owner or third party by consent of the above-mentioned carrier of identification attributes, provided that it is informed either by the offer agreement or within the limits of its professional competence (except for the data of the «red» and «orange» sectors).

The list of attributes of the «yellow» and «green» groups may have a fairly large list of identification data used in non-state digital resources.

5. Conclusions

The proposed solutions will contribute to the formation of new social relations and legal rules in the field of identity management and meet the needs of citizens, government and commercial organizations in legal instruments that will ensure the legal significance of transactions using any credentials. This will help increase trust in electronic services, secure identification of entities and objects, and ensure reliable protection of identification and personal data, conditioned upon expedite modernization and alignment of domestic legislation with relevant international standards.

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INFLUENCE OF LABOR LAW DOCTRINE ON DEVELOPMENT OF LABOR LEGISLATION

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Summary

The article is devoted to the analyses of influence of labor law doctrine on development of labor legislation. It is stated that labor law doctrine is primary source of law in following cases: (a) enshrined in legislation of legal norms; (b) resolving legal cases in practice, particularly in judicial bodies. It is emphasized that the labor law doctrine has been forming and developing during process of analyses of (a) international legal norms and current legislation of the country and foreign countries; (b) domestic court practice and practice of European Court of Human Rights; (c) real relationship in the sphere of labor, which comply with the conditions of social and economic development of the country; (d) obtained in the past knowledge about the nature and regularity of development labor relationship and closely related relationship. It was concluded that the labor law doctrine as sectoral legal doctrine is logical continuation of legal doctrine in the government simultaneously exactly at the level of sectoral doctrine of law, legal ideas of modernity, which has the abstract character in the sphere of socially useful work, acquire the qualitatively new expression with its maximum adaptivity to implementing particular type of relationship in the sphere of labor.

Keywords: legal doctrine, doctrine of labor law, source of law, Romano-Germanic law system, labor legislation.

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1. Introduction

Current conditions of development of Ukrainian statehood are characterized by reconsideration of values and place of law and doctrine among values. Undoubtedly the understanding the main role of legal regulation of social relationship, as a necessary condition of development of legal state. Regarding legal doctrine not everything is clear. Law as a regulator of social relation reflects these values in itself and level of social and cultural development, which is inherent for the society, but how the doctrine plays a role as a source of law? Particularly, what is the place of the doctrine of law at the system of law sources and how it influences the development of legislation and social relationship? The answer to these questions should give that science via grounding the influence of legal doctrine at the development of social relations within the framework of law. "Legal doctrine is conditioned by character of legal culture of the society, holistic and logically harmonized complex of recognized ideas and scientific views of law by legal society, which is the basis of professional legal conscientious and conceptual policy making, law enforcement and interpretation of law activities" (*Great Ukrainian law encyclopedia: 20t, 2016, p. 471*). It is caused by the necessity of analysis of features of sectoral doctrine, which is foundation for the development of labor legislation, and social relationships in the sphere of labor.

Analysis of last researches and publications shows that the answers to the key issues regarding legal nature, essence, and characteristics of legal doctrine and sectoral legal doctrine are found its reflection in a five-volume edition of the National Academy of Legal Sciences of Ukraine “Legal Doctrine of Ukraine”. Simultaneously legal doctrine cannot be considered as to be completely examined, and that is why such scientist as O.L. Boginich, O.O. Gubanov, M.V. Karmalita, M.M. Marchenko, E.U. Poliaskyi, O.M. Sydorenko, V.A. Trofimenko, E.M. Chernyh and other continue the analysis of the doctrine nature and the place in the system of sources of different legal systems, analyze the connection of legal doctrine with legal practice and other issues.

The aim of the article is to ground the legal influence of labor law doctrine at the development and improving the labor law.

2. Results

“Legal doctrine is one of the oldest textual sources of law, which still plays an extremely important role in legal regulation of social relations. Failure to recognize the legal doctrine as a formal source of law does not preclude its consideration as an existing and influenced phenomenon. Also, it influences not only at law enforcer and interpreter of current law and at the legislator. Obviously, that the level of the influence of legal doctrine and form if it expression at deferent countries are not the same” (*Karmalita M., 2010, p. 6*). Hence, during the process of analyses the essence of legal doctrine particularly and the doctrine of labor law, it is necessary to remember that the development of domestic doctrine of labor law should be performed in the context of that Ukraine belongs to Romano-Germanic law system, where the law (normative legal act) is the main source of law.

The concept of law, as M.N. Marchenko wrote, in Romano-Germanic law lies in that exactly law and not another law source (precedent, custom, doctrine, etc.) are placed at the prominent place in the process of formation and development of the current legal family and corresponding national legal system (*Marchenko M.N., 2008, p. 472*). Therefore, without denying the primacy of the normative legal act in the Romano-Germanic legal family, and accordingly in the legal system of Ukraine, its development still cannot be considered without taking into account the modern doctrine of law.

“Doctrine plays the role of theoretical foundation of the legislative and volitional activity of country, providing legislator with the terminological apparatus and first developments in the sphere of law. It could be said that the first normative acts were formalized consolidation of the main provision of the doctrine. However, in future, the doctrine lost its position as a source of law but received the same value in the field of legal methodology. At the level of methodology, its influence on the legislator shows new ways to influence it (*Trofymenko V. A., 2009, p. 87*)”. It should be noted that the legislation as a result of volitional actions of policymakers is a result of comprehending actual social relations and making a decision on the need to provide these relations with a legal form. It can be argued with confidence that the development of legal ideas in specific socio-economic conditions determines the revision of state policy concerning objects of legal regulation. The doctrine of law “opens” the way for society to streamline social relations in accordance with the ideas about the necessary and socially significant. And it is thanks to scientific developments and the rooting of legal ideas that a rethinking of the normative order of interaction between participants in public relations takes place.

“One of the main features of Romano-Germanic law system is the presence of legal doctrine as genetical source of principles of law continental type. It is harmonized synthesis of

theoretical and practical works. Taking care of problems of practice, the doctrine does not leave the problems of the development of the theory of law and vice versa (*Karmalita M., 2010, p. 7*). The doctrine of law is the source of new ideas regarding the conditions of the development of social essential relationship between citizens in the state, it coopts not only ideas of legal regulation and development of law, and “shows” the ways to reaching the aims of legal regulation. In its content, the doctrine of law grounds and justifies the necessity of new norms and improving existing legislation to comply with regularities of the development of social relationships. Simultaneously the doctrine of law in its nature is the reflection of legal reality where creative, intellectual results of activity of scientists are the conditions of transformation of lawmaking and law enforcement activity.

Doctrine integrally connects the dominated ideology in the society with practical activity, particularly, reformation of particular relationship does not occur spontaneously, and as a result of formed scientific results based on ideologist process in the government. For example, if dominated in society is the ideology of conservatism then legal regulation and legal ideas are directed on the saving the traditions of continuity in all spheres of social life. If e.g. libertarianism dominates then legal nature will explore and ground ideas of individual freedom and minimum influence of the government at the social relationship in government. Hence, as an origin of ideas regarding human rights and source of law in objective meaning, the doctrine of law is primarily in regards to the legislation but at the same time, it is not the source of law in the form of normative consolidation of human right.

The law could be named that by only legal norms, stated R. David, for those who count with reality and has wider, for our point of view, more correct view of the law, a doctrine at our days same as in the past, plays a very important role and is a vital source of law. Exactly the doctrine creates the vocabulary and legal definitions, which the legislator uses. Doctrine could influence legislators. In this case, the doctrine is only an indirect source of law. It would be difficult. Without distorting reality, deny the quality of the source of law (*David R., 1988, p. 143*).

Concurring with the statement of the scientist it should be noted that essential features of legal doctrine and doctrine of labor law particularly could be revealed via accepting as the base wide law implementation and understanding its destiny during process of regulation particular sphere of social life and as well as relationships which arise, change and end.

The main criteria which preconditioned the place of legal doctrine in the system of the law sources and accordingly the level of its importance and influence on other components of the legal system is the necessity of additional regulation of law relationship as a result of imperfection the main source of law. That is why within the framework of Roman-German legal system the legal doctrine plays not a big role comparatively, additional role, served as non-formalized additional source with the presence of the main source, particularly, normative legal act, which is maximally fully, comparatively with court precedent and religious norms, regulate all system of existing social relationship (*Hubanov O.O., 2015, p. 14*).

Admitting current statement it is necessary to add that the structure of legal system which includes subject of law, legal norms, and principles of law, legal relationship and legal behavior, legal consciousness, legal culture, etc. could not be developed without legal doctrine. Because in the society should the law and order prevail at the beginning, it is necessary to define the legal conditions of interaction between particular people who have rights and obligations. For such persons to become participants in legal relations, it is necessary to determine which circle of persons applies to this or that rule, and the rule itself should determine the measure of permissible behavior. For the purpose that such order of interaction takes place, it is necessary to turn to the legal doctrine, which will give an answer about the subjects of law, about their

rights and obligations, which naturally arise in relations, and exactly doctrine gives the answer to the question of the social significance of these relations and, accordingly, it justifies, that social relationship which should be regulated.

In the context of this, it should be noted that the doctrine of labor law is the primary source for the formation of novel in labor law and simultaneously it is secondary in regarding to current legislation regarding labor. Priority of doctrine of labor law regarding legal innovation is explained that at the beginning at doctrine level formed definitions and conceptions were defined, subjects in particular types of relationship in the sphere of labor were described and based on dominated ideology formed legal ideas regarding content and volume and order of realization of labor rights. For the purpose that main source of law, particularly, normative legal act would define the rules of behavior of participant of relationship in the sphere of labor, it is necessary to explore and understand between whom the legal connection occurs in real vivid relationship and how this connection should provide vital circle or/and development of these relationships. It is essential not only to name the participants of the relationship in the sphere of labor and define the object of their relationship and consolidate the range of correspondent rights and obligations of the participant of the relationship. Because law realization needs the participation at this process at least two people who have a right to choose type and measure of the behavior which authorize subjects on making action and oblige them to act according to established and sanctioned at the government rules. Definition of correspondent connection according to the regularities at the relationship should be grounded and justified, and only after this in such connection legal form with definition of rights and obligation of subjects of law should be provided.

Legal doctrine as the phenomenon of legal reality and definition of legal science has undergone in its development. In the beginning, it was works of lawyers practice regarding common and casual interpretation current at that time law. There were, for the first time, works of famous Roman lawyers – Gaius, Justinian, Ulpianus. Later in connection with the twilight of the Roman Empire relay at the formation of legal doctrine cached up the professors of medieval universities where mainly legal science was formed of that time and there was adaptation of Rome law to those conditions of existing society. During period of formation of first national governments and corresponding legal systems legal doctrine as an individual source of law to give its place to national legislation, to written law. Later the role of legal doctrine at Romano-Germanic law system gradually declined, plays the subsidiary role regarding positive law. Simultaneously, particular statutes of legal doctrine were included, forming new condition, particularly, legal legislation (legal law) (*Bohinich O. L., 2020, p. 287*). The abovementioned confirms the primacy of doctrine of law and doctrine of labor law at the development of legislation, which is based on legal ideas of modernity improving the coexistence of the citizens at the society according to main social interests.

In labor law legal doctrine plays the main role regarding the determination of the content of labor law and its subject. It directly influences the conscience of the legislator, participants of labor, and connected relationship via the way of convictions and reward these subjects to determinate or change legal conditions of realization of rights in the sphere of labor.

Authority and common recognition of legal ideas regarding legal regulation of relations in the sphere of labor requires official consolidation via improving the legislation. It is explained by the fact that the doctrine of labor law is formed textually and has a written form of expression of legal ideas. Also, it is a result of analysis and research of relationships at their direct interconnection with modernity and regularity of relationships in the sphere of labor. Such regularities however include subject assessment of a particular scientist or group of scientists

but they revealing the regularities of the development of relationship emphasizes attention at main features of the objects of the study which needs the development. Proposed authoritative scientists attempts of solution of legal problems or collision in the field of labor law allows not only discuss at the subject of improvement of legislation and also point at the ways with the help which formal clearness in particular relationship will facilitate its positive development.

Doctrine of labor law as an objective source of knowledge on regularity of development of labor and connected relationship and as a source of legal ideas regarding statutory normalization relationship in the sphere of law has been realized via state sanctioning, which has currently two ways at legislation and court practice.

Formation of legal doctrine as general performing during long time, crystallization of legal ideas proceeds during process of intellectual creative activity of the scientists. Purposefulness of the process of scientific way for improving the legislation and predicting of relationship in the sphere of labor gives it the qualities of the primary source of law. Because exactly doctrine reveals legal nature of the relationship in the sphere of labor by means legal methods show at legal possibility of realization of the rights of subjects in the sphere of labor.

E.U. Polianskii writes that “legal doctrine should be understood as a system of ideas and principles, also, as legal institutes, which are in inseparably mutual connection with legal science, legislation and practice and specify the main basics on which the legal state system is based. Doctrine traces origins at past, directly regulates law of modernity, recognizes the law of the future, and always functioning as a dynamic category that provides the following development and improvement of law. Legal doctrine of the government includes all knowledge which correspond to common requirements of current theory of law, which are reflected at legislation and used at the practice” (*Polianskyi Ye.Iu., 2015, p. 311*). “Phenomenon of legal doctrine maximally appears at its multi-aspect because it indeed expresses itself in different ways depending on the nature of social relations” (*Polianskyi Ye.Iu., 2014, p. 13*). Hence, if take into attention the fact that legal institutions are born and formed at the beginning by science, which in future could obtain the status of legal doctrine and legal idea precedes law principle. If to proceed from the fact that legal science and its doctrine statutes fulfill the practical task regarding improving current legislation then legal doctrine accordingly is secondary in relation to legal norms.

O.M. Sydorenko states that “doctrine is necessary to consider as a secondary source of law because it affects not only subjects applying and interpreting current law and legislator. That is why the role of legal doctrine should be improved as a source of law, legislative force, which determines the choice of the direction in legal regulation of social relationship, influences the character its development. In the legislative process, exactly doctrine should guarantee legal character of laws during their preparation, expert reviews, detection, disposal of collision and prevention. Members of legislative bodies apply to the doctrine during preparation and discussion drafts of law. Doctrine often is at the disposal of court bodies during decisions of controversial issues and during the formation of common principle of judge law. Direct and essential influence of law doctrine on law-making and law enforcement appeared in those cases when there is a deficiency in law (*Sydorenko O.M., 2006, p. 42*). Such approach confirms the importance of the legal doctrine as the source of law because exactly this source of law could be considered as commonly known and reliable. Simultaneously, usage of legal doctrine at lawmaking and law enforcement activity is willed actions which are willfully without force the subjects imply, realizing their authority.

Obligingness of legal doctrine, as E. M. Chernyh mentioned, this question, which is solved at the level of legal methodology. Descendental methodology of formal-procedural type

on which the opposers rely on, obligingness of legal doctrine, evokes essential conceptual and empiric observation. Its insufficiency becomes specifically expressed at the perspective of value criteria which are required alternative approaches to law. At this coordination, it could be said about obligingness of legal doctrine at specific meaning main but legally not absolute criteria, which obliges to choose ration and not forced necessity which he creates at the conscious (*Chernykh Ye.M., 2016, p. 28*). In fact, it confirms the problem of perception of legal doctrine as a source of law at Romano-Germanic law family however reveals the value of orientation of legal regulation of social relationship which indicates that usage of legal doctrine at the activity of state power depends on the level of social culture development at the society.

3. Conclusions

Abovementioned gives the reasons for following conclusions:

- doctrine of labor law as a legitimate phenomenon of past, current, and future development of law, is a source of legal ideas and knowledge about law relationship in the sphere of labor, legal patterns of development of these legal relationships, attempts of approval interests of the participants in labor and connected relationship, etc.;
- doctrine la labor law is primary source of law when it is: (a) enshrined in the legislation of legal norms; (b) and during resolving legal cases in practice, particularly in judicial bodies;
- doctrine of labor law is formed and developed during the process of analysis: (a) international-legal principles and current legislation of the government and international countries; (b) domestic court practice and practice of European Court of Human Rights; (c) real relationship in the sphere of labor which correspond with conditions of social and economic development of government; (d) obtained in the past knowledge about the nature and regularity of labor law and connected relationship;
- doctrine of labor law in theoretical aspect as a basic condition of formation of legal institutions in labor law is primary source and in law enforcement aspect is secondary. It is explained by multi-vector nature of legal influence of doctrine of labor law on development of labor law and relationship in the labor sphere. It is important to note that dynamism of doctrine of labor law and its multi-vector nature aimed at the development, not labor law as at the branch of legislation with formalized rules of behavior, it is aimed at development of labor rights of the participants of these relationships, realization of which, therefore, facilitate increasing the level of social-economic development at government;
- in case legal doctrine influences the formation of legal system, then sectoral doctrine – doctrine of labor law affects the formation and development of system of labor law. We may conclude that unity and internal structuring labor law as branch law owing to doctrine of labor law, which ground and predicts following development of labor and connected relationship by improving legal principles merged at legal institutions, which distinguish similar relationship in the sphere of labor;
- doctrine of labor law as sectoral legal doctrine is logical continuation of legal doctrine in the state, simultaneously, at the level of sectoral doctrine of law legal ideas of modernity, which have abstract character in the sphere of socially useful labor, has acquire a quality new expression with its maximum adaptivity to implementation for particular type of relationship in the sphere of labor.

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MENTALITY INFLUENCE ON POLITICAL EVENTS IN UKRAINE

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Summary

Since the declaration of independence, Ukraine has been involved in a rapid pace of events, aimed at building statehood and understanding the direction of the political course. However, it is becoming increasingly difficult to understand why, despite a series of revolutions, Russian aggression and numerous difficult steps to democratize the country through decentralization and territorial development, Ukraine has not yet formed a clear political course and ensured the stability of key state institutions, such as judicial, police and taxation systems. Such questions arise quite often and probably do not have an unambiguous answer. This article is devoted to those aspects of the Ukrainian mentality that have caused the current political situation in the state. The article reveals why, despite a series of revolutions, Russian aggression and a number of important steps to democratize countries through decentralization and territorial development, Ukraine does not form a clear political course and does not ensure the stability of key state institutions, such as the judicial, police and tax systems. The article utilizes the method of analysis, which is based on the comparison of historical events and their reflection in modern conditions. In addition to the aforementioned, the method of induction is introduced, which provides possibility of identifying a pattern in the presence of a limited amount of observations of recurring historical events. The article contains sections that consistently consider the historical facts, that have influenced the formation of the mentality of Ukraine, which has a significant impact on the formation of society and the choice of the leader, elected by the society. The article seeks to reveal the causes of certain political events in Ukraine from the influence of the Ukrainian mentality on them and to consider those aspects of it that hinder or help Ukrainians in the difficult process of state building. The purpose of the article is to determine the factors shaping the Ukrainian mentality that have an impact on the political processes that have been taking place for decades in Ukraine. The article does not criticize or accept the Ukrainian mentality, but on the contrary, reveals its historical stages of formation and influence on political processes in Ukraine in order to analyze, understand and predict them.

Keywords: Ukraine, Mentality, Society, Liberty, Freedom, Self-governance, Election.

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1. Introduction

In recent years, a lot of attention in Ukraine has been paid to the process of statehood building and determining the direction of the political course. However, it is becoming increasingly difficult to understand why, despite a series of revolutions, Russian aggression and numerous difficult steps to introduce democratic reforms to the country through decentralization and development of local communities, Ukraine has not yet formed a clearly defined political course and ensured the stability of key state institutions, such as judicial, police and taxation systems. Ukrainian society demands order and justice, but at the same time, it does not want

to strictly abide by the law. As a result of such social behavior, everyone knows the law, but for some reason is not very respected, and this is done purposefully and easily. Furthermore, such behavioral paradigm has been imprinted in the mindset and worldview of the Ukrainian society throughout history, for example, Ivan Sirko, the famous leader of Ukrainian Cossacks, said, "The need changes the law" (*Yavornytsky, 1990*). This statement quite possibly reflects the national mentality of Ukraine, which was shaped over the centuries and expressed demand for freedom and independence.

It is widely acknowledged, that mentality of the nation has a significant impact on the formation of society as well as personal qualities and choices of leader who will lead the society. It is the worldview and values of society that determine its further direction of development and stereotypes of behavior. Such behavior affects the attitude of society towards power, towards moral and ethical concepts. The way society perceives the general concept of power has been formed over the years and even today it can be seen how the mentality of society affects the results of local elections, which were characterized by the election of predominantly newly formed local parties as opposed to all-Ukrainian parties. This phenomenon reflects the fundamental aspects of the national mentality that guides Ukrainian society in election of a leader. The choice of a leader at the central or regional level largely depends on what way of life members of society lead and what qualities they endow the future leader with. The 2020 local elections, which demonstrated public distrust of the central leadership, have led to ubiquitous support for local leaders at the regional level. Why does this tendency prevail in Ukraine and how can the mentality be reflected in our choice and understanding of law and justice, trust or distrust of government?

These questions can be asked indefinitely and each time a different answer will be received. This article attempts to solve the conundrum of the Ukrainian mentality. In order to do this, it is necessary to consider the events of today, as well as history and facts.

2. Understanding the phenomenon of Ukrainian mentality

Since the declaration of independence on August 24, 1991, Ukraine has been involved in a constant cycle of reforms and transformations, characterized by a complete loss of public confidence in almost all of government institutions without exception. Of course, in such circumstances, any actions of the authorities find neither understanding nor support among the population. Constant dissatisfaction with the government leads to the fact, that the state is unable to perform the most basic functions: it does not protect the lives and property of its citizens, does not provide a credible level of education and healthcare, dooming most of its citizens to permanent existence in bureaucratic chaos and uncertainty in the future, complemented by fear and irritation in society. As a result, the chronic problem of Ukraine is presented by the weakness of state institutions, the constant change of leaders without determining the firm course of actions and political vector of development of the state, the constant distrust of the population to the government, which results in dissatisfaction with its actions. Most Ukrainians barely rely on social protection from the state, trying to solve social problems on their own, such as obtaining benefits, insurance and pensions. This is evidenced by the large number of practices in enterprises, when salaries are partially given in envelopes, not to mention the large number of transactions carried out between individuals for construction, repair and other services. Therefore, the vast majority of financial transactions is not recorded or taxed anywhere at all, and accordingly, no social charges are made against them. And interestingly, this situation suits not only employers but also workers. That is, people do not expect any kind of social

protection from the state. Instead, population mostly relies on its own savings and investments, which will eventually bring a stable income in the future.

As far as I am concerned, the main reason for dissatisfaction with the government and constant changes in the leadership of the state and state institutions is represented by the national mentality of Ukrainian society, which results in a weak concept of national identity in the conscience of most Ukrainians, giving it a secondary role. Nowadays, the problem of the Ukrainian mentality is exacerbated as never before, as Ukraine has failed to establish a firm, clearly defined political course of actions for almost 30 years of independence and has not provided a well-established system of state institutions that is capable of responding to citizens' requests in a timely and proper manner. In order to build a state, Ukrainian society needs to understand itself, to determine the peculiarities of the population's worldview of the state. Only the identification and implementation of those components of the Ukrainian mentality, that embody national values, is able to revive the national identity, the historical individuality of the people who unite around the national idea. For the further development of Ukraine on a democratic basis, one of the key driving forces is the Ukrainian mentality as a factor in the formation of national identity and national idea.

In my opinion, in order to understand the modern image of Ukrainians as a community, it is important to understand the phenomenon of the Ukrainian mentality. The mentality can be viewed from different angles. Traditionally, mentality is defined as a characteristics of the specifics of perception and interpretation of the world in the system of spiritual life of people, nation and social subjects, embodied in certain socio-cultural phenomena. The content of mentality is determined by the established, embossed by historical experience forms and ways of expressing intellectual and emotional reactions by stereotypes of behavior, archetypes of culture, and socio-psychological attitudes of social subjects (*Krymsky, S. & Zablotsky, V.: 369*). Mentality is a deep level of collective and individual psychology, including the subconscious, as well as a set of readiness, attitudes and beliefs of an individual or social group to act, think, feel and perceive the world in a certain way, depending on traditions, customs, social institutions and the social environment (*Danyliuk, 2010*).

One of the main features of mentality – in contrast to doctrines and ideological constructions, which are complete and meaningful systems, is its openness, incompleteness. Mentalities express not so much the individual guidelines of each of the people, as the impersonal side of public consciousness. The subject of mentalities is not the individual, but society, community. They are manifested in verbal language (verbal culture of society) and sign language, behavior, customs and beliefs (*Halushko, 2009: 615*).

3. Specifics of the Ukrainian mentality

In my opinion, there are two main stereotypes of the Ukrainian mentality that cause the current political background in the state:

The first one, is characterized by the constant change of leaders without defining a firm course of actions, policy, directed towards state building.

The constant change of leaders is caused by the fact that Ukrainians are very self-sufficient in terms of organization. Ukrainians are very enterprising, active and generally entrepreneurial people who follow the leader only when he promises them personal benefits, which are expressed in financial well-being. Most Ukrainians are not interested in such common values for the nation as the prestige of the country, quality of life, clean environment, stable development. Not only every Ukrainian tries to create their own, personal living conditions exclusively

for themselves, without compromising with other members of the society, but on the contrary, treats them as competitors or not as smart and agile as themselves. As a result, Ukrainians elect a leader, who promises financial benefits in the future, but will not set mandatory rules and regulations for all. This leads to a situation, where everyone sets their own rules and considers them as the best. However, when a leader is going to establish some general rules for everyone, Ukrainian society unites against such a leader, attempting to replace them with one, who will not interfere in the established social order and will not try to change it. Therefore, there is no clear course of actions in the policy of the state, because almost every member of Ukrainian society chooses their own direction and is guided by their own views. Such a worldview is a definition of freedom for Ukrainians, which they do not want to give up to anyone else, even for the benefit of all Ukrainian society, the whole nation.

In spite of the aforementioned, it can be concluded, that Ukrainians want not so much liberty as freedom. The prevalence of freedom as the dominating concept of national idea, is demonstrated in the original motto of the fighters for the independence of Ukraine, both among the Haidamaks and in the Kholodny Yar Republic, which is “The freedom of Ukraine or Death” (Volia Ukrainy abo smert). In my opinion, this motto acts as an embodiment of the mentality of the Ukrainian nation, because Ukrainian term “liberty” (svoboda) is an institutional phenomenon, while the corresponding national origin (volia) “freedom” means first of all liberation, independence from something or somebody (*Popovych et al, 2006*). If we take into account that “liberty” means a socio-legal institution that determines first of all the rights, social norms and responsibilities in society, then “freedom” acts as the equivalent of personal happiness, as a purely personal independence. Freedom in the Ukrainian mentality is perceived as the highest and most valuable good, which can be obtained only by one’s own blood, by one’s own efforts. Thus, in Ukrainian society, freedom means, first of all, individual independence from any government, which is perceived as a negative external factor imposed against the will of each individual member of society, and therefore against the people of Ukraine, and negative influence of which must be constantly counteracted or completely eliminated. But this does not mean that Ukraine is characterized by complete anarchy and absence of a leader. Throughout Ukrainian history, since the days of Kyivan Rus, Ukrainians have consistently demonstrated in social behavior a lack of instinct for submission, namely, disciplinary duty, non-recognition of the authority of others and authority per se. These features of the national character were tragically manifested in the period of feudal fragmentation in Kyivan Rus, the Cossack meeting, called chorna rada, which led to a period of Ukrainian history, called “The Ruin” and the atamanship, represented by numerous partisan squads, who acted during the Ukrainian Revolution in 1917-1921. However, ideas have always been authoritative for Ukrainians: respect and recognition of authority has developed in the form of glorification and protection of the idea (defense of Orthodoxy, Cossack rights, the idea of independence) (*Abramova, 2008*).

The leader in Ukraine has never been perceived as an absolute and adamant force to be obeyed for the common good or for fear of imminent punishment and expulsion from the community. The leader acted as a person chosen by the free community to implement its plans and goals. As long as the leader acts according to the will of the community, they enjoy authority and respect. At the same time, the leader is not perceived by the community as a representative of the nobility or the upper social class. The community treats them as an equal, and may therefore overthrow them and elect another leader if people notice, that the leader is trying to establish certain rules and responsibilities and forces the community to abide by them by coercion or by invoking the supreme, sacred nature of power. which society must unquestionably obey.

Based on the aforementioned, it can be argued, that this type of social mentality was formed and fixed in the minds of Ukrainians due to the long-term absence of a stable stratum of the Ukrainian intelligentsia, thinkers who would develop the national idea and determine the national traits, around which society could unite and create its own nation. Hence, the Ukrainian society was ruled by foreign countries with different values and worldviews.

Therefore, Ukrainians perceived power as the root cause of misery and captivity, which forced him to rely on his own. Nobody has the right to teach a Ukrainian how to have better and more appropriate lifestyle, because every person is a self-sufficient master of its life and creates its own fate. Ukrainians were forced to rely on their own strength and independent search for their destiny, their way of life, which caused competition and conflict within society, because everybody was convinced that their worldview and way of life is more profitable, successful and better than other members of society. According to the prominent Ukrainian educator and researcher of the Ukrainian mentality Hryhorii Vashchenko:

“The ambition and individualism inherent in Ukrainians, in politics leads to the fact that the struggle for power becomes acute, conflictual, and sometimes tragic. For the average Ukrainian, power is violence that can only be subjugated through fear, not voluntarily. When it weakens, anarchy often occurs, because after the death of the “father” (the authorities) “the sons of Ukraine” try not to allow each other to the vacated place” (*Vashchenko, 1992: 33*).

Such ambition and self-sufficiency of the nation contributed to the absence of the need to create a hierarchy in society led by a leader, who would be recognized by society and followed by it. In Ukraine, each household had ample means of safe living and therefore elected a leader, who promised easy and affordable benefits to society. The state was not perceived as a necessity for the development and prosperity of the community, because the citizen could achieve a decent standard of living on their own, without the help of community members or government intervention. The need to unite around the leader was needed only when the leader promised to gain quick, temporary benefits for everyone in the short term. Ukrainians willingly elected such a leader, because they saw the need not in a strong leader who will build and develop a powerful and stable state system in society, which, in turn, will ensure the sovereignty of territories and the recognition of state in the international arena, but as a temporary ruler, who has gathered around themselves a group of people who share their purpose and interests, and who, after achieving their common goal, must disband the group without claiming to further leadership on any basis. In the Ukrainian mentality, each member of society represents their own law and order, and at their own risk and discretion build their small state around themselves in accordance with their understandings and capabilities. The need for a leader arises when a common benefit or threat emerges, that can temporarily evoke the interest of individuals in a leader. Power for Ukrainians appears in the form of a negative external factor, which is not something superficial, sacred and inviolable.

As a result, a clearly defined concept of the national idea is not formed in society, which in turn does not allow Ukraine to build a clear strategy for the development of the state and position itself as a reliable and stable partner on the world stage. Foreign countries are reluctant to cooperate with Ukraine because of its unpredictability and inconsistency. The course of actions requires a certain idea, a goal, that society implements by creating a system of social, political, economic, cultural and other institutions, capable of forming the state, which gradually and systematically implements the goal, set not so much by a group of disparate people living in common territory, but by a nation, that creates such living conditions, which are beneficial to all members of society, to all citizens. In Ukraine, every citizen still shapes their way of life and their worldview as they see fit. Therefore, Ukrainian society is unstable, it is constantly

in a state of competition and conflict between citizens, which does not allow to establish stable and long-term relations with other states, and what can benefit external and internal enemies.

The second stereotype of the Ukrainian mentality can be characterized by the prevalence of personal instant benefit over the gradual and consistent program development of territories.

A distinct feature of the Ukrainian mentality is individualism, namely its focus on separating the individual from the rest of society by uncompromisingly following their own beliefs and views, directing all efforts of the individual to create their own unique world, to isolate it and protect themselves from community and society as a whole. Thus, it is possible to explain the phenomenon of the Ukrainian mentality, when the society of individualists catastrophically lacks creative personalities, people with leadership qualities. At the same time, other characteristics of egocentrism of Ukrainian society are noted. With an excessive focus on their own identity, followed by social indifference, Ukrainians have the ability to quickly self-organize against a person or group of people, who try to impose any norms and rules on the rest of society by forming government institutions and coercive mechanisms. Such self-organization in Ukrainian society is called a revolt against injustice and oppression, which is exacerbated by possible shift towards anarchism.

As a result, Ukrainians do not recognize any authority over themselves. Everybody believes that they can become a leader and they do not feel helpless without a leader, thus, they do not need to depend on him. Such thinking results in a constant change of leaders without determining a firm course of actions as well as the political direction of the state.

Ukrainian society comes to the recognition of authority under the influence of mood, momentary delight, rather than as a result of a balanced and logical analysis of its virtues and deeds. Ukrainians are mostly in opposition to any government (today they cast their votes, and in a few months they blame their own elected officials for all the troubles); the disappointment in government urges people to establish social justice by voting for a new source of power, a new leader, which promises to provide such justice. Such self-centrism, combined with other aspects of the Ukrainian psyche – sensory and emotional, leads to the fact, that Ukrainian society becomes very susceptible to arguments, which appeal to traditional family and national values, arguments that appeal to a sense of individuality, the importance of their own experience. As for the political sphere, Ukrainian society does not accept rapid and radical political changes, which is one of the reasons why democratic reforms in Ukraine are much slower than in other post-communist countries. The political and managerial establishment (representatives of which come from rural or small provincial towns), which tends to apply already approved and tested means to solve political problems, is skeptical of new ideas (*Vonsovych, 2008*).

Overall, Ukrainians do not see state power and the hierarchy created by it as a guarantee of their own development, prosperity and security. Every Ukrainian has his own strength to create and ensure their own development, well-being and security. Therefore, the Ukrainian perceives power as something temporary, something that does not concern them personally and will not affect their well-being.

4. Contemporary political consequences of the Ukrainian mentality

An interesting example of the manifestation of the Ukrainian mentality was the result of decentralization and development of local communities, initiated by Ukrainian government. It should be acknowledged, that the development of local self-governed administrative units is positively perceived by Ukrainian society and it actively participates in the development of local self-governed institutions and in activities, aimed at self-governance of local communities.

However, recent local election in Ukraine has demonstrated a tendency, when regional communities elect local political parties, in order to gain political influence in the region, thus undermining the true vocation of communities, which is to ensure self-governance and sustainable community development. Despite the fact, that the local election, according to experts, was competitive and generally complied with the legislation, it has also provided an opportunity to elect political party, rather than political candidate (*Liskovych, 2020*).

Thus, the local election on the one hand demonstrates the positive effect of decentralization, which in almost all regions of Ukraine was won by the mayors in office and the political parties they represent, but on the other hand, it has led to an emergence of the significant number of extra-parliamentary parties in several regions, such as Vinnytsia, Ivano-Frankivsk, Khmelnytsky, Chernihiv (*Central Election Commission, 2020*). The local population usually chooses its compatriots, regardless of their political views and moral background, believing that such a leader can be manipulated, in order to obtain certain benefits and concessions. Such regional policy is encouraged not only by the lack of reliable and democratic legislation, but also by the reluctance of both candidates for local mayors and the electorate to abide by laws and regulations.

Moreover, it becomes obvious, that the population considers such a situation in the country beneficial for themselves, because it does not matter, which kind of leader will be in charge, as long as it is possible to bargain with them for certain financial or social concessions and benefits. The consequence of this attitude towards the authorities is that regional entrepreneurs seek to become the head of the local community at any cost, only to solve their own problems and promote their own business, not to help community development and ensure stable prosperity in the region. Local communities, in turn, are happy to accept petty encouragement and populist promises from candidates, as they do not realize that having liberties, unlike freedom, requires, first of all, responsibility for leader's actions in office, responsibility to the community, strict supervision and implementation of the party program. Instead, the local population seeks to use its ties to local entrepreneurs, so that the law does not limit their activities in any way or hold them accountable to the law or the community for their business or other activities.

Now we see how the media are actively promoting great patriots, deputies, public figures, who, if you dig deeper, have three parties behind them in the past, which they changed a long time ago. They speak and change their slogans, depending on the needs of Ukrainians, on what is profitable. And unfortunately, we have a lot of people who believe what they are told. Why can't Ukrainians unite? Sometimes there are things when we do not want to give up something. Because everyone wants to be on top, they compete in patriotism. In our country, most parties act as they see fit (*Malko, 2020*).

5. Conclusion

The situation in the society as a result of the 2020 local election in Ukraine can be considered as a noticeable tendency to strengthen local authorities. In the majority of regions, local candidates came to power, nominated by newly formed parties, where instead of a clear course of actions, designed for the gradual and long-term development of the community, they offer quick and effectively solution for the economic crisis in the region. The result of local election suggests, that populist political projects are gaining more influence in the regions of Ukraine, whilst democratic parties face social distrust, caused by the disappointment of the majority of the population with the policies, pursued by the central government. The population of the country is more interested in their own well-being than in creating a common good for the region, the state.

Hence the tendency for communities in Ukraine to perceive fairness not as the application of written law, but rather as a natural exigency of community. Ideally, spravedlyvist (justice) is achieved through a pravova spilnota (righteous community) that does not require a state, as the latter can be hijacked, whereas the community's "natural law" reflects the common good (Wynnyckyj, 2020: 132).

Therefore, the results of the local election clearly show that a large part of the Ukrainian community is convinced, that the creation of a just social order is possible at the local level in accordance with generally accepted norms, which are followed by the majority of the population in the region. The central government is perceived as an entity, that outlines general trends and provides general recommendations that serve more as guidelines, rather than rules.

Naturally, these factors significantly prevent Ukraine from overcoming the difficult economic and socio-political situation and successfully implementing anti-corruption measures in various spheres of Ukrainian society. At the same time, the stable self-governing potential of the Ukrainian mentality, the traditional natural democracy of the Ukrainian people, their psychological rejection of the authoritarian nature of the central government creates favorable opportunities for its self-realization, which can serve in socio-political and state-building practice. Ukrainians must become conscious citizens of their country, who think not only about their own well-being, but also about the common good for the whole community.

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ANALIZA WPLYWU PANDEMII COVID-19 NA ZDAWALNOŚĆ NOTARIALNEGO EGZAMINU ZAWODOWEGO

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Streszczenie

Epidemia COVID-19 była jednym z kilku czynników, który mógł mieć wpływ na dostęp do egzaminów notarialnych w 2020 roku. Należy jednak wskazać, że wpływ ten nie miał jednostronnego charakteru. W przypadku egzaminów notarialnych rzeczona zależność miała negatywny charakter, co jest zauważalne przede wszystkim poprzez nagły spadek liczby osób, które zdecydowały się przystąpić do omawianego egzaminu w stosunku do ubiegłego roku. Spadek liczby osób, które uzyskały pozytywny wynik z rzeczzonego egzaminu prawdopodobnie nie pozostawał w bezpośrednim związku z epidemią COVID-19. Należy postawić tezę, iż zdawalność egzaminu notarialnego charakteryzuje się wysokim zróżnicowaniem wyników w różnych latach. Czynnikiem, które mają decydujący wpływ na osiągnięte przez przystępujących rezultaty, pozostają przede wszystkim trudność pytań egzaminacyjnych, czy też stopień przygotowania zdających osób.

Słowa kluczowe: notariusz, egzamin, zdawalność.

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Profesja, notariusza powszechnie postrzegana jest jako zawód o szczególnym znaczeniu dla społeczeństwa, a także jako służba publiczna dla ochrony dóbr wyższego rzędu w szczególności ładu społecznego, praw wolności jednostki, zdrowia, życia czy mienia osobistego lub publicznego. Przestrzeganie wartości etycznych podczas wykonywania tych zawodów, zachowanie reguł staranności oraz tajemnicy zawodowej to podstawowe atrybuty tej profesji (*Wiatrowski, Nowicka, 2019*).

Notariusz działa jako osoba zaufania publicznego. Natomiast, notariat (*Puchały, 1974*) zgodnie z definicją to – instytucja mająca na celu zapewnienie bezpieczeństwa obrotu prawnego i jego zgodności z obowiązującym prawem. Cytując literalne brzmienie art. 2 ustawy Prawo o notariacie (*Ustawa z dn. 14 lutego 1991 r.*) – notariusz w zakresie swoich uprawnień, o których mowa w art. 1, działa jako osoba zaufania publicznego, korzystając z ochrony przysługującej funkcjonariuszom publicznym.

Doktryna wskazuje cechy wyróżniające notariuszy od innych zawodów prawniczych, potwierdzające status notariusza jako osoby zaufania publicznego. Dlatego też, należy podkreślić i przytoczyć wielość wiodących genotypów symptomatycznych dla profesji notarialnej. Jako podstawowy i priorytetowy zaliczyć należy nieskazitelną charakter osoby wstępującej w szranki korporacji notarialnej. Kolejnym elementem świadczącym o powadze wykonywanej funkcji jest używanie pieczęci urzędowej z wizerunkiem orła. Ważny do wyartykułowania

pozostaje również fakt, iż wszystkie wykonywane czynności notarialne mają charakter dokumentu urzędowego. Również do wiodących charakterystycznych cech tego zawodu winno się zaliczyć obowiązek tajemnicy zawodowej. Zachowania w tajemnicy okoliczności sprawy oraz faktu, iż powinność ta ustaje tylko wtedy, gdy notariusz składa zeznanie jako świadek przed sądem za wyjątkiem ujawnienie tajemnicy, która zagraża dobru państwa albo ważnemu interesowi prywatnemu.

Należy mieć na uwadze, iż samorząd zawodowy o którym mowa w art. 17 ust. 1 Konstytucji RP (*Konstytucja Rzeczypospolitej Polskiej z dnia 2 kwietnia 1997*) wykonuje swoje zadania wyłącznie w granicach interesu publicznego. Innymi słowy oznacza to w szczególności zakaz nadużywania swojej pozycji. Ma to przede wszystkim na celu przeciwdziałanie nadmiernemu ograniczaniu sposobności w możliwości nabycia danych uprawnień zawodowych (*Wiatrowski, J. Wiatrowski, B. Wanot, 2020*). Jak podkreśla P. Sarnecki w komentarzu odnoszącym się do art. 17 Konstytucji RP – „*Podstawą włączenia określonego zawodu do kategorii zawodu zaufania publicznego powinno być zawsze uznanie, że nałożenie owych ograniczeń nie następuje w celu stworzenia określonej grupy zawodowej przywilejów, lecz ma służyć interesowi publicznemu, a zakres ograniczeń winien być odpowiedni do ochrony tego interesu. Konstytucja wymaga obdarzenia szczególnym statusem osoby wykonujące zawody zaufania publicznego, a jednocześnie wymaga, aby regulacja prawna sposobu ich wykonywania potwierdzała i instytucjonalizowała zaufanie do nich*”. (*Sarnecki, 2005*)

Notariusza powołuje i wyznacza siedzibę jego kancelarii Minister Sprawiedliwości, na wniosek osoby zainteresowanej, po zasięgnięciu opinii Rady właściwej Izby Notarialnej.

Zgodnie z ustawą prawo o notariacie, Notariuszem może być powołany ten, kto:

1) posiada obywatelstwo polskie, obywatelstwo innego państwa członkowskiego Unii Europejskiej, państwa członkowskiego Europejskiego Porozumienia o Wolnym Handlu (EFTA) – strony umowy o Europejskim Obszarze Gospodarczym lub Konfederacji Szwajcarskiej, albo obywatelstwo innego państwa, jeżeli na podstawie przepisów prawa Unii Europejskiej przysługuje mu prawo podjęcia zatrudnienia lub samozatrudnienia na terytorium Rzeczypospolitej Polskiej na zasadach określonych w tych przepisach;

2) korzysta w pełni z praw publicznych i ma pełną zdolność do czynności prawnych;

3) jest nieskazitelnego charakteru i daje rękojmię prawidłowego wykonywania zawodu notariusza;

4) ukończył wyższe studia prawnicze w Rzeczypospolitej Polskiej i uzyskał tytuł magistra lub zagraniczne studia prawnicze uznane w Rzeczypospolitej Polskiej;

5) odbył aplikację notarialną w Rzeczypospolitej Polskiej;

6) złożył egzamin notarialny w Rzeczypospolitej Polskiej;

7) ukończył 26 lat.

Dodatkowo, z treści rzeczony ustawy wynika, iż wymagania odbycia aplikacji notarialnej w Rzeczypospolitej Polskiej i złożenia egzaminu notarialnego, nie dotyczą osób, które:

1) uzyskały tytuł naukowy profesora lub stopień naukowy doktora habilitowanego nauk prawnych;

2) zajmowały stanowisko sędziego lub prokuratora;

3) wykonywały zawód adwokata lub radcy prawnego przez okres co najmniej 3 lat;

4) zajmowały stanowisko radcy lub starszego radcy Prokuraturii Generalnej Skarbu Państwa przez okres co najmniej 3 lat.

Również, bez odbycia aplikacji notarialnej do egzaminu notarialnego mogą z kolei przystąpić osoby, które w Rzeczypospolitej Polskiej:

1) posiadają stopień naukowy doktora nauk prawnych;

2) przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione na stanowisku referendarza sądowego, starszego referendarza sądowego, asystenta prokuratora, asystenta sędziego lub były zatrudnione w Sądzie Najwyższym lub w Trybunale Konstytucyjnym i wykonywały zadania odpowiadające czynnościom asystenta sędziego;

3) po ukończeniu wyższych studiów prawniczych przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu wykonywały na podstawie umowy o pracę lub umowy cywilnoprawnej wymagające wiedzy prawniczej czynności bezpośrednio związane z czynnościami wykonywanymi przez notariusza w kancelarii notarialnej;

4) po ukończeniu wyższych studiów prawniczych przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione w urzędach organów władzy publicznej i wykonywały wymagające wiedzy prawniczej czynności bezpośrednio związane ze świadczeniem pomocy prawnej na rzecz tych urzędów;

5) po ukończeniu aplikacji legislacyjnej przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione w urzędach organów władzy publicznej lub w państwowych jednostkach organizacyjnych i wykonywały wymagające wiedzy prawniczej czynności bezpośrednio związane z tworzeniem projektów ustaw, rozporządzeń lub aktów prawa miejscowego;

6) zajmują stanowisko radcy lub starszego radcy Prokuratury Generalnej Skarbu Państwa;

7) zdały egzamin sędziowski, prokuratorski, adwokacki, radcowski lub komorniczy;

jak również osoby, które przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione w międzynarodowym organie sądowym, w szczególności w Trybunale Sprawiedliwości Unii Europejskiej lub Europejskim Trybunale Praw Człowieka i wykonywały zadania odpowiadające czynnościom asystenta sędziego, przy czym osoby te muszą także spełniać wskazane powyżej w punktach: 1-4 i 7 wymagania przewidziane dla powołania na notariusza.

Relevantnym pozostaje, iż najczęstszą wybieraną przez kandydatów na notariuszy drogą dojścia do tego zawodu, jest rozwiązanie polegające na odbyciu aplikacji notarialnej i złożeniu egzaminu notarialnego.

Zgodnie z cytowaną ustawą prawo o notariacie, do egzaminu notarialnego może przystąpić osoba, która ukończyła aplikację notarialną w Rzeczypospolitej Polskiej i otrzymała zaświadczenie o jej odbyciu.

Natomiast, bez odbycia aplikacji notarialnej do egzaminu notarialnego mogą przystąpić osoby, które:

1) posiadają stopień naukowy doktora nauk prawnych;

2) przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione na stanowisku referendarza sądowego, starszego referendarza sądowego, asystenta prokuratora, asystenta sędziego lub były zatrudnione w Sądzie Najwyższym lub w Trybunale Konstytucyjnym i wykonywały zadania odpowiadające czynnościom asystenta sędziego;

3) po ukończeniu wyższych studiów prawniczych przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu wykonywały na podstawie umowy o pracę lub umowy cywilnoprawnej wymagające wiedzy prawniczej czynności bezpośrednio związane z czynnościami wykonywanymi przez notariusza w kancelarii notarialnej;

4) po ukończeniu wyższych studiów prawniczych przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione

w urzędach organów władzy publicznej i wykonywały wymagające wiedzy prawniczej czynności bezpośrednio związane ze świadczeniem pomocy prawnej na rzecz tych urzędów;

5) po ukończeniu aplikacji legislacyjnej przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione w urzędach organów władzy publicznej lub w państwowych jednostkach organizacyjnych i wykonywały wymagające wiedzy prawniczej czynności bezpośrednio związane z tworzeniem projektów ustaw, rozporządzeń lub aktów prawa miejscowego;

6) zajmują stanowisko radcy lub starszego radcy Prokuratury Generalnej Skarbu Państwa;

7) zdały egzamin sędziowski, prokuratorski, adwokacki, radcowski lub komorniczy;

jak również osoby, które przez okres co najmniej 4 lat w okresie nie dłuższym niż 6 lat przed złożeniem wniosku o dopuszczenie do egzaminu były zatrudnione w międzynarodowym organie sądowym, w szczególności w Trybunale Sprawiedliwości Unii Europejskiej lub Europejskim Trybunale Praw Człowieka i wykonywały zadania odpowiadające czynnościom asystenta sędziego, przy czym osoby te muszą także:

1) posiadać obywatelstwo polskie, obywatelstwo innego państwa członkowskiego Unii Europejskiej, państwa członkowskiego Europejskiego Porozumienia o Wolnym Handlu (EFTA) – strony umowy o Europejskim Obszarze Gospodarczym lub Konfederacji Szwajcarskiej, albo obywatelstwo innego państwa, jeżeli na podstawie przepisów prawa Unii Europejskiej przysługuje im prawo podjęcia zatrudnienia lub samozatrudnienia na terytorium Rzeczypospolitej Polskiej na zasadach określonych w tych przepisach;

2) korzystać w pełni z praw publicznych i mieć pełną zdolność do czynności prawnych;

3) być nieskazitelnego charakteru i odpowiednio dawać rękojmię prawidłowego wykonywania zawodu notariusza;

4) mieć ukończone wyższe studia prawnicze w Rzeczypospolitej Polskiej i uzyskany tytuł magistra lub zagraniczne studia prawnicze uznane w Rzeczypospolitej Polskiej;

5) mieć ukończone 26 lat.

Istotnym w rzeczonym opracowaniu pozostaje wyartykułowanie trybu i formy egzaminu zawodowego i egzegeza jego zdawalności. Mianowicie, egzamin notarialny przeprowadza się raz w roku w terminie wyznaczonym przez Ministra Sprawiedliwości. Minister Sprawiedliwości zamieszcza w Biuletynie Informacji Publicznej, nie później niż na 90 dni przed terminem egzaminu notarialnego, ogłoszenie o egzaminie notarialnym, w którym podaje w szczególności: termin złożenia wniosku o dopuszczenie do egzaminu notarialnego, adres siedziby komisji kwalifikacyjnej, termin przeprowadzenia przez komisję kwalifikacyjną każdej części egzaminu notarialnego i wysokość opłaty za egzamin notarialny.

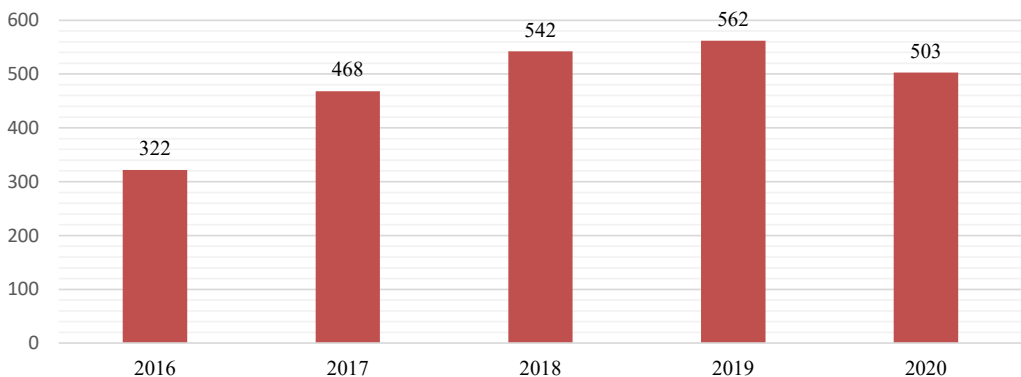
Egzamin notarialny polega na sprawdzeniu przygotowania prawniczego osoby przystępującej do egzaminu notarialnego do samodzielnego i należytego wykonywania zawodu notariusza. Składa się z trzech części pisemnych. Pierwsza i druga część egzaminu notarialnego polegają na opracowaniu projektów aktów notarialnych na podstawie opisanych przypadków. Trzecia część egzaminu notarialnego polega na opracowaniu projektu odmowy dokonania czynności notarialnej albo uzasadnienia jej dopuszczalności albo na opracowaniu projektu czynności notarialnej innej niż akt notarialny.

Ważnym jest, iż pozytywny wynik z egzaminu notarialnego otrzymuje zdający, który z każdej części egzaminu notarialnego otrzymał ocenę pozytywną. W przypadku nieuzyskania pozytywnego wyniku z egzaminu notarialnego, zdający może przystępować do kolejnych egzaminów notarialnych, z tym, że egzamin ten zdaje w całości (*Ustawa z dn. 14 lutego 1991 r.*).

Zważywszy na przedstawiony schemat dostępności do wykonywania zawodu notariusza, zasadniczym celem badawczym rzeczonego opracowania pozostaje, analiza wpływu

pandemii Covid -19 na zdawalność egzaminu zawodowego notariusza. W tym celu podano szczegółowej analizie wyniki uzyskane z egzaminu notarialnego kończącego okres aplikacji i umożliwiającego wykonywaniu profesji rejenta. W tym celu zostaną przedstawione dane dotyczące liczby osób, które zdecydowały się przystąpić do egzaminu notarialnego w latach 2016-2020, dane informujące o liczbie osób, które otrzymały pozytywny wynik z egzaminu notarialnego w latach 2018-2020, a na ich podstawie zostanie obliczony odsetek osób, którym udało się uzyskać pozytywny wynik w latach 2018-2020 ze wskazanego egzaminu. Rzeczone dane zostały przedstawione na trzech poniższych grafach oraz w dwóch tabelach.

Liczba osób przystępujących do egzaminu notarialnego w latach 2016-2020



Wykres 1. Liczba osób przystępujących do egzaminu notarialnego w latach 2016-2020

Źródło: Źródło własne na podstawie zestawienia ze strony Ministerstwa Sprawiedliwości, <https://www.arch.ms.gov.pl/pl/egzaminy-prawnicze/zawodowe-egzaminy-prawnicze/ogloszenia-i-komunikaty>, <https://www.gov.pl/web/sprawiedliwosc/wyniki-egzaminu-notarialnego> oraz wyników opublikowanych przez Izbę Notarialną w Gdańsku, Katowicach, Krakowie, Poznaniu, Warszawie i Wrocławiu w 2020 roku

Tabela 1

Liczba osób, które uzyskały pozytywny wynik z egzaminu notarialnego w poszczególnych izbach notarialnych w Polsce w latach 2018 i 2019

	2018	Liczba osób, które otrzymały pozytywny wynik w 2018 roku	Liczba osób, które otrzymały pozytywny wynik w 2019 roku
1	Gdańsk	39	38
2	Katowice	11	23
3	Kraków	16	54
4	Poznań	46	54
5	Warszawa	21	81
6	Wrocław	49	36
	Ogółem	182	286

Źródło: Źródło własne na podstawie danych zawartych na podstawie zestawienia ze strony Ministerstwa Sprawiedliwości, <https://www.arch.ms.gov.pl/pl/egzaminy-prawnicze/zawodowe-egzaminy-prawnicze/ogloszenia-i-komunikaty>, <https://www.gov.pl/web/sprawiedliwosc/wyniki-egzaminu-notarialnego> oraz własnych obliczeń pomocniczych

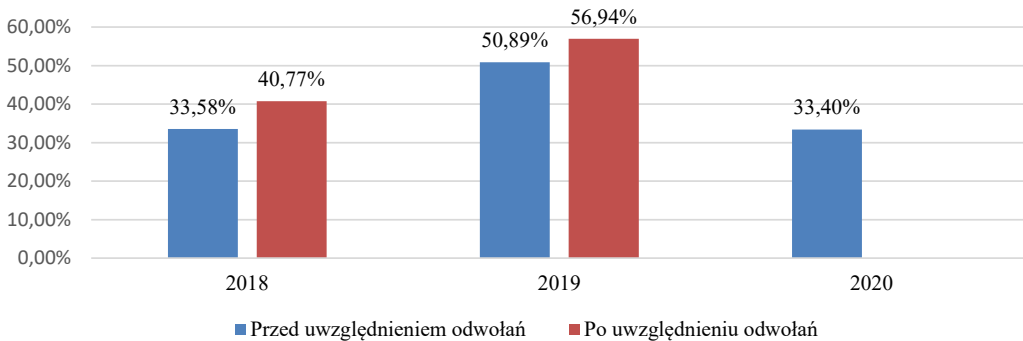
Tabela 2

Liczba osób przystępujących do egzaminu zawodowego, zestawienie liczby osób, które otrzymały pozytywny i negatywny wynik oraz procent zdawalności egzaminu notarialnego w poszczególnych izbach notarialnych w Polsce w 2020 roku

	Izba notarialna	Liczba osób przystępujących do egzaminu notarialnego	Liczba osób, które uzyskały pozytywny wynik z egzaminu notarialnego	Liczba osób, które uzyskały negatywny wynik z egzaminu notarialnego	Procent zdawalności
1	Gdańsk	75	34	41	45,33%
2	Katowice	47	14	33	29,79%
3	Kraków	65	28	37	43,08%
4	Poznań	120	29	91	24,17%
5	Warszawa	144	46	98	31,94%
6	Wrocław	52	17	35	32,69%
	Ogółem	503	168	335	33,40%

Źródło: Źródło własne opracowane na podstawie wyników opublikowanych przez Izbę Notarialną w Gdańsku, Katowicach, Krakowie, Poznaniu, Warszawie i Wrocławiu w 2020 roku

**Zdawalność egzaminu notarialnego w latach 2018-2020
(przed i po uwzględnieniu odwołań)**



**Wykres 2. Zdawalność egzaminu notarialnego w latach 2018-2020
(przed i po uwzględnieniu odwołań)**

Źródło: Źródło własne na podstawie zestawienia ze strony Ministerstwa Sprawiedliwości, <https://www.arch.ms.gov.pl/pl/egzaminy-prawnicze/zawodowe-egzaminy-prawnicze/ogloszenia-i-komunikaty>, <https://www.gov.pl/web/sprawiedliwosc/wyniki-egzaminu-notarialnego> oraz wyników opublikowanych przez Izbę Notarialną w Gdańsku, Katowicach, Krakowie, Poznaniu, Warszawie i Wrocławiu w 2020 roku

Przechodząc do analizy przedstawionych powyżej danych należy wyszczególnić kilka następujących implikacji.

Po pierwsze, w przeciwieństwie do egzaminu wstępnego na aplikację notarialną, w przypadku egzaminu notarialnego, pomiędzy 2019 a 2020 rokiem, nastąpił spadek liczby osób przystępujących do rzeczonego egzaminu. Zjawisko to jest tym bardziej nieoczekiwane, że

począwszy od 2016 roku mieliśmy do czynienia z ciągłym wzrostem liczby osób, które decydowały się przystąpić do egzaminu notarialnego. Ponadto, uwzględniając fakt, iż okres trwania aplikacji notarialnej trwa 3 lata i 6 miesięcy (*Art. 71 § 8 ustawy z dnia 14 lutego 1991 r.*), można założyć, że przeważający odsetek osób zdających egzamin notarialny w 2020 roku, przystępowało do egzaminu wstępnego na aplikację notarialną w 2016 roku. Jest to o tyle ważna do odnotowania zależność, gdyż wówczas łączna liczba osób przystępujących do egzaminu wstępnego na aplikację notarialną była najwyższa. W związku z powyższym zasadnym pozostaje postawienie hipotezy, iż epidemia COVID-19 mogła być jednym z czynników, który negatywnie wpłynął na możliwość dostępu do rzeczonoego prawniczego egzaminu zawodowego.

Po drugie zdawalność egzaminu notarialnego charakteryzuje się wysoką fluktuacją wyników i jest niezwykle niska. Biorąc pod uwagę wyłącznie informacje odnoszące się do 2020 roku, zdawalność egzaminu wyniosła zaledwie 33,40%. Najnowsze dane dotyczące bieżącego roku nie uwzględniają w prawdzie odwołań, dlatego też wskaźnik zdawalności może okazać się nieznacznie wyższy. Niemniej jednak, już w tym momencie można stwierdzić, że zdawalność wśród osób przystępujących do egzaminu w 2020 roku okaże się prawdopodobnie najniższa w ciągu trzech ostatnich lat. Ponadto negatywnym zjawiskiem pozostaje niewątpliwie znaczne zróżnicowanie wyników w poszczególnych izbach notarialnych. Podczas gdy zdawalność egzaminu notarialnego w Gdańsku wyniosła 45,33% (wynik wyższy od średniej krajowej o 11,93%), w Poznaniu wynik ten wynosił zaledwie 24,17% (wynik niższy od średniej krajowej o 9,23%). Różnica między wartościami skrajnymi to aż 21,16%.

Po trzecie należy zwrócić uwagę na różnicę zachodzącą pomiędzy zdawalnością egzaminu notarialnego przed i po uwzględnieniu odwołań. W wyniku rzeczonoj procedury liczba pozytywnych wyników z egzaminu w 2018 roku zwiększyła się odpowiednio o 7,19%, natomiast w 2019 roku o 6,05%. Wysoka rozbieżność zachodząca pomiędzy wynikami jest bez wątpienia zjawiskiem negatywnym. Świadczyć może o niedoskonałym systemie sprawdzania prac. Ponadto, rzeczono zjawisko zaburza obraz faktycznej zdawalności egzaminów notarialnych, jednocześnie wprowadzając powszechny stan dezinformacji wśród wszelkich osób zainteresowanych wskazanym tematem.

Reasumując, zasadnym pozostaje postawienie hipotezy mówiącej o tym, że epidemia COVID-19 była jednym z kilku czynników, który mógł mieć wpływ na dostęp do egzaminów notarialnych. Należy jednak wskazać, że wpływ ten nie miał jednostronnego charakteru. W przypadku egzaminów notarialnych wpływ ten był negatywny, co jest zauważalne przede wszystkim poprzez nagły spadek liczby osób, które zdecydowały się przystąpić do rzeczonoego egzaminu. Przechodząc do analizy egzaminu notarialnego zauważyć należy, że spadek liczby osób, które uzyskały pozytywny wynik z rzeczonoego egzaminu prawdopodobnie nie pozostawał w związku z epidemią COVID-19. Tak jak wskazano w powyższej pracy, zdawalność egzaminu notarialnego charakteryzuje się wysokim zróżnicowaniem wyników w różnych latach. Czynniki, które mają decydujący wpływ na osiągnięte przez przystępujących, pozostają przede wszystkim trudność pytań egzaminacyjnych, czy też stopień przygotowania zdających osób.

Generalnie należy jednak wskazać, iż do wskazanego stanu rzeczy mogły przyczynić się również inne czynniki, w tym ograniczenia pandemiczne. Dlatego też nieodzowna powinna być pogłębiona analiza dotycząca rzeczonoego tematu, która wykraczać będzie daleko poza czynniki o charakterze ekonomicznym i prawnym. Jednakże, kardynalnym wyznacznikiem dla tak pogłębionej egzegezy winno być założenie, wynikające wprost z dyrektywy zawartej w art. 17 ust. 1 Konstytucji RP, przewidujące możliwość powołania dla osób, wykonujących „zawody zaufania publicznego”, struktur samorządu zawodowego i nadanie im stosownych

uprawnień. Oznacza to, iż wymienione zawody winny występować jako korporacje publiczno-prawne, tj. przymusowe zrzeszenia, wyposażone w pewnego rodzaju władztwo publiczne wobec swych członków i takowe władztwo dla transparentności wykonywania owych profesji winno być w jeszcze większym stopniu scedowane na korporacje zawodowe w szczególności w zakresie kształcenia i dopuszczania do zawodu notariusza (Wiatrowski, Wiatrowski, 2020).

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CHANGES IN DIFFERENT TYPES OF COMMERCIAL ASSETS OF EUROPE AND THE USA DURING THE COVID-19 PANDEMIC

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Summary

As part of the analysis of changes in the market situation of retail operators in Europe and Ukraine, there is a clear need for detailed elaboration of ways out of the crisis caused by the Covid-19 pandemic. It is obvious that marketing approaches and management development strategies are undergoing significant structural changes. And first of all, these changes concern new forms of positioning and worldview. Consumers of shopping malls around the world have realized the possibility of alternative purchases in the online format, so the main task of top management today is to find new communication strategies and new mechanics to attract traffic to their facilities. The largest shopping mall operators in Europe, which are also leaders in asset management, real estate management, and shopping center development and refurbishment, set themselves the task of identifying trends in the retail market in the face of new global challenges. It is important to understand that we have to deal with a wide range of scenarios and measures in response to the COVID-19 outbreak by both local and national governments in different countries where shopping malls are located. In this article, we will look at the main trends that are already being implemented by key players in retail marketing in Europe and the United States.

Keywords: shopping centers, communication strategies, retail marketing, consumers of shopping malls, retail operators.

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1. Introduction

Consider, for example, Multi Corporation, which operates 15 shopping centers in the Netherlands. This company has developed a vector of development, which they have designated as “DNA Multi – creativity”.

The Multi Netherlands complex officially opened in September 2020, when after many years of hard work FORUM Rotterdam officially opened its doors with about 64,000 m² of shops, food and beverage outlets, offices and residential buildings. This is a large project of reconstruction of the central part of the city in the heart of Rotterdam. FORUM Rotterdam is

multifunctional, with many shops, bars and restaurants, offices, houses and other facilities such as fitness. This is a vivid illustration of the transformation of Europe's shopping district into a favorite destination, where something happens at any time of day. Today there is a real demand for expertise in rethinking and redesigning shopping and entertainment centers. This expertise allows shopping and entertainment centers to offer various new features.

The pandemic has caused an unprecedented economic crisis and health chaos. From the first minute, retail market operators focused on active and close communication with partners and tenants. The main goal was to provide recommendations and assurances about its commitments and long-term partnerships, which seeks the company that manages the shopping and entertainment complex, as well as to eliminate the uncertainties faced by many tenants and partners.

After all, when running such a business, you need to consider the risks and opportunities. This experience helps to become better and grow. When the full scale of the COVID-19 crisis in Europe became apparent in Europe in March 2020, this has become a scary factor for many top managers. Multi has invested in motivating and supporting their teams. As Multi manages assets in 14 European countries, including Turkey, it had to deal with a wide range of scenarios and measures in response to the COVID-19 outbreak by both local and national governments. An international task force was set up to coordinate responses in each country and to share best practices, conclusions and lessons learned from across the organization. Structuring the plans at the retail operator's head office ensured business continuity. The development of response protocols and pandemic plans at the country level has allowed each country to always be in the right phase of a pandemic plan. At the national level, it is important to work closely with local authorities and industry councils to obtain the necessary information on the details of local and national regulations in a timely and first-hand manner. This allows you to act quickly and responsibly to stakeholders.

One of the most important lessons of 2020 is that digital technologies have radically changed the lives of millions of consumers around the world. Retail operators must learn to think differently. It is necessary to act and closely monitor consumer behavior. New solutions need to be constantly sought to keep shopping malls attractive and safe so that people can continue to visit them.

2. Traction of anchor shops in shopping and entertainment centers

After the failure of V&D and the operation in the Dutch Hudson Bay, it became clear that you can no longer count on the traction of anchor stores in shopping malls. For a long time in real estate, the complex world of retail was prone to cycles. Analysts believe that in 10 years the consumer will still go to city centers and shopping malls for products. Retail should remain an attractive offer. Let's analyze the behavior of young people in Europe, and in particular in the Netherlands: they are looking for places to chat with their friends. Retail will always be relevant, because the physical experience of shopping is indispensable.

Eventually, the recovery of strong retail brands is coming. Zalando is opening more and more pop-up stores. Their Zircle retail concept in the Berlin shopping center sells clothes through the Zalando Wizard mobile app. Consumers can also use this program to sell their used clothing in exchange for credits that they can use in the store. Amazon has announced that it now plans to add physical stores in Germany after opening stores in the United States. This will help attract new tenants, which in turn will attract new visitors and increase traffic and traffic.

In the last nine months of 2020, the largest retail operators around the world paid much attention to the revision of leases. If we consider the model of Multi's relationship with tenants, the strategy of parity partnership is obvious. Modern and self-confident flagship operators do not deal with standard problems, so do not offer standard solutions. The management company is in tandem with the tenants and constantly consults with them. Conclusion: 10-year contracts with retailers are not flexible. Ideally, maintain a relationship with tenants with a long-term perspective. When the operator behaves like an honest partner, the partners will trust him (*Hubert Stech, Patrick van Dooyeweert, Harry Vroemen, 2020*).

3. The main goals for retail operators

The essence of the work of a progressive European retail operator is to offer a high level of service and create value for investors. In the arsenal of such companies have all the necessary skills and discipline for analysis asset, and to propose and manage sustainable improvements. In addition to active asset management, their services include leasing, marketing, center management, and finance and accounting. Some operators, such as Multi, have their own design agencies (in this case, TTDesign) that deal with redevelopment, renovation and architectural design. Work is being done in multidisciplinary teams to draw scenarios for the future, such as the conversion of commercial or unused premises for homes and offices, sports or medical facilities. Investors enjoy working with such teams because it is the most complete and integrated platform for commercial real estate, and they know that such a structure can handle every aspect of the project on its own. Investors and shareholders see the added value that such an operator can offer.

Another important aspect of a successful retail operator is transparency. Even during a crisis, it is important to demonstrate the importance of a constructive and transparent approach with all stakeholders and to report daily on the number of visitors, store closures and alternative solutions, informing and reassuring both visitors and asset owners (*Jens Nordfalt, 2018*).

Traditional marketing is a thing of the past. The marketing of each shopping center must be adapted to its target group. That is why today the world's key retailers are examining in detail the identities of customers and their individual ways to retail to determine potential marketing initiatives for each individual asset. Also, some make an informed decision to include students in their marketing teams to be able to look into the minds of tomorrow's consumers.

4. Consider the concept of management of square meters

In today's management vector, it is important to be fully service-oriented. It is necessary to think and act as an entrepreneur and solve current problems quickly. This is how the top management of Multi Corporation motivates the team in the Netherlands to be the best and make the most of the assets in its portfolio. The goal is not to create volume if the company cannot manage it. The main thing is to offer the best quality to help investors grow. Over the past few years, this approach to management and strategic marketing has helped Multi gain dozens of new shopping center management responsibilities for investors such as Commerz Real, Allianz Real Estate, Deutsche Bank, Credit Suisse and Corestate Capital Group.

It is important to understand that a lot of time is often spent optimizing assets and actively searching for new opportunities, new tenants and new ideas for existing assets. Large retail operators are very active in the market, offering new management powers. The time is quite right. There is a big movement in the market with new investors. Institutional investors

will also return to commercial real estate. Leading companies want to grow, despite the fact that they are in the midst of a crisis, the consequences of which will be visible only next year or even in 2-3 years. It takes a lot of work to expand the management portfolio, and for this you need to be a state-of-the-art organization. Only with this approach can you be included in the TOP management service providers in Europe.

5. The trend of re-equipment and reconstruction

The COVID-19 pandemic has accelerated existing trends. There is a term in retail marketing – creative destruction: an endless cycle of creation and destruction. Right now, the large retail market is in a phase of a cycle when large shopping centers in Europe are being repurposed. How to make multifunctional monofunctional shopping areas and shopping centers? And it's not just about adding leisure, food and drink and health. Basically it is a question of addition of a housing component.

Currently, the market revolves around mixed use. What can be done is to go beyond the existing situation with creativity and fresh ideas. Architects of TTDDesign design agencies always start from the basis of the project: from the location. Each place has its strengths, and it is very important to make the most of them and look for connections with the local environment. You can create locations, but a bad place will never turn into a good one. In 2021, experts expect that the market will be dominated by trends in re-equipment and reconstruction. One of the main advantages of agencies of this level is their international presence market from Finland to Ireland and from Portugal to Turkey. This coverage gives teams a great multidisciplinary experience of implementing creative ideas.

6. The role of architectural agencies in the reconstruction process

The teams of architectural agencies that are part of the eco-system of the retail operator are responsible for urban development plans, design, as well as architectural concepts of interior and exterior for all developments and redevelopments in the portfolio of the managing company. Currently, their role is changing. In the past, the head office had a budget for development and construction, and the agency was free in terms of form and design. Nowadays, everyone needs a capital expenditure budget to get a particular facility back on track. And the design agency is now coming to the fore. For example, the creative team now looks at which tenants want to work with the facility, and which vacancies can be resolved to improve the location. When the agency has all this information, it can quickly move to the strategy phase to optimize the retail project. As designers and architects, they play a completely different role in this process than the people responsible for financial purposes.

Nowadays, many key players have returned to the tried-and-tested concept of an integrated city, which combines a set of features, so you no longer need a large number of stores. The impact of the COVID-19 pandemic has increased demand for multifunctional shopping areas. Innovation in the mall is first and foremost to put the customer first. What motivates them and why do they choose this place and this shopping and entertainment center? This is all that a retail operator can offer them. And this is not a serious intervention that acts as a kind of panacea; it is necessary to make changes in all directions to create the optimum offer and experience. If the retail operator can express the emotions of the place and touch the emotions of visitors, then he will realize that he has chosen the right note, and visitors will return (*Hubert Stech, Patrick van Dooyeweert, Harry Vroemen, 2020*).

7. US Retail Operators Market Analysis in 2020.

Coresight Research estimates that 25 percent of America's approximately 1,000 malls will close within the next three to five years. The coronavirus pandemic hastened the ongoing death. According to Moody's Analytics, the fact that retail space has become vacant or unoccupied does not mean that it is automatically a good candidate for conversion to industrial space.

According to Moody's Analytics REIS, the level of apartment development in the United States is expected to decline by 15.6% in the world after Covid-19. And office development will fall by 10%, while retail will fall by 15.7%.

Meanwhile, industrial development is expected to grow by 3.6%.

According to Reuters, the open mall was seen before it was closed due to new restrictions in California during the global coronavirus outbreak (COVID-19) in Carlsbad, California, USA, on July 14, 2020.

What will happen to America's dead malls? It's a million-dollar issue that plagues retailers and developers. Earlier it was reported that the largest owner of a shopping center in the US Simon Property Group is in talks with Amazon to turn some department stores Sears and JC Penney into sales centers, many industry analysts identify the future of shopping centers as logistics centers (*Jens Nordfalt, 2018*).

In particular, there is an opinion that the transformation of old retail space into new warehouses may not be so simple, although it may seem a logical solution. Demand for logistics buildings is growing rapidly as an e-commerce sales balloon. But obstacles include the need to review real estate, which may be due to the repulsion of local municipalities.

The fact that retail space has become vacant or unemployed does not mean that it is automatically a good candidate for conversion into industrial space. You can't just build industrial buildings in areas that are meant for commercial use. This often requires redevelopment of areas – a long and tedious process with a low probability of success.

Public and local governments typically tax industrial property at half to two-thirds of the rate on commercial real estate, so municipalities have little incentive to reorient areas from commercial to industrial use because they will collect less tax revenue.

Demand for different types of commercial real estate assets is expected to change significantly due to the coronavirus pandemic, where more people are now working from home, flocking to the suburbs and buying things they used to see in stores.

Moody's Analytics REIS has identified five markets in the United States where it says it would be most appropriate to convert vacant space into warehouse space, based on where retail is inefficient and where warehouse demand is hot. These are: Central New Jersey, Northern New Jersey, Long Island, Memphis and Detroit.

Shopping malls are likely to close formwork in suburbs across the country as the number of closed stores grows and landlords capitulate.

According to Reuters, the Destiny USA shopping center opens when restrictions on coronavirus disease (COVID-19) are eased in Syracuse, New York, USA.

Another new report from Coresight Research estimates that 25 percent of America's approximately 1,000 shopping malls will close within the next three to five years, accelerating the pandemic's pre-emergence deaths.

Shopping malls that are most at risk of eclipses are classified as so-called shopping centers B-, C- and D, ie they bring less sales per square foot than shopping center A. For example, shopping center A ++ can earn up to \$ 1,000 per a square foot, while the C + mall is about \$320.

According to an analysis by commercial real estate company Green Street Advisors, there are about 380 C and D malls in the United States. Malls with a rating of C or lower are “not long-term viable malls.”

CBL & Associates, the owner of a Tennessee-based mall that has a number of B and C malls in its portfolio, said it plans to file for bankruptcy by Oct. 1, stressing how much pressure it is on these landlords.

However, even successful shopping malls are under pressure. In fact, no one is insured. Currently, the owner of an elite shopping center in Miami, Bal Harbor Shops, is going to evict a chain of luxury department stores Saks Fifth Avenue for the fact that he has not paid rent since mid-March. According to court documents, he owed Ball Harbor about \$1.9 million. “Despite being given months to meet past lease obligations, and despite Sachs’ impressive sales after selling COVID in Bal Harbor stores, Sachs has been reluctant to make any effort to pay any portion of the rent,” the president said. and Bal Harbor Shops CEO Matthew Whitman Lazenby in a statement.

About 90 percent of U.S. mall residents are either experienced tenants, such as movie theaters, or department stores and clothing retailers, according to a Coresight analysis. This makes shopping malls the most vulnerable type of shopping malls to the influence of Covid-19, compared to other properties such as strip centers that have grocery stores and shopping malls that offer consumers affordable prices.

During the pandemic, movie theaters and clothing stores faced long periods of closure, while consumers could still flock to retail centers, cleaning products and other necessities. In some states, such as New York and California, movie theaters are still closed. Therefore, when the minimum income comes, these are the companies that are most likely to demand a reduction in rent or do not pay rent at all.

Until now, mall developers have been courting entertainment companies such as Dave & Buster’s and iFly, skydiving, and restaurants such as Cheesecake Factory to reduce their reliance on declining retail sales. But these businesses also did not succeed in the era of social distancing.

So, if not warehouses and entertainment complexes, analysts have considered other cases of use of so-called dead shopping centers: churches, medical facilities, offices and even residential complexes.

But even office space is now a risky bet, as the trend of working from home can become permanent for some. For example, employees of the corporate and investment bank JPMorgan Chase will perform cycles between days spent in the office and at home, while maintaining the possibility of remote part-time work. The world’s largest bank on Wall Street in terms of income said that as a result of the move, it could close the reserve trading platforms located outside of New York and London.

External retailer REI also wants to sell its recently completed corporate town complex in the suburbs of Seattle, instead moving to other satellite offices as a result of the pandemic (*Lauren Tomas, 2020*).

8. Conclusions

Unfortunately, this whole thing with Kovid leveled almost all the experience of major retail operators. Until the world solves this pandemic, many will be in holdings with empty retail space. Then it will become clear which format is the most viable. The impact of the COVID-19 pandemic has increased demand for multifunctional shopping areas. Innovation in

the mall is first and foremost to put the customer first. What motivates them and why do they choose this place and this shopping and entertainment center? This is all that a retail operator can offer them. And this is not a serious intervention that acts as a kind of panacea; it is necessary to make changes in all directions to create the optimum offer and experience.

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HEALTH, ENVIRONMENT, DEVELOPMENT**MORPHOMETRIC INDICES OF ERYTHROCYTES IN DIFFERENT FORMS OF IRON DEFICIENCY ANEMIA AND MALIGNANT ANEMIA IN COLORECTAL CANCER****Artem Andriiaka**

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Summary

Due to the growing incidence of cancer in the world, it is becoming more relevant to study the indicators of secondary changes in blood in malignancies to use them as diagnostic and prognostic markers. The objective of the work is to conduct a morphometric analysis of peripheral blood erythrocytes in patients with iron deficiency anemia (IDA) and malignant anemia in colorectal cancer to identify specific changes and use them in a differential diagnostic practice. As the study material blood of 110 patients (58 men and 52 women) was taken. Among them 53 patients (31 women and 22 men) with IDA were examined, they formed the first (I) observation group and 57 patients (36 men and 21 women) with colorectal cancer, where the course of the underlying disease was burdened by malignant anemia second (II) observation group. The age of the patients under the survey is from 22 to 69 years. All patients were examined before any treatment was prescribed. The control group consisted of 50 healthy primary donors. Results. The data on the clinical significance of laboratory determination of morphometric changes in peripheral blood erythrocytes is highlighted in this paper. Differential-diagnostic and prognostic value of morphometric changes of erythrocytes in peripheral blood with iron deficiency anemia and anemia of malignancies is discussed. Indicators of morphometric characteristics of erythrocytes can be used in the differential diagnosis of anemia.

Keywords: peripheral blood, cancer detection, differential diagnosis, cancer control.

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1. Introduction

Colorectal cancer takes a leading place in the structure of cancer incidence in Ukraine – the second one among men and the third one among women, in the structure of mortality, it takes the second place in both men and women. Dynamic models of colorectal cancer incidence in Ukraine for the last 20 years show a steady increase in both male and female population, with the predominance in men. The peak incidence of colorectal cancer is registered in the older

groups. The average mortality-to-incidence ratio in Ukraine ranges from 51,8 to 57,3 % with an increase of this value in some region to 76,0 %. Significant shortcomings in the prevention, diagnosis and treatment of patients with colorectal cancer lead to the fact that 27,6 – 33,3 % of them died within one year since the time of diagnosis, and in some areas, this rate exceeds 40 %. Survival of persons with colorectal cancer directly depends on the timeliness of cancer detection, therefore, the 5-year relative survival rate of patients with early stages of the cancer is 8-10 times higher than of those with advanced stages (*Fedorenko et al., 2019*).

The anemic syndrome often occurs as a result of the development and progression of the tumor process, and chemotherapy and (or) radiation therapy used to treat cancer, the presence of hemolysis, splenomegaly, hemorrhagic syndrome, hemodilution, ineffective erythropoiesis, the cascade of disorders in iron metabolism regulation in the body of the patient, whose key link is now considered to be the changes in the synthesis of hepcidin (*Andriiaka, 2018, Atanasiu, 2007, Vydyborets, 2017*). In the erythrocytes of a person in the course of his life changes occur due to gender, age-specific features of metabolism, hematopoiesis (*Matlan, 2015, Shparyk, 2015*). In the hematopoiesis system itself, when pathological conditions and disease development occur, certain functional and morphological changes appear (*Andriiaka, 2018, Green, 2014*). Iron deficiency anemia (IDA) is a disease that is accompanied by significant changes in erythropoiesis, qualitative and quantitative changes in erythrocytes, impaired functioning of organs and systems (*Green, 2014, Popovych, 2020*). Fundamentally different mechanisms of formation have anemia of malignancies, which, no doubt, should affect the particular qualities of erythropoiesis (*Andriiaka, 2018, Matlan, 2015*). Colorectal cancer is a malignance which can lead to mortal complications even without significant tumor progression. Colorectal cancer can be also characterized by rapid spreading (*Fedorenko et al., 2019*). In the available literature, we have not encountered data on the comparison of morphometric changes in erythrocytes in patients with IDA and patients with malignant anemia in malignant diseases of the colorectal cancer, so it prompted us to conduct appropriate study.

The objective of the work is to conduct a morphometric analysis of peripheral blood erythrocytes in patients with iron deficiency anemia (IDA) and malignant anemia in colorectal cancer to identify specific changes and use them in a differential diagnostic practice.

2. Material and methods

As the study material blood of 110 patients (58 men and 52 women) was taken. Among them 53 patients (31 women and 22 men) with IDA were examined, they formed the first (I) observation group and 57 patients (36 men and 21 women) with colorectal cancer, where the course of the underlying disease was burdened by malignant anemia second (II) observation group. The age of the patients under the survey is from 22 to 69 years. All patients were examined before any treatment was prescribed.

The diagnosis of IDA was verified based on a typical clinical picture (signs of anemic hypoxia and sideropenic syndrome), typical hematologic picture of peripheral blood and indicators of iron metabolism.

The severity of anemia was defined according to the criteria proposed by the National Cancer Institute (USA) as follows: mild hemoglobin (Hb) from 10 to 12 g/dL, moderate Hb from 8 to 10 g/dL; severe Hb from 6,5 g/dL to 8 g/dl, life-threatening Hb below 6,5 g/dL. Among the patients with IDA, 19 were diagnosed with a mild type, 15 with a moderate, 11 with severe, and 8 with a life-threatening one. Among the patients with malignant anemia 29 were diagnosed with a mild type, 12 with moderate, 10 with severe, and 6 with life-threatening.

The study was conducted in compliance with the main provisions of the Council of Europe Convention on Human Rights and Biomedicine, Declaration of Helsinki Ethical Principles for Medical Research and (1964, with further additions, including 2000 version) and the Ministry of Health of Ukraine Order No. 690 dated September 23, 2009. All patients admitted to the hospital were examined with the use of clinical, laboratory, instrumental and special research methods, and were consulted by specialists of related specialties, if necessary. The examination and treatment of patients were performed in accordance with the World Medical Association Declaration of Helsinki (*Seoul, 2008*), and the relevant orders of the Ministry of Health of Ukraine (No. 281 from 01.11. 2000, No. 355 from 25.09.2002, No. 356 from 22.05.2009 in revision of the Ministry of Health of Ukraine Order No. 574 of 5 August 2009, No. 1118 of 21 December 2012).

The control group consisted of 50 healthy primary donors who had no history of cancer or chronic inflammatory disease. All donors were examined at the State Institution "Blood Transfusion Station of the Southwestern Railway" following the requirements of the "Procedure of medical examination of blood donors and (or) its components", approved by the Order of the Ministry of Health of Ukraine dated 01.08.2005 under No. 385 "On infectious safety of donor blood and its components".

Patients with colorectal cancer were conducted with a thorough histological examination of the drugs, taking into account the nature of the tumor margins with the surrounding tissues, the severity of infiltration, the presence of tumor cells in the vessels, the number of mitoses, including atypical ones. In addition, the cellular elements of different maturity (in %): low differentiated (LD), moderately differentiated (MD), highly differentiated (HD) cells were determined in tumors. The degree of malignancy and histologic type of the tumor were evaluated according to the generally accepted criteria.

The research materials were statistically processed according to the relevant programs (*Khalafian, 2014*). The significance of the difference was assessed using the Student's Difference Factor t-test ($p < 0,05$).

3. Results of the study and discussion

When analyzing the obtained data, it was found that the erythrocyte indicators in the examined patients were as follows (Table 1).

Table 1

Erythrocyte indicators in the examined patients and healthy people ($X \pm m$)

Indicator	Control group (n=50)	I group (n=53)	II group (n=57)
RBC, $10^{12}/L$	4,62±0,05	3,19±0,14*	3,30±0,15*
MCV, fl	86,01±0,47	80,11±0,74*	81,21±0,41*
MCP, pg	28,95±0,11	27,71±0,43	27,73±0,37
MCHC, g/dL	33,12±0,12	34,61±0,04*	34,31±0,04*
RDW, %	13,21±0,06	14,25±0,21*	13,99±0,09*

* $p < 0,05$ compared with indicators in control group.

As it is seen from the data above, significant changes in the morphometric parameters in patients with IDA and malignant anemia with colorectal cancer were found in the peripheral blood link. Besides, patients from group I showed a significant ($p < 0,01$) increase in RDW

compared with patients from group II. We have not found any significant changes in the above indicators depending on the sex and age of the patients from the observation groups I and II ($p < 0,05$). Data on the erythrocyte cytometry indicators in patients under the observation is given in Table 2.

Table 2

Indicators of erythrocyte cytometry in patients under the observation ($\bar{X} \pm m$)

Indicator	Control group (n=50)	I group (n=53)	II group (n=57)
Average diameter erythrocytes, μm^3	7,22±0,04	6,21±0,12*	6,31±0,03*
Share of micro- and schizocytes, fl	4,81±0,11	30,39±0,63*	14,21±0,23*
Anisocytosis indicator, %	4,01±0,12	17,33±0,12*	7,76±0,13*
Discocytes, %	80,91±0,47	54,29±0,15*	65,11±0,08*
Anomalous forms,%	19,07±0,52	45,71±0,14*	34,79±0,11*

* $p < 0,05$ compared with indicators in control group.

As it is seen from data in table 2, patients in both groups showed a significant increase in the number of transformed erythrocytes (stomatocytes, echinocytes, etc.), and, accordingly, a decrease in the number of normal discocytes. A more significant decrease in the average diameter of erythrocytes, an increase in the proportion of microcytes and an increase in the level of anisocytosis ($p < 0,05$) was found in patients from a group I. In addition, a clear poikilocytosis was found in patients from group I, that showed a significant decrease in the number of discocytes, an increase in the number of echinocytes and irreversibly altered pre-hemolysed forms of erythrocytes.

An increase in the number of echinocytes is always accompanied by an increase in blood viscosity. Moreover, rigid erythrocyte forms, due to their loose contact with the vessel wall, cannot fully participate in a gas exchange, which enhances tissue hypoxic processes. The movement of these cells in the total volume of capillary blood flow slows down, which can create a favorable background for the formation of microtubules. If we take into account that these processes occur in the vessel crease, where pathophysiological and pathobiochemical shifts occur, the significance of these disorders in the formation of anemic hypoxia syndrome in the examined patients of both groups will become more obvious. In the erythrocyte formula in patients from group I, against the background of a decrease in the average size of erythrocyte cell diameter and an increase in anisocytosis due to an increase in the number of microcytes we observed a significant decrease ($p < 0,01$) in the number of discocytes, an increase in the number of echinocytes and irreversibly changed prehemolized erythrocyte forms, that can obviously affect the life span of erythrocytes.

4. Conclusions

1. Malignant anemia is an urgent problem in the modern oncology clinic since anemic syndrome is one of the common complications of cancer. Instead, the number of studies highlighting this problem in cancer of the urinary system is limited. Also, the issues of secondary metabolic disorders in anemic hypoxia in combination with tumor intoxication are insufficiently covered.

2. Malignant anemia at colorectal cancer is accompanied by significant changes in the morphometric characteristics of erythrocytes, which is manifested by a decrease in the proportion of discocytes, an increase in the proportion of echinocytes and irreversibly altered prehemolytic forms of erythrocytes.

3. The changes that we have detected in the erythrocyte link of peripheral blood, on the one hand, is a reflection of the peculiarities of hematopoiesis and, in particular, erythropoiesis, and on the other, evidence of deeper pathophysiological disorders in people with malignant anemia while colorectal cancer.

4. IDA is characterized by changes in morphometric parameters: a decrease in the average diameter of erythrocytes, an increase in the number of microcytes and an increase in the level of anisocytosis, clear poikilocytosis, which showed a significant decrease in the number of discocytes, an increase in the number of echinocytes and irreversibly changed prehemolyzed erythrocyte forms.

5. Further study of the pathophysiological and biochemical changes in the erythrocyte link of hematopoiesis with IDA and malignant anemia is a promising area of scientific research. Its implementation will allow optimizing diagnostics, differential diagnosis and pathogenetic treatment regimens in these categories of patients, which, in the end, will obviously lead to an improvement in their quality of life.

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PERSONAL CHARACTERISTICS OF PATIENTS WITH DEPRESSIVE DISORDERS

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Summary

The aim of this paper is to study the features of the personal characteristics of patients with depressive disorders at the present stage, taking into account gender and age factors. Clinically examined 107 men and 138 women with depressive disorders (ICD-10 codes F31.3, F31.4, F32.0, F32.1, F32.2, F33.0, F33.1, F33.2) using Mini-mult test. Persistent pathocharacterological changes were revealed in patients with depressive disorders, the basis of these transformations are persistent depressive manifestations in combination with a high level of anxiety, asthenia and hypochondriasis, as well as moderate manifestations of hysteria, psychopathy, paranoia and schizoidism. In men, more pronounced manifestations of depression, paranoia and schizoidism were revealed, and in women – psychasthenia, hypochondriasis and psychopathic manifestations. The manifestations of depression, hypochondriasis, psychopathy, paranoia and schizoidness, which are least pronounced in the young age group (up to 30 years old), and most pronounced in the older age group (45 years and older). The manifestations of psychasthenia are minimal in the younger age group, reach the highest level in the middle age group (30-44 years old), and slightly decrease in the older age group.

Keywords: depression, anxiety, hypochondriasis, hysteria, psychopathy, paranoia, psychasthenia, hypomania.

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1. Introduction

Depressive disorders are one of the main problems of modern psychiatric science and practice (Fekadu *et al.*, 2017; Ogbo *et al.*, 2018; Kraus, 2019). Depressive disorders has been ranked as the third cause of the burden of disease worldwide by WHO, which has projected that this disease will rank first by 2030 (Malhi *et al.*, 2018). Depressive disorders are associated with important risk for suicidal behavior, reduced of quality of life, and social maladaptation both in patients with depressions and in their microsocial environment (Zuckerman *et al.*, 2018; Pshuk *et al.*, 2018). Depressive disorders in modern stage are characterized by polymorphism of symptoms, difficulty of diagnosis and resistance to therapy (Wiles *et al.*, 2018; Limandri, 2018; McLachlan, 2018). An important factor in the development of preventive measures for depressive disorders is the study of their pathomorphosis; a some of important issues of clinical pathomorphosis of depressive disorders remain insufficiently studied, and the data of existing studies are incomplete and contradictory (Cleare, 2015; Markova, 2017). We have described some trends in the current socio-demographic and clinical pathomorphosis of endogenous depressions (Belov, 2019). In this regard, it is important to study the personal characteristics of patients with depressive disorders: current evidence suggests that depression is linked to traits such as neuroticism and negative emotionality, extraversion and positive emotionality, and conscientiousness; moreover, personality characteristics appear to contribute to the onset

and course of depression through a variety of pathways (Klein et al., 2011: 269). Therefore, the study of the personal characteristics of patients with depressive disorders is important for the development of treatment, rehabilitation and prevention programs for depression.

2. The aim of the study

The aim is to study the features of the personal characteristics of patients with depressive disorders at the present stage, taking into account gender and age factors.

3. Materials and methods

With the observance of the principles of biomedical ethics, we have clinically examined 107 men and 138 women who applied for medical care at Vinnitsa Regional Psycho-Neurological Hospital from 2015 to 2019. The nosological structure of the contingent was as follows: bipolar affective disorder, the current episode of depression (ICD-10 codes F31.3, F31.4); depressive episode (F32.0, F32.1, F32.2); recurrent depressive disorder (F33.0, F33.1, F33.2). The average age of the men was 34.2 ± 11.1 years, and 33.2 ± 11.4 years for women ($p=0.422$), the average duration of depression was 5.7 ± 5.8 years for men, and 4.5 ± 5.4 years for women ($p=0.064$). 3 subgroups were allocated in group of men and women depending on the age of patients at the time of the study: up to 30 years (38 men and 51 women), from 33 to 44 years (46 men and 53 women), 45 years and older (23 men and 34 women). The study was conducted using Mini-mult test (Zaytsev, 1981). Statistical analysis of differences between groups was carried out using non-parametric Mann-Whitney test.

4. Results

The personal profile of patients with depressive disorders is characterized high rates of depression (D): 81.6 ± 4.3 T-points (82.7 ± 6.1 T-points in men, 80.7 ± 1.9 T-points in women, $p=0.006$). The quantitative value of the depression indicator exceeds 80 points, which corresponds to the pathological level, and in men the indicator is significantly higher than in women (figure 1). In the profile of patients with depression, psychasthenia (Pt) also occupies high positions: 79.1 ± 9.6 T-points (76.0 ± 10.1 T-points in men, 81.4 ± 8.7 T-points in women, $p=0.035$). Psychasthenia is also characterized by high scores (almost 80 points), but women have significantly higher scores than men. Another indicator in patients with depression exceeds the norm (more than 70 T-points): hypochondriasis (Hs) – 70.1 ± 7.9 T-points (67.2 ± 9.1 T-points in men, 72.2 ± 6.1 T-points in women, $p=0.025$); this figure is also higher in women. Indicators on the rest of the clinical scales are within the normal range (less than 70 T-points): hysteria (Hy): 64.6 ± 8.3 T-points (66.0 ± 10.1 T-points in men, 63.6 in women ± 6.7 T-points, $p=0.060$); psychopathic deviate (Pd): 64.4 ± 11.9 T-points (63.6 ± 11.2 T-points in men, 65.0 ± 12.5 T-points in women, $p=0.761$); paranoia (Pa): 64.4 ± 7.4 T-points (67.2 ± 8.3 T-points in men, 62.4 ± 6.0 T-points in women, $p=0.001$); schizophrenia (Sc): 66.1 ± 8.2 T-points (64.7 ± 8.4 T-points in men, 67.2 ± 7.9 T-points in women, $p=0.057$); hypomania (Ma): 45.1 ± 10.2 T-points (44.0 ± 12.4 T-points in men, 45.9 ± 8.2 T-points in women, $p=0.416$).

The profile of patients in the middle age group (30-44 years) is also characterized by pathological (more than 80 T-points) depression levels: 82.7 ± 3.1 T-points (84.4 ± 3.4 T-points in men, 81.2 ± 1.8 T-points in women, $p=0.001$), but in this age group, the psychasthenia indicator exceeds the depression indicator: 83.4 ± 9.3 T-points (81.2 ± 9.5 T-points in men,

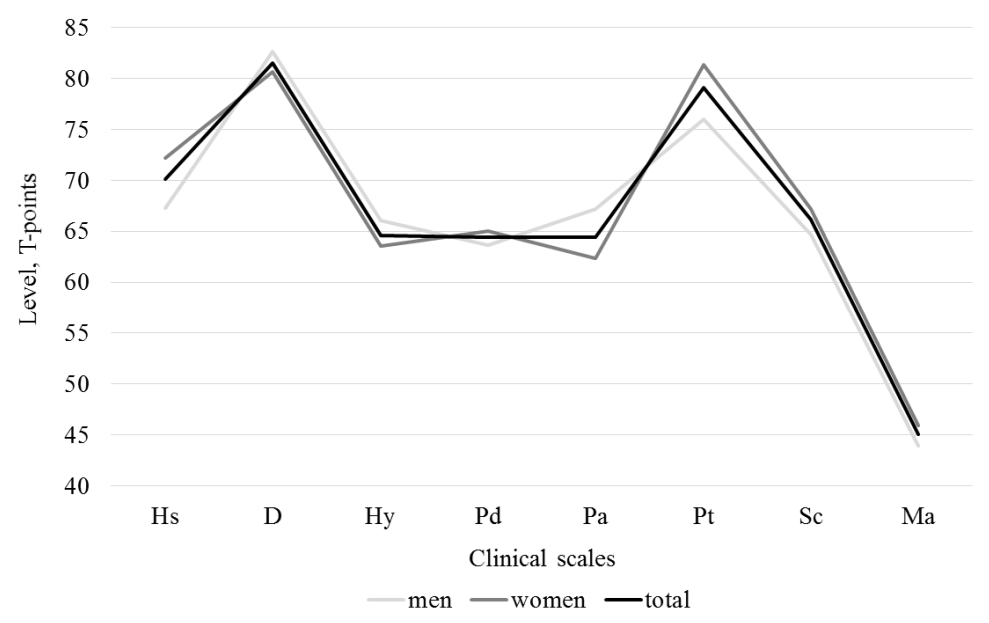


Figure 1. Personal profile of patients with depression in the age group up to 30 years

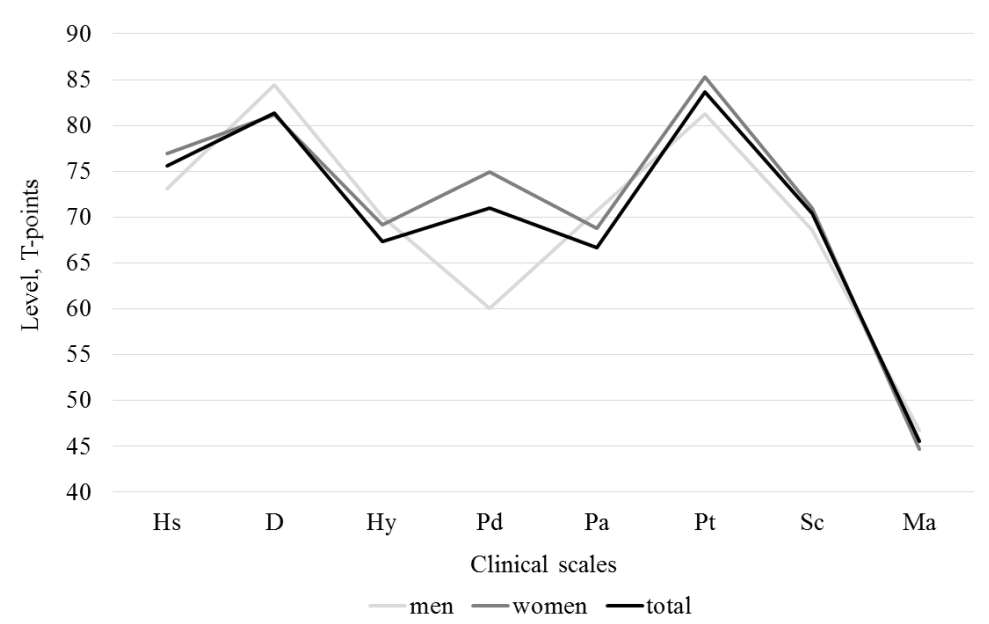


Figure 2. Personal profile of patients with depression in the age group from 33 to 44 years

85.3±8.8 T-points in women, p=0.042) (figure 2). The middle age group is also characterized by a higher indicator of hypochondriasis: 75.1±6.7 T-points (73.0±8.1 T-points in men, 77.0±4.6 T-points in women, p=0.018). Indicators on the rest of the scales are higher than in the younger age group, and approach the border of the norm (70 T-points), with the exception of hypomania: hysteria: 69.5±6.4 T-points (70.0±7.7 T-points in men, 69.2±4.9 T-points in women, p=0.628); psychopathic deviate: 68.0±13.2 T-points (60.0±8.9 T-points in men, 74.9±12.5 T-points in women, p=0.001); paranoia: 69.7±8.1 T-points (70.7±9.2 T-points in men, 68.7±6.8 T-points in women, p=0.115); schizophrenia: 69.8±7.9 T-points (68.5±7.5 T-points in men, 71.0±8.1 T-points in women, p=0.012); and hypomania: 45.6±8.8 T-points (46.7±10.3 T-points in men, 44.7±7.2 T-points in women, p=0.172).

In patients of the older age group, the indicators of depression reach the highest value among all groups: 83.8±2.9 T-points (85.7±3.4 T-points in men, 82.5±1.6 T-points in women, p=0.001), and psychasthenia indices slightly decrease in comparison with the average age group: 82.1±7.1 T-points (78.4±7.1 T-points in men, 84.6±6.1 T-points in women, p=0.002) (figure 3). In this age group, the indicators of hypochondriasis reach the maximum: 77.2±4.9 T-points (in men 75.0±5.2 T-points, in women 78.6±4.1 T-points, p=0.004); hysteria: 69.4±4.5 T-points (68.7±5.3 T-points in men, 69.9±3.8 T-points in women, p=0.283); psychopathic deviate: 69.2±11.7 T-points (62.7±9.8 T-points in men, 73.6±11.0 T-points in women, p=0.001); paranoia: 69.9±7.9 T-points (69.9±9.5 T-points in men, 69.8±6.7 T-points in women, p=0.606); schizophrenia: 69.8±8.7 T-points (63.3±7.5 T-points in men, 74.2±6.4 T-points in women, p=0.001) and hypomania: 48.0±9.9 T-points (50.4±10.3 T-points in men, 46.4±9.5 T-points in women, p=0.122).

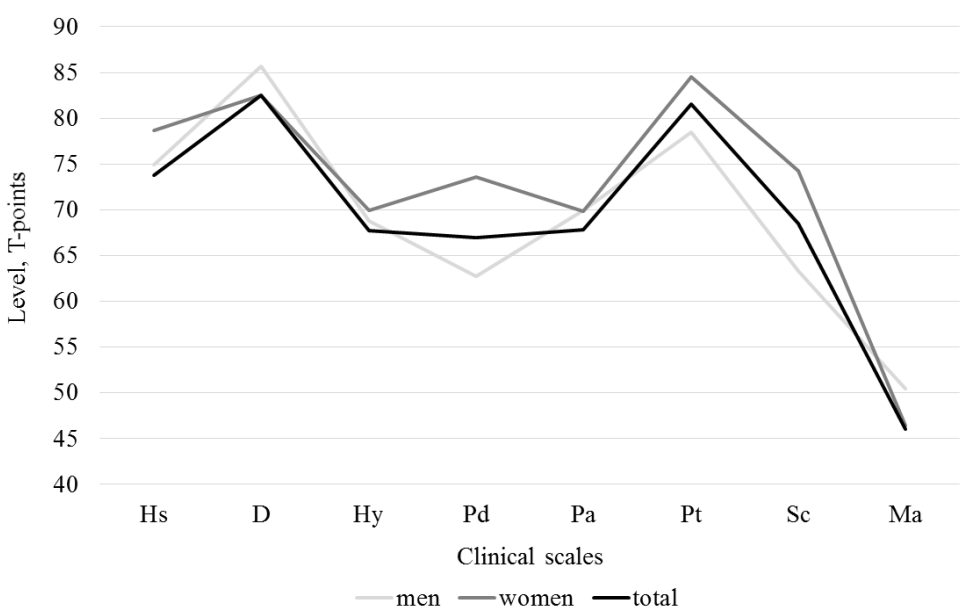


Figure 3. Personal profile of patients with depression in the age group 45 years and older

Statistically significant differences between different age groups were found for men between the younger and middle groups for hypochondriasis (p<0.01), psychasthenia (p<0.05),

schizophrenia ($p < 0.05$), between the younger and older age groups for hypochondriasis ($p < 0.01$), between middle and older age groups for schizophrenia ($p < 0.05$). For women, statistically significant differences were found between the younger and middle age groups for hypochondriasis ($p < 0.01$), hysteria ($p < 0.01$), psychopathic deviate ($p < 0.01$), paranoia ($p < 0.01$), psychasthenia ($p < 0.05$) and schizophrenia ($p < 0.01$). Significant differences between the younger and older age groups were found for hypochondriasis ($p < 0.01$), depression ($p < 0.01$), hysteria ($p < 0.01$), psychopathic deviate ($p < 0.01$), paranoia ($p < 0.01$), psychasthenia ($p < 0.01$) and schizophrenia ($p < 0.01$). Differences between the middle and older age groups were found for hypochondriasis ($p < 0.05$) and depression ($p < 0.01$).

5. Discussion

The personality profiles of patients with depression reflect both premorbid personality traits and pathocharacterological transformations caused by the prolonged course of depression. A depression score of more than 80 points corresponds to the severity of depression in the examined patients. The combination of high indicators on the scales of depression and asthenia reflects a high level of anxiety, sensitivity, self-doubt, frustration, difficulties in social adaptation and low self-esteem, which in patients with depression takes on the character of painful ideas of self-blame and self-deprecation. High rates of hypochondriasis are a correlate of somatic anxiety, and in depressed patients, they can also reflect the many unpleasant somatic sensations that accompany depression. Over time, such somatic fixations can acquire the properties of pathocharacterological personality traits. Patients with depression also showed high rates of hysteria, psychopathic deviate, paranoia, and schizophrenia. High rates of hysteria in patients with depression can be interpreted as withdrawal into illness, the desire to draw attention to their suffering, lack of vision of the future, loss of the ability to orderly activity, momentary reactions determined by the current situation. Increased rates of psychopathic deviate can be an indicator of social maladjustment, emotional instability, feelings of guilt, and often accompany the development of depression. The manifestations of paranoia in patients with depressive disorders reflect the rigidity of affect, fixation on negative emotions, the stability of low mood, and a feeling of insufficient support from others. High values on the scale of schizophrenia in depression reflect difficulties in interpersonal interaction, inability to understand the emotional state of others, ambivalence in relationships with the expectation of attention and support, and fear of coldness on their part. Low rates of hypomania naturally accompany the development of depression and correlate inversely with the severity of depressive phenomena. In general, individual patient profiles are highly variable and can be very different from one another.

The features of the age-related dynamics of personality changes in patients with depression reflect the progression of the depressive process and the formation of pathocharacterological personality changes associated with the long-term course of depression. The increase in persistent depressive manifestations with age is a natural reflection of the chronic nature of affective disorders; it is important to note that significant differences in the severity of stable depressive characteristics were found only in women, and these differences are most pronounced between the middle and older age groups. This corresponds to the tendency a more significant increase in the manifestations of depression at an older age, revealed in our studies towards (Belov, Pshuk, 2020). Psychasthenia is most pronounced in the middle age group, which is also consistent with our research data on the maximum values of personal anxiety in the middle age group with a further decrease in the older group (Belov, Pshuk, 2020). The reason for such features may be age-related changes, in particular, age-related mental rigidity and a decrease in

mental reactivity with age. The natural increase in the manifestations of hypochondriasis with age may be associated with an increase in the number and range of unpleasant somatic sensations, both due to natural aging and due to increased depression. Similarly, an increase in characterological manifestations of hysteria, psychopathic deviate, paranoia and schizophrenia may be a manifestation of age-related increased sensitivity, affective lability, and decreased social activity. Gender differences are manifested by higher rates of depression in men, and hypochondriasis and psychasthenia in women. These differences may be associated with different psychological models of depression in men and women. Similarly, differences in higher rates of psychopathic deviate in women, which reflect stronger emotionality, less control over emotions, spontaneity of affective response in women, as well as higher rates of paranoia and schizophrenia in men, reflecting rigidity of affect, restraint, greater control over emotions inherent in men. At the same time, the individual variability of the personality profiles of patients with depressive disorders indicates the complex nature of personality changes and the need for further research in this area.

6. Conclusions

Depressive disorders are accompanied by pronounced pathocharacterological changes.

The basis of the personal characteristics of patients with depression is persistent depressive manifestations in combination with anxiety and somatic fixations.

In men, depressive manifestations are stronger than in women, and are accompanied by greater rigidity and alienation, and in women, persistent depressive manifestations are combined with higher anxiety, asthenia, emotional instability and spontaneity of emotions.

The general trend is an increase in depressive, hypochondriac, psychopathic, schizoid personality characteristics with age, while psychasthenic manifestations are maximum in the middle age group (30-44 years), and decrease in the older age group.

Prospects for further research are associated with the study of the pathophysiological and pathopsychological mechanisms of depression, taking into account age and gender factors, as well as with the development of differentiated therapeutic and preventive measures for depressive disorders.

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THE MAIN PARAMETERS OF IRON METABOLISM IN PATIENTS WITH UROTELIAL BLADDER CANCER AT DIFFERENT DEVELOPMENT STAGES OF MALIGNANT NEOPLASM ANEMIA

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Summary

The article presents information about the protein responsible for the iron depot in the body – ferritin. Its physiological role and clinical significance are demonstrated. A batophenanthroline method was used to determine the range of iron in the blood serum and the range of the total iron-binding capacity of the blood serum. The range of unsaturated iron-binding capacity of blood serum was calculated as the difference between total iron-binding capacity in blood serum and the range of iron in blood serum. The transferrin saturation coefficient of iron was defined as the ratio of the content of iron in blood serum to the total iron-binding capacity in blood serum. The range of transferrin was determined by the rate of the total iron-binding capacity in blood serum, and ferritin using the radiometric method. The dynamics of changes in ferritin content in malignant neoplasm anemia in patients with bladder cancer has been demonstrated. The conclusion about the importance of this parameter for laboratory diagnosis of iron deficiency and anemia of malignant neoplasms is made.

Keywords: ferritin, physiological role, clinical significance, blood serum.

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1. Introduction

Bladder cancer is one of the ten most common diseases of the urinary system of non-plastic nature, and given its prevalence, it is second only to prostate cancer (Titov, 2018). Among the entire population of Ukraine, the incidence range of malignant neoplasms of the bladder in the years 2012-2018 ranged from 9,7 to 11,4 per 100 thousand population. And among the male population of Ukraine, this range was significantly higher and ranged from 17,1 to 19,8 per 100 thousand population (Linchevskii, 2019). Urotelial bladder cancer is the most common non-plastic form of this organ and in percentage terms reaches almost 90%. In three-quarters of cases, urotelial bladder cancer is detected in stages Ta and T1 (non-invasive stages), but as clinicians note, the results of treatment in non-invasive stages do not always give the expected outcome. There is a significant number of methods and algorithms for diagnosis and prognosis, but they require further improvement (Fedorenko, 2019, Linchevskii, 2019). Recommendations of the European Society of Oncologists (2018) for the management of patients with malignant neoplasm anemia have been developed.

The main function of ferritin is considered to be the binding and accumulation (deposition) of iron in a physiologically accessible, non-toxic form for the body (Wick, 1995). This

function of ferritin is well studied. It provides, if necessary, the mobilization of iron for the synthesis of hemoglobin, other heme-containing, and non-heme iron-containing compounds. The main iron-depositing function in the body is performed by the ferritin of the liver. Ferritin of the mucous membrane of the small intestine is responsible for the transfer of absorbed iron into enterocytes, and then to plasma transferrin. Ferritin of phagocytic macrophages system absorbs iron that is released after the destruction of erythrocytes and iron-containing compounds, for the processes of its reutilization. Ferritin of erythroid progenitor cells provides adequate iron supply for hematopoiesis. Ferritin of the spleen plays a depositing role and provides the transition of iron to plasma transferrin (Green, 2014). Ferritin is synthesized by cells of the liver, spleen, bone marrow, small intestine, pancreas, kidneys, lungs, thyroid gland, placenta as well as leukocytes. Synthesized in various organs, ferritin is used by them to function, however, in small quantities, it enters the blood plasma. In the state of physiological equilibrium, the level of ferritin in plasma correlates with iron stores in the body (Wick, 1995). It was found that in the blood serum of an adult 1 $\mu\text{g/l}$ ferritin is normally equivalent to about 8 mg of deposited iron. In healthy adults, the level of ferritin in the blood serum depends on gender and, to a lesser extent, on age (Popovych, 2020). Women of reproductive age have a blood serum ferritin level of 10-90 $\mu\text{g/l}$, and men – 30-200 $\mu\text{g/l}$. In the postmenopausal period, the level of ferritin for women is equal to that for men of the same age. The level of ferritin in the blood serum of children increases during the first three months after birth, and after 6 months and before puberty does not change, varying in the range of 8-84 $\mu\text{g/l}$ (Wick, 1995). There are circadian rhythms of changes in ferritin levels of blood serum.

Currently, the problem of malignant neoplasm anemia is being actively studied, and the very nosological form of this anemia is included in the International Classification of Diseases (ICD) under the code D63.0. In the available scientific literature, we have not found studies of generalizing and research nature, which from the standpoint of modern vision, would cover the relationship of glycolytic processes in peripheral blood erythrocytes, ferritin metabolism, and the emergence and development of malignant neoplasm anemia in patients with urothelial bladder cancer. So this prompted us to conduct relevant research.

The purpose of the research was to study peripheral blood parameters, plasma iron metabolism parameters in patients with malignant neoplasm anemia having urothelial bladder cancer, to trace the relationship of their changes with the ferritin rates in blood plasma, to evaluate the possible diagnostic and prognostic value of the detected changes.

2. Material and methods of research

The material for the study was the blood of 96 patients (64 men and 32 women) with bladder cancer, among them were 39 patients (28 men and 11 women) who did not have anemia during the underlying disease (first (I) observation group) and 57 patients (36 men and 21 women) who had malignant neoplasm anemia during the underlying disease (second (II) observation group). 45 patients (19 men and 26 women) were examined separately. They had iron deficiency anemia, the cause of which was chronic blood loss (third (III) observation group). The age of the study group ranged from 22 to 69 years. All patients were examined after verification of the diagnosis and before the administration of any treatment.

The severity of anemia was determined according to the criteria proposed by the National Cancer Institute (USA) and distinguished as: mild (Grade 1), Hb from 10-12 g/dL; moderate (Grade 2), Hb 8,0–10,0 g/dL; severe (Grade 3), Hb 6,5-8 g/dL to 6,5 g/dl; life-threatening (Grade 4), Hb <6,5 g/dL. 29 patients were diagnosed with mild severity of malignant neoplasm

anemia, 12 patients with moderate, 10 patients with severe, and 6 had a life-threatening severity. Respectively 19 patients with iron deficiency anemia had mild severity, 14 patients had moderate, 7 patients had severe and life-threatening severity had 5 patients.

All studies were carried out in compliance with the main provisions of the Council of Europe Convention on Human Rights and Biomedicine, World Medical Association Declaration of Helsinki on Ethical Principles for Medical Research with Human Participation (1964 with subsequent amendments, including version 2000), and Order of the Ministry of Health of Ukraine No. 690 dated 23.09.2009. Upon admission to the hospital, all patients were examined using clinical, laboratory, instrumental and special research methods, if necessary, they were consulted by specialists of related specialties. The examination and treatment of patients were performed following the World Medical Association Declaration of Helsinki (*Seoul, 2008*), and the relevant orders of the Ministry of Health of Ukraine (No. 281 from 01.11. 2000, No. 355 from 25.09.2002, No. 356 from 22.05.2009 in the revision of the Ministry of Health of Ukraine Order No. 574 of 5 August 2009, No. 1118 of 21 December 2012).

The control group consisted of 50 healthy primary donors who had no history of oncological or chronic inflammatory diseases. All donors were examined at the State Institution "Blood Transfusion Station of the Southwestern Railway" following the requirements of the "Procedure of medical examination of blood donors and (or) its components", approved by the Order of the Ministry of Health of Ukraine dated 01.08.2005 under No. 385 "On infectious safety of donor blood and its components".

The range of iron in blood serum and total iron-binding capacity in blood serum were determined by the batophenanthroline method. The range of the unsaturated iron-binding capacity of blood serum was calculated as the difference between the total iron-binding capacity in blood serum and the range of iron in blood serum. Iron transferrin saturation coefficient was defined as the ratio of the range of iron in blood serum to the total iron-binding capacity in blood serum. The range of transferrin was determined by the total iron-binding capacity of blood serum, the range of ferritin was determined by the radiometric method.

A careful histological examination of the drugs was performed for patients with urothelial bladder cancer. We took into account the nature of the margins of the tumor with the surrounding tissues, the severity of infiltration, the presence of tumor cells in the vessels, the number of mitoses, including atypical ones. Also, we determined in tumors cell elements of different degrees of maturity (in %) – low-differentiated, moderately differentiated, highly differentiated cells. According to generally accepted criteria, the degree of malignancy and histological type of tumor was assessed.

The research results were statistically processed according to the relevant programs (*Khalafian, 2014*). The reliability of the difference was assessed using the Student's difference coefficient ($p < 0,05$).

3. Results and its discussion

According to the analysis of the results of the peripheral blood study in patients, the hemoglobin concentration in patients of groups II and III was significantly lower than in the control group and group I ($p < 0,001$). The control group had this range on average ($142,72 \pm \pm 4,60$) g / l, while women had $131,06 \pm 3,77$ g / l, with individual fluctuations from 125 to 147 g / l. Men had a higher hemoglobin concentration than women ($p < 0,001$). At the same time, for patients of groups II and III, we did not find significant differences in hemoglobin concentration depending on gender ($p > 0,05$).

The number of erythrocytes in the control group was $(4,76 \pm 0,15) \times 10^{12} / l$ on average. At the same time, this range for men averaged $(4,86 \pm 0,15) \times 10^{12} / l$, and for women, it was $(4,38 \pm 0,13) \times 10^{12} / l$, with individual fluctuations for men – from 4,4 to $5,0 \times 10^{12} / l$, and for women – from 4,2 to $4,7 \times 10^{12} / l$. The number of erythrocytes in the control group with men was higher than the control group with women ($p < 0,001$). At the same time, for patients of groups II and III, we did not find significant differences in the number of erythrocytes depending on gender ($p > 0,05$).

The range of leukocytes in the control group with men, on average, was $(5,85 \pm 1,24) \times 10^9 / l$, with individual fluctuations from 3,9 to $7,3 \times 10^9 / l$, and in the control group with women – $(5,83 \pm 1,32) \times 10^9 / l$, with individual fluctuations from 3,8 to $8,3 \times 10^9 / l$. We did not find significant differences in this range in the examined groups of patients in comparison with the control group, as well as differences depending on gender ($p > 0,05$).

The number of platelets in the control group, on average, was $(203,40 \pm 13,94) \times 10^9 / \text{liter}$. This range for men averaged $(204,38 \pm 15,23) \times 10^9 / l$, and for women, it was $(201,67 \pm 11,51) \times 10^9 / l$, with individual fluctuations for men – from 180 to $230 \times 10^9 / l$, and for women – from 190 to $220 \times 10^9 / l$. A comparative analysis of these ranges showed that it was higher in patients of groups II and III compared with the control group ($p < 0,001$). This fact may confirm the idea of the presence of overt or covert bleeding in patients of groups II and III with a compensatory enhancement of hematopoiesis in the myelocyte sprout, in particular, thrombocytopoiesis.

The range of reticulocytes in the control group, on average, was $(0,88 \pm 0,05) \%$, in men – $(0,87 \pm 0,05)$, and for women – $(0,88 \pm 0,04) \%$. We found that in patients of group II this range was significantly lower than in the control group, groups I and III ($p < 0,001$). This, in our opinion, can be explained by the suppression of erythropoiesis in patients with malignant neoplasm anemia by exposure to humoral factors and intoxication syndrome.

The range of MCH in the control group was $(30,63 \pm 0,25) \text{ pg}$, with fluctuations from 27 to 33 pg. For women, this range averaged $(29,40 \pm 0,42) \text{ pg}$, with individual fluctuations from 27 to 31 pg, and for men, respectively was $(31,13 \pm 0,24) \text{ pg}$, with individual fluctuations from 28 to 33 p.m. There were no significant differences in the MCH range for this group depending on gender ($p > 0,05$). A comparative analysis of this range showed that it was lower for patients of groups II and III compared with the control group ($p < 0,001$). This fact indicates that patients of groups II and III have disorders of hemoglobin synthesis and iron deficiency. It can be assumed that in group III it occurs due to chronic blood loss, and in group II, apparently, due to increased levels of pro-inflammatory interleukins and hepcidin.

The MCV range in the control group was $(93,41 \pm 0,91) \text{ fl}$, with fluctuations from 84 to 97 fl. For women, this range averaged $(94,22 \pm 1,69) \text{ fl}$ with individual fluctuations from 89 to 97 fl, and for men it was $(92,29 \pm 1,01) \text{ fl}$, with individual fluctuations from 84 up to 96 fl. We did not find significant differences in the MCV range in group I compared with the control group ($p > 0,05$), at the same time, we found a decrease in the range in groups II and III ($p < 0,001$).

The range of MCHC in the control group was $(34,38 \pm 0,23) \%$, with fluctuations from 33 to 35%. For women, the range of MCHC, on average, was $(34,35 \pm 0,31) \%$ with individual fluctuations from 33 to 35%, and for men, on average it was $(34,41 \pm 0,41) \%$, with individual fluctuations indicator from 33 to 35%. We did not find significant differences in the rate of MCHC among patients of group I compared with the control group ($p > 0,05$). We found a decrease in the range of MCHC among patients of groups II and III ($p < 0,001$), which reflects the presence of disorders of iron metabolism and erythropoiesis, and hemoglobin synthesis.

The main ranges of iron metabolism among the study groups are shown in table 1.

Table 1

The main ranges of iron metabolism in the study groups ($M \pm m$)

Range, unit	Study groups, number (n)				Reliability of difference (p)
	Control group (n = 50)	Group I (n=39)	Group II (n=57)	Group III (n=45)	
Iron in blood serum, $\mu\text{mol} / \text{l}$	20,04 \pm 2,03	20,75 \pm 1,94	15,77 \pm 1,53	8,47 \pm 0,69	$p_1 > 0,05$ $p_2 < 0,001$ $p_3 < 0,001$ $p_4 < 0,001$ $p_5 < 0,001$
Iron-binding capacity in blood serum, $\mu\text{mol} / \text{l}$	57,25 \pm 2,49	56,52 \pm 2,37	68,55 \pm 2,20	88,75 \pm 2,01	$p_1 > 0,05$ $p_2 < 0,001$ $p_3 < 0,001$ $p_4 < 0,001$ $p_5 < 0,001$
Unsaturated iron-binding capacity of blood serum, $\mu\text{mol} / \text{l}$	37,21 \pm 4,31	36,77 \pm 4,07	39,78 \pm 3,53	80,28 \pm 1,19	$p_1 > 0,05$ $p_2 < 0,001$ $p_3 < 0,001$ $p_4 < 0,001$ $p_5 < 0,001$
Saturation of transferrin with iron, %	35,18 \pm 4,90	36,88 \pm 4,74	32,17 \pm 3,63	9,54 \pm 0,43	$p_1 > 0,05$ $p_2 < 0,001$ $p_3 < 0,001$ $p_4 < 0,001$ $p_5 < 0,001$
Blood serum transferrin, g / l	3,23 \pm 0,10	2,90 \pm 0,09	2,78 \pm 0,09	4,02 \pm 0,23	$p_1 < 0,05$ $p_2 < 0,001$ $p_3 < 0,001$ $p_4 < 0,001$ $p_5 < 0,001$
Blood serum ferritin, $\mu\text{g} / \text{l}$	43,92 \pm 7,75	86,91 \pm 9,14	134,19 \pm 11,11	8,03 \pm 1,98	$p_1 < 0,05$ $p_2 < 0,001$ $p_3 < 0,001$ $p_4 < 0,001$ $p_5 < 0,001$

Note: p_1 – the reliability of difference between the ranges of the control group and group I;
 p_2 – the reliability of difference between the ranges of the control group and group II;
 p_3 – the reliability of difference between the ranges of the control group and group III;
 p_4 – the reliability of difference between the ranges of the group I and group II;
 p_5 – the reliability of difference between the ranges of the group II and group III.

From the data in table 1, it is seen that the content of iron in blood serum in the control group, on average, was (20,04 \pm 2,03) $\mu\text{mol} / \text{l}$. This range for men, on average, was (20,75 \pm 1,94) $\mu\text{mol} / \text{l}$, with individual fluctuations from 17,30 to 24.60 $\mu\text{mol} / \text{l}$, and for women – (18,77 \pm 1,53) $\mu\text{mol} / \text{l}$, with individual fluctuations from 16,40 to 21,30 $\mu\text{mol} / \text{l}$. The content of iron in blood serum for men of the control group was higher than for women

($p < 0,01$). The results of our study show that patients in groups II and III had a significant decrease in the content of iron in blood serum ($p < 0,001$).

The range of iron-binding capacity in blood serum in the control group, on average, was $(57,25 \pm 2,49) \mu\text{mol} / \text{l}$. For men, on average, it was $(56,52 \pm 2,37) \mu\text{mol} / \text{l}$, and for women – $(58,55 \pm 2,20) \mu\text{mol} / \text{l}$, with individual fluctuations for men – from 52,05 to 61,03 $\mu\text{mol} / \text{l}$, and for women – from 54,87 to 62,05 $\mu\text{mol} / \text{l}$. The range of iron-binding capacity in blood serum for women of the control group was higher than for men ($p < 0,01$). We found that patients of groups II and III had a significantly lower range of iron-binding capacity in blood serum, which reflects the presence of iron metabolism disorders ($p < 0,001$).

The range of unsaturated iron-binding capacity of blood serum for men of the control group, on average, was $35,77 \pm 4,07 \mu\text{mol} / \text{l}$, with individual fluctuations from 28,05 to 43,37 $\mu\text{mol} / \text{l}$, and for women – $39,78 \pm 3,53 \mu\text{mol} / \text{l}$, with individual fluctuations from 34,18 to 45,65 $\mu\text{mol} / \text{l}$. In general, in the control group, the rate of unsaturated iron-binding capacity was $37,21 \pm 4,31 \mu\text{mol} / \text{l}$, for women it was higher than for men ($p < 0,01$). As the analysis of our results showed, patients of groups II and III, had a significantly higher range of unsaturated iron-binding capacity of blood serum, which reflects the presence of iron metabolism disorders ($p < 0,001$).

The range of saturation of transferrin with iron in the control group, on average, was $(35,18 \pm 4,90) \%$. For men, on average, it was $(36,88 \pm 4,74) \%$, and for women – $(32,17 \pm 3,63) \%$, with individual fluctuations for men – from 28,60 to 46,10 %, and for women – from 26,40 to 38,30 %. Men from the control group had a higher range of saturation of transferrin with iron than women ($p < 0,01$). We found that patients of groups II and III, had a significantly lower range of saturation of transferrin with iron, which confirms the presence of iron metabolism disorders ($p < 0,001$).

The range of blood serum transferrin in the control group, on average, was $(3,23 \pm 0,10) \text{g} / \text{l}$. For men, this figure averaged $(3,20 \pm 0,09) \text{g} / \text{l}$, and for women – $(3,28 \pm 0,09) \text{g} / \text{l}$, with individual fluctuations for men – from 2,23 to 3,38 g / l , and for women – from 2,24 to 3,42 g / l . Women from the control group had a higher range of blood serum transferrin than men had ($p < 0,01$). As the analysis of our results showed, changes in the range of blood serum transferrin for patients of groups II and III compared with the control group had a multidirectional nature: for patients of group II it was significantly lower, and for patients of group III it was significantly higher ($p < 0,001$). This nature of the changes indicates a violation of the synthesis and metabolism of blood serum transferrin in conditions of tumor intoxication.

The blood serum ferritin in the control group for men, on average, was $(24,91 \pm 2,14) \mu\text{g} / \text{l}$, with individual fluctuations from 20,64 to 30,12 $\mu\text{g} / \text{l}$, and for women – $(19,19 \pm 1,41) \mu\text{g} / \text{l}$, with individual fluctuations from 17,15 to 21,82 $\mu\text{g} / \text{l}$. In General, the range of blood serum ferritin in the control group was $(22,85 \pm 3,36) \mu\text{g} / \text{l}$. The blood serum ferritin for men in this group was higher than for women ($p < 0,001$). We found that changes in the range of blood serum ferritin for patients of groups II and III compared with the control group, also had a different nature: for patients of group II it was significantly higher and for patients of group III significantly lower ($p < 0,001$). This nature of the changes is that since blood serum ferritin is an acute-phase protein and in conditions of tumor intoxication, its level increases.

It is quite natural that analyzing the obtained data, we considered it necessary to investigate how the ferritin level changes, depending on the severity of the anemic syndrome in patients with urotelial bladder cancer having malignant neoplasm anemia. The data is presented in table 2.

Table 2

The range of blood serum ferritin in patients with urothelial bladder cancer (UBC) with concomitant malignant neoplasm anemia (MNA) depending on the severity of anemia ($M \pm m$), $\mu\text{g} / \text{l}$

Groups of patients, (n)		Reliability of difference, (p)
Control group (n=50)	Patients with UBC having MNA (n=57)	
(43,92 \pm 7,75)	mild anemia (n = 29), (88,98 \pm 11,15)	$p_1 < 0,05$ $p_2 > 0,05$ $p_4 > 0,05$ $p_5 < 0,05$ $p_6 < 0,001$
	moderate anemia (n = 12), (122,89 \pm 15,87)	$p_1 < 0,05$ $p_2 < 0,05$ $p_3 > 0,05$ $p_5 < 0,05$ $p_6 < 0,01$
	severe anemia (n = 10), (134,19 \pm 14,19)	$p_1 < 0,05$ $p_2 < 0,05$ $p_3 < 0,05$ $p_4 < 0,05$ $p_6 < 0,01$
	life-threatening anemia (n = 6), (143,28 \pm 7,11)	$p_1 < 0,01$ $p_2 < 0,01$ $p_3 < 0,05$ $p_4 < 0,01$ $p_5 < 0,01$

Note: p_1 – the reliability of difference compared with the control group; p_2 – the reliability of difference reliability of differences with patients of group II; p_3 – the reliability of difference with patients who had a mild course of anemia; p_4 – the reliability of difference with patients who had an average course of anemia; p_5 – the reliability of difference with patients who had a severe course of anemia; p_6 – the reliability of difference with patients who had a course of life-threatening anemia.

As can be seen from the data in Table 2, the range of ferritin in the blood serum increases in proportion to the severity of anemia in patients with urothelial bladder cancer with concomitant anemia of malignant neoplasm. It means that the degree of life-threatening anemia in patients with urothelial bladder cancer with concomitant malignant neoplasm anemia is accompanied by a significant increase in the range of ferritin in the blood serum, which is obviously a reflection of the peculiarities of its metabolism in the tumor process.

In clinical practice, the range of ferritin is widely used to assess iron deposition. It is well known that a decrease of ferritin in blood serum is an early sign of latent iron deficiency. In combination with changes in other parameters of iron, it may indicate the presence of iron deficiency anemia. A sharp increase of ferritin in blood serum may indicate hemochromatosis or posttransfusion hemosiderosis. The normal level of ferritin in blood serum in the presence of sideropenic and anemic syndromes may indicate a violation of the processes of iron utilization in erythroid progenitor cells [1; 3].

Recently, other physiological functions of ferritin that are not directly related to iron metabolism have been identified. Ferritin can have a cytotoxic effect on some cells, primarily myeloid progenitor of granulocytes, monocytes. It was found that the processes of myelosuppression are correlated with the activation of the synthesis of H-subunits at the genome level. H-ferritin can block the proliferation of both myeloid and lymphoid cells. It is thought that this process may be protective to prevent malignant growth. The mechanism of ferritin suppression of cell proliferation is associated with its ferroxidase properties. The process of oxidation of iron from Fe^{2+} to Fe^{3+} is accompanied by the transfer of electrons to molecular oxygen, by the formation of various oxygen radicals, which are cytotoxic agents. The inhibition of proliferation occurs at the level of the S-phase of the cell cycle. Interestingly, ferritin suppresses normal myeloid progenitor cells and does not suppress progenitor cells in leukemia patients. L-subunits of ferritin do not have ferroxidase and myelosuppressive properties. They are attributed to the functions of stabilizers of the ferritin structure (Wick, 1995, Popovych, 2020).

The level of ferritin increases significantly in acute inflammatory processes, it is considered as an acute-phase protein with expressive cytotoxic and cytotropic properties. The level of ferritin in the blood serum increases in the presence of different types of tumors in the body: ovarian cancer, prostate, pancreas, lung, rectum, hepatocellular carcinoma, etc (Green, 2014, Titov, 2018). The concentration of ferritin increases in various liver diseases (hepatitis, cirrhosis, etc.), which are accompanied by the destruction of hepatocytes. In this case, ferritin is directly released from the liver cells, which is its depot. Therefore, an increase of ferritin in blood serum may be both a tumor marker and a sign of liver disease.

4. Conclusions

1. The range of ferritin in the blood serum is an important laboratory diagnostic criterion in modern clinical practice, which reflects the state of the deposited iron in the body. Ferritin is an acute-phase protein, its definition has both diagnostic and differential diagnostic value in the study of disorders of iron metabolism, in particular, in anemia of malignant neoplasms in patients with urothelial bladder cancer, and iron deficiency anemia, since changes in the range of blood serum ferritin in these diseases are multidirectional.

2. New data on the functions of ferritin and its participation in metabolism indicate that the determination of its range in various diseases is a promising area of laboratory research in oncology and hematology practice.

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MORPHOMETRIC CHARACTERISTICS OF THE LONGITUDINAL PARAMETERS OF THE MIDDLE CRANIAL FOSSA OF ADULTS DEPENDING ON EXTREME TYPE OF SKULLS STRUCTURE

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Summary

Surgical accesses through the middle cranial fossa (MCF) and their variations require the surgeons a detailed understanding of a complex anatomy of this site of the inner base of the skull (IBS) and an individual anatomical variability of the anatomical landmarks often used in their medical practice. The aim of this study is to establish individual anatomical variability of the longitudinal dimensions of MCF of mature age human. The research was carried out by studying 50 craniotomograms and 50 bone preparations of mature age human skulls with their further subdivision to extreme types of skulls groups. The examinations of the main longitudinal parameters were done for detailed MCF craniometry, namely: MCF lateral cranial length, MCF general length, MCF medial areas length. It was determined that all longitudinal dimensions increase from brachicephales to dolichocephales. This is due to the fact that for brachicrans (round-headedness) short form of the skull is inherent, for dolichocrans (narrow-headedness) – long and for mesocrans (moderate-headedness) average head size is inherent. According to the received data, MCF longitudinal parameters of mature age human regardless of the extreme types of the skull structure have the tendency to increase from medial sections of the investigated area to lateral. The results of this study substantially complete the existing information about the individual anatomical variability of MCF of mature age human and also make it possible to deeply use this data in practical medicine and for further research in morphology and in craniology in details.

Keywords: individual anatomical variability, adulthood, morphometry, middle cranial fossa.

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Interrelation between publications and planned research works. This work is carried out in accordance with the thematic plan of scientific research of Kharkiv National Medical University, within the topics of the Department of Anatomy “Individual anatomical variability of craniotopographic features and spatial relationships of human head areas in postembryonic period of ontogenesis”, number of state registration is 0118U000954.

1. Introduction

For many years, the study of skull structure features especially from the point of view of individual anatomical variability, remained relevant. (Bekov, 1998; Vovk, 2012; O.Yu. Vovk et al., 2016; Yu.N. Vovk et al., 2016). Surgical accesses through the middle cranial fossa (MCF) and their variations require the surgeons a detailed understanding of a complex anatomy of this site of the inner base of the skull (IBS) and an individual anatomical variability of the anatomical landmarks often used in their medical practice. (Altuna et al., 2017; Kizilkanat et al., 2017;

Maina et al., 2007). Thus, more detailing of the structure, forms and size of MCF, depending on the extreme types of skulls will contribute to the development of low-invasive neurosurgery, otolaryngology, etc. (Eddelman et al., 2019; Mahanbaev et al., 2013; Trosh et al., 2002; Yu.N. Vovk et al., 2016).

The aim of this study is to establish individual anatomical variability of the longitudinal dimensions of MCF of mature age human.

2. Materials and methods of the study

The research was carried out by studying 50 craniotomograms and 50 bone preparations of mature age human skulls with their further subdivision to extreme types of skulls groups.

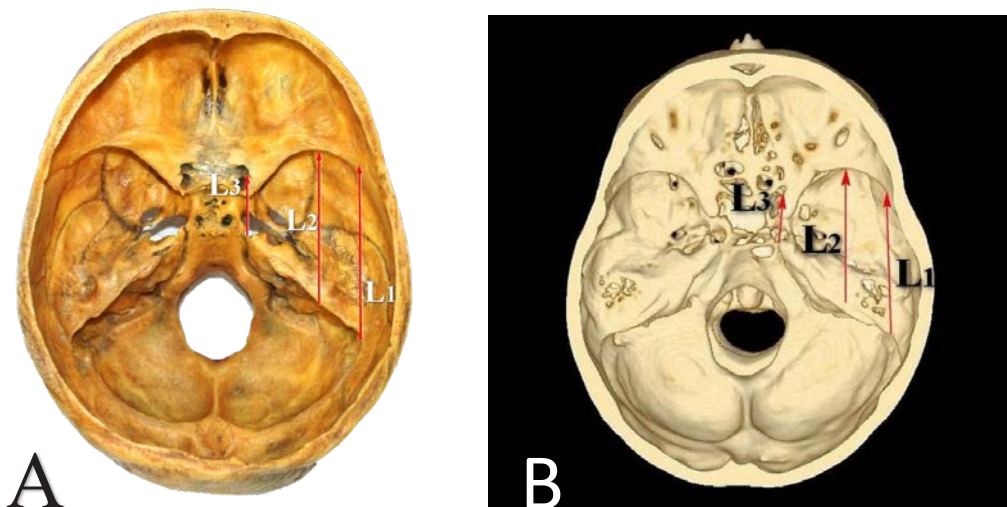
Craniometric study of MCF on CT images of mature age humans was carried out using Anatomage Table anatomy visualization system with Launching Table 6.0 Application setting. Measurement of linear parameters of MCF on bone preparations of the human skull was carried out according to standard craniological technique using a generally accepted set of measuring instruments.

The examinations of the main longitudinal parameters were done for detailed MCF craniometry (fig. 1), namely:

L₁ – MCF lateral cranial length, measured from the most protruding point of small wings of the wedge-shaped bone to the opposite point of the upper edge of the stony part of the temporal bone;

L₂ – MCF general length, determined from the arc increase of the anterior surface of the stony part of temporal bone to the opposite point of small wings of the wedge-shaped bone;

L₃ – MCF medial areas length, calculated from the lateral edge of the opening of the visual channel to the top of the stony part of the temporal bone.



**Fig. 1. Determination of MCF of mature age people distances in length:
A – on bones preparations; B – of CT images**

In order to distribute the investigated material into groups taking into account the craniotype, a cranial (transverse-longitudinal) index was installed by the formula:

$$Ind_{skull} = \frac{\text{the width of the skull}(eu - eu)}{\text{the length of the skull}(gl - op)} \times 100$$

In the indicators of this index, less than 74.9 the preparations were attributed to dolichocrans (dolichocephales); 75,0–79,9 – mesocrans (mesocephales); 80.0 and more – to brachicrans (brachicephales).

The statistical processing of the received data was carried out using the “SPSS 7.0” applications packets and Excel application from the MS Office XP package with the average arithmetic calculation (\bar{x}), mean square deviation (σ) and the average error (m) and the Mana-Whitney criterion ($p \leq 0,05$).

3. The results of the study and their discussion

During the study, the length of the lateral sections of both halves, which is used in determining the transverse-long index of this site of the skull were found (table 1).

Table 1

Variation-statistical indicators of craniometric dimensions of the length of lateral sections of MCF of mature age human (in mm)

Studied signs		min	max	\bar{x}	σ	m
Shape of the skull						
Brachicrans	Left	59,0	79,0	68,08	5,258	0,696
	Right	60,5	79,0	68,48	5,021	0,665
Mesocrans	Left	60,5	80,0	70,84	5,526	0,993
	Right	59,7	81,0	70,75	5,606	1,007
Dolichocrans	Left	66,0	83,0	74,36	5,160	1,490
	right	65,0	82,0	73,58	4,825	1,393

According to our data, in people of mature age with a brachiocephalic form of the skull structure the length of MCF lateral sections on the left does not exceed $\bar{x} \pm \sigma = 68,08 \pm 5,258$ mm and $\bar{x} \pm \sigma = 68,48 \pm 5,021$ mm on the right. In mesocrans the mentioned size is slightly increasing reaching $\bar{x} \pm \sigma = 70,84 \pm 5,526$ mm and $\bar{x} \pm \sigma = 70,75 \pm 5,606$ mm of the left and right areas of MCF consequently. The parameter L_1 reaches maximal meanings in people with dolichocephalic structure and comprises $\bar{x} \pm \sigma = 74,36 \pm 5,160$ mm on the left and $\bar{x} \pm \sigma = 73,58 \pm 4,825$ mm on the right.

Similarly, the range of individual anatomical variability of the total length of MCF of mature age human is established (table 2).

Thus, from the left half of MCF total longitudinal parameter accounting the craniotype in brachicephales equals $\bar{x} \pm \sigma = 53,14 \pm 5,241$ mm, in mesocephales it has the meaning $\bar{x} \pm \sigma = 56,17 \pm 4,241$ mm in dolichocrans it comprises $\bar{x} \pm \sigma = 56,86 \pm 4,072$ mm.

From MCF right side for a given size L_2 minimal meanings are typical $\bar{x} \pm \sigma = 53,88 \pm 4,944$ mm in mature age people with brachicranial type of the skull and maximal meanings $\bar{x} \pm \sigma = 56,94 \pm 3,763$ mm in male and female of the same age period with dolichocranic type of the skull. In mesocephales total length of MCF has average meanings and comprises $\bar{x} \pm \sigma = 55,87 \pm 4,218$ mm.

Table 2

Variation-statistic indices of craniometrics sizes of MCF general length of mature age human (in mm)

Studied signs		min	max	\bar{x}	σ	m
Shape of the skull						
Brachicrans	Left	42,9	65,0	53,14*	5,241	0,694
	Right	42,6	65,0	53,88	4,944	0,655
Mesocrans	Left	46,8	64,0	56,17	4,241	0,762
	Right	47,3	65,0	55,87**	4,218	0,757
Dolichocrans	Left	48,4	64,0	56,86**	4,072	1,176
	Right	49,2	63,9	56,94**	3,763	1,086

The morphometric study of the medial length from MCF both sections of mature age people was carried out (table 3).

It was determined that the smallest MCF longitudinal size has a certain range of individual variability, namely: in brachicrania it is $x \pm \sigma = 21,99 \pm 2,305$ mm on the left and $x \pm \sigma = 22,12 \pm 2,462$ mm on the right; in mesocrania – $x \pm \sigma = 23,70 \pm 2,362$ mm and $x \pm \sigma = 23,64 \pm 2,717$ mm consequently; in dolichocrania the mentioned parameter from MCF left part is $x \pm \sigma = 24,48 \pm 2,591$ mm and from the right part – $x \pm \sigma = 25,34 \pm 3,033$ mm.

Table 3

Variation-statistic indices of craniometric sizes of MCF medial length of mature age human (in mm)

Studied sign		min	max	\bar{x}	σ	m
Shape of the skull						
Brachicrans	Left	18,0	26,0	21,99	2,305	0,320
	Right.	17,7	27,0	22,12	2,462	0,345
Mesocrans	Left	18,5	28,0	23,70	2,362	0,431
	Right	18,9	29,0	23,64	2,717	0,488
Dolichocrans	Left	21,0	30,0	24,48	2,591	0,748
	Right	22,4	33,0	25,34	3,033	0,876

Thus it was determined that all longitudinal dimensions increase from brachicephales to dolichocephales (fig. 2, fig. 3). This is due to the fact that for brachicrans (round-headedness) short form of the skull is inherent, for dolichocrans (narrow-headedness) – long and for mesocrans (moderate-headedness) average head size is inherent (Vovk *et al.*, 2019).

According to the received data, MCF longitudinal parameters of mature age human regardless of the extreme types of the skull structure have the tendency to increase from medial sections of the investigated area to lateral (fig. 3).

In the course of the study of MCF linear parameters of mature age human it has been found that longitudinal parameters at different levels of the investigated area have a certain range of individual variability with the smallest values in brachicrans and the largest – in dolichocrans. In humans with mesocranic type of the skull average values of MCF length are determined. Morphometric study also showed the predominance of longitudinal sizes in lateral sections of the studied MCF area with average values of total length and minimal in the medial sections of MCF.

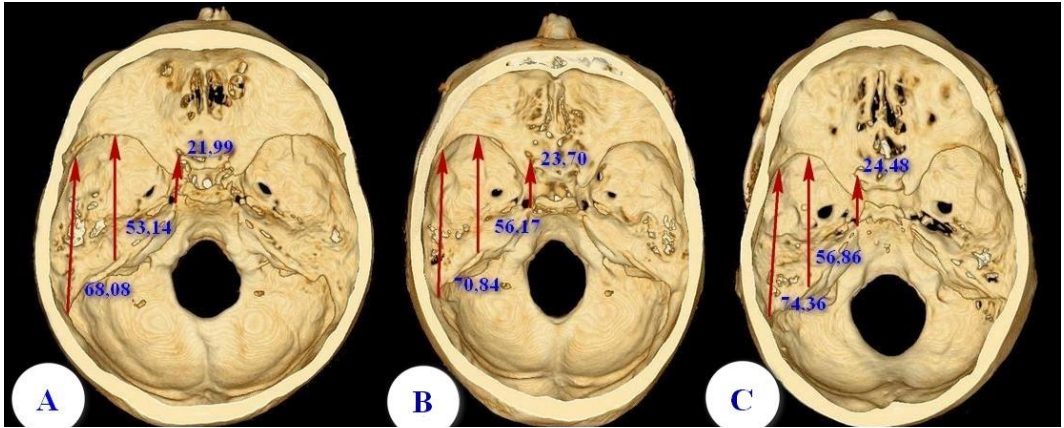


Fig. 2. MCF longitudinal sizes of average meanings on CT images of mature age human depending on extreme types of the skull: A – brachicrains; B – mesocrains; C – dolichocrains.

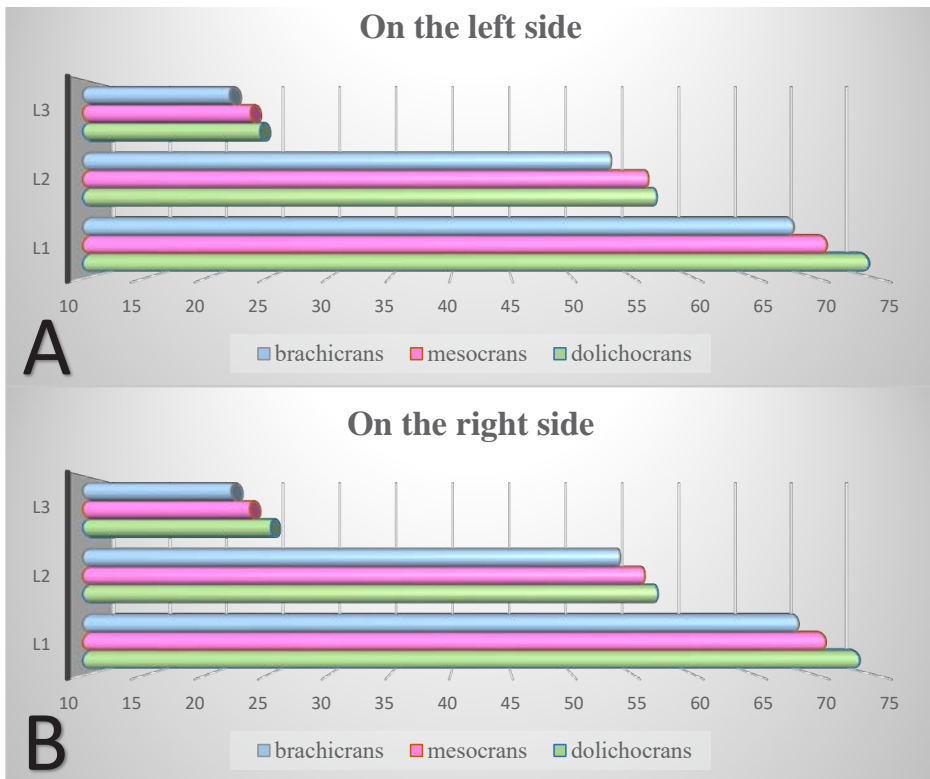


Fig. 3. Range of MCF longitudinal sizes individual variability of mature age human: A – from MCF left section; B – from MCF right section.

4. Conclusions

Prospects for further research. Thus, the results of this study substantially complete the existing information about the individual anatomical variability of MCF of mature age human and also make it possible to deeply use this data in practical medicine and for further research in morphology and in craniology in details.

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CHANGES IN MENTAL HEALTH AFTER COVID-19 TRANSFER AND HEALTH CARE RESOURCES

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Summary

The article analyzes the incidence of COVID-19 and complications after the disease, especially in terms of the mental health of the world's population. The purpose of the study was to analyze changes in the mental health of the population of Ukraine after the transfer of COVID-19 and determine the resources of health professionals in the field of health, summarize the most common complaints that arose during the disease, identify compliance with quarantine measures and duration of treatment as in the hospital and at home, in the systematization of complications after the disorder, the duration of antidepressants and the assessment of respondents' attitudes towards vaccination against COVID-19. A sociological survey has been conducting of 611 respondents mostly students, and teachers of Vinnytsia National University Pirogov. According to the results of the questionnaire, complaints from the nervous system: fatigue – 85.6%, sleep disorders during the disease were noted – 41.4%, irritability – 38.6%, anxiety disorders – 26.0%, memory impairment – 23.2%, depression – 17.9%, fear – 13.3%, confusion – 11.9%, panic attacks – 10.2%, convulsions – 4.9% and suicidal thoughts in 2.1% (66.6% of men) respondents. In Ukraine, it is necessary to create new conditions for alternative treatment of the mentally ill and the population that has negative consequences in mental health after the transfer of COVID-19 based on primary health care, namely: in psychiatric wards of general hospitals, day hospitals, in crisis centers, mental health centers. It is necessary to create a single electronic medical system for recording appeals from the public (personal data) to improve the health care system, as is done in European countries.

Keywords: pandemic, mental disorders, quarantine, isolation, depression.

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1. Introduction

Prolonged quarantine due to the COVID-19 pandemic has affected the mental health of people in 188 countries. A speech by WHO Director-General Tedros Adhan Gebreesus noted the importance of the COVID-19 pandemic's impact on the mental health of millions of people on the planet who have fallen ill and have been quarantined or isolated for a long time. According to scientists from many countries, there have been changes not only in the respiratory system – a characteristic respiratory syndrome but also in changes in mental health. Thus, according to Nasir Mustafa, Carod-Artal F.J., Garg R.K. – 52.7% of respondents rated the impact of the pandemic as «severe»; the presence of symptoms of depression has been finding in 18.6% of respondents; anxiety symptoms in 26.5%; high levels of stress as a result of COVID-19 disease,

concerns about their health and loved ones, financial losses due to quarantine restrictions in 7.9% of respondents (*Carod-Artal F.J., 2020; Gard R.K., 2020; Mustafa N., 2020*).

Mental health disorders in the world are the chief causes of disability and significant burdens for any state in financial, economic, and social policy. The WHO is constantly working to prevent depression, anxiety, stress, and suicide due to epidemiological data that 5 to 7% of the world's population suffers from the mental illness of the COVID-19 pandemic. The WHO predicted that by 2020, mental illness worldwide would increase to 50% of all diseases but did not expect chief consequences from the COVID-19 pandemic. At the same time, according to the WHO, before the start of the COVID-19 pandemic in Ukraine, 628 new cases of mental illness were registered each year (per 100,000 population), and no less pre-dominant environmental/anti-terrorist operation in the east of the country (*Gladun Z.S., 2005; Korol'chuk O.L., 2016*).

The shortage of health workers in the EU has always been an acute problem, especially in the field of mental health (psychiatrists, neurologists, psychologists) as in Ukraine. Thus, according to Satiani A. (2018), in the United States by 2024, the deficit of the number of psychiatrists to the population will be between 14,280 and 31,091, according to Hadlaczky G. (2012), the number of practicing psychiatrists in Sweden has decreased, and therefore 5-10% of the population needs psychiatric treatment, and only 3-4% seek psychiatric help, and about 10 million Swedes commit suicide each year (*Hadiaczky G. et al., 2012; Satiani A. et al., 2018; Sun J., Sun R. et al., 2020*).

The aim – to analyze the changes in the mental health of the population of Ukraine after the transfer of COVID-19 and determine the resource of health professionals in the field of health, summarize the most common complaints that arose during the disease, identify compliance with quarantine measures and duration of treatment in hospital and at home, to systematize the occurrence of post-disease complications, the duration of antidepressant use, and to assess respondents' attitudes toward COVID-19 vaccination.

Materials and methods

611 respondents mostly students and teachers of National Pirogov Memorial Medical University, took part in the optional anonymous sociological survey, aged 17 to 23 years – 68.6%, from 23 to 30 years – 19.0%, from 30 to 45 years – 6.2% and over 45 years – 6.2%. Of all respondents, women accounted for 77.9% and 22.1% of males, respectively. Statistical processing of the survey results has been performing in the licensed standardized package «Statistica 6.1 for Windows» and Excel-2010. The analysis of domestic and foreign scientific sources, biblio-semantic and analytical research methods have been also using in the work.

2. Results and discussion of indicators of morbidity and prevalence of the disease

In recent years, the incidence and prevalence of diseases and disabilities in Ukraine have increased with a catastrophic decrease/reduction in the number of doctors of all specialties for the period 1995/2015 at 3.1%, and for 2010/2017 by 10.5% (10 thousand population) and nurses for the period 1995/2015 at 25.1%, and 2010/2017 by 16.6% (10 thousand population); the number of health care hospitals decreased during the period 1995/2015 at 53.8%, and for 2010/2017 – by 39.3% (thousand units) and the number of hospital beds decreased during the period 1995/2015 at 37.6%, and for 2010/2017 by 22.2% respectively (10 thousand population). And among psychiatrists and psychiatrists-narcologists per 10 thousand population for the period 1995/2015 at 15.4%, and for 2010/2017 by 21.4%, respectively, since the beginning of the JFO (OOS)/ATO in the East of the country since 2014, the number

of patients with mental disorders has increased, who needed the help of psychiatrists, narcologists, psychologists. The second fatalistic side of the health care reform is the lack of funding for the outdated material and technical base of psychiatric hospitals built in the XVIII-XIX centuries, which contradicts the solution requirements of the mental health system in European countries and does not allow to create of a «therapeutic environment» (*Chorna V.V. et al., 2020: 150; Chorna V.V. et al., 2020: 8*). According to the results of the survey, we found that out of 611 respondents – 47.5% became ill with COVID-19, of which 11.0% were male, and 36.4% were female.

According to Komisarenko S.V., there are three types of COVID-19 virus: A, B, C. It depends on the nucleotide sequence Sequencing is a method that determines the sequence of nucleotides (DNA and RNA), but unfortunately in Ukraine, this is not yet possible, as it depends on the funding of research institutes. We can assume that the population of Ukraine suffers from different strains of COVID-19 from the answers of respondents how many times they were sick, the data are as follows: 1 time fell ill – 91.5% 2 times – 7.5% and 1% of respondents fell ill three times. The following data have been establishing from the analysis of scientific works (see table № 1) (*Komisarenko S.V., 2020*).

Table 1

**The dynamics of the spread of the disease, fatalities
caused by various pathogens of the coronavirus**

Year of registered pandemic	The causative agent of the disease	The number of countries covered	The number of cases	The number of fatalities	% of fatalities
2002-2004	Virus SARS-CoV (civet)	37	8422	916	10,9%
2012-2018	MERS-Cov (camels)	26	2519	866	34,4%
3 2019 p.	SARS-CoV-2	188	The number is constantly increasing today to 119 million.	The number is constantly increasing today 2.64 million.	11-12%

72.5% of respondents had a mild severity, 23.7% had a moderate severity, and 3.8% had a severe severity. According to data (*Petri W. (2020)*), in 7 countries, 40% of respondents had mild symptoms of the disease. All data depend on the epidemiological situation during the observation (*Petri W., 2020*).

Complaints that respondents indicated in the anonymous questionnaire were as follows: from the respiratory system – cough has been finding in 52.3% (76% in women and 24% in men), nasal congestion in 48.8% (81% in women and 19% in men), difficulty breathing in 28.1% (67% in women and 13% in men) and fever in 54.7% (72.0% in women and 28.0% in men). The data are shown in Figure 1.

As a result of the analysis of respondents' complaints from the nervous system: fatigue was noted in 85.6%, sleep arrhythmia during the disease was noting in 41.4%, irritability in 38.6%, anxiety disorders in 26.0%, memory impairment 23.2%, depression 17.9%, fear 13.3%, confusion 11.9%, panic attacks 10.2%, seizures 4.9% and suicidal thoughts 2.1% (66.6% in men). Respondents' data have been presenting in Figure 2.

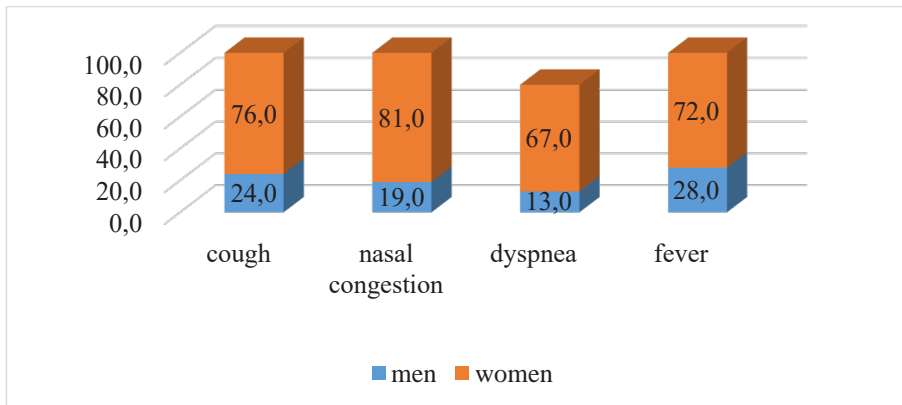


Figure 1. The proportion of complaints of patients with COVID-19, (%)

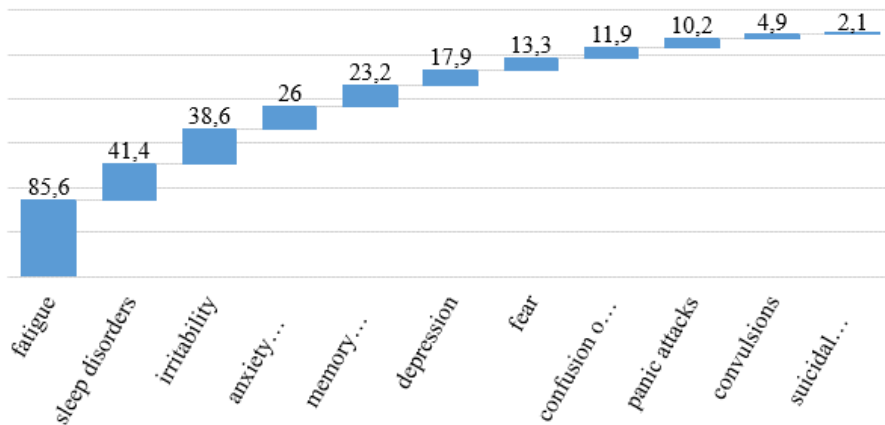


Figure 2. The proportion of mental health disorders after COVID-19 transfer, (%)

More frequent changes in mental health have been noting by women in both Ukraine and the EU. According to EU scientists, there were mental health disorders in the form of stress in 22.8%, maladaptation in 21.8%, anxiety disorders in 20.8%, depression in 17.3%, sleep disorders in 7, 3% of respondents. The World Federation of Neurology has proposed the introduction of international neurological registries and international neuro-epidemiological cooperation to help identify the problem of neurological disorders (*Roman G.C. et al., 2020*).

Symptoms such as loss of taste and smell in COVID-19 patients with 59.9% of respondents noted in themselves, namely: 47% – female and 15.2% – male, and this symptom is specific to COVID-19. Polymerase chain reaction (PCR) tests from all sick respondents showed a positive result in 20.2%, negative in 18.6%, and did not pass this test – 61.2% due to the high cost. According to research by Liuqian L. (2020), 14% of patients after hospital discharge from COVID-19 with negative PCR test results after recovery had a positive outcome after some time (*Liuqian L. et al., 2020*). Blood test for IgG-class antibodies from sick respondents has been doing by only 31.3%, they appear on the 24-28th day in each patient with COVID-19,

their number varies depending on many factors and can remain in the human body both from several months and years (*Hadiaczky G. et al., 2012*).

43.4% of respondents sought medical help from a family doctor, 28.7% treated themselves and 27.9% did not take any medication due to the mild course of the disease. Of the complications indicated by the respondents, these are mostly disorders of the nervous system – 63.9%, from the respiratory system – 33.9%, from the gastrointestinal tract – 26.7%. On the side of mental health disorders, patients have been forcing to turn to psychiatrists who prescribed antidepressants. The duration of antidepressants up to 14 days was noted – 47.7% (66.6% – women), up to 1 month – 25.0% (81.8% – women), up to 2 months – 6.8% (of which 100% – women), more than 2 months – 20.5% of respondents (77.7% of them – women). According to scientists for the month (from 15.02.2020 to 15.03.2020) prescriptions for antidepressants increased by 18.6% and sleeping pills by 14.8% in European countries (*Mosolov S.N., 2020*). According to the results of the questionnaires, the respondents needed medical care the most – 41.3%, psychological – 32.7%, information – 20.9%, and 32.7% – noted the need for help from relatives. And the last question for the respondents was about their attitude to the vaccination against COVID-19. Of all 611 respondents – 17.9% are ready to receive vaccinations, 30.5% – flatly refused, and 51.6% – have doubts about the quality of the vaccine.

Vaccination has been currently carrying out in many countries, but its effectiveness has also been studying (*Komisarenko S.V., 2020*).

3. Conclusions

Millions of people around the world have been severely damaging by the COVID-19 pandemic, which has become a global socio-economic problem. The consequences are catastrophic and require global action, especially in the field of healthcare in Ukraine and around the world.

Carrying out the reform in the field of mental health care in Ukraine according to the experience of EU countries: with reduced places in psychoneurological hospitals (deinstitutionalization) of Ukraine, it is necessary to create new conditions for alternative treatment of mentally ill people -19 based on primary health care, psychiatric wards in general hospitals, day hospitals, crisis centers, mental health centers and the creation of a single electronic register of appeals of the population of Ukraine to improve the provision of medical care.

Conflict of interest. The authors declare no conflict of interest.

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MATERNAL RISK FACTORS OF PERINATAL WOMEN COMPLICATIONS WITH THE URINARY SYSTEM DISEASES

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Summary

The aim of the study was to determine the maternal factors of perinatal complications in women with diseases of the urinary system. A group of women with pathology of the urinary system were studied during the course and completion of pregnancy. The complications in childbirth condition of newborns in comparison with similar indicators in healthy women were also assessed. It was found that most women with urinary tract pathology that were pregnant again, had complications of somatic (most often a combination of urinary tract pathology and chronic infectious diseases) and reproductive history (most often – miscarriages). Women with complications during pregnancy, pyelonephritis, anemia, and the threat of abortion were significantly more often registered in the main group ($p < 0.05$). Women in the main group were significantly more likely to have premature births: 15.4% of women with acute pyelonephritis and 46.2% of women with chronic pyelonephritis, while all women in the control group gave birth on time ($P < 0.05$). Significantly more women in the main group had complications in childbirth: most often – weakness of labor – I group 8 (6.2%), II – 9 (6.9%). Termination of pregnancy in the vast majority of women in the main group was physiological, cesarean delivery was completed in 3 (2.3%) women in group I and 10 (7.7%) women in group II. All women in the control group had timely, physiological births. The condition of newborns of mothers with pathology of the urinary system was often disturbed. A significant proportion of children from the main group (I – 5.4%, II – 10.0%) required immediate resuscitation measures at birth and their transfer to specialized departments for further treatment.

Keywords: kidney diseases, pregnancy, retrospective analysis.

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1. Introduction

In Ukraine, studies of genetic and demographic processes conducted in recent years have shown that the socially conditioned demographic crisis observed in the country is significantly exacerbated by perinatal complications. This is manifested in an increased incidence of lost pregnancies and the birth of unhealthy children in women with extragenital pathology (*Veropotvelian MP, 2016; Shestakova T. S., 2012; Mandal D., 2017*).

The relevance of the study of infectious diseases of the urinary system in obstetrics is due to the high prevalence of this pathology, as well as complications that occur during

pregnancy, childbirth and postpartum and pose a danger to mother and fetus (*Bounds KR, 2015; Hryhorenko AP, 2014; Samigullina AE, 2016; Sharhorodska Ye.B., 2018*). Nowadays, almost 60% of pregnant women have diseases of the internal organs. Abnormalities in the development of the child are observed in extragenital diseases of the mother 4 times more often than in the general population. The relationship between the severity of the clinical course of the disease in pregnant women and the degree of fetal and neonatal disorders was found (*Haistruk N.A., 2017; Limanskaya A.Yu., 2016; Olshevska O.V., 2016*).

The role of extragenital diseases (diseases of internal organs) in the occurrence of obstetric complications (late preeclampsia, prematurity, uterine contractile dysfunction, etc.) in the development of perinatal pathology (*Tillett J., 2015; Veropotvelian P.M., 2011; Wing D.A., 2014*) has been convincingly proven.

Diseases of the urinary system in pregnant women are second only to extragenital diseases. Their frequency is from 0.1 to 7–10% and poses a serious danger to the normal development of pregnancy and fetus (*Glaser A.P., 2015; Govoruha I.T., 2016; Talalaienko Yu.O., 2016*). First of all, it is pyelonephritis, urolithiasis, abnormalities in the development of the kidneys and ureters, chronic cystitis, asymptomatic bacteriuria, chronic glomerulonephritis (*Bahri A.El., 2015; Holubenko M.Yu., 2012*). Most often there is a combination of several diseases of the urinary system (*Kazemier B.M., 2015; Szweda H., 2016*).

Most complications of the gestational period manifest in the second half of pregnancy, but the causes of their occurrence, which are due to a complex of placental dysfunction, are most often laid in the pre-pregnancy, implantation and early placental periods (*Holubenko M.Yu., 2012*). Pregnant women with pyelonephritis develop the following obstetric and perinatal complications: early toxicosis (65.5%), placental dysfunction (73.3%), preeclampsia (78.3%), risk of miscarriage (76.1%) and premature birth (56.2%), low placentation (76.1%), polyhydramnios (76.7%), gestational anemia (67.8%), fetal growth retardation (17.1%), premature placental abruption (26.3%). During childbirth they develop premature ejaculation of amniotic fluid (22.4%), weakness of labor (72.3%), obstetric bleeding (47.1%). In the postpartum period they develop subinvolution of the uterus (26.3%) (*Godaly G., 2015; Haistruk N.A., 2017; Holubenko M.Yu., 2012; Romanenko T.H., 2016*). The level of perinatal mortality and miscarriage increases by 2–3 times (*Hryhorenko A.P., 2014*).

Scientific research and practical experience show that the issues of preserving reproductive health, reducing maternal and fetal losses, and especially the demographic situation go far beyond the medical field and have become a national interdisciplinary problem in Ukraine.

Improving the principles of pregnancy management and the use of optimal delivery help reduce infant mortality and morbidity. The analysis of the literature shows that not all reserves for the improvement of perinatal indicators are used. One such reserve is the improvement of measures to improve the preconceived health of the population of reproductive age. Screening of preconception perinatal risk and its active correction in women who have had negative consequences of previous pregnancies, allows to realize the positive results of the next pregnancy (*Melenchuk L.M., 2019; Safonova I.M., 2015*).

Therefore, the development of informative criteria for individual prediction of pregnancy and perinatal period is of great medical and social importance.

Thus, effective prevention of the pathological condition of the fetus in women with diseases of the urinary system requires a targeted study of maternal factors due to the influence of somatic pathology. Timely detection of women at risk will create a basis for the prognosis of the next pregnancy, reduce the level of perinatal pathology, which will have a significant medical and social effect. The obtained data will allow to improve the system of approaches

to determining the risk groups of perinatal pathology and improve specialized care for women with diseases of the urinary system. As a result of this work, informative factors of high risk of perinatal pathology in women at risk with pathology of the urinary system will be identified.

The purpose of the research is to identify maternal factors of perinatal complications in women with kidney disease. To solve this goal, the following tasks were set:

1. To form contingents of women with pathology of the urinary system among the population of Lviv region.
2. Investigate the complications of pregnancy and childbirth in women with kidney disease.
3. Assess the condition of newborns in women with kidney disease.

2. Selecting a group of women with pathology of the urinary system for this research

To achieve this goal, we conducted an analysis of clinical, epidemiological, medical and statistical data of primary medical records. Selected maps of pregnant women with a clinical diagnosis of "Diseases of the urinary system" according to the International Classification of Diseases-10 (N010 – N099). The obtained indicators were compared with similar parameters of the control group: healthy women who gave birth to alive children in the maternity ward of the Regional Clinical Hospital of Lviv in 2014-2017: 100 healthy pregnant women who gave birth to children in the same period of time formed a control group. To assess the maternal factors of perinatal complications in women with diseases of the urinary system, the course of pregnancy and childbirth, gestational age at birth, assessment of the condition of children at birth were studied.

For the purpose of this study two groups of researched women were created – the main 130 pregnant women and the control 100 women (without extragenital pathology). The main group was divided into two groups: I – pregnant women with acute pyelonephritis (GP), this group included pregnant women, who were diagnosed with acute pyelonephritis for the first time during their pregnancy. Group II included pregnant women with chronic pyelonephritis (CP) – women who had diseases of the urinary system before pregnancy.

The women in the control group had no reproductive and somatic history of diseases and were healthy.

It should be noted that in the Regional Clinical Hospital of Lviv pregnant women with extragenital pathology from all Lviv region are concentrated. Statistical processing of research results was performed using computer programs «Statistica 6.0» and Excel 5.0 «. Differences were considered significant at $P < 0.05$.

3. The course of pregnancy in women with diseases of the urinary system

Analysis of archival documentation – maps of pregnant women in the obstetrics department of the Regional Clinical Hospital of Lviv for a period of (for) 4 years showed that most women in groups I and II were pregnant again, and the control group was dominated by women with the first pregnancy number ($P < 0.05$), table 1.

According to the results of a detailed retrospective analysis, it was proved that somatic diseases were diagnosed in the majority of patients of the main group. In 10 (7.7%) women of the main group and in all 100 (100.0%) women of the control group complications of somatic anamnesis were not registered ($p < 0.05$). Significantly more often than the control group, women with kidney disease had a combination of pathology of the urinary system and chronic

infectious diseases (58-44.6%), diseases of the endocrine system (21-16.2%), a combination of cardiovascular diseases and chronic infectious diseases (17-13.1%), a combination of diseases of the cardiovascular and endocrine system (12-9.2%), diseases of the cardiovascular system (12-9.2%), a combination of pathology of the urinary system and endocrine pathology (5-3.8%) ($p < 0.05$).

Table 1

The ordinal number of pregnancy in women with pathology of the urinary system

Group		Number of women (%)	Indicators (%)			
			Pregnancy I	Pregnancy II	Pregnancy III	Pregnancy IU and more
Main 130(100%)	I	68(52.3)	37 (28.4)	19(14.6)	8(6.2)	4(3.1)
	II	62(47.7)	20(15.4)	29(22.3)	8(6.2)	5(3.8)
Control		100 (100.0)	52(52.0)	29(29.0)	14(14.0)	5(5.0)
Statistical indicators			$t_1=3.7$ $P_1<0.05$ $t_2=6.2$ $P_2<0.05$	$t_1=2.6$ $P_1<0.05$ $t_2=1.15$ $P_2>0.05$	$t_1=1.9$ $P_1>0.05$ $t_2=1.9$ $P_2>0.05$	$t_1=0.7$ $P_1>0.05$ $t_2=0.43$ $P_2>0.05$

Note: t_1 , P_1 – comparison of I group with control; t_2 , P_2 – comparison of II group with control

Analysis of the spectrum of reproductive losses showed that 32 (24.6%) women of I and 42 (32.3%) women of group II had various complications. Thus, frozen pregnancies: in group I – 9 (6.9%), in group II – 17 (13.1%); ectopic pregnancy – in group I – 7 (5.4%), in group II – 8 (6.2%); unauthorized miscarriages – in group I – 13 (10.0%), in group II – 10 (7.7%); medical abortions – in I – 3 (2.3%), in II – 7 (5.4).

In women with acute and chronic pyelonephritis in the spectrum of reproductive losses in the first place were miscarriages – 10.0% and 7.7%, respectively. In contrast to the women of the main group, in the control group – all patients – 100 (100.0%) had no features of reproductive history ($p < 0.05$).

In the sample of patients who were analyzed, a study of the peculiarities of the course of pregnancy of patients was conducted (Table 2).

Table 2

The course of pregnancy in women with pathology of the urinary system

Indicators	Main group, 130 (100.0%)		Control group, p. (%)	Statistical indicators
	I. p (%)	II. p(%)		
1	2	3	4	5
Without complications	-	-	90/90.0	$t_1=30.0$; $P<0.05$ $t_2=30.0$; $P<0.05$
Early gestosis	8(6.2)	2(1.50)	2(2.0)	$t_1=1.65$; $P>0.05$ $t_2=0.28$; $P>0.05$
Pre-eclamsia	4(3.1)	3(2.3)	-	$t_1=2.04$; $P<0.05$ $t_2=1.75$; $P>0.05$
Early gestosis + anemia	-	6(4.6)	1(1.0)	$t_1=1.0$; $P>0.05$ $t_2=1.72$; $P>0.05$
Preeclampsia + anemia	-	7(5.4)	-	$t_1=1.0$; $P>0.05$ $t_2=2.72$; $P<0.05$

Table 2 (Continued)

1	2	3	4	5
Early gestosis + preeclampsia	3(2.3)	1(0.8)	-	$t_1=1.75;P>0.05$ $t_2=1.03;P>0.05$
Early preeclampsia + threat of abortion	6(4.6)	1(0.8)	2(2.0)	$t_1=1.13;P>0.05$ $t_2=0.75;P>0.05$
Threat of termination of the first half of pregnancy	6(4.6)	7(5.4)	2(2.0)	$t_1=1.13;P>0.05$ $t_2=1.4;P>0.05$
Threat of interruption of the second half	-	8(6.2)	1(1.0)	$t_1=1.0;P>0.05$ $t_2=2.22;P<0.05$
Anemia	7(5.4)	11(8.5)	2(2.0)	$t_1=1.4;P>0.05$ $t_2=2.31;P<0.05$
Threat of termination of the second half of pregnancy + anemia	-	9(6.9)	-	$t_1=1.0;P>0.05$ $t_2=3.1;P<0.05$
Preeclampsia + threat of termination of the first and second half of pregnancy	-	5(3.8)	-	$t_1=1.0; P>0.05$ $t_2=2.27; P<0.05$
Polyhydramnios	2(1.5)	-	-	$t_1=1.41;P>0.05$ $t_2=1.0; P>0.05$
Lowhydramnios	-	2(1.5)	-	$t_1=1.0;P>0.05$ $t_2=1.0; P>0.05$
Pyelonephritis	32(24.6)	62(47.7)	-	$t_1=6.51;P<0.05$ $t_2=10.89;P<0.05$
Total	68(52.3)	62(47.7)	100 (100.0)	

Note: t_1 . P_1 – comparison of I group with control; t_2 . P_2 – comparison of II group with control

According to the results of the analysis of pregnancy indicators, all 130 (100.0%) women of the main group had complications. The main complications were in group I – pyelonephritis – 32 (24.6%) cases (a), and in women of group II, with chronic pyelonephritis recorded 11 (8.5%) cases of anemia, 8 (6.2%) – threats of termination of the first half of pregnancy, 7 (5.4%) cases of preeclampsia in combination with anemia, 5 (3.8%) with the threat of abortion of the first and second half of pregnancy. In contrast to women in the main group, in the control group significantly more patients – 90 (90.0%) did not notice pregnancy ($p < 0.05$). And the number of complications there was significantly lower ($p < 0.05$).

4. Completion of pregnancy and childbirth. Assessment of the condition of children at birth in women with diseases of the urinary system

The analysis of the results of termination of pregnancy showed that women of the main group II had significantly more frequent recurrences, as well as patients of group II in 10 (7.7%) cases – completion of childbirth by cesarean section ($p < 0.05$) (table 3).

When studying the course of childbirth in women of both groups a significantly higher percentage of complications in women of the main group compared to the control was found. 28 (21.5%) women with pathology of the urinary system and 97 (07%) women of the control group did not show any features of childbirth ($p < 0.05$).

Table 3

Characteristics of childbirth in women with renal pathology

Group of women	Number of women p(%)		Indicators n(%)			
			First childbirth	Second childbirth	Physiological childbirth	C-section
Main 130(100.0)	GP	68(52.3)	37 (28.5)	31 (23.8)	65 (50.0)	3 (2.3)
	HP	62(47.7)	20 (15.4)	42 (32.3)	52 (40.0)	10 (7.7)
Control	100 (100.0)		52(52.0)	48(48.0)	100(100.0)	-
Statistical indicators			t ₁ =3.69 P ₁ <0.05 t ₂ =6.19 P ₂ <0.05	t ₁ =3.88 P ₁ <0.05 t ₂ =2.43 P ₂ <0.05	t ₁ =11.4 P ₁ <0.05 t ₂ =13.96 P ₂ <0.05	t ₁ =1.75 P ₁ >0.05 t ₂ =3.29 P ₂ <0.05

Note: t₁, P₁ – comparison of group I with the control; t₂, P₂ – comparison of group II with the control

Significantly more women in the main group had a weakness of labor: Group I – 8 (6.2%), II – 9 (6.9%) against 1 (1.6%) in the control group; manure defect – group I 8 (6.2%), II – 7 (5.5%) in the absence of these complications in the control group (p < 0.05). In the main group, births occurred significantly more often: Group I 6 (4.6%), II – 29 (22.3%) (p < 0.05). It should be noted that much more often premature births were in group I of women with chronic pyelonephritis. All women in the control group had timely births (table 4).

Table 4

Features of childbirth in women with pathology of the urinary system

Group of women, p. (%)		Indicators		Complications during childbirth					
		Timely childbirth	Premature birth	Weakness during childbirth	Premature water break	Defect manure	Bleeding	Combined	Absent
		n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)
Main 130 (100.0)	I-68 (52.3)	62 (47.7)	6(4.6)	18 (13.8)	8(6.2)	8(6.2)	2(1.5)	4(3.1)	28 (21.5)
	II-62 (47.7)	33 (25.4)	29 (22.3)	15 (11.5)	9(6.9)	7(5.5)	3(2.3)	28 (21.5)	-
Control n=100 (100.0)		100 (100.0)	-	2(2.0)	1(1.0)	-	-	-	97 (97.0)
Statistical indicators		t ₁ =11.9 P ₁ <0.05 t ₂ =19.5 P ₂ <0.05	t ₁ =2.5 P ₁ <0.05 t ₂ =6.1 P ₂ <0.05	t ₁ =3.54 P ₁ <0.05 t ₂ =3.03 P ₂ <0.05	t ₁ =2.22 P ₁ <0.05 t ₂ =2.42 P ₂ <0.05	t ₁ =2.93 P ₁ <0.05 t ₂ =2.75 P ₂ <0.05	t ₁ =1.4 P ₁ >0.05 t ₂ =1.75 P ₂ >0.05	t ₁ =2.04 P ₁ <0.05 t ₂ =5.97 P ₂ <0.05	t ₁ =18.9 P ₁ <0.05 t ₂ =56.8 P ₂ <0.05

Note: t₁, P₁ – comparison of I group with control; t₂, P₂ – comparison of II group with control

According to the results of the assessment of the condition of children at birth, it was found that the number of children of women in the main group with a score on the V. Apgar scale was: Group I satisfactory – 7-10 points – 53 (40.8%) children; mild and severe hypoxia 6 or less points – 15 (11.5%) newborns; and in group II – satisfactory condition – 7-10 points – 37 (28.46%) children; mild and severe hypoxia 6 or less points – 25 (19.2%) children.

A significant proportion of children from mothers with pathology of the urinary system required transfer to specialized intensive care units: 7 (5.4%) from women of group I and 13 (10.0%) – group II. In one case (0.8%) mortality was noted. All children from the mothers of the control group were discharged home in satisfactory condition ($P < 0.05$) (table 5).

A significant proportion of children from mothers with pathology of the urinary system required transfer to specialized intensive care units: 7 (5.4%) from women of group I and 13 (10.0%) – group II. In one case (0.8%) mortality was noted. All children from the mothers of the control group were discharged home in satisfactory condition ($P < 0.05$) (table 5).

Table 5

**Assessment of the condition of newborns from mothers
with pathology of the urinary system**

Group of children n (%)		Indicators (number of children. p(%))				
		Evaluation according to V. Apgar		Discharge	Transfer to reanimation	Died
		6 6. i <	7 6. i >			
Main p=130 (100%)	I 68(52.3)	15(11.5)	53(40.8)	61(46.9)	7(5.4)	-
	II 62(47.7)	25(19.2)	37(28.46)	48 (36.9)	13(10.0)	1(0.8)
Control p=100(100%)		-	100(100.0)	100(100.0)	-	-
Statistical indica- tors		t ₁ =4.11 P ₁ <0.05 t ₂ =5.56 P ₂ <0.05	t ₁ =13.7 P ₁ <0.05 t ₂ =18.06 P ₂ <0.05	t ₁ =12.13 P ₁ <0.05 t ₂ =14.91 P ₂ <0.05	t ₁ =2.72 P ₁ <0.05 t ₂ =3.8 P ₂ <0.05	t ₂ =1.02 P ₂ >0.05

Note: t1. P1 – comparison of group I with the control; t2. P2- comparison of group II with the control.

Therefore, after conducting a comparative analysis of reproductive losses, somatic history in women with pathology of the urinary system and studying the results of the course and completion of pregnancy, as well as complications of childbirth in such women living in Lviv region, we can draw the following conclusions.

It has been proved that women with pathology of the urinary system are at risk of obstetric complications. Significant differences were found in the comparison of pregnancy parity in women of the main and control groups ($P < 0.05$): most women in both surveyed groups were pregnant again: 74 (56.9%) in the main group, and 22 (73.3%) in the control group with most women pregnant for the first time. There were significant differences in the rates of termination of pregnancy and complications during childbirth: women in the main group were significantly more likely to have premature births (15.4% of women with GP and 46.2% of women with CP), while all women in the control group gave birth in term ($P < 0.05$).

5. Conclusions

1. Significant differences were found in the comparison of the ordinal number of pregnancy in women of the main and control groups: a significant number of women in the main group were pregnant again: 74 (56.9%), and the control group was dominated by first-born 22 (73.3%), ($P < 0.05$). The majority of patients in the main group (120 – 92.3%) had somatic

diseases. The most common was the combination of pathology of the urinary system and chronic infectious diseases (58-44.6%). All women in the control group were healthy ($p < 0.05$).

2. It was found that 32 (24.6%) women with acute pyelonephritis and 42 (32.3%) women with chronic pyelonephritis had complications of reproductive history, most often – miscarriages: 10.0% and 7.7%, respectively ($p < 0.05$).

3. Analysis of the course of pregnancy in the studied women showed a much higher percentage of complications in pregnant women of the main group. The main complications were in group I – pyelonephritis – 32 (24.6%) cases. Significantly more often women of group II had chronic pyelonephritis, anemia – 11 (8.5%), the threat of termination of the first half of pregnancy – 8 (6.2%), preeclampsia in combination with anemia – 7 (5.4%) and the threat of termination of the first and second half of pregnancy 5 (3.8%). In the control group, 90 (90.0%) women did not note the peculiarities of pregnancy ($p < 0.05$).

4. There were significant differences in the rates of termination of pregnancy and complications during childbirth: women in the main group were significantly more likely to have premature births (15.4% of women with acute pyelonephritis and 46.2% of women with chronic pyelonephritis), while all women in the control group gave birth on time ($P < 0.05$). Significantly more women in the main group had a weakness of labor: Group I 8 (6.2%), Group 9 (6.9%) against 1 (1.6%) in the control group; defect of manure I group 8 (6.2%), II 7 (5.5%) in the absence of these complications in the control group ($p < 0.05$).

5. Pregnancy termination in the vast majority of women in the main group was physiological: in 65 (50.0%) women of group I and in 52 (40.0%) women of group II ($P < 0.05$). Respectively, cesarean delivery was completed in 3 (2.3%) women from groups I and 10 (7.7%) from group 2. All women in the control group had timely, physiological births.

6. The obtained results indicate that the condition of newborns from mothers with pathology of the urinary system, was often disturbed and was differed from similar indicators in almost healthy newborns. Estimate on the V. Apgar scale was the following: in group I 6 or less points had 15 (11.5%) newborns; and in group II – 6 or less points – 25 (19.2%) children. A significant proportion of children from the main group (I -5.4%, II – 10.0%) needed immediate resuscitation measures at birth and their transfer to specialized departments for further treatment.

Prospects for further research

The solutions proposed in the paper are promising in terms of further possibility to determine the informative range of risk factors for perinatal pathology in women with diseases of the urinary system to improve the comprehensive prevention of this pathology.

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THE STATE OF CHILDREN MASTICATORY MUSCLES WITH DENTITION DEFECTS IN THE FRONTAL AREA AND NARROWING OF DENTAL ARCHES IN THE TRANSVERSE PLANE

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Summary

Orthopedic and orthodontic treatment of 49 patients aged 6 to 17 years with dentition defects in the frontal area was examined and performed to conduct and determine the state of the masticatory muscles in children with dentition defects. Patients were divided into two groups depending on the period of formation of the dento-maxillaire system and each of the groups was divided into two subgroups depending on the method of treatment and the mechanism of fixation of the orthodontic appliance in the oral cavity. When comparing the indicators between groups I A and I B, we can state that there were more qualitative and dynamic changes in electromyographic indicators in children of group I B than group I A. When comparing the data received after orthopedic and orthodontic treatment of children in group II, we can state that quantitative and qualitative indicators of electromyography for group II B were better than those of children in group II A. In children who were treated with removable appliances, these indicators improved, but remained at a worse level than in those treated with non-removable appliances.

Keywords: dentition defect, electromyography of the masticatory muscles, orthodontic treatment.

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1. Introduction

Nowadays, the requirements for the provision of dental care to the population, and in particular to children, are being increased. In turn, the requirements for diagnostic equipment, which provides a comprehensive assessment of the functional state of the dento-maxillaire system are being increased as well (*Iezerska O.O. 2013*).

More and more scientists are paying attention to the fact that electromyography analysis allows us to make conclusions on the reconstruction of the masticatory and facial muscles, to monitor them in the dynamics of treatment. It is established that recurrences of occlusal anomalies occur with insufficient functional reconstruction of the masticatory muscles. (*Persyn L.S. 2007; Liakhovska A.V. 2015*).

Anomalies, deformities, as well as dentition defects of the dento-maxillaire system prevent from the normal articulation of sounds, contribute to the enrooting of habits of incorrect pronunciation of sounds, the formation of specific bad habits (putting the tongue in the defect and biting the upper lip), which leads to complicated correction and treatment (*Flis P.S. and oth. 2018*).

It is established that an untimely prosthetics or its absence often leads to complications in the form of secondary dento-maxillaire deformities, functional and other disorders,

which requires long-term and costly treatment. The absence of teeth in children contributes to impaired masticatory efficiency, the formation of dysfunction of the temporomandibular joints and tongue, it especially affects the aesthetics of the face, which together often has a negative impact on the child's psyche, forming their social maladjustment (*Doroshenko S.I. 2017, Bida O.V. 2017, Zajac' O.R., Ozhogan Z.R. 2020*).

In such conditions there is a need for prosthetics of teeth and dentitions in the period of temporary and early mixed occlusion, using prosthetic designs that have a positive effect on the normal development of the body as a whole and the dento-maxillaire system in particular (*Drogomyrecka M.S. 2016, Bul'buk O.V. 2018*).

2. The purpose of the study

To assess the functional state of the masticatory muscles (m.masseter) in children with dentition defects in the frontal area before and after treatment.

3. Materials and methods

47 patients (27 males and 20 females) who applied to the Department of Orthopedic Dentistry and Orthodontics, Private Educational Institution Kyiv Medical University, aged from 6 to 17 years with dentition defects in the frontal area were examined and received orthopedic and orthodontic treatment to conduct and determine the state of the masticatory muscles in children with dentition defects. The control group consisted of 27 children who did not have dentition defects and concomitant orthodontic pathology.

All the children were divided into two clinical groups depending on the period of formation of the dento-maxillaire system: I group – children with the mixed period of occlusion, and II group – with the permanent period of occlusion. Each of the groups was divided into two subgroups depending on the method of treatment of orthodontic pathology and the way of fixation of the orthodontic appliance in the oral cavity. The children of group I A (14 people) and II A (8 people) were treated using removable orthodontic prosthesis appliances, whereas the children of group I B (13 people) and II B (12 people) – using non-removable orthodontic appliance. The data on the age and gender distribution of children is presented in Table 1. The functional state of the masticatory muscles was determined in the patients of group I and II using the method of functional electromyography which is registration of bioelectric potentials of muscles before the beginning of treatment and after orthodontic correction of the dimensions of dental arches and restoration of the dentition defect.

All the electromyographic recordings, which were obtained from two symmetrical sections of the masticatory muscles of the right and left sides were performed using an electromyograph M-Test-4, produced by NVP "DH-systemy" (Ukraine), combined into one unit with a personal computer. The studies were performed according to the generally accepted method and with the help of skin electrodes with a permanent inter-electrode distance.

The clinical examination consisted of studying the anamnestic data, identifying bad habits, determining the cause of teeth loss and the age of the dentition defect. During the intraoral examination, attention was paid to the number of teeth, their position in the dental arch, the shape and ratio of dental arches, the ratio of the first permanent molars. Supplementary research methods included the measurement of control and diagnostic models (the transverse dimensions of dental arches were measured by Pont's methods) and the registration of masticatory muscle biopotentials in children.

Table 1

Distribution of the admitted for treatment people by age and gender

Group	Gender				Total number	
	Boys		Girls			
	Absolute number	%	Absolute number	%	Absolute number	%
I A	8	17,02	6	12,76	14	29,78
I B	5	10,63	8	17,02	13	27,65
II A	4	8,51	4	8,51	8	17,02
II B	7	14,89	5	10,63	12	25,53

Statistical processing of the obtained results was performed on a personal computer using the statistical software package “Statistica 6.0” and “Microsoft Excel 2002”, using generally accepted methods of variation statistics (parametric and non-parametric). During the processing of the results by the parametric method, the arithmetic value of the variation series (M), the standard deviation (σ) and the average inaccuracy (m) were calculated. The accuracy of the different was determined using the T-test method (t).

Results: Assessing the results of the replacement of dentition defects by prosthesis appliances for children and correction of the width of dental arches in the transverse plane, we proceeded from the indicators of the physiological norm. In the control group bioelectric activity of the resting lower jaw was recorded in the form of a “straight line”, with maximum jaw compression – the inclusion of motor units, which was presented in the form of high-amplitude oscillations of bioelectric potentials. In turn, relaxation was characterized by a rapid transition to the resting state. The sequence of biopotentials of activity and resting, as well as the change of the sides of chewing in the course of one period was noted at voluntary chewing.

Table 2

The average electromyographic indicators in the control group compared with the patients of groups I and II of the study

Parameters	Masticatory muscle	Control group	Before treatment			
			I		II	
			A	B	A	B
Average compression amplitude (μV)	Right	527 \pm 2,7	386 \pm 6,7•	375 \pm 8,3•	394 \pm 7,4•	384 \pm 6,0•
	Left	486 \pm 11,2	392 \pm 9,5•	378 \pm 10,5•	396 \pm 9,3•	391 \pm 8,7•
Average chewing amplitude (μV)	Right	538 \pm 13,2	402 \pm 9,3•	413 \pm 9,5•	385 \pm 9,2•	425 \pm 8,4•
	Left	529 \pm 14,4	387 \pm 10,4•	423 \pm 8,3•	398 \pm 8,6•	398 \pm 9,4•
Duration of the activity phase (ms)	Right	272 \pm 10,7	337 \pm 9,7•	340 \pm 7,8•	364 \pm 7,4•	327 \pm 9,1•
	Left	293 \pm 13,9	345 \pm 8,3•	354 \pm 8,8•	355 \pm 8,6•	•346 \pm 9,5
Duration of the resting phase (ms)	Right	241 \pm 10,4	284 \pm 13,2•	267 \pm 10,7•	276 \pm 13,2•	295 \pm 11,4•
	Left	252 \pm 12,6	303 \pm 12,7•	289 \pm 9,5•	303 \pm 11,3•	314 \pm 10,5•
Coefficient K	Right	1,01 \pm 0,02	1,28 \pm 0,03•	1,24 \pm 0,02•	1,32 \pm 0,03•	1,25 \pm 0,04•
	Left	1,02 \pm 0,01	1,32 \pm 0,02•	1,26 \pm 0,03•	1,28 \pm 0,05•	1,29 \pm 0,03•

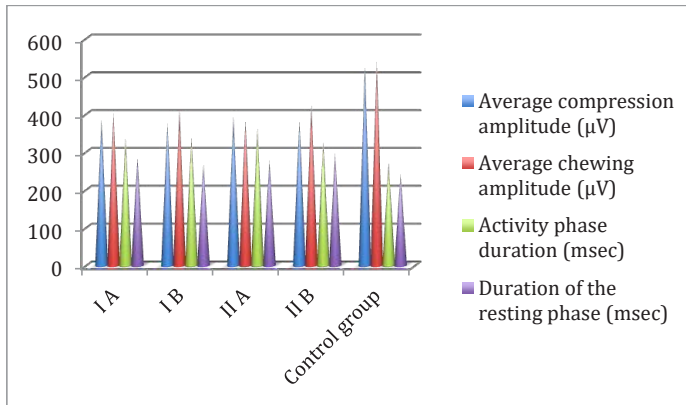
• – accuracy of differences ($p \leq 0,05$) from the indicators of the control group

Analyzing the data presented in Table 2 before treatment, we can observe that representatives of all the study groups had an extension of the chewing period, reducing its rhythm.

The ratios between the excitation and inhibition phases deteriorated with increasing activity phase and decreasing relative bioelectric resting period. The range of the amplitude of biopotentials was decreasing according to standard.

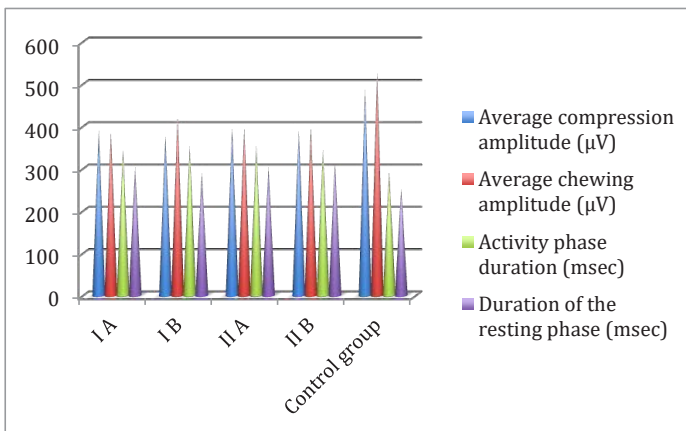
The ratio of the studied groups before the beginning of orthodontic correction and orthopedic replacement of the dentition defect is presented in Diagram 1 for the right masticatory muscle and Diagram 2 for the left one.

Diagram 1



Pic. 1. The ratio of electromyographic examination for the right masticatory muscle before treatment

Diagram 2



Pic. 2. The ratio of electromyographic examination for the left masticatory muscle before treatment

To fix the degree of physiological disorders of the masticatory system in patients with dentition defects in the frontal area and disorders of the dimension of dental arches in the

transverse plane, compared with the control group and the degree of functional rehabilitation of children after correction of the dimension of dental arches and the replacement of the dentition defect we conducted the quantitative analysis of electromyographic indicators in the study groups, the data of which is shown in Table 3.

Table 3

The average indicators of electromyographic indicators in people of the control group compared with the patients of I and II study groups

Parameters	Masticatory muscle	Control group	After treatment			
			I		II	
			A	B	A	B
Average compression amplitude (μV)	Right	527 \pm 2,7	454 \pm 8,6	512 \pm 9,2	417 \pm 9,2	493 \pm 7,4
	Left	486 \pm 11,2	448 \pm 8,9	487 \pm 8,8	415 \pm 8,7	485 \pm 8,3
Average chewing amplitude (μV)	Right	538 \pm 13,2	476 \pm 8,6	517 \pm 12,2	400 \pm 9,2	506 \pm 9,4
	Left	529 \pm 14,4	461 \pm 6,8	503 \pm 11,7	421 \pm 8,9	497 \pm 7,6
Duration of the activity phase (ms)	Right	272 \pm 10,7	305 \pm 9,4	293 \pm 9,7	347 \pm 6,5	286 \pm 8,9
	Left	293 \pm 13,9	309 \pm 8,1	301 \pm 11,1	338 \pm 8,4	302 \pm 9,1
Duration of the resting phase (ms)	Right	241 \pm 10,4	269 \pm 7,5	246 \pm 10,3	289 \pm 11,2	252 \pm 7,6
	Left	252 \pm 12,6	287 \pm 7,9	259 \pm 9,7	303 \pm 10,5	271 \pm 8,2
Coefficient "K"	Right	1,01 \pm 0,02	1,09 \pm 0,04	1,02 \pm 0,02	1,28 \pm 0,05	0,99 \pm 0,01
	Left	1,02 \pm 0,01	1,11 \pm 0,03	1,01 \pm 0,02	1,25 \pm 0,04	1,02 \pm 0,02

• – accuracy of differences ($p \leq 0,05$) from the indicators of the control group

Electromyographic indicators have undergone some changes after orthodontic and orthopedic treatment of children. We would like to state, that before treatment there were observed statistically significant values of electromyograms in children with dentition defects of the frontal area compared with the control group. After treatment, namely, the restoration of the integrity of dentition and correction of the transverse dimensions of dental arches, the data indicates a positive dynamic in treatment, and for some groups – maximum approaching to that of the control group.

The average compression amplitude in children of group I A after treatment was at the level of $454 \pm 8,6 \mu\text{V}$ for the right masticatory muscle and $448 \pm 8,9 \mu\text{V}$ for the left one compared with the control group – $527 \pm 12,7 \mu\text{V}$ and $486 \pm 11,2 \mu\text{V}$, respectively. Duration of the activity phase for the right masticatory muscle – $305 \pm 9,4 \text{ ms}$ and for the left one – $309 \pm 8,1 \text{ ms}$ compared with the control group – $272 \pm 10,7 \text{ ms}$ and $293 \pm 13,9 \text{ ms}$, respectively. The value of coefficient "K" after the replacement of the dentition defect and normalization of the jaws sizes – $1,09 \pm 0,04$ and $1,11 \pm 0,03$. The average compression amplitude in patients of group II B was – $512 \pm 9,2 \mu\text{V}$ та $487 \pm 8,8 \mu\text{V}$ which almost corresponded to the values of the control group – $527 \pm 12,7 \mu\text{V}$ and $486 \pm 11,2 \mu\text{V}$, respectively. Duration of the activity phase was $293 \pm 9,7 \text{ ms}$ and $301 \pm 11,1 \text{ ms}$, compared with the control group – $272 \pm 10,7 \text{ ms}$ and $293 \pm 13,9 \text{ ms}$ for the right and left muscles. The indicator of coefficient "K" after treatment was $1,02 \pm 0,02$ for the right and $1,01 \pm 0,02$ for the left masticatory muscle.

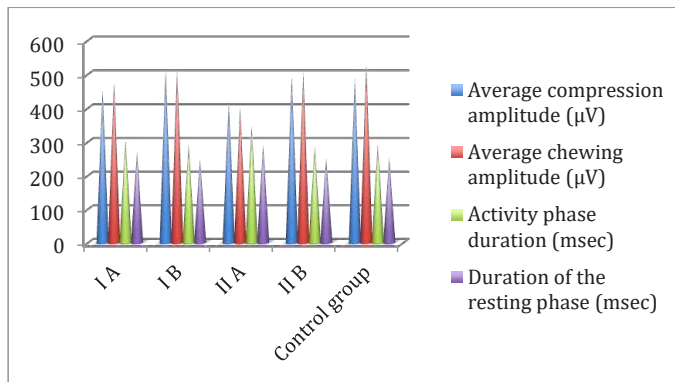
When comparing the indicators between groups I A and I B, we can say that there were identified more qualitative and dynamic changes in electromyographic indicators in group I B than in group I A. The value of coefficient "K" after treatment in children of group II A was at the level of $1,09 \pm 0,04$ and $1,11 \pm 0,03$ and for group I B $1,02 \pm 0,02$ and $1,01 \pm 0,02$ compared

with the control group – $1,01 \pm 0,02$ and $1,02 \pm 0,01$ respectively for the right and left masticatory muscle.

Comparing the data after orthodontic and orthopedic treatment of children of group II, we can say that the qualitative and quantitative electromyographic indicator of for group II B were better than the same indicators for children of group II A. This can be explained by the structural elements that were used in the appliances for each of the subgroups.

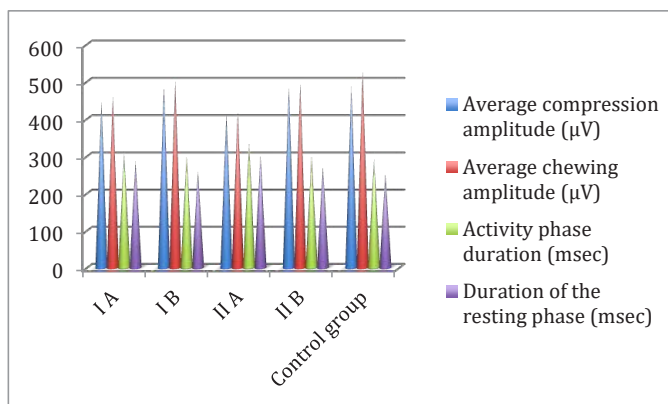
The ratios of the study groups after orthodontic correction and orthopedic replacement of the dentition defect are presented in Diagram 3 for the right masticatory muscle and Diagram 4 for the left one.

Diagram 3



Pic. 3. The ratio of electromyographic study for the right masticatory muscle after treatment

Diagram 4



Pic. 4. The ratio of electromyographic study for the left masticatory muscle after treatment

Analyzing the indicators of patients in the study groups after restoring the integrity of the dentition and correction of the transverse sizes of the dentition, we can state the fact that all the studied indicators improved, but the patients in groups I B and II B had better changes than in groups I A and II A, which is explained by the method of fixation of the appliance in the oral cavity.

Conclusions: When identifying the indicators of bioelectrical activity of the masticatory muscles in children before orthodontic correction and the replacement of the dentition defect of the frontal area compared with the control group, we observed extension of the chewing period, the ratio between excitation and inhibition processes in the masticatory muscles deteriorated by reducing the period of bioelectric resting.

In the case of a timely compensation of dentition defects and restoration of the transverse dimensions of dental arches, the indicators of bioelectrical activity of the masticatory muscles in the group in which treatment was performed with non-removable orthodontic appliances had no statistically significant differences from the standard indicating functional rehabilitation. In children who were treated with removable appliances, these indicators improved, but remained at a worse level than in those treated with non-removable appliances.

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ECO-ANALYTICAL MONITORING OF RADIOACTIVE MICROELEMENTS AND EVALUATION OF THEIR IMPACT ON DENTAL PERIODONTOLOGICAL STATUS

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Summary

The world community has a well-founded concern about anthropogenic pollution and the danger to human health it poses. An important role in increasing the incidence of ecologically polluted areas belongs to the exposure to anthropogenic toxins, certain socio-economic conditions, lifestyle, the presence of bad habits and the nature of human nutrition, and, in particular, the interaction of these risk factors. The effect of various endogenous factors in modern socio-ecological conditions on the human body is diagnostically manifested in the form of functional shifts in the parameters of oral fluid, which are mainly adaptive-compensatory in nature. The microelement composition of biological fluids reflects the total amount of toxic substances received from the environment, which is why it is an indicator of the impact anthropogenic pollution and can be a test object in the ecological and analytical monitoring of micronutrients. The level of macro- and micronutrients and the immunoglobulin status of the altered picture reflects the state of the oral cavity local immunity, internal organs and the human environment, because the indicator, reflecting the physical status, can use the signaling system in pathological homeostasis. The most common cause of decreased body resistance is adverse long-term exogenous factors that have a pronounced effect on both the immune system and the local immunity of the oral cavity, and the trace element composition of mixed saliva can be regarded as parameters of local resistance of the oral cavity.

Keywords: odontostatus, diseases of the periodontal complex, oral fluid, essential chemical elements, immune homeostasis, radiation-contaminated area, osteotropic radio pollutants.

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1. Introduction

The world community has a well-founded concern about anthropogenic pollution and the danger to human health it poses.

Pathological changes in the human body that occur due to shifts in ecological homeostasis are considered as eco-conditioned pathology (Zerbino D.D., 2009: 208; Horishyna O.V., 2006: 60; Hruzieva O.V., 2007: 167-168).

When the morpho-functional capabilities of the organism are depleted, a deep critical state arises, which is manifested by a non-specific endogenous intoxication syndrome, which is

characterized by a number of differences depending on the etiological nature and severity of the underlying disease (*Vasilenko I.Ya., 2006: 4-5*).

An important role in increasing the incidence of ecologically polluted areas belongs to the exposure to anthropogenic toxins, certain socio-economic conditions, lifestyle, the presence of bad habits and the nature of human nutrition, and, in particular, the interaction of these risk factors (*Dobrovolskyi L.A., 2008: 25-29; Gzhegockij M.R., 2002: 575-596; Hruzieva T.S., 2010: 167-168; Yahenskyi A.V., 2007: 64-67; Vasilenko I.Ya., 2006: 4-5*).

2. Topicality

The ability to detect the content of radioactive trace elements in unstimulated mixed saliva as an indicator of the impact of anthropogenic pollution, with subsequent characterization and assessment of the antioxidant and immune systems (local oral immunity) is a topical issue today. After all, the effect of high concentrations of pollutants is accompanied by their accumulation in the relevant tissues and organs of the human body. The microelement composition of biological fluids reflects the total amount of toxic substances obtained from the environment (air, water, soil) and food.

3. The aim of study

To study the microelement composition of saliva in patients living permanently in radiation-contaminated areas, patients with chronic generalized periodontitis of varying severity.

4. Research goals

1. To determine the quantitative and qualitative biochemical parameters and properties of oral fluid in persons who permanently live in conditions of radiation exposure.
2. To conduct a comparative analysis of changes in dental and periodontal status in the studied populations.
3. To establish the relationship between the development and progression of periodontal disease and general somatic pathology in persons living permanently in radiation-contaminated areas.
4. To substantiate the expediency and clinical effectiveness of optimization of periodontal treatment protocols and methods of dental status registration patients which are resident in radiation-contaminated areas, taking into account the specifics of ionizing-associated pathological changes of the dental-maxillary apparatus.

5. Materials and Methods

The subjects were patients with chronic generalized periodontitis of varying severity, which according to certain criteria were divided into the following groups of clinical trials.

The main group of the study consisted of 46 people living in the radiation-contaminated area – with. Children, Ivankiv district, Kyiv region. (30 km exclusion zone after the accident at the Chernobyl nuclear power plant (ChNPP)).

The comparison group was presented by 38 patients from Kyiv as a settlement with the most developed urban system and the highest level of man-caused load.

The control group consisted of 22 healthy individuals with clinically healthy gum tissue in intact and reduced periodontium, ie non-periodontal patients or «stabilized» periodontal patients.

The subject of biochemical studies was the oral fluid of patients with chronic generalized periodontitis of varying severity (CKD).

For the purpose of salivary diagnostics we carried out definition of speed of salivation, measurement of pH of oral and gingival liquids.

To determine the rate of salivation, oral fluid was collected in graduated tubes, in the morning, on an empty stomach, before oral hygiene, without stimulation for 10 minutes, after rinsing the mouth with distilled water, followed by calculation according to the appropriate formula.

A capillary hemoviscosimeter «VK-4» («Transmetal LLC», Russia) was used to determine the viscosity of the oral fluid. The unit of viscosity was taken as centipoise (SP).

The acid-base state in the oral cavity was assessed using the most informative hydrogen index (pH). Determination of the pH of the oral fluid was performed with a laboratory test system «Saliva Check Buffer» («GC», Japan). The test strips were immersed in a container with oral fluid for 10 seconds, and then compared the color of the test strips with the table from the kit.

The pH of the oral fluid was determined in relative units using a digital pH meter («Radelkis», Hungary) immediately after its collection.

To determine the gingival fluid pH the excretory ducts of the large salivary glands were isolated with cotton balls, the surface of the teeth and gums in the study area was dried, then the test strips from the Saliva Check Buffer set were immersed in the gingival cleft or periodontal pocket for 10-15 seconds. Then compared the color of the test strips with the table from the kit.

The microelement composition of oral fluid (Fe, Zn, Mn, Cu, Cr, Pl, Sr, etc.) was determined by the spectral method using the atomic absorption spectrophotometer C-115 PC (Ukraine). Determination of the content of macronutrients was performed using a biochemical analyzer «Humalyzer 2000».

In order to determine the immune homeostasis of the oral cavity in patients with chronic generalized periodontitis, a study of the titer of secretory immunoglobulin A (sIgA) in the oral fluid at 3, 6, 12 months of treatment. Its level was determined by the method of solid-phase enzyme-linked immunosorbent assay (ELISA), using tablets manufactured by «Vektor-Best» and a universal photometer («Absorbance Microplate Reader» Elx800, BioTek). The analysis was performed in two stages. In the study of samples during the first incubation, sIgA binding occurs. During the second incubation, the conjugate of monoclonal antibodies to α chains of horseradish peroxidase IgA binds to sIgA immobilized during the first incubation. Immobilized monoclonal antibodies «sIgA-conjugate» are formed, which are detected by color reaction using a peroxidase substrate: hydrogen peroxide and tetramethylbenzidine chromogen. The color intensity is proportional to the concentration of sIgA in the analyzed sample. After measuring the optical density of the solution in the wells on the basis of the calibration graph was determined by the concentration of sIgA in the test samples according to the classical variant according to the instructions. The sensitivity of the method is 0.35 pg / l.

6. Main content

Oral fluid as a test system

Oral fluid is an integral part of the fluid environment of the human body, in its composition it is a complex biological substrate, which consists of the secretion of salivary glands,

polymorphonuclear leukocytes (PYAL), desquamated epitheliocytes, food detritus and oral microbiota. In recent years, scientific studies have obtained data that confirm the clinical and diagnostic parallelism of differentiation and changes in the parameters of peripheral blood and oral fluid in a number of general somatic diseases (*Gilmiyarova F.N., 2006: 312*). That is why the analysis of mixed saliva is a valuable alternative informative non-invasive diagnostic method in cases where blood sampling is impossible for one reason or another (*Vavilova T.P., 2008: 22-25*).

The effect of various endogenous factors in modern socio-ecological conditions on the human body is diagnostically manifested in the form of functional shifts in the parameters of oral fluid, which are mainly adaptive-compensatory in nature.

The composition and properties of saliva are influenced by a number of individual parameters: general somatic condition of the body, functional activity of salivary glands, saliva viscosity, oral hygiene, consistency of food and the presence of food residues on the tooth surface, depending on the initial dental status of the patient.

The acid-base balance of the oral cavity is characterized and interrelated with the rate of salivation, the interaction of salivary buffer systems (bicarbonate, phosphate and protein systems), metabolites of the oral biofilm and the dental status of the patient.

The values of pH in the normal state are in the range of 6.5-7.5.

The set of buffer systems forms the first line of protection of teeth and periodontal tissue from acidic and alkaline influences (phosphate c-mobile is active at pH = 6.8-7.0, bicarbonate at = 6.1-6.3, protein provides a buffer) capacity at what are the pH values).

Update of acid-base intelligence after the «attack» in the normal state extends to the chemical indication, and in case of unsatisfactory operation of the buffer systems will be underestimated. This pattern is accompanied by an improvement in the rate of demineralization of the enamel, initiating the development of carious and non-carious lesions of the hard tissues of the teeth.

«Macro» role of essential trace elements

The level of macro- and microelements and immunoglobulin status of mixed saliva reflects the state of local immunity of the oral cavity, internal organs and environments of the human body, so it is a kind of marker that reflects the physiological status of the body and can serve as a signaling system for pathological homeostasis.

Trace elements are components of substances that participate in the metabolic and regulatory processes of the human body.

Particular attention is drawn to the content in mixed saliva of the following trace elements – lead, strontium, cadmium, nickel, cobalt, manganese and aluminum, because these metals are osteotropic, and therefore compete with calcium on the formation of apatite hard tissues of teeth and periodontal bone; replacing calcium during the processes of mineralization, demineralization and remineralization (*Ibragimova M.Ya., 2011: 606-609; Skalnyj A.V., 2004: 272*).

It is important to note that trace elements also act as anti- and prooxidants, which ensures the formation and maintenance of balance in the system of «generation-detoxification» of free radicals (*Skalnyj A.V., 2004: 216*).

To assess the level of antioxidant protection, it is important to analyze the content of the following trace elements in mixed saliva – calcium, magnesium, selenium, zinc, copper and iron, as they are cofactors of enzymes and reducing their concentration automatically leads to reduced enzyme activity.

The content of the following trace elements in the human body are particularly important – copper, selenium, magnesium and zinc, as through the regulatory mechanisms of immunogenesis they act on protein synthesis, energy processes in the cell and regulate the immune

response at both cellular and humoral levels. Deficiency of the above trace elements increases the sensitivity to the penetration of infectious agents, reduces the production of interleukin-II and interferon-g, inhibits the lytic activity of natural killers and their relative content in the population of T-lymphocytes.

7. Analysis of the obtained results

living in radiation-contaminated areas indicators of the prevalence and intensity of the carious process does not differ significantly from similar indicators in the surveyed control and comparison groups. This can be explained by the patients' less attention to their own health, their lack of routine dental examinations and oral remediation, and the long period of time that has elapsed since the Chernobyl accident. However, the prevalence of non-carious lesions of hard tissues of teeth of dystrophic nature (pathological abrasion, wedge-shaped defects, erosions and abrasion of enamel), diseases of the oral mucosa and periodontal complex, the presence of dentition defects in the main and comparative groups is higher than in the control group. Chronic generalized periodontitis in the main study group, in contrast to the periodontitis of men in the comparative group, was characterized by a more severe areactive course of the disease, indicating the adverse effects of long-term action of radioactive elements accumulated in periodontal bone.

As a result of studies of the level of concentration of trace elements in mixed saliva in patients of the main and comparative groups, the content of metals that are competitors of calcium is much higher than in the control group. Content of lead in 3.5 times, manganese – 3 times, strontium – 12 times, cadmium 29 times, chromium 4 times, cobalt and aluminum 5 times.

The content in saliva of essential trace elements that act as anti- and prooxidants, which are cofactors of enzymes – zinc, copper, selenium, magnesium, iron and calcium is much lower than in the control groups: calcium and copper in 2 times, magnesium in 1,5 times, iron 6 times, zinc 6.5 times. During the analysis of the microelement composition of tartar, 50% of calcium, up to 30% of inorganic phosphorus and 0.7% of magnesium are determined, traces of lead, strontium, silicon, molybdenum, aluminum, cadmium and fluorine are traced as a residue. As the degree of environmental tension increases, the content of the following elements in mixed saliva decreases – zinc, selenium, copper and magnesium, which play an important role in the regulation of the immune response.

8. Conclusions

The results above indicate the possibility of using mixed saliva as a test object in the ecological and analytical monitoring of essential trace elements, such as zinc, copper, selenium, iron and calcium, which are part of many enzymatic systems of the body, chromium, lead, Nickel, cadmium, cobalt, manganese, strontium and aluminum are toxic metals, their high content can lead to an imbalance of one of the most important homeostatic systems of the body – the immune system, which determines the degree of general health and its adaptive capacity which is the primary link in the chain of biological response to xenobiotics. Given the fact that the most common cause of decreased body resistance are adverse long-term exogenous factors that have a pronounced effect on both the immune system and the local immunity of the oral cavity, and indicators of micronutrient composition of mixed saliva can be regarded as parameters of local resistance of the oral cavity. One of the mechanisms by which the influence of environmental factors on the human body is realized is «oxidative stress».

The obtained results can serve as a basis for further widespread use of salivary diagnostics in diagnostic medicine, as the development of parameters will confirm the permeability of the blood-salivary barrier, which will open new opportunities in the diagnosis and treatment of dental diseases.

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CLINICAL AND MORPHOLOGICAL FEATURES OF LUMINAL A SUBTYPE OF INVASIVE DUCTAL BREAST CANCER

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Summary

The aim of this article was to study clinical and morphological features of luminal A subtype of breast cancer to assess its relationship with disease progression. Methods: This study included 79 patients with luminal A subtype of breast cancer who treatment in 2017 at the Lviv State Oncological Regional Treatment and Diagnostic Center. The Luminal A subtype was identified by immunohistochemistry (IHC) as ER+, PR+/-, HER2- and Ki-67 less than 20 percent on surgically resected breast cancer tissue. Results: The mean age of patients was $60,41 \pm 12,25$ (range, 32–85 years), 26 (32,9%) were under 55 years. Nottingham Histologic Grade distribution was as follows: G1 – 10 (12,66%), G2 – 56 (70,88%), and G3 – 13 (16,46%) cases. Clinical stage II – 35 (44,3%) and III – 31 (39,24%) was observed. Menopausal status was in 67,1% of cases. Morphological analysis of the tumor tissue showed that except alveolar structures, there were trabecular, solid, tubular structures and separately located groups of tumor cells. The stromal component of the tumor was weak or moderate, most tumors showed minimal or marked inflammatory infiltration and low proliferative activity. Conclusions: To predict the probability of lymphogenic metastasis should be considered: menstrual function, histologic grade, the presence of alveolar structures in the infiltrative component, the different types of structures in the infiltrative component, hyalinosis in the stroma of the tumor node and inflammatory infiltration of tumor.

Keywords: clinical features, morphological structure, luminal A breast cancer, disease progression

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1. Introduction

Breast cancer is the most common malignancy in the female population worldwide. It is the most commonly diagnosed cancer among women in 140 of 184 countries. According to the WHO data, published in 2018, the number of deaths from breast cancer in Ukraine reached 8,983, or 1,49% of total deaths. With age-related mortality 20,93 per 100,000 population, Ukraine ranks 36th pace in the world. Early diagnostic and treatment of this pathology is not only an important medical, but also a social task (*Bulletin*, 2020).

To mark International Women's Day 8 of March 2021, "WHO is launching a new Global Breast Cancer Initiative, to reduce mortality from breast cancer by 2,5% every year until 2040, saving 2,5 million lives" (*WHO*, 2021).

Breast cancer is a morphologically heterogeneous group of tumors that differ in clinical course and sensitivity to treatment. Characteristics of breast cancer are presented in the World Health Organization's classification of breast tumors (*Tavassoli and Devilee, 2003*). It is known that tumors that belong to the same histological type may have different clinical course. The most numerous group is ductal breast cancer and this type of cancer has the highest heterogeneity.

Previously, pathological diagnosis was the "gold standard" in determining the histological subtype and assessing the degree of differentiation. It was further established that breast tumors with similar histological pattern can have different clinical manifestations, aggressive course, treatment outcome, overall and recurrence-free survival.

Currently, to determine adequate treatment tactics used molecular-genetic classification of breast cancer, proposed in 2000 by Perou CM. and co-authors (*Perou CM, 2000*). This approach is based on patterns of expression of so-called native genes, which show a greater difference in expression between tumors than within a single tumor (*Perou et al., 2000; Strehl et al., 2011*). The molecular subtype identifies subgroups with different biological properties and response to treatment.

The most well-known molecular subtypes of breast cancer include luminal, with positive expression of HER-2 / neu human epidermal growth factor receptors and triple-negative tumors (*Guarneri V., Conte PF., 2009*). In addition, there is a well-known division of the luminal subtype into luminal A and luminal B. Basal breast cancer is also being actively studied today because it is overlapping on the triple negative subtype, but is not synonymous with it.

Luminal A subtype, according to various authors, amount up to 60% of cases of breast cancer and is characterized by positive receptors for hormones (estrogen and / or progesterone), negative HER-2 / neu receptor and low levels of Ki-67 protein. This group, compared with others, is characterized by low recurrence rates and a high level of overall survival, a high sensitivity to hormone therapy (e.g. tamoxifen, aromatase inhibitors) (*Parker J.S., 2009, Zaha et al., 2010; Yanagawa M. et al., 2012*).

Most genes found in luminal A subtype of breast cancer are usually expressed in the luminal ductal epithelium (*Raica et al., 2009*). However, despite the rather favorable biological characteristics of luminal type A breast cancer, patients in this group may develop both lymphogenic and hematogenous dissemination and have different disease outcomes. The search for additional clinical and morphological criteria will help to individualize the prognosis in patients with breast cancer.

The aim of this article was to study clinical and morphological features of luminal A subtype of breast cancer to assess its relationship with disease progression.

2. Material and methods of research

Current study included patients with luminal A type of breast cancer stages T1-3N0-3M0, who were treated in 2017 at the Lviv Regional Oncological Treatment and Diagnostic Center. Patients who received neoadjuvant chemotherapy or were diagnosed with recurrent breast cancer or cancer without invasive component were excluded from this study. A total of 79 consecutive cases meeting the criteria above were included in this study. Medical histories, outpatient medical records were analyzed in order to identify clinical and treatment data.

Morphological and immunohistochemical examination of the surgical material of all patients was performed at the Western Ukrainian Histological Laboratory, Lviv. The study was approved by the Ethics Committee of Danylo Halytskyi Lviv National Medical University.

General morphological data included tumor size, assessment of tumor location in the surgical sample, tumor color, tumor edges and affected lymph nodes. For microscopic examination, tumor tissue, tissue from lines of surgical resection, breast tissue outside the evident tumor, all identified lymph nodes were presented.

Samples of primary tumor tissue after macroscopic examination were fixed in neutral buffered 10% formalin, carried out the conductance of pieces of biological material in solutions of alcohols of ascending concentration, prepared in paraffin blocks. On a *Microtome Manual Microm HM325* serial standard sections were made with a thickness of $5 \pm 1 \mu\text{m}$, which were placed on ordinary slides for histological staining or Thermo Scientific™ *SuperFrost Plus™ Adhesion slides* for immunohistochemical studies.

Histological examination was performed on deparaffined sections of $5 \pm 1 \mu\text{m}$, which were stained with hematoxylin and eosin according to standard methods. Stained slides were examined under microscope Leica DM 750 (Leica Microsystems GmbH, Germany) to determine the type of tumor, the differentiation grade, the presence of secondary changes such as necrosis, inflammation, sclerosis, peritumoral lymphatic infiltration and invasion.

Tumors were diagnosed according to the WHO classification of breast tumors (*Tavassoli and Devilee, 2003, Lakhani SR, 2012*). The characteristics of the parenchymal component of the tumor (formation of various morphological structures, cell polymorphism, mitosis, tumor invasion beyond the basal membrane), the microenvironment of the tumor were evaluated. Tumors were classified according to grade of differentiation based on the classification of the Scarff – Bloom – Richardson, modified by Elston and Ellis (1991), which takes into account the ability of neoplasia to form tubular and glandular structures, the degree of nuclear polymorphism and the number of mitoses: G1 – well differentiated tumor, G2 – moderately differentiated tumor and G3 – poorly differentiated tumor. TNM stages were determined according to the 7th edition of the AJCC Cancer Staging Manual (*Edge et al., 2010*).

Based on ER, PR, HER2 / neu and Ki-67 expression status, breast cancers were categorized into molecular subtypes in accordance with St. Gallen 2013 consensus surrogate definitions of the molecular subtypes (*Harbeck N., 2013*). The Luminal A subtype was identified by immunohistochemistry (IHC): ER +, PR +/-, HER2- and Ki-67 less than 20 percent on surgically resected breast cancer tissue.

Histological sections of $5 \pm 1 \mu\text{m}$ were subjected to standard deparaffinization and dehydration in xylene and alcohols in increasing concentrations. After dewaxing and rehydration of the sections, Tris-EDTA Buffer for Heat Induced Epitope Recovery, pH 9.0, inhibiting the activity of endogenous peroxidase with 3% hydrogen peroxide solution and applying blocking serum. Incubation with primary antibodies was performed according to the instructions of the manufacturers, visualization of the IGH reaction was performed using the detection system DAKO EnVision + System with diaminobenzidine (Dako). The sections were stained with Mayer's hematoxylin and enclosed in Canadian balm.

In our study we used an antibody panel (Dako, Denmark) to determine the expression of ER α , PgR sex hormones – monoclonal rabbit antibodies to estrogen receptor) (Clone ER1, dilution 1: 1, Dako Flex) and progesterone receptor (Clone PgR 636, dilution 1: 1, Dako, Flex).

Evaluation of ER and PR expression was performed according to the recommendations of D.C. Allred taking into account the proportion of stained nuclei and the intensity of their staining. It was considered a negative reaction when the sum of points was 0-2, weakly positive – 3-4 points, positive – 5-6 points and strongly positive – 7-8 points (*Allred D.C., 2010*). A total score of 3 on this scale corresponds to 1-10% of stained cells and is the minimum positive result.

Membrane staining was evaluated for HER-2 / neu (Clone SP3, dilution 1: 1, Thermo scientific) according to HercepTest™ as follows: 0 – no staining is observed or membrane staining is observed in less than 10% of tumor cells; 1 – weak or barely noticeable staining of the membrane is found in more than 10% of tumor cells, the cells are stained only in part of their membrane; 2 – weak and moderate complete staining of the membrane is observed in more than 10% of tumor cells; 3 – strong complete staining of the membrane is observed in more than 30% of tumor cells. HercepTest is interpreted as negative for HER2 protein expression (staining intensities 0 and 1+), weakly positive (2+ staining intensities) and strongly positive (3+ staining intensities) according to Dako HercepTest™, 16th edition. At the level of expression 2+, a FISH study was required.

To study the proliferative activity of tumor cells we used rabbit monoclonal antibodies to the protein Ki-67 (Clone MIB-1, dilution 1: 1, Dako, Flex). According to the classification of St. Gallen Consensus (2013) considered the level of Ki-67 to be less than 20% as the index of proliferative activity for Luminal A breast cancer.

Routine microscopy, photographing of micropreparations, evaluation of immunohistochemical staining was performed on a light optical universal laboratory microscope Leica DM 750 (Leica Microsystems GmbH, Germany) with a digital video camera Leica ICC50 HD.

All calculations were performed using the statistical software package Statistica® for Windows 13.0 (StatSoft Inc., license №JPZ804I382130ARCN10-J). The results were represented by the interval $M \pm m$. Significance of differences was assessed by Student's t-test. Survival rates were assessed by Kaplan-Meier analysis. The difference parameters were considered statistically significant at $p < 0,05$.

3. Results of the research and their discussion

The Luminal A subtype was identified by immunohistochemistry (IHC) and *immunohistochemical profile was*: ER+, PR +, HER2-negative, and Ki-67 less than 20 percent (Fig. 1).

The mean age of patients was $60,41 \pm 12,25$ years (range, 32–85 years), 26 (32,9%) were under 55 years. Clinical stage II – 35 (44,3%) and III – 31 (39,24%) was observed. Menopausal status was in 67,1% of cases. G1 – 10 (12,66%), G2 – 56 (70,88%), and G3 – 13 (16,46%) cases. In 42 (53%) cases, the tumors were localized in the left and in 37 (47%) – in the right breast. All patients received combination treatment in the form of surgery in the amount of radical mastectomy or radical resection and hormone therapy (aromatase inhibitors or tamoxifen). Clinicopathological characteristics of Luminal A subtype of invasive ductal breast cancer are shown in Table 1.

According to the results of morphological examination of the surgical material, metastases to the axillary lymph nodes were diagnosed in 39 (49,37%) patients. Morphological analysis showed that tumor involvement of the lymph nodes was found more often with a large variety of infiltrative component of the primary tumor node and the presence of alveolar structures. Alveolar structures represent as clusters of tumor cells either rounded or slightly irregular, resembling a rounded shape. The morphology of the cells forming this type of structures varied from small with moderate cytoplasm and rounded nuclei, to large with hyperchromic, irregularly shaped nuclei and abundant cytoplasm (Fig. 2). Simultaneously, we diagnosed trabecular, solid, tubular structures and separately located groups of tumor cells and single tumor cells.

An important practical morphological characteristic feature of alveolar complexes in invasive ductal breast cancer is the absence of myoepithelial cells on the periphery. At immunohistochemical typing single myoepithelial cells can be found in the central departments of a complex.

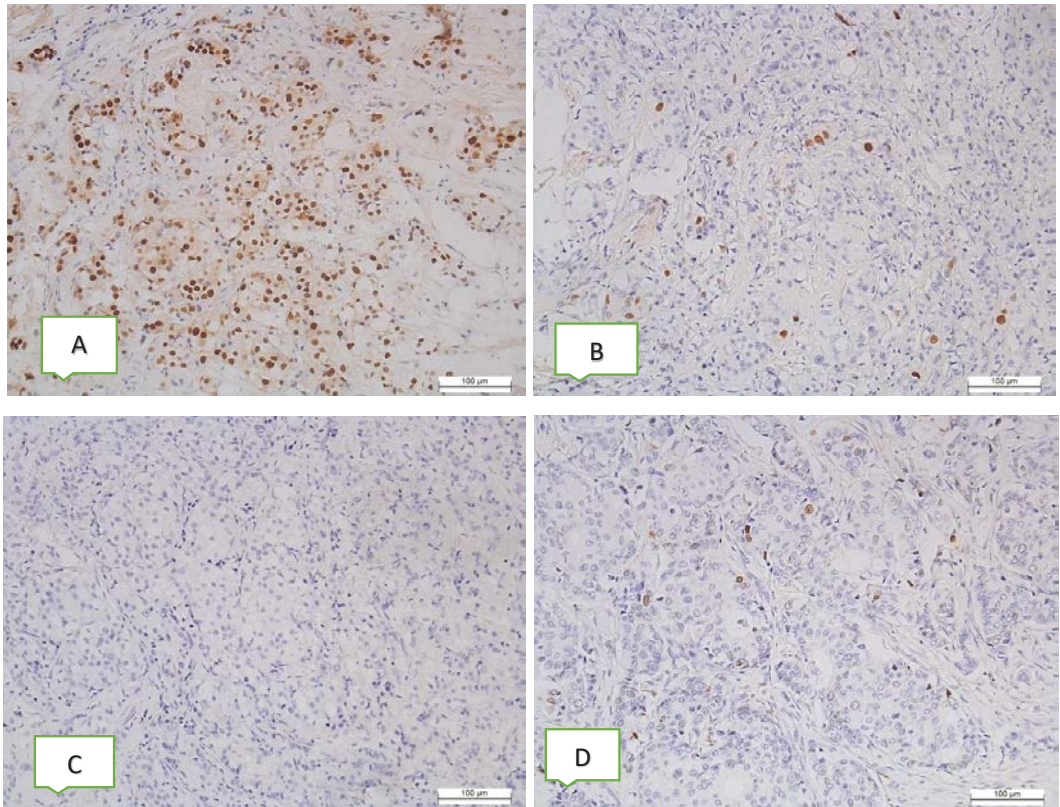


Fig. 1. Invasive ductal carcinoma of the breast. Luminal A subtype. IHC.
A – Positive nuclear expression of ER (Clone EP1, Dako Flex). B – Positive nuclear expression of PgR (Clone PgR 636, Dako, Flex). C – Negative membrane expression of receptors for c-erbB-2 (negative HER-2 / neu status, Clone SP3, Thermo scientific). D – Positive nuclear expression of Ki-67 in the tissue of invasive carcinoma (Clone MIB-1, dilution 1: 1, Dako, Flex). x200.

Table 1

Clinicopathological characteristics of Luminal A subtype of invasive ductal breast cancer

Variable	Luminal A n=79
Age Mean ± SD (years)	60,41 ± 12,25 (Range, 32–85 years)
Menopausal status	
Premenopause	26 (32,91%)
Postmenopause	53 (67,09%)
pT1	25 (31,64%)
pT2	39 (49,37%)
pT3	7 (8,86%)
pT4	8 (10,13%)

Table 1 (Continued)

pN0	36 (45,57%)
pN1	23 (29,11%)
pN2	13 (16,46%)
pN3	3 (3,8%)
Nx	4 (5,06%)
G1	10 (12,66%)
G2	56 (70,88%)
G3	13 (16,46%)
Positive ER status	79 (100%)
Negative ER status	0 (0%)
Positive PR status	72 (91,14%)
Negative PR status	7 (8,86%)
Low Ki-67	79 (100%)
High Ki-67	0 (0%)
Negative HER2 status	79 (100%)

Trabecular structures were short, formed by one line of small monomorphic cells, or long, consisting of 2-3 lines of medium-sized cells with moderate cytoplasm, rounded normochromic or hyperchromic nuclei (Fig. 3). Tubular structures were formed by 1-2 lines of monomorphic cells with normochromic rounded nuclei and had the form of thin channels (Fig. 4). Solid structures were represented as fields of different size and shape, consisting of small cells with moderate cytoplasm and monomorphic nuclei or of large cells with abundant cytoplasm and polymorphic nuclei (Fig. 5). Separate groups of cells were clusters of 1-4 cells of variable morphology (Fig. 6). Most often, the infiltrative component had a mixed structure (Fig. 7). Microscopic examination in each case indicated the number of different types of structures in the infiltrative component.

The stromal component of the tumor was weak or moderate. In most tumors, there was minimal (Fig. 8) or moderate inflammatory infiltration (Fig. 9). Neoplasms were characterized by low proliferative activity.

The study of the infiltrative component of Luminal A subtype of invasive ductal carcinoma of the breast showed the presence of different types of morphological structure, such as alveolar, solid, trabecular, tubular and separately located groups of tumor cells. The frequency of detection of different structures is presented in table 2.

Invasive ductal carcinoma is the most common morphological type of breast cancer. In our study, almost all cases of luminal A subtype of ductal cancer were diagnosed at stage pT1 and pT2, when the tumor had the largest diameter up to 5 cm. Metastases to the axillary lymph nodes were diagnosed in 39 (49,37%) patients. Among the tumors which were smaller than 2 cm in the largest diameter (pT1), lymph node metastases are absent.

In pT2 cancer, the distribution of pN was different: metastases were not detected in 11 (28,21%) cases, 1-3 positive lymph nodes were detected in 23 (58,97%) cases, and 4-9 metastases to axillary lymph nodes were detected in 5 (12,82%). Larger tumors were associated with more aggressive spread, as pT4 cases had ≥ 10 metastases in 37,5% of cases.

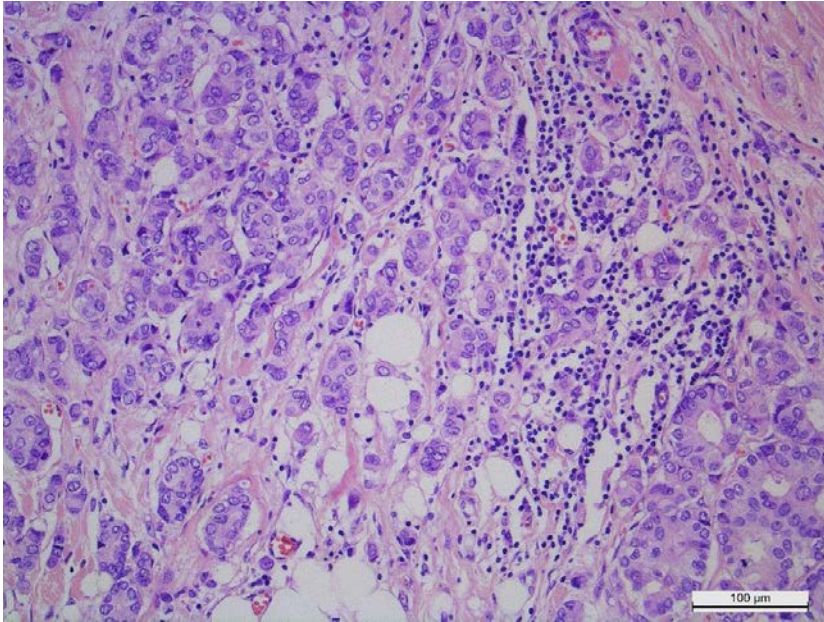


Fig. 2. Clusters of tumor cells of round or oval shape forming alveolar structures in the invasive component of ductal cancer. H&E stain, × 200

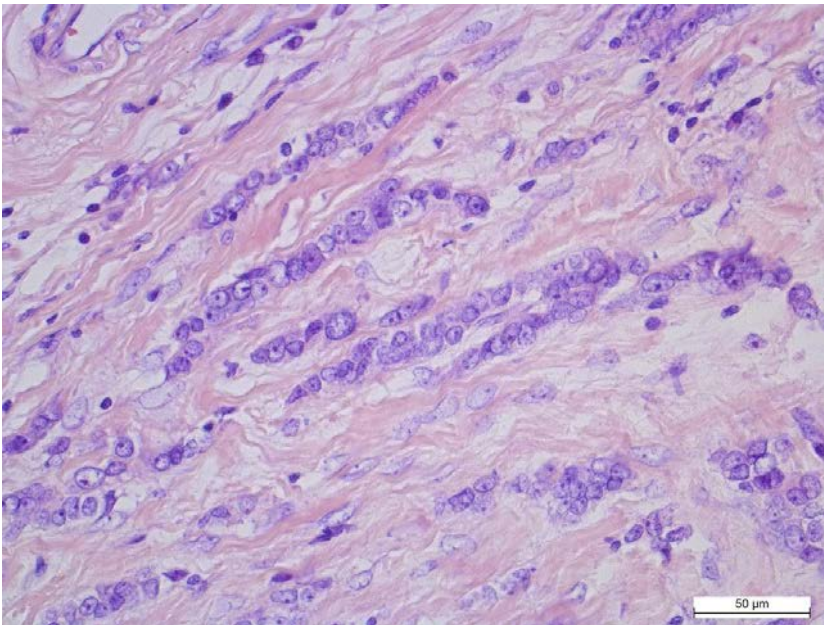


Fig. 3. Trabecular structure in the infiltrative component of invasive ductal carcinoma of the breast. H&E stain, × 400

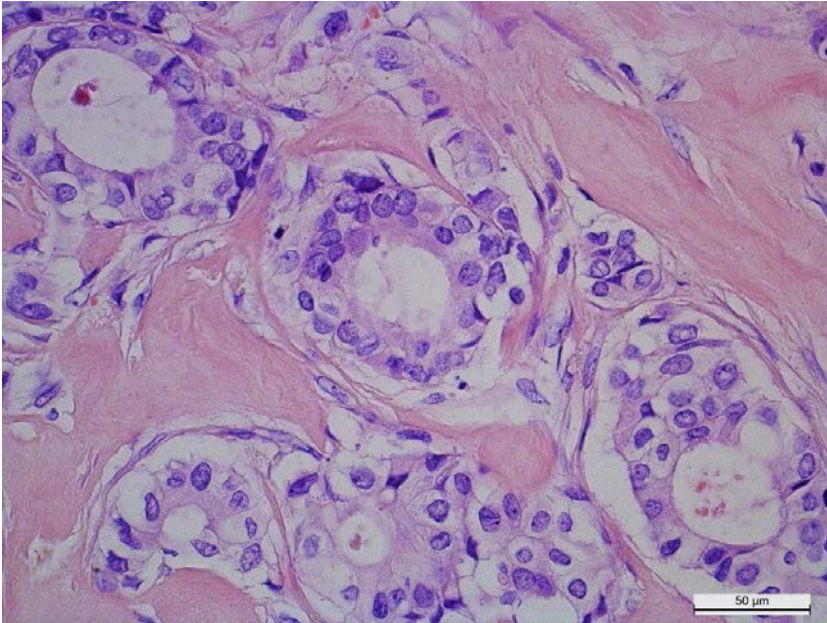


Fig. 4. Typical tubular structures in the infiltrative component of invasive ductal carcinoma of the breast. H&E stain, × 400

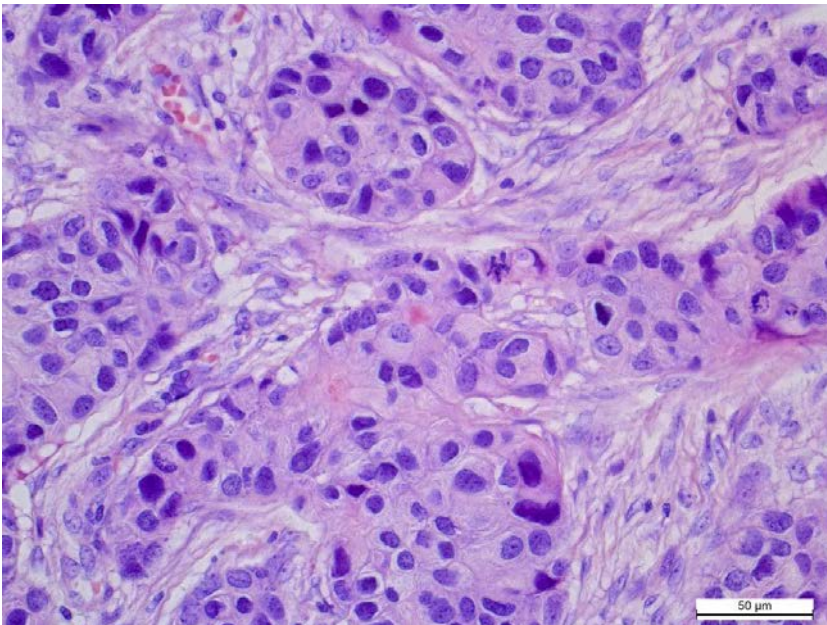


Fig. 5. The presence of solid structures in the infiltrative component of invasive ductal carcinoma of the breast. H&E stain, × 400

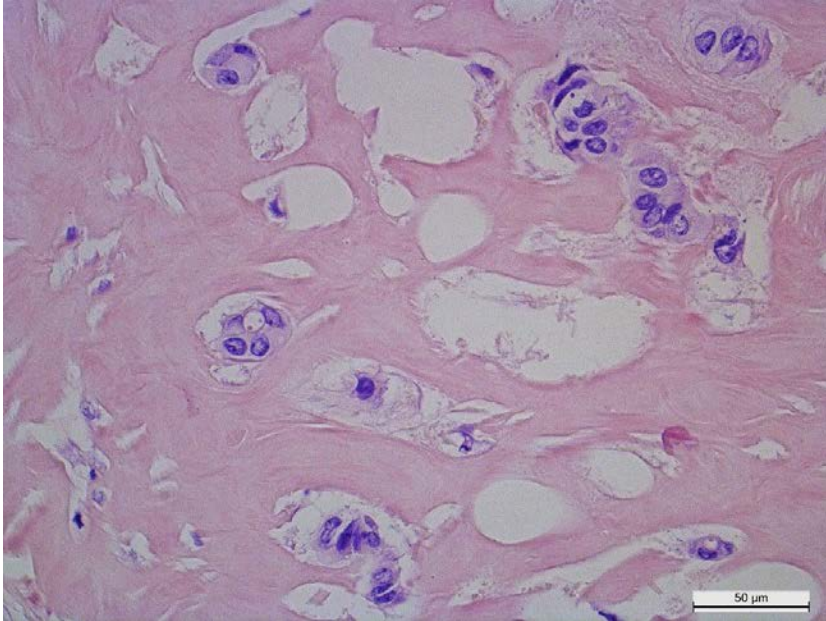


Fig. 6. The presence of individual tumor cells in the infiltrative component of invasive ductal carcinoma of the breast. H&E stain, × 400

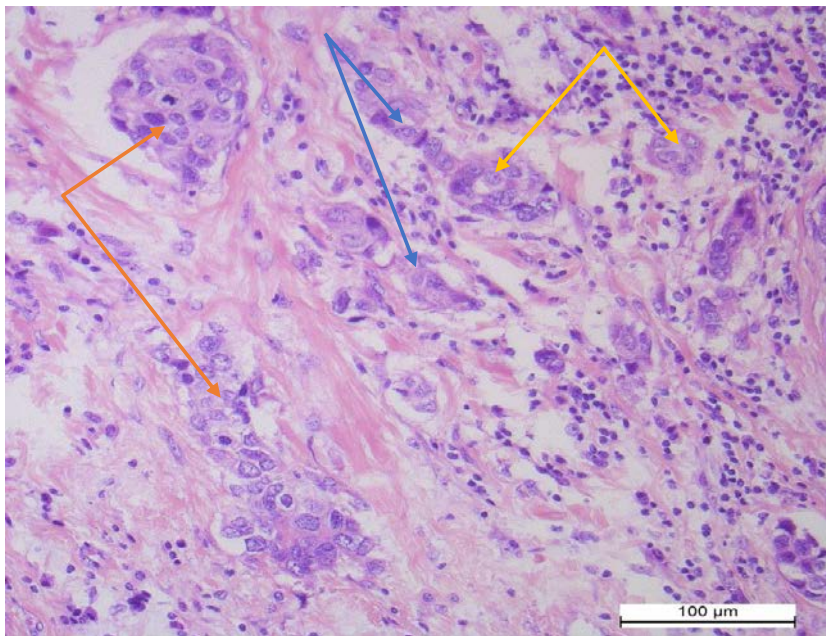


Fig. 7. The infiltrative component of invasive ductal carcinoma of the breast is represented by solid (orange arrow), trabecular (blue arrow) and alveolar (yellow arrow) structures. H&E stain, × 200

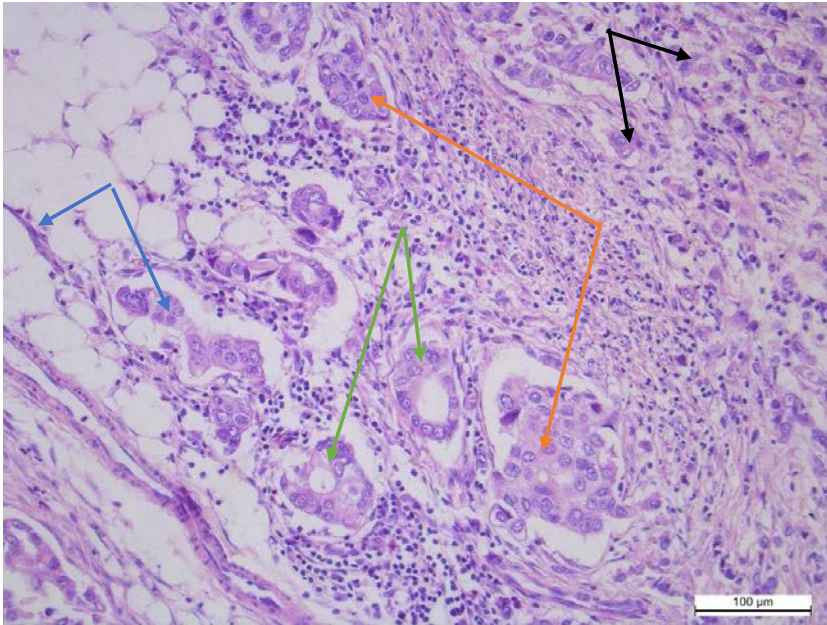


Fig. 8. Infiltrative component of invasive ductal carcinoma of the breast of mixed structure, represented by tubular (green arrow), solid (orange arrow), trabecular (blue arrow) structures and individual groups of tumor cells (black arrow). Weak inflammatory infiltration of the stroma. H&E stain, × 200

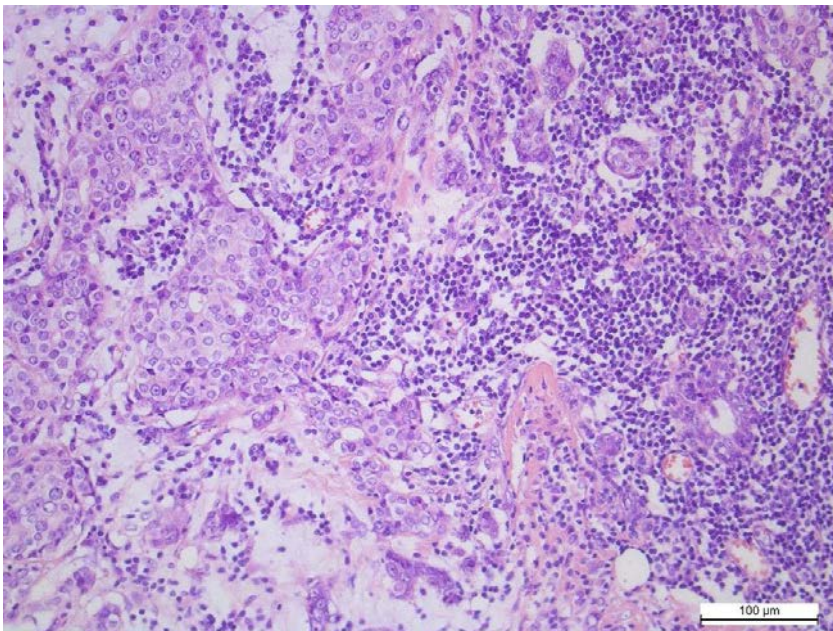


Fig. 9. Abundant inflammatory infiltration of the stroma of invasive ductal carcinoma of the breast. H&E stain, × 200

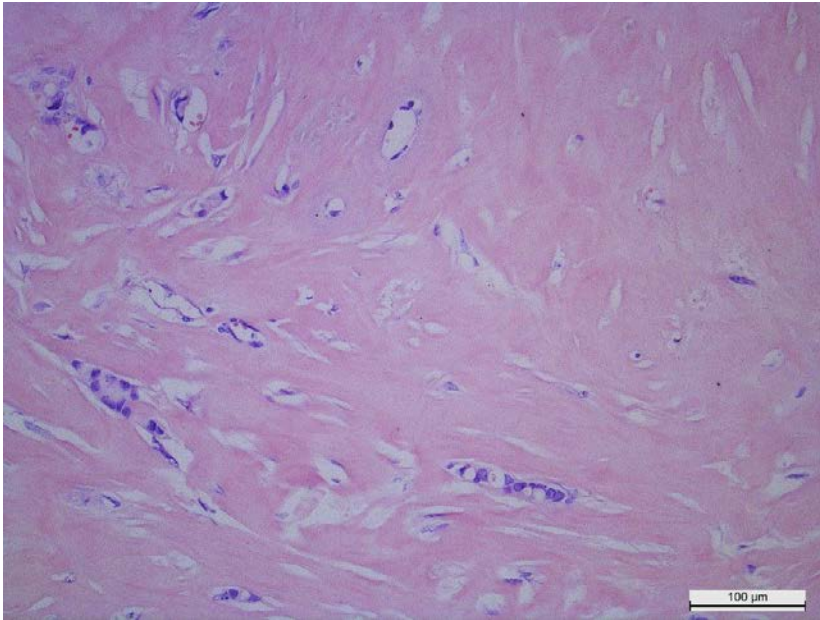


Fig. 10. Severe hyalinosis of the stroma of invasive ductal carcinoma of the breast. The infiltrative component is represented by separate small groups of tumor cells. H&E stain, × 200

Table 2

Frequency of detection of different types of morphological structures in the infiltrative component of Luminal A subtype of invasive ductal carcinoma of the breast

Types of morphological structures in the infiltrative component	Luminal A subtype n=79
Alveolar (in the form of glandular structures)	56 (70,89%)
Trabecular (in the form of chains or cords)	61 (77,22%)
Tubular (in the form of tubes)	35 (44,30%)
Solid (solid sheets as nests)	32 (40,51%)
Individual single cells	53 (67,09%)

Evaluating negative and positive cases of lymph node involvement, pT1 tumors predominated in the pN0 group. In the pN1 group with 1-3 positive lymph nodes, pT2 was the most common finding, accounting for 58,97%. Similarly, pN2 (4-9 positive lymph nodes) was dominated by pT2, which was 12,82%. There were statistically significant differences ($P < 0,0001$). Among the cases showing peritumorous invasion of lymphatic vessels, cases of pT2 were predominant, which is consistent with studies by other authors (*Metzger-Filho O., 2013*).

In our study, patients with Luminal A subtype had a total three-year survival rate of 100%, and one-, two-, and three-year recurrence-free survival was 91,7%. Molecular luminal A subtype is generally associated with an extremely favorable prognosis (*Tsoutsou PG et al., 2017*) and usually exhibits less frequent and less extensive lymph node involvement (*Sanpaolo P et al., 2011, García Fernández A et al., 2014*). This subtype tends to develop more slowly over time than other molecular subtypes (*Jatoi I et al., 2011*). In addition, the positive

status of hormone receptors is a favorable prognostic factor and also provides a response to endocrine therapy (*van der Leij F. Et al., 2012, Haffty BG., 2002*). Several retrospective studies have shown similar results with a percentage ranging from 0,8 to 8% (*Millar EKA et al., 2009; Voduc KD. Et al., 2010; Arvold ND et al., 2011; Albert JM et al., 2010 Nguyen PL et al., 2008*).

As breast cancer is a heterogeneous group of tumors with variable biological and clinical characteristics, the detection of prognostic markers is clinically important. ER and PR, determined immunohistochemically, are widely used as prognostic markers for hormone therapy, and as prognostic factors (*Elizabeth M. H. 2010*).

According to the histological evaluation (G), all cases in presented study were classified as following: G1 – 10 (12,66%), G2 – 56 (70,88%), and G3 – 13 (16,46%) cases. Onitilo et al. (2009) analyzed the histological parameters of breast cancer. Their study group included G3 tumors (35,9%), G2 tumors (38,4%), and a relatively small proportion of G1 tumors (21,2%). Luminal A subtype group included almost half of the cases (44,9%) of the disease with G2.

High proliferative activity of the tumor with a high level of Ki-67 expression is associated with worse prognosis. The Ki-67 proliferation marker should be included in routine clinical trials, as the Ki-67 index is crucial for distinguishing between luminal A and luminal B (negative HER-2 / neu) molecular subtypes. The value of the Ki-67 index is being studied by many researchers and important recommendations for this test are still being developed. Ki-67 values <14% were found for differentiation with luminal B subtype and this means that tumors with high Ki-67 values have a worse prognosis (*Cheang et al., 2009; Goldhirsch et al., 2011*). According to the latest recommendations of St. Gallen Consensus (2013) the Ki-67 level of less than 20% is considered to be the index of proliferative activity for Luminal A breast cancer. According to our results, this study showed an association between luminal A subtype and low Ki-67 proliferation index.

4. Conclusions

Molecular classification of breast cancer has important prognostic value. Luminal A subtype is associated with good prognosis and less aggressive behavior.

Luminal A subtype of breast cancer was characterized by small tumor nodules not exceeding 2 cm in diameter and stage I of the process in 31,64% of cases, which is consistent with well-known data.

Luminal A subtype of breast cancer is diverse in the morphological structure of the tumor and lymphogenic metastasis is associated with a variety of structures of the infiltrative component, including the presence of alveolar, solid, trabecular, tubular structures and separate groups of tumor cells. Survival is significantly affected by pT, pN, age, menopausal status, molecular subtype and structure of the infiltrative component.

Molecular subtypes should be determined using immunohistochemistry as a cost-effective surrogate method and a significant factor associated with survival or locoregional recurrence (*Gabos Z, 2010*).

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TECHNOLOGY, CREATIVITY, IMPLEMENTATION**AGILE-METHODOLOGY IN SHIPBUILDING PROJECT MANAGEMENT
IN CONDITIONS OF CLUSTER INTEGRATION****Nikolai Fateev**

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Summary

The aim of the article is to study the features of the development of cluster systems for the construction of transport vessels and develop on this basis recommendations for the use of agile methodology in the mechanisms of effective management in cluster integrations. The characteristic features of a project-oriented operating system with a matrix organizational structure have been determined. The principles of the agile methodology have been adapted to the management mechanisms of the shipbuilding cluster system. The examples of the use of agile approaches that complement and strengthen the existing matrix management structure in the shipbuilding cluster system are given. The agile approaches are implemented through: maintaining stable links in the supply chain at all stages of the life cycle of the cluster; focusing the cluster system as a whole on customer needs; creation of cross-functional teams for support and development of human resources; creation of a logistics center in accordance with the agile methodology, which is implemented through short feedback cycles and regular adaptation of supply processes; lean production – from design to production at all stages. It is proposed to develop a corporate information system in business processes and supply chains of the shipbuilding cluster. Information flows connect cluster members, functions, supply chain management tasks, as well as different levels of management decision-making. Team cooperation between representatives of project organizations and the project management office of shipbuilding enterprises will ensure the development of the information system as a whole, as well as the integrity and consistency of individual elements. This confirms that the agile methodology provides flexibility in management and operational adaptation to changes in order to achieve the main goal – the competitiveness of cluster integration and its elements.

Keywords: transport vessels, flexible technologies, cognitive modeling, iterative-incremental approach, predictive mechanisms, project-oriented production, cross-functional teams.

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1. Introduction

The current state of economic development is characterized by the emergence and development of new relationships, the basis of which is the cooperation of manufacturers, suppliers, users in order to integrate business process management throughout the product life cycle. The influence of non-production factors on the economic system is increasing: supply, sales, service, etc. This requires the search for new approaches to management mechanisms, which are based on the development of inter-industrial relations, the integration of communication channels between suppliers, users, manufacturers.

The leading countries in the shipbuilding market have accumulated positive experience in creating strategic alliances in the form of *economic cluster systems*. Using the synergy of clusters, shipbuilding enterprises ensure their competitiveness through effective cooperation in the use of knowledge, financial resources, technologies, means of production. The peculiarity of cluster integrations is the participation of business structures, public administration bodies, scientific and educational institutions. At the same time, a significant factor is the real possibility of activating small and medium businesses, implementing socially important regional and national programs (Fateev N.V., 2014; 106).

The special features of shipbuilding cluster systems management are described in (Kozyr, B. Yu., 2016; 91), (Fateev N.V., 2014; 106). In work (Zaporozhets I.M., 2018; 183), the scheme of decomposition of production processes as a basis of formation of network model of the project in the vessel construction is offered and substantiated. These studies are mainly aimed at the development of planning models for shipbuilding projects. Problems of project implementation management in the context of cluster integration, metrics for assessing their effectiveness in the literature are insufficiently disclosed.

Modern mechanisms of project management using flexible technologies are described in detail in the works (Stelman, E., 2017), (Kon Mayk, 2018). They are based on the specifics of software development project management. In 2018, the Project Management Institute (New York) published a manual "Agile: a practical guide" (*Agile: A Practical Guide*, 2018), which reveals ways of transition in project management from predictive mechanisms to flexible technologies based on iterative-incremental models.

Shipbuilding is a production system with a high degree of uncertainty. This factor is the reason why shipbuilding projects are characterized by high rates of change, complexity and high level of risk. When using traditional predictive approaches to management, these features lead to problems that are difficult to solve using traditional management mechanisms. In the early 2000s, the Agile approaches presented in the Agile Manifesto of Software Development were created (Stelman, E., 2017), (Kon Mayk, 2018). The basis of the agile methodology is flexible models and mechanisms implemented in the format of iterative refinement to achieve the best end results of projects. Although these principles have emerged in the field of software development, since then they have been successfully used in many other areas (*Agile: A Practical Guide*, 2018).

The adaptation of the values and principles of the agile methodology to the management mechanisms of shipbuilding cluster integration will enable the members of the cluster and the cluster as a whole to obtain significant competitive advantages, which determines the relevance of the content of the scientific article.

The aim of the research. Introduction of the agile methodology principles into the portfolio management system of transport vessel construction and repair projects in the conditions of cluster integration.

2. Statement of the main research material

The modern shipbuilding cluster is a social and technical system with a high degree of integration (*Zaporozhets I.M., 2018; 183*). The material flow acts as an integrator, as well as the information and financial flows associated with it. According to the object-functional feature, the shipbuilding cluster can be represented as a macrologistic system, which includes shipbuilding enterprises, project, research organizations and shipbuilding educational institutions. Despite the fact that the elements of cluster integration are of different quality, their compatibility is ensured by the unity of goal to which its functioning is subordinated – the construction of competitive vessels that meet the requirements of shipowners. The main factors of competitiveness are the duration of the vessel construction, cost and quality (a complex indicator, including the volume of operating costs, maintainability, etc.)

The characteristic features of the shipbuilding industry are the project-oriented nature of production and the matrix management structure (*Fateev N.V., 2014; 106*). In terms of cluster integration, this generates a number of systemic contradictions on the way of implementing the chosen strategy when distributing resources between cluster members, individual projects and programs. Management decisions at different levels have to be made in conditions of abrupt changes in the situation, which are not always foreseen in conditions of incomplete and inaccurate information. Therefore, the problem of managing its sustainable functioning and development is of paramount importance for cluster integration. To solve this problem, it is necessary to develop mechanisms of logistic analysis as a decision-making tool in the management of sustainable development of the cluster. The basis of these mechanisms is an integrated concept of streaming of all business processes, which will ensure the validity of the choice of effective options for end-to-end management of material, information and financial flows at all levels. Cognitive modeling is an effective tool for the analysis and management of such production systems. In combination with the methods of system dynamics, cognitive analysis will make it possible to resolve the contradictions inherent in shipbuilding cluster integration.

For the practical implementation of a set of tasks for the development of the shipbuilding cluster management system, it is advisable to use some provisions of the agile methodology. In accordance with the recommendations set out in (*Stelman, E., 2017*), it is necessary to form a number of cross-functional teams, including specialists from various enterprises and organizations of the cluster, suppliers, customers, consulting firms and others. Creative cooperation as a part of cross-functional teams will provide operative adaptation of a cluster to changes of factors of external and internal environment.

Here are examples of the use of agile approaches that complement and strengthen the matrix management structure existing in the shipbuilding cluster system.

1. Maintaining stable links in the supply chain at all stages of the cluster life cycle (*Fateev N.V., 2014; 106*). This is a complex task, which includes analysis and evaluation of motivational mechanisms of cluster participants, analysis of common challenges and opportunities, collection of proposals for the development of cluster integration. The technology and organization of solving these problems with agile tools does not replace the functions of strategic management, but complements them, involves specialists from various departments and stakeholders in the preparation and implementation of management decisions.

2. Focusing the cluster system as a whole on the needs of customers (shipowners, leasing companies, etc.). At the same time, effective benchmarking, collection and analysis of information are used on the state of the global and regional shipbuilding markets, active use of feedback in the processes of reengineering of cluster business processes. The cross-functional

teams using agile technologies will provide rapid response and adaptation of the cluster system through the preparation and implementation of informed management decisions. This approach will allow cluster members to focus on the values they create in the overall supply chain. These tools are used in teams working on Scrum, a popular way of organizing production processes in agile (Kon Mayk, 2018).

3. An important factor in ensuring the competitiveness of the shipbuilding cluster is the quality level of labor resources. The basis of labor quality management mechanisms is a thorough analysis of the global and national labor market, as well as the market of educational services. Shipbuilding requires a fairly large list of workers, engineers and managers. The cross-functional team for the support and development of human resources should provide facilitated interaction of educational institutions of different levels, research centers, technology parks.

4. The strategic direction in the development of the shipbuilding industry is the development of 6D-design technology – 3D modeling combined with the management of the design, construction and operation of vessels in a single information space. To solve problems of this level of complexity, the agile methodology offers an iterative-incremental approach. Its essence is revealed in the agile manifesto (*Agile: A Practical Guide, 2018*) and is aimed at containing the growth of the complexity of the problem. This is achieved by planning and executing work at short fixed intervals, that is, in short cycles.

The system of planning and accounting units is used in shipbuilding and ship repair. The upper level of decomposition consists of shop-stages, work packages performed by a certain production unit. The middle level of decomposition consists of technological sets that are being formed in the process of production planning on the principles of structural and technological unity of work and are the basic elements of calendar-network models of shipbuilding processes. The result of the completion of work on the technological set is the final product of the production unit. This is an incremental result that is required to complete the work of an adjacent production unit. Thus, the use of technological sets in the management mechanisms of shipbuilding is effectively combined with iterative and incremental approaches to agile methodology.

The corporate information system plays a key role in coordinating business processes in the supply chains of the shipbuilding cluster. Information flows connect cluster members, different supply chain management functions and tasks, and different levels of decision-making.

The corporate information system of the cluster can be functionally divided into two parts.

1. The information model of the vessel is formed at all stages of design and technological preparation of production. These works are performed in project organizations and technological services of shipbuilding enterprises.

2. The cluster management information system is a set of hardware, software and information tools that provides decision support at all levels in the elements of the cluster supply chain.

To provide controlled access to the corporate information model database, it is proposed to form a cross-functional team in accordance with the agile methodology. Creative cooperation in the team of representatives of project organizations and the project management office of shipbuilding enterprises will ensure the development of the information system as a whole, as well as the integrity and consistency of individual elements.

5. In work (Kozyr, B. Yu., 2016; 91), the expediency of the organization in the structure of the cluster of shipbuilding and ship repair of the logistics center is offered and substantiated.

Its main functions are cluster modeling and material management. The planning and implementation of processes for the supply of materials and components in warehouses and production sites are an essential factor in the stability of the cluster in a dynamic environment. To build effective delivery mechanisms, it is advisable to use agile recommendations based on a balance of authority and responsibility of performers.

The network model of shipbuilding processes in the cluster system makes it possible to form the list of projects of material and technical resources necessary for the implementation of a portfolio of all nomenclature of technological sets. In accordance with the agile methodology, the logistics center implements short feedback cycles, regular adaptation of supply processes.

6. An important element of the agile methodology is *lean production* – an approach to managing the organization, aimed at improving the quality of production processes by reducing losses (Stelman, E., 2017), (Agile: A Practical Guide, 2018). This approach applies to all aspects of the activity – from design to production at all stages. Coordination with the customer at different stages of design will allow obtaining such characteristics of the vessel that will ensure its efficiency during the period of operation. For example, the factors of maintainability of individual elements and the vessel as a whole are formed at different stages of design, and this is an important component of maintenance costs.

3. Conclusions

These examples confirm that the use of Agile principles and values will give flexibility to the matrix management structure inherent in the cluster system of shipbuilding and ship repair. The transition to flexible methodologies in management will ensure rapid adaptation to changes in internal and external factors, which will achieve the main goal – the competitiveness of shipbuilding cluster systems.

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MODERN METHODS OF GEAR MILLING OF HARDENED LARGE-MODULE GEARS

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Summary

The latest developments of modern methods of high-speed gear milling of large-module cylindrical gears, both for preliminary grinding of teeth and for final blade processing of gears, are considered. For high-speed blade gear processing, promising designs of worm carbide cutters have been developed, manufactured and implemented. The technological regulations of blade gear processing for the operation of each of the design solutions of worm carbide cutters have been developed. The design of a special double-body worm cutter for double-sided cutting has been developed. It is shown that the carbide cutting elements of the milling cutters, which are placed only along the lines of the machine engagement of the tool and the workpiece, make it more economical compared to the known designs of similar tools. The application of the developed technological methods of pre-blade processing of the teeth of hardened wheels with carbide cutters reduces the labor intensity of low-performance gear grinding operations, depending on the wheel module, by 3-4 times by reducing the allowance from 1.5–2.5 mm on the tooth side to 0.3–0.5 mm, and also allows you to ensure the gear processing process is economical by reducing the consumption of carbide plates. The developed technological studies of ensuring the quality of gear processing of large-module cylindrical wheels allow us to solve the scientific and technical problem associated with the production of large-module gears with high-hardness teeth while improving the quality of their manufacture, reducing labor costs and reducing material consumption.

Keywords: high-speed blade gear processing, carbide cutters, cutting elements, technological methods, surface layer quality.

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1. Introduction

The increase in production efficiency in various industries is largely due to the development and development of mining and processing equipment, transport and energy systems, and other large-sized machines whose drives include large-module gears ($m > 12$ mm). The improvement of the specified technological equipment consists in increasing its power, increasing the speed of mutual movement of elements, ensuring the reliability of operation in deteriorating dynamic conditions, increasing durability (Czerniec, M., 2019: 53).

The scientific novelty of the obtained results is that on the basis of a broad analysis and generalization of industrial achievements in gear processing, requirements for heavy-loaded and responsible gears, general principles for the development of structures and parameters of technological systems for gear processing of hardened large-module gears are formulated and implemented for the first time. This allows you to intensify the processing process and increase the efficiency of the process by minimizing the wear rate of the cutting tool and the cost of manufacturing it, provided that high accuracy of engagement and the quality of the surface layer are obtained.

The relevance of scientific solutions is to increase the productivity, accuracy and quality of gear processing of hardened large-modular gears on the basis of improving the technological system and kinematics of gear milling, the design of tool and technological equipment. This allows you to increase the efficiency of shaping while ensuring the required accuracy of the gears. The development of a scientifically based assessment system allows technological support of the operational properties of the contact surfaces of hardened large-modular gears.

The purpose of the study is to solve the main directions of ensuring high performance of gear processing of hardened large-module gears at the specified parameters of accuracy and quality. To achieve this goal, it was necessary to solve research tasks to justify the development of a system of objective criteria for evaluating technological solutions that characterize the processing object, the technological process of shaping and allow us to formulate the main directions for ensuring high performance of gear processing of hardened large-module gears with specified parameters of accuracy and quality of the surface layer after processing.

The methodological basis of the work is a systematic approach to the study and description of the object and subject of research and, first of all, the technological processes of shaping the gear processing of hardened large-module gears as the basis for the formation of the principles of production system management, the principles of modeling and management of the structure and parameters of discrete technological systems. Theoretical research is based on the basic principles of mechanical engineering technology, the theory of similarity and dimensions, the theory of simulation modeling, and the theory of artificial intelligence. Methods of pattern recognition theory and vector algebra are used for mathematical modeling of the structure of the production system. The theory of algorithms and the principles of structural object-oriented programming, as well as methods of discrete optimization, were used to create a software and methodological complex of the production system simulation system. Group theory and relationship theory were used to analyze the structural properties of technological operations. The formalization of technological solutions was carried out on the basis of production models of knowledge representation. Experimental studies were conducted using the theory of modeling, discrete and correlation analysis.

2. Technological methods of processing large-module gears

The creation of new equipment in some cases is constrained by the technological capabilities of manufacturing gear drives. Increasing the hardness of the working surfaces of the teeth of gears is one of the most effective and relevant ways to increase the load capacity and durability of gears and, consequently, gearboxes while reducing their size and weight (*Alaa, F., 2017; Dhafer, W., 2016: 45*).

The results of a number of studies (*Kostyk, K., 2016: 54; Nechyporuk, M., 2020*) indicate that increasing the surface hardness of the teeth from HRC 30 to HRC 60 allows you to halve the dimensions of the gearbox and reduce its weight by 3 times (*Golebski, R., 2018: 645*).

Modern technology of gear processing of large-modulus hardened wheels is developing in the direction of developing new technological approaches (Klochko, A., 2020: 25; Kostyk, V., 2019), forming processes of working surfaces of teeth (Gołębski, R., 2018: 647), creating new high-performance equipment (Mironenko, E., 2013: 3; Mironenko, E., 2015: 28), new tool materials and tools (Mohammadkhani, R., 2012: 6685).

Modern requirements for increasing the hardness of the working surfaces of the teeth of gears is one of the most effective and relevant directions for increasing the load capacity and durability (Kostyuk, G., 2019: 27) of gears and gearboxes while reducing their size (Jian, K., 2013: 4780; Suslov, A., 2006).

During the operation of the gears, rolling friction and sliding friction occur simultaneously, causing wear and destruction of the working surfaces of the teeth (Permyakov, A., 2020: 17). This is accompanied by a violation of the correct engagement, an increase in noise, a drop in efficiency, the occurrence of dynamic load, etc. (Masjedi, M., 2015: 235).

In case of excessive wear of the teeth of the gear rings ($m > 26$) and the wheels of the drums ($m > 20$), it is not allowed to leave them in the mechanisms. The amount of wear and tear must not exceed the standard value by more than $0,17m$.

The maximum wear of the gear teeth is $(0.1-0.24)m$, where m is the normal modulus. For gears with hardened teeth, the maximum wear is 0.8 of the cemented layer thickness. (Artoni, A., 2019: 103; Gavranovic, S., 2019: 553; Suslov, A., 2018: 3).

If the working surface of the tooth is painted and other violations of the profile exceed the permissible standards, the wheels and gears must be replaced.

At the same time, a significant increase in the hardness of gears dramatically increases the complexity of their manufacture: the requirements for the rigidity of gear-cutting equipment, tool durability, and the need for expensive, but low-performance gear-grinding machines increase.

If for gears of small and medium modulus it is possible to obtain the required gearing characteristics relatively steadily by chemical-thermal treatment and gear grinding, then for large-modulus wheels ($m=12\div 65$ mm), especially oblique-toothed ones with a tooth angle of more than $\beta_d = 250\div 30^\circ$ and a tooth length of more than $b_k = 400\div 1200$ mm, the performance of technological operations of chemical-thermal treatment and gear grinding is repeatedly complicated, and it is not always possible to achieve the set goals due to significant thermal deformations of the teeth (0.8-2.5 mm) and high (more than 200 machine hours) labor intensity of gear grinding operations (Nazapov, Yu. F., 2009: 9; Shapovalov, V., 2009: 4).

Performing the technological operation of gear grinding on the teeth of a large module in the conditions of removal of an increased allowance (1.0-2.5 mm) leads to the appearance of such defects in the surface layer as «cauterization» and microcracks, and in the layer itself there are tensile stresses, which ultimately reduce the load capacity and durability of heavy-loaded cylindrical gears.

When assigning the parameters of the state of the contacting surfaces of cylindrical large-modulus hardened gears, the possibilities of technological processing methods for providing the parameters of the state of the surface layer of roughness (R_{max} , R_a , R_z , R_p , S_m , S), undulation (W_a , W_p , S_mW), and physical and mechanical properties of the surface layer are established ($k=(H_{\mu 0}/H_{\mu})\cdot 100\%$, $h_{\mu 0}\pm\sigma_0$, $h\sigma$) (Timofeev, Yu. V., 2010: 214).

Analysis of the results of studies on the formation of the height of the roughness profile in various methods of gear processing of large-modulus hardened gears allowed us to conclude that the formation of roughness in all methods of gear processing by counter milling is influenced not only by the geometric parameters of the cutting part of the cutter, but also by the radius of rounding of the cutting part of the cutter. However, the effect of the rounding radius on the

quality of the tooth surface formation during tooth processing has not been studied. The quality of the surface and the accuracy of the shape of the teeth of the wheels largely depends on the kinematic scheme of shaping, dynamic processes during gear milling, oscillatory movements of worm and special modular cutters relative to the surface to be processed.

3. Design features of advanced designs of carbide milling cutters

The traditional technology of processing teeth with standard worm cutters, in which the size of the cutting edges depends on the size (modulus) of the processed wheel teeth, does not allow to increase the number of cutting elements and reduce the load on the cutting edges of worm cutters, especially when equipped with hard alloy cutters. Due to the large size of the cutting edges, the process of grinding the teeth is complicated, ensuring the accuracy of the tool (*Iurchyshyn, O., 2019; Stokes, J., 2008: 2*).

Currently, two scientific directions of technological support of the operational properties of hardened large-module gears are being considered. The first of them provides for the technological support of the system of parameters of the surface layer (*Czerniec, M., 2019; Popov, V., 2019: 471*). The second is the technological support of the direct operational properties of hardened large-module gears (*Kostyk, K., 2015: 39*).

The foundation of the laid scientific foundations of the technology of manufacturing parts in mechanical engineering was the work of Balakshin B. S., Bazrov B. M., Granovsky G. I., Dalsky V. A., Kovan V. M., Korsakov V. S., Matalin A. A., Sokolovsky A. P., Suslov A. G., etc. (*Suslov, A., 2006; Suslov, A., 2018: 8; Timofeev, Yu., 2010: 210*).

When performing technological operations of tooth processing, it is time-consuming to manufacture and operate a complex tooth-processing tool. A significant increase in the hardness of the teeth of the wheels dramatically increases the complexity of their manufacture, as the requirements for the rigidity of gear cutting equipment, tool durability, there is a need for expensive, but low-performance gear grinding machines, etc. Limited processing capabilities of large-modulus gears with $m=12-65$ mm and a tooth hardness above 350 HB with a degree of accuracy of 7B–8B lead to the fact that in a number of branches of mechanical engineering, hardened gears are less than 20 %, which makes it necessary to manufacture a large number of spare parts and, accordingly, increases the labor intensity of operation, reduces the efficiency of machines.

One of the important issues of improving the reliability of hardened large-module gears is to ensure their quality indicators at the design stage of manufacturing technologies. The production of large-module gears with a tooth hardness of 52–60 HRC and a tooth length of 200–800 mm requires considerable labor. In the EU countries, the share of this stage is spent (30–35) % of the total cost of production of the product, since up to 80 % of defects are «laid» in the design of the technological process, and the quality of the product is largely determined by the condition of the contact surfaces of hardened large-module gears.

For pre-grinding of teeth or final blade processing of large-modulus cylindrical gears with a module $m=12-65$ mm, hardened 30–60 HRC, promising designs of worm carbide cutters have been developed, manufactured and implemented. For the operation of each of the design solutions of worm carbide cutters, the technological regulations for their operation have been developed (*Shapovalov, V., 2009: 5; Timofeev, Yu., 2010: 211*).

A special feature of the design of special double-body double-sided worm milling cutters for cutting chevron hardened gears is that a circle is used as a palloid of machine engagement of the tool and the part (Fig. 1), passing through the lower boundary points of the involute B and

B1. In this case, the active sections of the gearing lines BE and $BIEI$ are located symmetrically relative to the inter-axial perpendicular and at some distance from it (Jian, K., 2013: 4782; Gasanov, M., 2018: 36).

The angle of the profile of the teeth of the special cutter α_k depends on the number of teeth of the processed wheel Z_k and is determined by the dependence:

$$\alpha_k = \alpha_B - \sigma_B,$$

where α_B – is the angle of pressure at the lowest point B of the involute; σ_B – is half the angular thickness of the tooth at the lower boundary points B and BI of the involute.

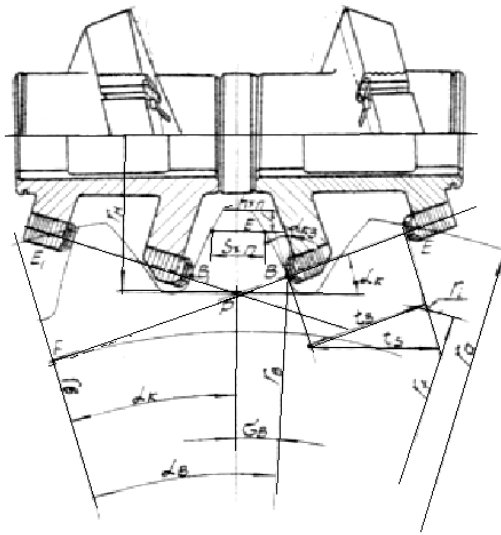


Fig. 1. Scheme of machine engagement of a special carbide milling cutter with a processed wheel

In the range of the cut teeth of the wheel $Z_k = 20-400$ the angle of the profile of the teeth of special milling cutters varies within $\alpha_k = 5^\circ-19^\circ$.

Each cutter can cut the teeth of the wheel in a certain range of tooth numbers: $Z_k = 33-49$, $Z_k = 46-66$, $Z_k = 60-88$, $Z_k = 88-134$, $Z_k = 134-204$ (Gasanov, M., 2018: 37). The technological installation of the milling cutters is achieved by turning one milling cutter body relative to the other at a certain calculated angle and changing the thickness of the remote ring laid between the housings. In each of the milling cutter bodies, several keyways are made (Mironenko, E., 2013).

Toothed uncorrected wheels with a number of teeth 33-49 can be cut with a cutter with an angle of the profile $\alpha_k = 9^\circ$ and the installation of the cutter bodies with a turn on the angle θ :

$$\theta = 2z_k \beta_k,$$

where Z_k – number of teeth of the wheel to be cut;

$$\beta_k = \alpha_k - \alpha'_k,$$

where α'_k – determined from the graph (Fig. 2).

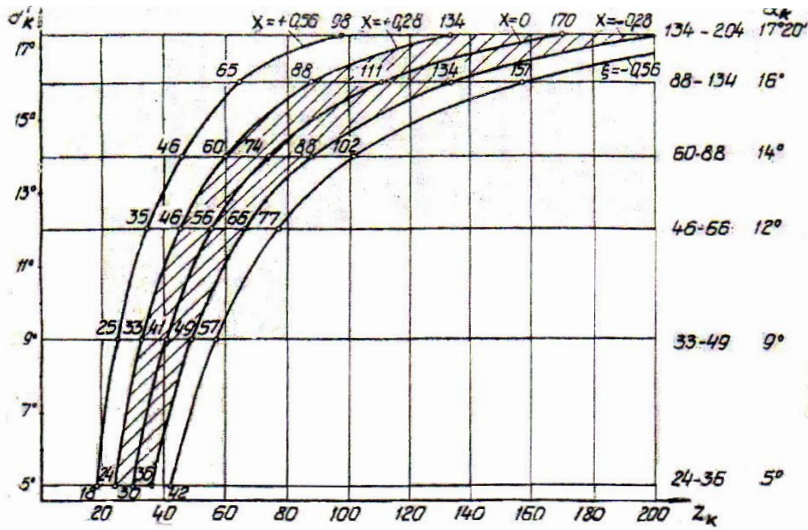


Fig. 2. Graph for determining the applicability of special carbide cutters

For corrected wheels, the range of the number of teeth to be cut increases: at $X = +0.56$, applying the cutter with $\alpha_k = 9^\circ$, cut gears with the number of teeth 25, and at $X = -0.56$, cut gears with the number of teeth 57 (Gasarov, M., 2018: 38).

When installed on the machine, the milling cutter bodies located on the mandrel are combined with the first teeth in the same plane and set at a distance S_ϕ , determined by the cone template. Measure the internal distance between the ends of both bodies of the cutter and select the remote ring on it. Then install the cutter bodies on the corresponding keyways and fix them on the mandrel. The milling cutter with a mandrel is installed in the caliper of the machine with subsequent adjustment relative to the axis of the wheel tooth.

The advantage of the considered designs of special worm cutters is that they simultaneously process both side surfaces of the wheel teeth with both housings. The cutting forces from both bodies are directed towards each other, i.e. there is a power short circuit inside the tool. This helps to reduce vibrations and vibrations of the machine table together with the processed wheel.

The most rational area of use of the considered special milling cutters is the serial and large-scale production of gears, for example, used in coal-grinding and ore-grinding mills, excavators, rolling mills, lifting mechanisms.

A special worm milling cutter (Fig. 3) $m=20$ mm was developed and manufactured. The development of the technology of pretreatment of hardened gears with an allowance for gear grinding with worm cutters equipped with non-sharpenable rotary plates was preceded by the development and modeling of the technological process of forming using universal milling cutters $m=12-36$ mm of one-sided and two-sided cutting, equipped with plates made of alloys VK10-OM; VK10-XOM. On the side surfaces of the turns in the tangential grooves, hard-alloy non-sharpenable rotary plates made of alloys VK10-OM; VK10-XOM with dimensions of 20x16x6 mm are installed, which are fixed in the sockets with eccentric screws.

The carbide cutting elements are placed only along the lines of the machine engagement of the tool and the workpiece, which makes such a cutter more economical compared to the known designs of similar tools.

Also, the tangential arrangement of carbide cutting plates with wear-resistant coatings contributes to the increase in tool durability.

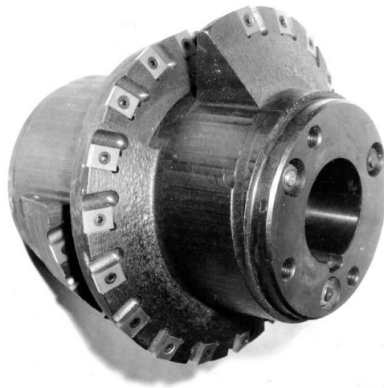


Fig. 3. Special worm carbide milling cutter $m=20$ mm, ($\alpha_u=9^\circ$; $z_k=25-57$)

The technological disadvantage of special carbide cutters is the impossibility of processing gears with the same tool, which significantly differ from each other in the number of teeth. Meanwhile, in the practice of heavy engineering, gears that include a gear with a small number of teeth are widely used, for example, $z_k=12-40$ and a multi-toothed wheel, for example, $z_k=180-316$. These are gears of coal-and ore-grinding mills, excavators, etc.

When processing such wheels with different worm cutters, the identity of the main pitch and the profile of the teeth will not be ensured, which will undoubtedly affect the quality of engagement and the durability of the gear train. Of particular importance for the quality of engagement is the processing of the mating pair of hardened (*HRC* 30-60) gears with the same tool, the operational run-in of which is practically excluded.

In order to improve the accuracy of engagement of mating, mainly hardened, gears with a different number of teeth, and to reduce the range of tools used, the design of universal large-modulus carbide worm cutters $m=12-65$ mm has been developed. As a pallod of machine engagement of such milling cutters with the processed wheel, the dividing circle of the wheel is used, and the angle of the profile of the teeth of the tools is equal to $\alpha_u=20^\circ$.

The double-body design of single-sided cutting cutters is designed for processing wheel teeth in two passes. The milling cutter (Fig. 4) consists of the left 1 and right 2 bodies with a conical screw thread of one direction, in the grooves of which there are hard-alloy non-sharpenable rotary plates.

According to the gear processing technology developed for this design (*Shapovalov, V., 2009: 3; Timofeev, Yu., 2010: 209*), each of the milling cutter bodies is installed separately on the gear milling mandrel with an offset relative to the center perpendicular $00'$ pair "tool-part" at a distance of l_y (Fig. 4), defined by the point B (B') of the intersection of the circle of the lower boundary point of the tooth involute and the machine engagement line BE ($B'E'$). The installation distance does not depend on the number of teeth of the wheel to be processed. The value of l_y is determined by the profile angle of the initial contour of the toothed rail α_0 , the height of the tooth leg h_f and the radius of the rounding of the tooth head of the tool for pre-cutting r_ϕ . These parameters depend only on the modulus and the displacement coefficient of the original contour of the rack.

Thus, by alternately installing each of the housings with an offset on the gear mandrel, one cutter can process gears with any number of teeth in two passes. The displacement of the milling cutter body from the centerline perpendicular to the calculated distance l_y is carried out using a special template installed in the center finder of the machine, which is placed on the milling head in the axis of rotation of the machine table.

For the convenience of practical determination, a graph is presented (Fig. 2) of the dependence of the installation distance l_y on the modulus of the cut teeth of the wheel and the displacement coefficient of the initial contour of the gear rack-X. For values of the offset coefficient of the original contour $X > 1.0$, the value of the installation distance l_y can be obtained with a negative sign. This means that the tool must be moved on the machine during installation so that its first tooth with the largest radius of rotation does not cross the centerline perpendicular during displacement.

In practice, the installation of the tool at the calculated distance l_y does not require high accuracy and can be performed either using a special template or using a ruler mounted on the caliper of the machine.

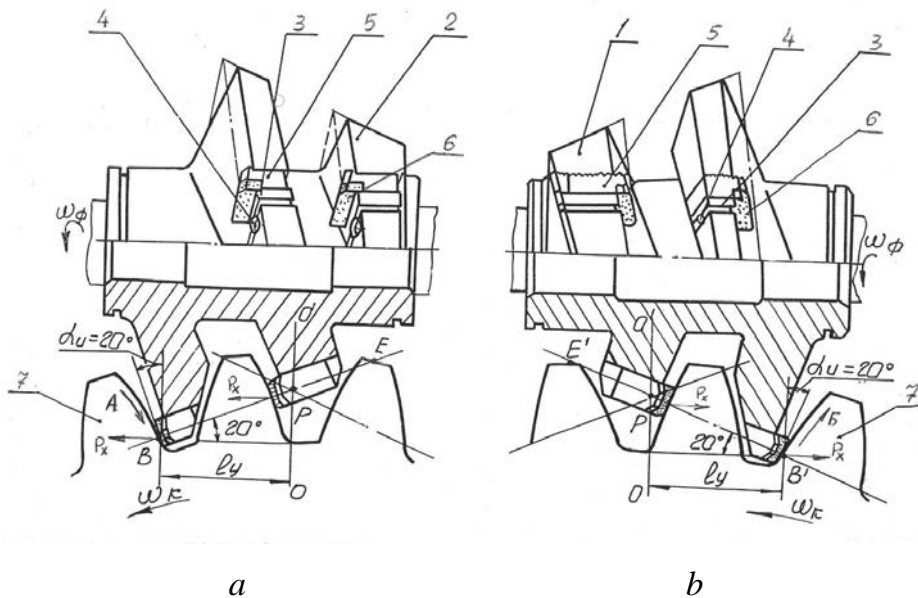


Fig. 4. Two-body universal single-sided milling cutter:

a-left housing assembly; b-right housing assembly (1-right housing; 2-left housing; 3-hard-alloy substrate; 4-screw for fixing the block 5; 5 – block for fixing the cutting blade; 6-cutting plate; 7-cutting tooth)

Analysis of cutting schemes and kinematics of gear processing with universal double-body cutters (Shapovalov, V., 2009: 3; Mironenko, E., 2015: 30) shows that when the right body is working (Fig. 4, a), the axial cutting forces P_x coincide with the direction of rotation of the processed wheel ω (with the direction of rotation ω_x of the dividing worm wheel of the machine), and the removal of the allowance goes sequentially from the base of the tooth to its top (arrow B).

When removing the allowance in the direction of the arrow *B* (Fig. 4, *b*), the width of the layers cut by the teeth of the left housing, although not exceeding the nominal length of the cutting edge of 20 mm, is still 2-2.5 times greater than that of the teeth of the right housing (Iurchyshyn, O., 2019; Klochko, A., 2020).

The placement of the carbide cutting elements of the cutter only along the lines of the machine engagement of the tool and the workpiece makes it more economical compared to the known designs of similar tools.

4. Conclusions

The developed technological studies of ensuring the quality of gear processing of large-module cylindrical wheels allowed us to solve the scientific and technical problem associated with the production of large-module gears with high-hardness teeth while improving the quality of their manufacture, reducing labor costs, and reducing material consumption.

The application of the developed technological methods of pre-blade processing of the teeth of hardened wheels with carbide cutters reduces the labor intensity of low-performance gear grinding operations, depending on the wheel module, by 3-4 times by reducing the allowance from 1.5–2.5 mm on the tooth side to 0.3–0.5 mm, and also allows you to ensure the gear processing process is economical by reducing the consumption of carbide plates.

The obtained results of the research allow us in the long term:

- to develop a technological system for finishing gear milling of large-modulus hardened cylindrical gears instead of gear grinding for gears of accuracy degree 6B-8B (GOST1643-81), operating in wide speed ranges (0.5-30 m/s), power 50-500000 kW wheel diameter 500-12000 mm, gear crown height up to 1200 mm, module 12-65 mm;
- develop special equipment to provide technological equipment for intensive and high-quality high-speed gear processing of large-modulus hardened cylindrical gears;
- to develop methods for modeling the relationship between the operational properties of the surfaces of large-modulus hardened cylindrical gears with quality indicators using graph theory, the choice and purpose of technological support for the system of parameters for assessing the impact of vibrations on the formation process, the criterion method for assessing the impact of thermal balance on the performance, accuracy and quality of the surface layer, which allows us to form a single technological approach for processing large-modulus hardened cylindrical gears.

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METHODS OF DEVELOPING INTEGRATED MODULAR AVIONICS SYSTEMS**Yuliia Kovalenko**Candidate of Pedagogical Sciences, Associate Professor,
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Summary

The development of modern avionics systems makes the design of such systems impossible without the use of automation tools. Currently, the area of such tools is represented by patented tools developed by major aircraft manufacturers such as Boeing and Airbus, as well as a number of open or partially open international projects, differing in terms of validity, availability of source code and documentation. All tools are based on architectural models of the developed system. This article discusses the languages available for describing architectural models of avionics systems and shows which programming language is most appropriate due to its textual notation and embedded concepts that are well suited to represent most of the elements of embedded systems. The article then presents a set of tools for designing modern avionics systems. The toolbox provides both a general platform for designing and analyzing architectural models and a specialized solution for a specific area of avionics systems. It supports creating, editing and manipulating models in both text and graphic formats.

Keywords: information systems, decision-making support, project in the aviation industry, automated design system, technological process, integrated modular avionics.

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1. Introduction

The development of modern avionics systems and other safety-critical control systems requires advanced methodological and instrumental support. There are appropriate tools available, but the development of such high-tech domestic industries as aircraft construction cannot rely on them alone for at least two reasons. First, such tools are quite expensive; secondly, and probably more importantly, they are “closed” for development and adaptation by domestic researchers and engineers, which leads to an even greater backlog of available technologies in this area.

Tools for the design, development, verification and validation of avionics-type systems traditionally support the model-based approach to model development (Model Driven Engineering – MDE, and Model Driven System Engineering – MDSE), as modeling methods in their various forms: full-scale, semi-natural, mathematical – are always utilized in aircraft construction and related industries (*Hayley and other, 2012*). In the last 20 to 30 years, a new type of modeling has appeared in the field of software development, related to research on formal program specifications and the use of so-called formal methods for analysis – in particular, for verification of software systems. Avionics systems today are a complex interaction of software and hardware, so the methods and approaches developed in the field of design and analysis of avionics and software systems should enrich each other. For this reason, the use of formal methods of verification of complex software and hardware systems, such as operating systems and microprocessors, allowed us to quickly master the development of design and integration

of avionics systems, as many problems in this new area can be solved based on modeling technologies and verification (*Parkinson and other, 2015*).

This article focuses on the development of methods for modeling, synthesis and verification of complex aircraft systems, but the scope of potential application of these technologies is much wider.

2. Integrated modular avionics

Currently, the main approach to the design and development of on-board systems of civil aircraft is the approach of integrated modular avionics. According to this approach, specialized controllers are replaced by general-purpose processor modules, which provide independent operation of different aviation systems. The wires of each aviation subsystem are replaced with virtual connections within a switched network infrastructure based on technologies such as AFDX (Avionics Full Duplex Switched Ethernet) (*Tiedeman and other, 2019*) and CAN (Controller Area Network) (*Ghannem and other, 2017*). This reduces unreasonable duplication of hardware, which leads to unacceptable levels of power consumption and complexity of the on-board equipment system (*Neretin, 2019*). But, on the other hand, this approach greatly complicates the process of software and hardware development, posing new challenges in the design and integration of software and hardware (*Murphy and other, 2009*).

With the introduction of the IMA approach in the complex of on-board equipment of the aircraft, there is a new subsystem that provides a hardware platform for the software of other on-board systems. This subsystem is called the IMA platform and codenamed ATA-42. The team responsible for designing, configuring and verifying the IMA platform is usually called the System Integration Group, as its task is not only to develop a stand-alone subsystem, but also to coordinate the needs of all platform users and ultimately integrate the entire software and hardware components using the IMA platform (*De Niz D, 2007*).

The tasks of the System Integration Group also include:

- clarification/coordination of discrepancies between requirements and needs with software and hardware developers;
- projecting the IMA platform based on the needs of functional applications in hardware resources, including:
 - a. distribution of functional applications from computing modules (Core Processing Module – CPM) taking into account the needs of applications (amount of CPU time, distribution of CPU time between strictly periodic applications, RAM/ROM memory, network interface bandwidth, etc.);
 - b. determining the composition of network components (network topology), taking into account the requirements of reliability, delivery time of messages from sender to recipient, etc.
- verification of the developed on-board equipment complex (OEC) for compliance with the requirements set forth in the design documentation for the aircraft, OEC and its individual components;
- preparation of configuration tables for IMA platform components.

To solve these problems requires an accurate understanding of all the details of the developed complex at both high and low levels of detail, as well as the greatest care in the analysis of the consequences in case of changes. Due to the size of the OEC and the number of essential parts of modern aircraft, it is impossible for one person to have complete knowledge of the full systems. In such conditions, the use of traditional development methods by specialists, based on a careful description of all requirements, architectural solutions, etc. in text documents,

becomes excessively time-consuming and error-prone. The ability to utilize software automation to solve these problems encounters problems of heterogeneity and unstructured information. A natural step to overcome this problem is the formalization of information, translating it into a unified machine-readable form, which allows automation of its processing.

In the context of designing complex software and hardware systems such as the IMA platform, the main core is the architecture of the complex, around which the requirements for the system as a whole are designed, including its individual components, design trade-offs, analysis and verification, etc. Therefore, it is not surprising that it is the architectural models that describe the components of the system and the relationship between them become the basis for the formation of new technologies and tools for design automation. They allow different aspects of the architecture to be described in a single formalized model, which can be processed by different tools to check the internal consistency of the architecture, meet the system's various requirements, automate design decisions, generate configuration data and files, source code, etc. Model analysis tools can be applied at different levels of abstraction, including at the earliest stages of the project in the presence of only partial and evaluative information. Among experts, this practice is called "Early Validation", and associated sets of relevant tools (Early Validation Tools) (*Gilles and other, 2010*).

The places for application of such tools in the process of designing and developing the IMA platform are shown in Fig. 1.

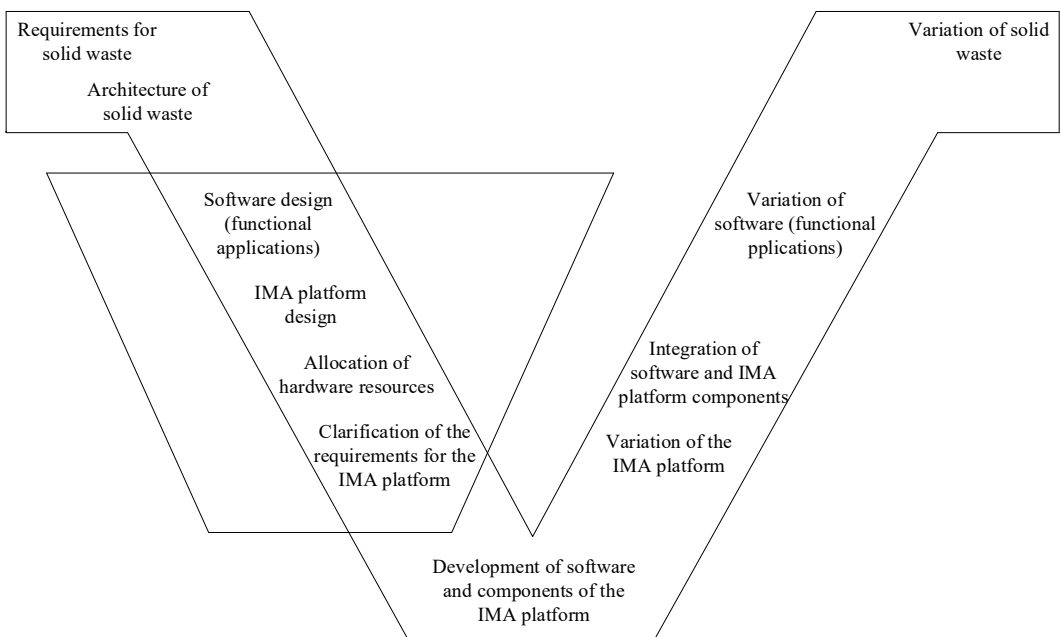


Figure 1. Validation during design and development IMA platforms

The use of architectural models in this area allows resolution of the following problems:

1. Checking restrictions/requirements for the components of the developed complex:
 - checking the adequacy of hardware resources; for example, that the needs of all functional applications in CPU time and memory meet the hardware characteristics of the computing module on which these applications will run;

- checking the temporal characteristics of the interaction of functional applications or computing modules; for example, that the delivery time of a message from one functional application to another does not exceed the specified requirements;
 - checking the possibility of allocating hardware resources in accordance with certain restrictions; for example, the ability to allocate CPU time for a set of strictly periodic tasks, taking into account that each task must be run at certain times according to a given period;
 - safety and failure analysis of individual components of the OEC (safety analysis).
2. Automation of distribution of hardware resources between functional applications, taking into account defined restrictions; for example, distribution of functional applications on computer modules taking into account sufficiency of bandwidth of network interfaces and possibility of scheduled periodic tasks.
3. Generation of elements of the BWC platform: configuration data / files, source codes of individual components of the platform, etc.

3. Description languages of architectural models

During the research in the field of design of software and hardware systems on the basis of models, several approaches to the description of architectural models were formed (table 1).

Table 1

Languages for describing architectural models

UML	AADL
Notations	
<ul style="list-style-type: none"> • Provides a set of charts to represent the structure of the software; in this case, individual diagrams that describe certain components of the software and hardware complex that cannot be fully related to each other, i.e. combining models developed by different groups of developers is extremely difficult. Developed more in the tradition of programming languages than descriptions of diagrams; it operates with declarations of types and implementations of model components that can be reused in declarations of other components. 	<ul style="list-style-type: none"> • developed more in the tradition of programming languages than descriptions of diagrams; it operates with declarations of types and implementations of model components that can be reused in declarations of other components.
Extending	
<ul style="list-style-type: none"> • Can be extended by using the following mechanisms: <ul style="list-style-type: none"> • stereotypes, which allow to expand the UML dictionary to create new modeling elements; • tags of identifiers and values (tagged values); • redefinition of model elements with additional constraints. These mechanisms are usually used by one or another profile, which is a dialect of model description (for example, SysML and MARTE). 	<ul style="list-style-type: none"> • Can be extended by defining: <ul style="list-style-type: none"> • user-defined property sets that can add new property types and definitions or extend existing types and properties; • annex-specifications, which allow to describe additional characteristics of model elements in arbitrary syntax and with arbitrary semantics, which are processed by specialized tools.

Table 1 (Continuation)

Aspects of modeling	
<ul style="list-style-type: none"> • used mainly to describe the structure of the software; it is based on three aspects: data, interaction and state; data is described by class diagrams, interaction is described by connection diagrams or sequence diagrams, states are described by state diagrams. The most used SysML and MARTE profiles extend UML as follows: <ul style="list-style-type: none"> • SysML adds two types of charts – the requirements chart and the parametric chart; the requirements diagram is used to describe the requirements and link the requirements to the elements of the model; parametric diagram is used to describe the relationships of software model components with hardware model components. • MARTE expands UML by introducing the following stereotypes: software model, hardware model, the relation between software and hardware models. 	<ul style="list-style-type: none"> • used to describe the “execution architecture”. “Execution architecture” is implicitly divided into two parts: a set of software components and interaction between them, a set of hardware components and interaction between them; also describes the relationship between software components and hardware components.

The most widespread approaches are based on AADL (*Martin and other, 2006*), EAST-ADL (*Zelenov, 2011*) and UML (*Konakhovych and other, 2020*). The EAST-ADL language is not considered in this paper because its scope is limited to automotive systems based on AUTOSAR architectural solutions. AADL inherited the main features from the Meta-H language, developed to describe on-board avionics systems in the late 1990s, and is now the most common language for describing architectural models of software and hardware systems in various application areas. UML is most often used to describe software and hardware systems in the form of one of its profiles, the most popular of which are SysML (*Kovalenko and other, 2020*) and MARTE (*Kozlyuk and other, 2020*). Below are the main features of these languages (*Kovalenko and other, 2020*).

Based on the above, it can be concluded that both UML (in the form of SysML and MARTE profiles) and AADL provide approximately the same capabilities to describe the software and hardware model of the OEC. At the same time, AADL has a number of advantages:

- In addition to graphical notation, AADL has a text representation that will allow a specialist to create and edit models, as well as analyze the semantics of existing models without specialized editors, while “reading” UML-based models without special chart editors can be an intractable task;
- AADL limits the developer to a specific set of declaration types (model element types) that have specific semantics that the developer can use to describe the firmware model, allowing you to reuse existing models developed by independent teams at no additional cost. At the same time, UML, due to its versatility, does not impose strict restrictions on the types and semantics of the elements used, which complicates the understanding of models developed by third-party experts.

4. MASIW – a system integrator workstation

Given the above features, the AADL language was chosen as a formalism to describe architectural models in research in the field of automation of software and hardware systems.

The research pursues a dual goal, consisting of a research component – the development of methods for modeling and verification of complex software and hardware systems, and an engineering component – the development of working tools for designers and integrators of avionics systems.

The basic principles on which research and tools are built are as follows:

- openness – as a necessary condition for cooperation with the international research community;
- reliance on international standards;
- a combination of mathematical rigor in the choice of proposed solutions and ensuring the availability of these solutions for engineers;
- focus on support and integration of various processes of the life cycle of systems: definition and analysis of requirements, design, integration and verification of software and hardware systems.

Currently developed MASIW tools allow to solve such tasks.

1. Creating, editing and managing models in AADL:
 - a. creating / editing models using a text or graphic editor;
 - b. support for team development with the ability to track and make changes to individual elements of the model;
 - c. support for the re-use of third-party AADL models.
2. Analysis of models:
 - a. analysis of the structure of the software and hardware complex – the sufficiency of hardware resources, consistency of interfaces, etc.;
 - b. analysis of data transmission characteristics in the AFDX network – time of delivery of messages from sender to recipient, depth of queues of transmitting ports, etc.;
 - c. simulation of a model of software and hardware with the generation of user-defined reports on the results of the simulator.
3. Synthesis of models:
 - a. the distribution of functional applications from computing modules, taking into account the resource constraints of the hardware platform and taking into account additional constraints on the reliability and security of software and hardware;
 - b. generation of CPU computing time allocation between functional applications (application launch schedule cyclogram for ARINC-653 compatible real-time operating systems).
4. Generation of source code / configuration data:
 - a. development of specialized code / configuration data generation tools, based on the provided software interface (API);
 - b. generation of configuration files for VxWorks653 RV and AFDX network end devices.

Model creation, editing and management, as well as code and configuration data generation are implemented using common Eclipse environment extensions, such as Eclipse Modeling Framework, Graphical Editing Framework, Eclipse Team Providing, SVN Team Provider, GIT Team Provider. When implementing these capabilities, we mainly had to solve engineering problems, so in the following sections we will focus in more detail on the implementation of support for analysis and synthesis of models, where the main research tasks were concentrated.

5. Analysis of models

When it comes to the analysis of models, it means the derivation of new properties of the model as a result of considerations about its already known properties. For example, the result

of the analysis may be an estimate of the maximum time between sending a message and its delivery based on an analysis of the path of the message and the characteristics of the components encountered in this path. The most important type of model analysis is its verification, i.e. verification of the model's compliance with the requirements for it. Other types of analysis are usually used as an intermediate step in the verification process.

Requirements for OEC architecture arise from a variety of sources.

- These may be design requirements for the aircraft and the OEC architecture – these requirements in the process of analysis are clarified and decomposed into requirements for individual components of the system.
- Project often regulates the requirements for the design and organization of architectural models, which are described in the so-called model design standard.
- Another source of requirements is the restriction on the area of permissible use or on the permissible configurations of the simulated components (usage domain rules).
- The author of a library model component may impose requirements on the consistent use of this component.
- There are also requirements imposed by model analysis tools or tools that are necessary to be able to perform the relevant analysis.

Since when modeling the system there is a need to detect errors as early as possible, the task is to analyze the model, which has unspecified components or components with a still unknown structure. Sometimes in such cases for some kind of analysis enough assumptions about the raw components. For example, the system has a process A with an unknown implementation. However, it is assumed or known that on average every 100 ms it generates a data packet with an average size of 100 bytes, intended for process B. In this case, the components that provide network interaction are described in detail in the model. Then such an incomplete model can be analyzed in terms of network interaction, process delays, buffer occupancy of network components, and so on.

6. Automatic synthesis of models

The designer of the IMA system has a task to build an architecture that must meet the requirements of different types: the adequacy of hardware resources, fault tolerance, reliability, security of the system as a whole, limiting the maximum allowable time for delivery of messages between components, requirements for timely functions etc.

To a certain extent, the art of experienced specialists, armed in addition with the tools of verification of the constructed architectural model, allows to solve such a problem. However, this approach has limited scalability and high subjectivity. System design automation tools that meet a set of requirements and constraints can make designers work much more efficiently.

In many cases, individual parts of the model can be automatically synthesized based on the information contained in another (“source”) part of the model, which describes the basic logical relationships between the components and the requirements for the resulting architecture. In this case, the development of the original part of the model is much easier than the development of the corresponding synthesized part. In addition, the source part in any case must be described in the design process. For example, based on the source information about the available set of applications and their hardware requirements, as well as information about the architecture and capabilities of computing modules, it is possible to automatically synthesize the binding of applications to these modules to meet all resource adequacy and scheduling requirements.

The MASIW design environment offers the following work scenario for developing a model of the designed system. The designer develops the necessary source part of the model, then launches an automatic synthesis algorithm, which based on the available information contained in the source part of the model, completes the architecture model with new parts, which can be adjusted manually or regenerated if the original part of the model is updated.

6.1. Automatic synthesis of schedules for strictly periodic tasks

When dividing hardware resources between several applications, one of the most important aspects is the timely provision of CPU resources for all tasks in the system. This aspect is usually dealt with by a special operating system task scheduling subsystem, which allocates CPU time to functional applications based on a pre-prepared schedule.

As initial data in the task of construction of the schedule for each of periodic tasks are set:

- task start period;
- task execution time on one start-up period.

Classical algorithms for scheduling periodic tasks work only when the start time of the task within the period is allowed to vary at different periods of its execution. However, there is currently a need to compile schedules in which the time between adjacent launches of one periodic task would be fixed and equal to the length of the period. This additional requirement of strict periodicity does not allow the use of classical planning algorithms in the scheduler.

The main difficulty of the algorithm for planning strictly periodic tasks is the search for starting points for all tasks, so that it was possible to build the actual schedule. This search is an NP-complete task.

In addition, we use the strategy of finding starting points implies a search in the first place of such options that provide the longest possible continuous execution of the first ticks after starting each task.

In general, this approach allows you to quickly get a solution to the problem of scheduling for strictly periodic problems.

6.2. Automatic synthesis of IMA system architecture

As initial data in the problem of synthesis of architecture of IMA the following are set:

- functional applications and logical data flows between them, as well as between applications and sensors / actuators;
- a set of needs for functional applications to hardware resources (memory, computing power, etc.);
- a set of requirements for the maximum time of delivery / processing of messages in logical data streams;
- a set of available hardware components (computing modules, switches, etc.) in conjunction with a description of their capabilities and limitations on the scope of their permissible use (usage domainrules).

You need to automatically build the architecture of the IMA system, which includes:

- composition and communication of hardware components;
- placement of functions on computing modules;
- details of the organization of connections in the AFDX-network;
- work schedule of application and system partitions ARINC-653 compatible operating systems.

The system architecture must meet all safety and performance requirements.

The synthesis task is divided into two major subtasks:

1. placement of applications from computing modules so that it was possible to build a schedule on each module;
2. assignment of virtual channels between computing modules and distribution of switches on virtual channels so as to meet the requirements for message delivery time.

The solution of the first problem is based on the consideration of the set of periods of application launch and on the application of numerical reasoning, which allow to divide the set of periods into such subsets that for each obtained subset there are guaranteed starting points of the corresponding applications.

The solution of the second problem is based on the use of genetic algorithms, at each step of the genetic algorithm is built a population consisting of N correct topologies of the AFDX-network. Each topology of the new population is obtained either as a result of a small modification (mutation) of some topology of the previous population, or as a result of crossing some two topologies of the previous population. When crossing, the resulting topology receives the maximum number of common properties (in the sense of connecting components together), which are in both source topologies.

After the next population is constructed, the incoming topologies are ranked in such a way that N topologies that best meet the requirements for message delivery time are selected for further construction. Static methods (Trajectory, Network Calculus) are used to estimate the delivery times obtained in this topology, and the main component of the ranking function looks like this:

$$\sum e^{T-\tau},$$

where the summation is performed on all channels for which the delivery time limit is set, T is the delivery time for this channel in this topology, τ is the specified maximum delivery time for this channel.

7. Conclusions and suggestions

At the moment, the MASIW tool allows to perform only part of the tasks assigned to the system integration group and further plans to expand the functionality of its functionality in many areas.

In the context of static structural analysis of models, the main direction of development is the development of a full-featured language for describing constraints on the structure of an architectural model convenient for a compact description of both global and component constraints. In our opinion, this language should be based on one of the well-known existing programming languages in order to be able to reuse ready-made libraries with a variety of functionality and simplify the task of training engineers. A good contender for the role of such a language is the Python language, which due to the concept of decorators provides an opportunity to form a specialized language based on standard syntax, which means the ability to use the existing interpreter and other tools unchanged for a new language. Other promising areas are the development of libraries of ready-made parts of the code for their reuse in checking the conditions of correctness and the implementation of static structural analysis of reconfigured systems.

In the context of static behavioral analysis of models, a promising area of development of supported analysis methods is the analysis of data transmission in the system as a whole, and not only within the AFDX network. The main difficulty here is to take into account the behavior of all components of the gateways located between the sender / recipient of the message and the AFDX network.

In the context of dynamic behavioral analysis of models, the main direction of development is to support standard ways of setting behavior for the components of the model (Behavioral Model Annex, BLESS). Another very important area of development of this type of analysis is the implementation of the possibility of using the simulator in combination with a stand of semi-natural modeling and in combination with external emulators of hardware platforms. This will save time on developing detailed models for existing system components that are available for use on the stand or in a virtual environment, which reduces the total time and cost of preparation for testing the model.

In the direction of dynamic static analysis of models, only research work has been carried out, so the implementation and conduct of experiments with this method of analysis is another task for the future development of the functionality of the tool.

In the context of automatic synthesis of models promising areas of development are the support of new types of constraints on the synthesized model, research methods of incremental synthesis of architecture and automatic updating of the model when changing the initial requirements taking into account manual modifications of previous synthesized models. The degree of criticality of each function ensured the smooth operation of the entire system, provided the possibility of failure of individual components.

Another area for the development of MASIW tools is the generation of documentation describing the architecture of the BWW system, as well as the generation of project templates and source code of functional applications that would already include typical functions such as message processing whose structure is already described in the architectural model.

The complexity of modern aviation systems and high requirements for their reliability lead to the need to use shared resources (IMA architecture). When creating IMA systems, developers (in particular, system integrators) face a number of tasks and problems that they have not encountered before. To solve these problems come to the aid of various automation tools and computer development support. The development of this area is primarily associated with the use of various models, including architectural models of software and hardware systems. The corresponding group of technologies is called Model Driven System Engineering (MDSE).

The implementation of MDSE technologies requires serious research and well-thought-out engineering solutions. One of the sources of complexity in the development and implementation of MDSE is the need to take into account the needs and preferences of different groups of professionals, as models are used both as input for synthesis and verification, as a design tool and as a means of communication and cooperation. This article is devoted to the methods and tools for solving these problems. The article pays special attention to the issues of integration of methods of formal specification and formal analysis of avionics models with methods of design, implementation and integration of avionics systems, which were developed in this field earlier.

The MASIW tool simplifies the solution of a number of tasks related to the development of aviation systems. It allows you to conveniently and clearly create and edit models of such systems in AADL, as well as analyze such models for compliance with various requirements related to both the structure and behavior of the model (calculate various temporal characteristics, predict the behavior of the simulated system in different situations, including non-standard behavior of components and failures within the system).

In addition, MASIW facilitates architecture design through the implementation of a number of model synthesis algorithms. This allows, in particular, to distribute the tasks on the computing units so that each task was allocated enough CPU time, and to generate an on-board network model and network resource allocation scheme according to the needs of system components.

The MASIW tool is constantly evolving. This development is based on close cooperation with customers, potential users and with the international community of developers of open standards and open tools to support the development, integration and verification of responsible systems based on the use of modeling tools.

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THE EXAMPLE OF THE DESIGN OF MATERIALS**NEW ECONOMIC SYSTEM OF SOCIETY DEVELOPMENT****John Sitdson**

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Summary

The article deals with the information economy as a new economic system wherein information and knowledge are the main products. It is proved that a central component of an economic system is work with information and use of information systems in the process of management. The author substantiates the requirement for the search of new approaches to the solution of problems of development of institutional structures of information economy.

Keywords: knowledge, information, system, information economy, management.

DOI: <http://dx.doi.org/10.23856/xxxxxxxxxxxx>

Introduction

Global growth of information and telecommunication technologies, on the one hand, and also the necessity of development of scientific knowledge in the area of theory, methodology and practice of informative approach of study of information economy and society, on the other hand, determines topicality of consideration of the process of formation of information economy. Information turns into a strategic resource and factor of acceleration of scientific, technical and technological development and becomes a part of the real economy.

Subtitle of the body

It presupposes the conceptual comprehension of the process of establishment of an informative and technological method of production and related to it forming of an information paradigm in a modern economic science.

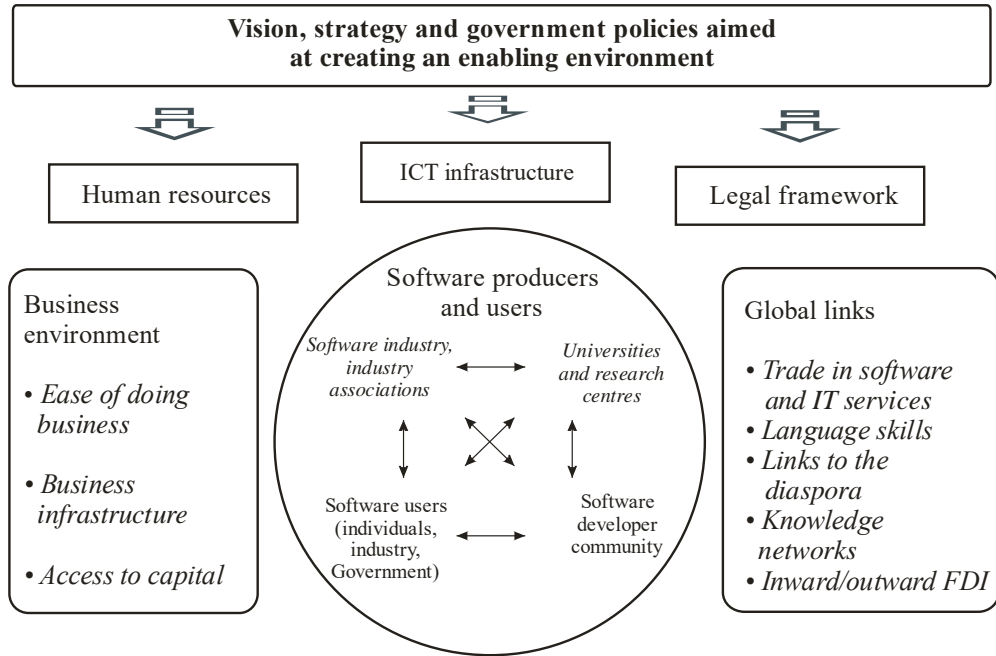
The evolutionary process of the establishment of information society is represented in researches of P. Drucker, who used a notion “information revolutions” (Drucker, 1989). He worked out the theory of the stages of development, which allows deeper understanding of the logic of establishment of information economy.

The term “information economy” was first used in 1976 in works of Mark Porat, an employee of the Stanford Centre and designated by him as a cluster of industries, engaged in the production of modern databases and facilities which provide their application and functioning (Porat, 1978). He is given the credit for introducing a distinction between the primary and secondary information sector of economy. A primary sector, according to his opinion, can be estimated quantitatively, while everything is much more difficult with the secondary one.

The Revolution in the development of information technologies allowed to talk about a global network, which materialized the globalization of economy. New information technologies, in fact, are not simply becoming the instruments of application, but also the

processes of development. The system-oriented analysis of the information economy with due regard to the forming informative paradigm of the economic theory requires additional consideration.

Figure. 1. A national software system (Information Economy Report, 2012)



Conclusions and suggestions

Conception of information economy includes fundamental definition of information society. It's defined as a system of connections and relations between individuals, which appear in the process of interchange of information concerning social and economic activity. Information economy is simultaneously defined as a system of public relations, wherein the information is a basic productive resource.

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