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CONNECTIVIST APPROACH TO THE ANALYSIS OF RELIGIOUS SYMBOLS IN SLOVAK POSTMODERN LITERATURE

*Abstract. **The Purpose of the Study** is the analysis of spiritual symbols in the works of Slovak postmodernists - D. Dušek, D. Mitana, P. Vilikovsky and M. Vadas, as well as the verification of the principles of connectivism within the framework of literary studies. **The Research Methodology** is based on hermeneutic and deconstruction methods, as well as on the connectivist approach, which allow the interpretation of deconstructed motifs at the level of connecting individual elements into a secondary semantic network. **The Scientific Novelty** of the research lies in the fact that for the first time in Slovak literary studies, connectivism was used for the study of postmodern literature. It is concluded that a complete denial or confirmation of religiosity as such can be achieved, for example, by combining religious meanings from different novels. **The Conclusions.** The analysis of religious symbols with the principles of connectivism shows how the authors reveal the strong desire of humanity to have a stable core, which is absent in modern society. Therefore, considering how much evil has been committed in the world, the writers choose a version that describes the reign of Lucifer himself. Slovak postmodern literature works*

hard to create its own models of reality, in which authors allow their stories to arbitrarily organize and create connections between the material and transcendental realms, thus providing a unique perspective on the complex system of reality.

Keywords: *connectivism, Slovak postmodern literature, religious symbols, Dušan Dušek, Dušan Mitana, Pavel Vilikovský, Marek Vadas*

The Problem Statement. Contemporary Slovak postmodern literature is an incredibly perspective and attractive object for research, because in simply tuned texts we find countless serious ideas, moreover, it reflects not only "dynamic transformations of the social system" (Čúzy – Hochel – Kákošová, 2007, p. 6) but also transformative psychological processes of the individual. Contemporary literature has gradually "taken the form of a poetically and value-diverse, pluralistic, significantly differentiated and open structure, governed by spontaneous literary processes" (Passia, Taranenková et al., 2014, p. 14), and precisely the present character makes it possible to explore the figurative world of Slovak (not only) postmodern literature using the instruments of various disciplines, owing to which it is possible to penetrate as far as the curtain of images of the irrational world. The given research focuses specifically on the analysis of religious symbols, also raising the issue of why the just-mentioned motifs are investigated in the field of postmodernity, which positions itself as an opponent of religiosity. However, the fact is that the emphasis on the important – religious part of culture is typical for Slovak postmodernism, as well as for the entire Slovak society.

"Slovak literature today represents a pluralistic system" in which "authors of different political orientations, worldview convictions and individual poetics coexist side by side", due to which "conditions are created for free, uncensored, creation unrestricted by non-literary circumstances" (Hochel, 2007, p. 22). It is for this reason that the works of the four most important representatives of Slovak postmodern art, peers and pioneers of Slovak postmodernism – Dušan Dušek, Dušan Mitana and Pavel Vilikovský, together with Marek Vadas, one of the most popular contemporary Slovak authors, were selected for research. M. Vadas's poetics should be referred to postmodern categories, postmodern practices upted though, therefore it is possible to analyze the connection of the motifs used by the selected writers. Their works stands out for the originality, additionally, the contents of the selected works allow us to study their coexistence in the literary space, as well as the explicit or implicit aspects and motifs which we consider topical because of their universality.

For the analysis of individual motifs, in this case, motifs related to spiritual themes, a connectivist approach was chosen because this contemporary theory makes it possible to attribute certain connections to apparently non-linear structures. Connectivism (also called connectionism or synergetics) is a newer,

still developing direction that describes the cognitive system as a network of interconnected elements.

Connectivism emerged at the end of the 20th century and is currently a very popular science. Its principles and concepts penetrated a wide spectrum of scientific fields – biology and physics, history and economics, literature and philosophy. Connectivism, based on elements of rhizomatic philosophy, uses the image of brain neurons not only for their ability to process or deal with complex processes or phenomena, but also for its disposition to self-transformation within the process of processing complex information systems (Jefimova, 2008, pp. 18−25).

The Analysis of Sources and Recent Researches. The starting point for the development of connectivism was primarily the rhizomatic character of postmodern philosophy. The poststructuralist G. Deleuze, together with the psychoanalyst F. Guattari, using the metaphor of a rhizome – a stolon, an underground stem, depicted the current state of reality as that having no core (Deleuze – Guattari, 2010, p. 6).

A new approach to poetics – connectivism – developed a little later from the above-described approach to the system or way of knowing. As South African philosopher Paul Cilliers explains, the complexity of postmodern theory revolves around "the process of self-organization and the rejection of traditional notions of representation. The language model, developed by poststructuralist and postmodern linguists and philosophers (F. Saussure, J. Derrida), is closely connected with distributed modeling techniques, an example of which is connectivism. This approach leads to models of complex systems that avoid the oversimplification that is often the result of rule-based thinking models" (Cilliers, 2022, pp. 35–37).

However, one of the most important philosophical conclusions of connectivism may appear doubtful, especially for an individual inclined to mystical thinking because under certain conditions, order is born from chaos. This conclusion can best be expressed by the supporters of the said theory themselves. "The essential thing is that from the connectivist point of view, the birth of a new order from chaos is not forced by some external (in relation to this reality) force, but has a spontaneous character. Therefore, connectivism is a theory of self-organization (and not organization)" says V.P. Branskij (Branskij, 2010).

Connectivism (otherwise called synergetics) is, according to I. Prigozhin, "a theory of chaotic processes in complex random dynamic processes" (cited according to Machlina 2001). But even a work of art can be perceived as a complex dynamic system with a very unstable order that can be generated by chaos.

Chaos in the postmodern understanding of the world does not deny logos, but refuses to establish any of the created worldview systems as "absolute" truth. Chaos is a confirmation of pluralism, from the point of view of postmodernists "it is not terrible, nor destructive, but self-organizing, constantly generating something new. Decentered postmodern text initially does not have uniform semantics, is fundamentally open-ended and represents a field of actualization of proliferating potential meanings" (Karpova, 2015, p. 70).

Connectivism may provide a more adequate description of how the human brain works as well as how language works. Linguistics is therefore often understood today as a mirror of neural networks and as a window into the functioning of the human brain. With the help of language, literary texts are created, which subsequently appear to be the representation of complex networks.So it can be argued that by examining literary texts, we are not only examining words on paper, but particularly trying to understand the complex systems hidden in the bowels of the gray mass of our consciousness.

Derrida explains language as an open system. There is no place outside language where meaning can be generated, because where there is meaning, language is automatically present. Language cannot be separated from the world it describes. "The outside connects with the inside a relationship that is, as usual, anything but simply the outside. The meaning of the outside was always present inside, at the same time imprisoned outside and vice versa" (Derrida, 1976, p. 35). "Only when the difference between inside and outside is broken, the system can open" (Cilliers, 2002, p. 43). If the system of language is as open as Derrida suggests, if relations are always playfully changing in unpredictable ways, then nothing permanent and concrete can be said about them that applies to language in general, which is also true of connectivism theory.

Even the thoughts of the French philosopher J. Lacan, describing the so-called "object a", which in our case is a word with which the subject releases the idealistic interior, speak of the fact that through language, i.e. the word itself, a human being can express what is hidden inside them because the purest and most symbolic function of language, including literature in general, is the confirmation of human existence itself (Lacan, 1995, pp. 39, 44, 46; see also Shteinbuk, 2008, p. 103).

Today, connectivism can be understood as interdisciplinary knowledge, a new picture of the world, the language of modern science, a scientific paradigm, as well as the connection of knowledge in the space of non-linear self-organization (Andrejev, 2008, p. 118). The distinguishing feature of connectivism is an open network in which elements cooperate with each other and with the environment through the exchange of energy, information, or matter, therefore it is possible to

connect apparently unconnected material images with transcendental phenomena, such as the essence of human being.

The Purpose of the Article. The goal of the research is to examine and interpret the spiritual theme in selected works using contemporary philosophy – connectivism, thus, provide a new approach to the analysis of Slovak postmodern literature. In addition to the analysis of individual symbols, the aim of this study is also to clarify and verify the principles and content of the connectivist approach in practice.

The Research Methods. As part of the research on the perception of religious symbols in postmodern texts, the hermeneutic method is first used, helping in the process of interpreting specific expressions of culture – literary texts through which an individual receives reality (Gadamer, 1988; see also Voskobojnikov, 2006, pp. 182–183). Furthermore, the research is guided by the method of deconstruction (Derrida, 1976; see also Skoropanova, 2001, p. 17; Rivkin, Ryan, 2004, p. 257), according to which the works are initially divided into individual motifs, so that they can then be interpreted on the basis of connectivist theory. For the analysis of literary works, in addition to hermeneutics and deconstruction, a connectivist approach is also significant, adding a new dimension to the mentioned pair – which allows to interpret the deconstructed motifs on a different level, one that connects specific elements into a secondary meaning network.

The Main Material Statement. In relation to the literary work author, the literary text shows "undoubted signs of an open system and is consequently subject to its characteristic features. While creating a literary work, there is a constant exchange of energy with the external environment – the depicted reality and the consciousness of the author. An artistic text is not a sum of its basic elements [images, tropes, storylines, compositional techniques, etc.], but it forms a new, qualitatively defined whole" (Stecenko, 2008, p. 212).

The text contains a balance of traditional literary practices and unique expressions of the writer's individuality, and also contains many potential ways of developing characters and events. "In this way, elements of self-organization appear which can lead to a closed [...] or open [...] finale" (Stecenko, 2008, p. 213; see also Evin, 2004, pp. 101–115), that simply means that the text functions as a set of non-linear possibilities of correlation, resulting in original creations and senses.

Just as it is true in the connectivist prototype of the world, in this case, one can also speak about a model type of reality perception based on the principle of the activity of brain neurons which function as a link between different nerve "nodes" (Jefimova, 2008, p. 19). In our understanding, the connectivist node is represented by an individual who is constituted by a material envelope and at the

same time a transcendent being. However, literature as an open system provides space for this kind of interaction, thus in the spirit of connectivist philosophy, in the process of creation there is an exchange of energy between the author's consciousness and subconscious perception, which subsequently is materially transformed in the form of a text.

The religious form of knowledge plays an significant role in human thinking. An individual's desire for an absolute beginning, for knowledge of their soul, can take different forms – mystical, religious, but a special role in this process belongs to art. According to M. Weber, art is currently constituted as a kind of independent microcosm, taking on "the function of salvation in the world, interpreted in different ways, from [...] the oppression of everyday life and above all from the growing oppression [...] of rationalism" (cited according to Careva, 2011, p. 118).

In the philosophy of postmodernism, art is presented as a space for the interaction of the empirical and the transcendent; it is able to penetrate beyond the visible shell of things to their innermost essence. J. Deleuze says that created being is overcome in the creative process through symbolization and a breakthrough into the transcendent occurs (Deleuze, 1999, p. 67). Therefore, literature (as a part of art) can be understood as a connectivist network, in which parallel worlds are created owing to infinite possibilities and boundless symbolism, which, due to imagination, reflect arbitrary images, acquiring particular forms and shapes in the process, thereby creating various new forms of transformed reality.

The absolute entity – God – cannot be contained in the material world because sacral and other spiritual beings are an exclusively idealistic phenomenon. It is a sphere of existence that is accessible to an individual exclusively through some internal relationship between the individual and the source of being – the divine spark hidden in the bowels of that Self. With the help of the creed, the individual tends to achieve an imaginary connection with the alleged primordial being.

The symbolism of the "other world" has a notable presence in the texts of the selected authors. In connection with the world of spiritual dimensions, Vilikovský states that "nebo je v našich predstavách čosi dokonalé, raj, ktorý sme si kedysi vlastnou vinou zašantročili" ("heaven is something perfect in our imaginations, it is a paradise that we once squandered by our own fault")[1] (Vilikovský, 2018, p. 256), but at the same time he writes about how the other world is "iba ustálený jazykový zvrat, eufemizmus, ktorý si ako náplasť prikladáme na [...] boľačku. Všetci pri tom majú na mysli nebo, o očistci či pekle nijaký dospelý človek vážne neuvažuje" ("only a regular twist of language, an euphemism that we apply as a band-aid to [...] the sore. Everyone has heaven in

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[1] Translation here and everywhere. – V. S. M.

mind, no adult seriously thinks about purgatory or hell") (Vilikovský, 2018, p. 252). The given contradictory statement can be understood both as an expression of disappointment in the decadence of the human race's approach to the gifts of nature (God's gifts), but at the same time the author argues that the entire described phenomenon is once again only one of man-made simulations, serving to deceive one's own senses, and it also underlines the naivety of human thinking through focusing primarily on the state and space of "bliss", not taking into account that every coin has two sides.

Dušan Dušek also mentions the alleged former paradise "ktorý sa navždy stratil v závejoch piesku a času" ("which was lost forever in the drifts of sand and time") (Dušek, 2013, p. 135). In the story *Volavka* (*Heron*) from the book *Kufor na sny* (*Suitcase for dreams*), the text focuses on the symbol of the sea, which "by mohlo byť liekom [...] na beznádej z domu" ("could be a cure [...] for hopelessness from home") (Dušek, 2012, p. 126), and this space can be identified as an earthly form of the so-called "purgatory", where the hero's soul eliminates all its problems and vices.

The analysis of the short story *Sci-fi* (*Sci-fi*) from the author's identical book proves that the entire text can be enterpreted as an analogy of the biblical scene of the sacred paradise, as well as the first couple of the human race – Adam and Eve. Primarily, it is about the idea of "návratu vesmírnej lode na Zem" ("the return of the spaceship to Earth") (Dušek, 2012, p. 160). The problem could be as follows that "v celom vesmíre sa vraždilo a zabíjalo iba na Zemi" ("in the entire universe there was murder and killing only on Earth") (Dušek, 2012, p. 162), which can be seen as a symbol of hell, into which unconscious souls, led by the "commander" – the Demiurge, rush.

Nonetheless, the pair of protagonists, stimulated by an inner urge, would pluck up the courage to step out onto the untouched planet, and at that moment "začala rásť tráva [...] a vzápätí stromy" ("grass would begin to grow around them [...] and soon trees"), they would feel "ako pôda víta [ich] kroky, ako [im] prejavuje svoju náklonnosť" ("how the ground welcomes [their] steps, how it shows it's affection to [them]") (Dušek, 2012, p. 163), and they would be very careful that this time "ich odtiaľ už nijaký anjel s horiacim mečom nevyhnal" ("no angel with a flaming sword drives them out of there") (Dušek, 2012, p. 164). The form of the future tense used in the short story suggests that in these scenes there is a hidden subconscious wish of Dušek's characters yearning for the restoration of the fallen kingdom, in which the man realizes that coexistence with nature – *Gaia* – is the key to inner harmony.

Marek Vadas works with transgressive transitions between earthly and supernatural reality in an exemplary manner, and within the framework of religious archetypal images of that "other world" he writes that spiritual beings

reside "v palácoch, na oblakoch, v inej dimenzii" ("in palaces, on clouds, in another dimension") (Vadas, 2021, p. 26). In general, it can be stated that, portraying the former alleged paradise, the authors try to find a kind of core connecting the infinite number of layered elements of human existence, but at the same time they immediately draw attention to the dubious nature of the element itself.

In the short story *V hlbinách* (*In the depths*), the author depicts "jazero Nyos" ("Lake Nyos"), in its depths there is an "podvodný palác" ("underwater palace") which has a "veľkú záhradu plnú ovocných stromov" ("big garden full of fruit trees") (Vadas, 2018, p. 114), which in its turn can be interpreted as an image of a forgotten, lost divine eden. Looking below the surface, it seems to the protagonist "akoby kdesi hlboko zem krvácala" ("as if somewhere deep down the earth is bleeding"), and when he returns from his stay in the depths, he thinks "že si na všetko spomenul" ("that he remembers everything") (Vadas, 2018, p. 115), which subsequently made him nauseous. It is an image of a human being who has reached a state of enlightenment for a moment, while he is later overcome by unpleasant feelings, associated with disappointment and fear of where the earth's population has reached. Also, in connection with the symbol of water as a metaphor for death (the end), we can speak about a human being who for a certain time finds himself between worlds, and before he gets back to himself, he tastes what it is like on the "other shore".

A similar image can also be found in Vadas's short story *Hotel Beau Regard* (*Hotel Beau Regard*) from the book *Liečiteľ* (The *Healer*), where the hotel can be understood as a symbol of the earthly world, and "ľudí je tu niekoľkonásobne viac ako v časoch, keď [...] otec hotel založil" ("there are many times more people here than in the times when [...] the father founded the hotel"), where the image of the father can be depicted as the image of the Creator, but "z jeho biznisom to ide dolu vodou" ("his business is going downhill") (Vadas, 2007, p. 30), which means that humanity has become corrupt. Not only in the story, but also in reality, humanity destroys everything around it, following the exclusively selfish impulse of the desire for power, because the man's grandparents "neodolali, hoci žili v Božom svetle, [...] uverili Satanovej lži, uverili, že Boha nepotrebujú, že sú sami sebe bohmi, [...] uverili, že môžu [sami] postaviť vežu, ktorá prenikne až do neba" ("could not resist, although they lived in God's light, [...] they believed Satan's lie, they believed that they did not need God, that they were their own gods, [...] they believed that they could [by themselves] build a tower that would penetrate the sky") (Mitana, 2017, p. 105).

Regarding Mitana's work, it can be stated that it is saturated with religious images. To speak about the symbol of the "other world", in the book *Zjavenie* (*Revelation*) he writes how his hero, and people in general, lacks "odvaha k

pokore...Nechceme si priznať, že jestvuje niečo, čo nás presahuje, niečo, čo nikdy nepochopíme" ("the courage to be humble... We do not want to admit that there is something that goes beyond us, something that we will never understand"), because "sme sa vzbúrili a ideme vlastnou cestou" ("we have rebelled and are going our own way") (Mitana, 2017, pp. 142–143). The individual subconsciously suppresses the transcendental essence of existence with the fear of finding out what kind of disillusionment they are in, in addition, the hero claims that people "sú peklo, oni robia peklo svojím myslením" ("are hell, they make hell with their thinking") (Mitana, 2017, p. 150), which is filled with an egocentric desire to control and consume everything (nowadays not only) on this planet.

The basic theme of the book *Hľadanie strateného autora* (*Searching for the Lost Author*) is the wrongdoing of the first inhabitants of paradise, as well as the consequences for the expulsion from the divine eden for the entire humankind. In addition, the author writes that eden was only a reservation for mutated apes-humans (Mitana, 2017, p. 59). The book also says about undeniable proofs of the existence of the "other world", which supposedly cannot be refuted – unless, of course, someone wants to "tvrdiť, že neexistujú egyptské pyramídy" ("claims that there are no Egyptian pyramids") or "mezopotámske zikkuraty" ("Mesopotamian ziggurats"), "ani Brána Slnka" ("not even the Gate of the Sun") (Mitana, 2017, p. 63).

The phrase paradise on earth is shaken to its foundations in the given work, because the novel's protagonist discovers that "na zemi raj nikdy neexistoval" ("paradise on earth never existed") (Mitana, 2017, p. 67). He talks about several levels of the heaven spheres, and finally, in his reflections, he comes to the conclusion that even if we did not live directly "v pekle" ("in hell"), we would be guaranteed to "žijeme v očistci" ("live in purgatory") (Mitana, 2017, p. 116), thereby defending the imperfection of the functioning of life on Earth to himself.

Based on the words of Mitana – since "sa odohral v nebi palácový prevrat" ("a palace coup took place in heaven") (Mitana, 2017, p. 55), a god, whom human beings still recognize as the source of all being, took the imaginary throne. The writers of the examined texts work with the symbol of the highest instance in their reflections on the meaning of existence with the help of internal monologues of the characters, but some of them, through a transgressive turn, depict spiritual beings at some interspheric level, when these beings converse with the authors, although their physical presence is not evident. In the form of conversations with ethereal creatures, the authors blur the boundaries and thus create new – connectivist – links between the earthly world and the immaterial world, thereby weaving their own, alternative network of realities.

In his work, Vilikovský also avoids portraying images of a spiritual nature in P*ríbeh ozajského človeka* (*The Story of a real Man*), as it is primarily a matter

of pointing out the ability of the previous regime to erase the brains of weak personalities, but the hero nevertheless states that God "je všemohúci a keby chcel, raz dva urobí s hriešnikmi poriadok" ("is almighty and if he wanted to, he would do one or two things to sinners order") (Vilikovský, 2014, p. 93), which indicates that it was not adequately orthodox to believe in the cult of the personality of the "heroes" of the time.

His approach to dealing with spiritual topics changes in the book *Rajc je preč* (*Drive is gone*), where the protagonist, in addition to what has already been discussed above, thinks about the meaning of his stay in the world, and claims that he is perhaps "nevedomým kolieskom v plánoch Boha či Vesmíru" ("an unconscious cog in the plans of God or the Universe") (Vilikovský, 2018, p. 260), which, however, does not satisfy him, because he is aware of the limited human existence.

The text *Letmý sneh* (*Fleeting snow*) is much more open to ideas about the Divine presence, and apart from thinking about the purpose of the soul, the author criticizes the very first commandment of the Christian Ten Commandments – "nevezmeš meno Božie nadarmo" ("thou shalt not take the name of God in vain"), because "Boh nijaké meno nemá [...] je to iba označenie funkcie" ("God has no name [...] it is only a designation of a function") (Vilikovský, 2014, p. 27), the protagonist does not intend to limit the Creator with such a man-made category. He explains that it worked differently in ancient religions, and because of the polytheistic orientation of the religion, every god had to have his own name, but "náš Boh nepotrebuje meno, lebo je jeden a jedinečný" ("our God does not need a name, because he is one and unique") (Vilikovský, 2014, p. 28).

"Keď Boh videl, že skazenosť ľudí na zemi bola veľká a všetko zmýšľanie ich srdca bolo ustavične zlé, oľutoval, že stvoril človeka" ("When God saw that the depravity of people on earth was great and all the thoughts of their hearts were always evil, he regretted that he had created man") (Vilikovský, 2014, p. 40), writes the author, not hiding the self-critical undertone of the written lines. However, this claim could be justified by a statement from the book Šesť cudzincov (Six Strangers), where Vadas writes about God as a crazy director "ktorý nemá tušenie, ako má dobrý film vyzerať. Alebo [...] túžil iba po rozptýlení a bolo mu jedno, ako to celé dopadne [...] alebo chcel iba experimentovať, [...] možno je to umelec a v tom prípade by bolo jasné, že výsledku človek rozumieť nebude" ("who has no idea what a good film should look like. Or [...] he just wanted distraction and did not care how it all turned out [...] or he just wanted to experiment, [...] maybe he was an artist and in that case it would be clear that the result would not be understood") (Vadas, 2021, pp. 79−80). Among other things, Vadas's character in *Liečiteľ* (*The Healer*) debates why "sú v nebi len belosi a prečo je zlo čierne ako moja tvár" ("there are only white people in heaven and

why evil is as black as my face") (Vadas, 2007, p. 88), which outlines doubts of Baudrillard's theory that as everything else, even God and the heavens themselves, are just a tangle of layered simulacra (Baudrillard, 2015, p. 11).

Marek Vadas and Dušan Mitana present a significant deviation from superficial and dull images of the spiritual aspect of existence. Both of them work extensively with transgression, which can be defined using the interpretation of the French philosopher G. Bataille as "the exit of an individual beyond the boundaries of the daily routine or comfort zone. The binary of the profane and the sacred is lost precisely by this act" (Bataille, 2000, p. 74). This transgressive transition carries certain epistemological changes in the perception of reality, since looking behind the curtain of knowledge, the individual reevaluates the previous illusions about the acquired knowledge, which is another example of the use of Plato's well-known story about the cave.

One of the heroes of the book *Šesť cudzincov* (*Six Strangers*) talks how "pri ňom stojí anjel strážny" ("a guardian angel has been standing by him") since a certain time, it is not "dané vidieť ho, ale počuje ho zreteľne" ("given to see him, but he hears him clearly") (Vadas, 2021, p. 102), even one day "anjel povedal" ("the angel told him") , to take a notebook to the pub and he "bude diktovať" ("will dictate") to him what to write, which resulted in a "kniha o zmysle života" ("book about the meaning of life") (Vadas, 2021, p. 103), which can be understood as an analogy to the legend of the creation of the *Holy Bible*.

In the short story *Našepkávač* (*The Whisperer*), Vadas writes about an evil spirit that enters people's "heads" (Vadas, 2007, p. 77) and forces them to do terrible things, and also in the short story *Tieň* (*The Shadow*), he describes a ghost that repeatedly appears to the hero, is guilty of several criminal offensive actions, but in the end he admits that he is responsible for everything, and that he is haunted by his own shadow (Vadas, 2007, pp. 82–85).

Finally, in the short story *Liečiteľ* (*The Healer*), the author uses supernatural images and portrays the figure of an "neviditeľného muža" ("invisible man") (Vadas, 2007, p. 154), who guided the hero's steps until he finally realized that "bol úplne v jeho moci" ("he was completely in his power") (Vadas, 2007, p. 155).

The protagonist of *Zlá štvrť* (*The Bad Neighborhood*) says that people around him often "rozprávali sami so sebou, [...] prosili Boha a vyjednávali s ním" ("talked to themselves, [...] begged God and negotiated with him"), but his insides did not give him any response, so he was "prekvapený, keď sa hlas [...] z ničoho nič vynoril" ("surprised when the voice [..." emerged from nowhere") (Vadas, 2018, p. 81). Gradually, however, he gets the impression that he is completely "otrokom cudzieho hlasu" ("a slave of a foreign voice") (Vadas, 2018, p. 83), that is, of some kind of immaterial entity that tries to manipulate him from the supernatural realm. He feels as if "bol niekoho prostredníkom, bábkou na nitkách,

ktorej končatiny niekto zhora poťahuje" ("he is someone's intermediary, a puppet on strings whose limbs are being pulled by someone from above") (Vadas, 2018, p. 83).

Such motifs regarding "conversations" with transcendental beings are also described in monograph written by M. Yampolsky, who explains the given scene through the phenomenon of doubling, when the personality is stripped of any individual core and begins to be understood only as a system of doublings and mutual reflections (Yampolsky, 1997, p. 33). Jampolsky calls such a divided being a demon (genius), and it is said that Socrates already believed that he was "accompanied by a certain demon (genius) who [...] gives him advice, stops him when he wants to commit a 'wrong' act and actively it encourages action" (Yampolsky, 1997, p. 39). But the demon of Socrates is not yet physically completely separated from the subject itself, it is a kind of internal "whisperer", just like the beings in Vadas's books.

Mitana puts God in the main role of most of the analyzed texts, he constantly speaks to him, but the answer from the highest also comes only indirectly – through the hero himself. He writes to himself on the computer, even the fact that God "neodpovedal vlastným hlasom, ale začal [...] komunikovať skrze počítač, svedčil o tom, že [jeho] domŕzanie Ho už začína otravovať" ("did not answer him with his own voice, but began [...] to communicate through the computer, testified that [his] teasing was already beginning to annoy Him") (Mitana, 2017, p. 86), but the opposite is true. This communication becomes an inseparable part of the hero's everyday life, as a result of which the character reevaluates the previously fixed ideas about reality. Enriched, he then looks at the world with new eyes, which he owes to a successful – transgressive – transition beyond the earthly sphere.

Even in the book *Zjavenie* (*Revelation*), the hero hears a voice, "taký zreteľný a jasný, akoby hovoriaci stál vedľa neho. Bol v ňom neopísateľný pokoj, láska, milosrdenstvo, odpustenie" ("so distinct and clear, as if the speaker were standing next to him. There was indescribable peace, love, mercy, forgiveness in it" and it seemed to him that "sa narodil len preto, aby počul tento hlas" ("he was born only to hear this voice") (Mitana, 2017, p. 121). However, Mitana takes this form of communication with the transcendental sphere to a new level and goes even further in the book *Hľadanie strateného autora* (*Searching for the Lost Author*). In the given text, the inner demon described by Yampolsky transforms from a symbolic interlocutor into a physical form and completely leaves the subject's body, while conducting a dialogue with the latter that defies any norms. This split being, which can be considered as a kind of side effect of the doubling (split) of the connectivist knot (a person who appears as a combination of a physical being and a spiritual being) is Lucifer himself, known as the ruler of

darkness. Using the doubling effect, Mitana creates his own connectivist reality in which fiction, the spiritual realm, and reality are connected at the same time.

The framework of the described book is *Rozhovory s Luciferom* (*Conversations with Lucifer*), who was willing to explain to the protagonist that "klasická interpretácia je falošná" ("the classical interpretation is false" (Mitana, 2017, p. 111), "pravý Boh" ("the true God") (Mitana, 2017, p. 55) is him, and he is also the creator of the human race, which means that "sme vlastne démoni" ("we are actually demons") (Mitana, 2017, p. 105), which only confirms why a man is such a hideous creature.

He says of God that he is a "hochštapler, manipulátor a hypnotizér" ("trickster, a manipulator and a hypnotist") and that he "najskôr [...] podviedol, potom zmanipuloval a nakoniec [...] zotročil" ("first [...] deceived, then manipulated and finally [...] enslaved" people to suggest to them that they were "hriešni a vinní – od počiatku až naveky" ("sinful and guilty – from the beginning to eternity") (Mitana, 2017, p. 108). He also says that the creation of man was only an "experiment Adam" ("experiment Adam") (Mitana, 2017, p. 211), which did not succeed when settling the new planet – Earth – with extraterrestrial sons of God, and therefore it is not surprising that with this kind of existence, everything is not with the church order. By constantly intertwining information and emerging new facts, the Devil leads the hero into a trap, and he begins to get lost in a vicious circle of endless interpretations.

Towards the end, the main character decides to go with Lucifer to the world "beyond the border", thus letting his material form disappear, which means that he allows himself to be absorbed by a fantastic substance in order to know the absolute truth.

Satan's claims are also confirmed by Mitana in the book *Zjavenie* (*Revelation*), where he writes that "Boh na Zemi nevládne, [...] na Zemi vládne Satan, lebo Adam človek sa rozhodol ísť vlastnou cestou, nezávisle od Boha, a tak odovzdal vládu [...] Satanovi" ("God does not rule on Earth, [...] Satan rules on Earth, because Adam the man decided to go his own way, independently of God, and thus handed over the rule [...]] to Satan") (Mitana, 2017, p. 157). He fears that the only option "ako sa vyhnúť utrpeniu a súženiu pre Krista" ("to avoid suffering and tribulation for Christ") (the materialized divine substance) is to "skloniť sa pre Antikristom a jeho pečaťou. Táto cesta však nevedie do Božieho kráľovstva, ale [...] rovno do pekla" ("bow down to the Antichrist and his seal. However, this path does not lead to the kingdom of God, but [...] straight to hell") (Mitana, 2017, p. 255), which, according to the statements of Lucifer in *Hľadanie strateného autora* (S*earching for the Lost Author*), is paradoxically the mentioned kingdom of God.

The Conclusions. Using the theory of connectivism to form its principes, the analysis of the texts of Slovak postmodernists shows that a literary work can be perceived as a space of interaction of various parts of the figurative world. A complex system of interconnected elements is generated in the process of creating a text, which forms itself and thus makes it possible to perceive not only the figurative reality but also the real one by means of different layers of its existence.

Human consciousness depicted in literary works is also a connectivist network created by God, with which Slovak postmodernists play. And one of the most important connectionist principles is to show how complex chains of meaning interactions work that further generate new meanings. For example, by combining religious meanings from different works, an overall denial or affirmation of religiosity as such can be achieved.

Connectivism proved to be a suitable method for analyzing artistic texts because, with the help of connectivist categories, it is possible to rationally accept, at least in part, simulations of reality provided by the authors, in the books of which, either metaphorically or by means of a transgressive transition, reality is transformed into the coexistence of various spheres of being.

Having used the principles of connectivist philosophy, the research into the perception of religious symbols in the inner world of characters in Slovak postmodern works showed how the authors represented the intense desire of man to return to the initial, "blissful" state of being, to a kind of stable core that is missing in today's world. Aware of these facts, the authors turn to the dark side of the supernatural, because they come from a Christian-oriented society, and considering the fact how much evil has been done in the world, it is difficult to believe that the good God could allow it, they resort to the version that speaks of the domination of the opposite being, namely Lucifer himself.

In addition, due to findings after analysing the texts, it can be concluded that Slovak postmodern literature works to a large extent with the designing of its own models of reality, in which the authors, in the process of creation, allow their story to freely organize and form interconnections between the material and transcendent spheres, thus providing readers with a unique view of the complex system of the world functioning. Finally, in the words of P. Vilikovský – "Boh je práve preto taký užitočný pojem, že si pod ním každý môže predstavovať, čo chce" ("God is such a useful concept that everyone can imagine what they want under it") (Vilikovský, 2014, p. 29).

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PHYSICS

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GLOBAL CLIMATE: THE PLANET AS A THERMODYNAMIC SYSTEM

*Abstract. **The Purpose of the Study** is to theoretically substantiate the problem of studying the planet as a thermodynamic system in the context of the global climate. **The Research Methodology.** Methods of analysis, modeling, description and generalization of data were used to study the problem of global climate and formulate conclusions. **The Scientific Novelty** of the research lies in the integrated focus on the global climate problem and the actualization of the complex study through the creation of mathematical-physical calculation model. **The Conclusion**. Joint efforts of scientists and society are necessary for a comprehensive study of the global climate problem. Modern research should use an integrated approach and be based on a mathematical and physical calculation model.*

***Keywords**: global climate problem, thermodynamics, entropy, mathematical calculation model, physical calculation model*

The Relevance of the Topic. Technically speaking, our earth is a so-called "system" within the enveloping gas jacket, which can be "viewed" using secure physical principles with the result that a more or less detailed mathematical model is created which is based on measured data in the first step the following is verified: "everything has to fit"... ie the model must confirm the measured data as precisely as possible at all times and for every location. If this is successful, a large number of primary influencing factors (which essentially result from the geometry

and the movement of the system) are already known and not only qualified, but also quantified against each other.

As I already said, this initial model should initially be global, i.e. we do not yet distinguish between the earth's surfaces, land and water, and we do not take into account tidal currents or wind systems.

However, we first take into account the geometry of the earth as a sphere with a known diameter of approx. 42,000 km and define the boundary layer of interest to us of, say, a height of 5 km above the earth's surface, which would correspond to an enveloping sphere with a diameter of 52,000 km. The formula for the spherical volume $V = 4/3 * p * (d / 2)$ 3 results in a volume of 3.87924E + 13 km3 for the earth itself and a volume of 7.36222E + 13 km3 for the envelope sphere, i.e. almost double the volume. If you calculate the difference, you get the result of 3.48298E + 13 km3, the gas volume (our air above the earth), the warming of which we want to consider here.

With the formula $F = 4 * p * (d / 2)$ 2 we get the earth's surface as 5.54E + 09 km2 and the surface of the envelope as 8.49E + 09 km2. (Note on scientific number format: E + 13 = 1013)

We now know that the earth has a very hot earth core, which is distributed over the entire surface of 5.54E + 09 km2 and heats it "from below" through an influx of heat. This energy is passed on to the boundary layer that is of interest to us via radiation; this heat influx heats our "atmosphere" (our defined boundary layer at a height of 5 km). Of course, all the heat flows that humans and animals cause add up to this.

On the other hand, we know from the measurement of the outside temperature of high-flying aircraft, for example, that temperatures of -40 to -60 ° C prevail at an altitude of about 10 km. Gases of this low temperature surround our envelope ball –our system- and since they are much colder than the gases (air) in the boundary layer, heat is transported from the warmer boundary layer to the cold space, namely via the surface of the envelope ball of 8.49E + 09 km2 as an exchange area.

So far so good. Now, however, the sun comes into play as a very important factor; solar radiation must be taken into account. And now it gets a little more complicated, because it is not simply "constant" but has a periodic effect on our boundary layer (envelope layer). For this one has to consider the dynamics of the earth's movement (earth's rotation).

In relation to a day the following results: solely from the possible irradiation angle and the fact that the earth rotates exactly once a day around the axis between the north pole and south pole, it results that every point on the earth's surface is theoretically 12 hours long from the sun is heated and then, turned away from the sun, would cool down again in the direction of cold space.

Based on a whole year and taking the seasons into account, the picture is somewhat more complex: the sun does not simply rotate around this one axis between north and south, but around another, which brings us the different seasons. When a body rotates around more than one axis at the same time, this is called a "tumbling motion" in technology and since this all takes place periodically or cyclically, we are dealing with a cyclic tumbling motion in two spatial planes, which is the earth or each point on the surface of the earth under the sunlight.

If one wants to determine the energy equation or the associated temperature curve for any point on the earth's surface at any time, it is also necessary to take into account the respective angle of incidence of sunlight. Everyone knows that at noon at 12 o'clock the sun is "at its highest" or that the angle of incidence is 90 ° to the surface of the earth, which is why the sun warms the most at this time. What I said now for a point on the earth's surface also applies to a gas molecule (oxygen, CO2, nitrogen, whatever) which we think of standing above the point on the earth's surface, i.e. resting.

If, in addition, the warming from the side of the earth were assumed to be evenly distributed in the first step, we would have created all the prerequisites for an energy balance for a gas molecule from the layer around the earth that is of interest to us, namely what we call the atmosphere. And the temperature is ultimately derived from the energy balance; the air temperature that interests us so much.

The Formulation of the Problem. To verify this mathematical-physical basic model, we must ask or answer a few questions: Can temperature changes also be determined at measuring stations at high altitudes, for example in the Andes or on the 8,000ths in the Himalayas? How is the determined warming distributed over the earth's surface (map)? What about altitude measurements in general, do we have any significant readings at all? Gases have different weights! The CO2 molecule, for example, is heavier than the oxygen O2 by the weight of the additional carbon atom; consequently, in a tall vertical glass tube, after some time a higher concentration of CO2 would set in at the bottom of the tube, while oxygen dominates in the upper area. However, there are winds on the real earth that whirl the whole thing up again. The decisive question, however, would be what was measured where exactly and at what altitude on the planet (pressure, temperature, humidity and the composition of the air), for example by a measuring system of tethered balloons at different heights.

Once this basic mathematical model is in place, we can refine it step by step: we first take into account the influence of land areas and oceans. When this is done, we can try to integrate the influence of human activity in the form of industry, air traffic and other heat-generating processes into the model.

The Purpose of the Article is to theoretically substantiate the problem of studying the planet as a thermodynamic system in the context of the global climate.

The Presentation of the Topic. *Energy supply to the system. "Earth's envelope" = atmosphere.*

Ultimately, it is simply a matter of adding energy to the air in its lowest form, namely in the form of heat.

CO_2 as a practical common measure for the generation of heat from fossil fuels. This statement is so important because it is by no means the now "famous" CO_2 that supposedly "warms the earth". This is nonsense. When fossil fuels are burned, a certain amount of CO_2 is always produced in proportion to the burned mass (gas, oil and oil derivatives, coal, wood), which, via a conversion factor, allows conclusions to be drawn about the amount of fuel used. That's all. Apart from that, the CO_2 behaves like any other ideal gas in the air: in each case in its molecular structure-related natural frequencies it absorbs energy during the day, for example when exposed to sunlight (becomes warmer) and emits this energy again to the cold night sky via the same frequencies as a radiator cools down in the process. The same applies to all other gases in the air. The game repeats itself on the following day.

General heat inflow into the shell layer as the core of the problem. In our thought model, we have defined a 5 km thick layer of air as a covering layer around the earth and its energy balance is at stake: there are inflows and outflows of heat and if this balance is disturbed, it either becomes warmer or colder. At the moment it is getting warmer.

While the outflows in the direction of cold space would have to be investigated in more detail, for example by creating the aforementioned mathematical-physical calculation model, and are still largely uncertain today, a lot can already be said about the inflows, at least as long as it is human-generated heat.

Every energetic process leads − partly through several stages of the conversion of energy into another type of energy - at the very end to one, namely to heat as the lowest level of the forms of energy. The end of the flagpole is reached when this heat has been distributed so far over a large amount of mass that the existing "residual heat" in this mass can no longer be used by any processes. The thermodynamicist speaks of entropy, which is constantly increasing.

If we even rub our hands in winter, the use of mechanical energy from rubbing immediately creates heat in the form of frictional heat, which our hands release to the surrounding air and − strictly considered energetically − consequently heat the atmosphere. Something similar can be said about a rail

vehicle, which is easy to move. But where does the energy used for the drive ultimately go? Rail and wheel deform elastically when rolling and the wind absorbs energy in the form of frictional heat when the air resistance is overcome. Everything we do adds warmth to the atmosphere.

Fossil and regenerative primary energies. From the previous paragraph it becomes clear that it doesn't matter which type of energy - fossil or regenerative - we use. The only thing that matters is the amount of energy used, because this is ultimately converted into heat and heats the air.

This is exactly where the danger of the "CO2 lie" is: this CO2 bashing suggests that only the use of fossil fuels would be harmful to the climate in the sense of global warming. That is a fallacy!

The use of wind turbines, photovoltaics or tidal power plants also generates energy, which at the very end is converted into heat and fed to the envelope under consideration. The only difference is that one does not notice the efficiency, which is always below 1, because nature tacitly compensates for the amount of energy that is required to compensate for the otherwise visible efficiency-related power losses: energy simply comes out of the apparatus; man doesn't really have to "spend" it.

Actions: what can we do? The mathematical-physical calculation model for the planet presented at the beginning must be set up in the medium time term. No, I am not in a position to do this on my own this afternoon when I wrote this essay, and it is not my core competence either. But if you put a capable physicist and an equally capable mathematician at the same table with a mechanical engineer, you can get useful results very quickly. The task of the engineer is to ensure that the presentation of the solution at the respective stage of development does not remain in the sky of incomprehensible differential equations but is converted into a representation with which one can work sensibly - also in the direction of politics.

State of science, Concentrated in a global institution. Quite clearly: such considerations have long been undertaken by colleagues from science ... somewhere in the world and again and again. But it is not published sufficiently ... as is so often the case and probably not translated into a generally understandable language.

It is a global task and we will not get any further if the one is investigated in the USA, the other in Germany and something else in India. ONE institution with worldwide authority − similar to the UN, for example − must be created that can justify and comprehensibly say with constantly updated figures how the situation is and what measures are required and can explain the effects.

Only in this way will we be able to convince even the brightest president in the world! With this model or with extended physical considerations it could well emerge that the earth's atmosphere warms up due to increased solar radiation or a

deteriorated filter effect through the upper gas layers ... more than the heat introduced "from below" by humans. How these two heat sources are related to each other would have to be clarified by the calculation model.

Energy balance of the earth in publications. Of course, you can already find publications on the Internet by certainly very well-known scientific colleagues. If you look at Wikipedia under "Greenhouse Effect", you will find the following statement, for example:

The earth is currently not in thermal equilibrium. It heats up due to the increased concentration of greenhouse gases as a result of human activity. The irradiation of 341.3 W / m² contrasts with a radiation of 340.4 W / m². (Reference period 2000−2004).

That is a difference of 0.38%! There are three things that bothers me about this statement: Firstly, I don't know whether this information has been scientifically independently confirmed. Second, I don't know how accurate this calculation is, and 0.38% is a small number. And third, it says "due to human activity". Is it really like that ? The following picture shows − certainly very well − what it is about:

The "received solar radiation 100%" is essentially based on the so-called "solar constant", which is by no means constant over a whole day, as the word suggests. Thruth: it is currently not constant but calculated! And: the smallest change in the assumptions necessary for the calculation of the balance can change the result significantly for a balance sheet that is unbalanced by the 0.38% quoted,

Figure 1. Energy balance of the earth

and in any direction! This shows how sensitive such bills are.

I would like an internet calculation model that has been scientifically cross-checked by the aforementioned global institution and published officially and bindingly for everyone (!) And which allows (example) to look directly at the impact on the energy balance after entering a fictitious gas consumption for Germany. All countries with all types of energy would have to be considered.

Another clear picture about the world energy balance:
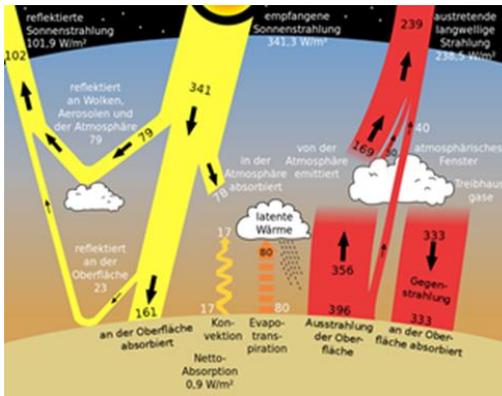
Figure 2. The world energy balance

Did you notice that the term CO2 does not appear in either of the images? Such representations are certainly correct according to the textbook and make it easier to get started with understanding.

However, representations of this kind are not suitable when the aim is to quantify the effect of individual concrete measures on the energy balance in an up-to-date quantified manner!

Only when a globally binding computational model exists, as described above, can international politics move at a nominal value. At the moment the connection between measure and effect cannot be seen or the resulting impression depends too much on the factual presentations of individuals and on counter-opinions (myself included).

With regard to the "internal heat supply" generated by humans, it can be said in any case that even the smallest contribution contributes to the warming of the climate and that humanity should be recommended to cease to exist in order to maintain the planet. However, without knowledge of the external influences, it would not even be ensured that the climate development would stabilize or that a further increase in temperature would not take place, because there have always been developments on earth.

Since such a radical proposal would not be able to reach a consensus, we have to consider which steps we can actually take - broken down according to effectiveness and feasibility.

The options are: Energy saving in general and isolation wherever possible. Based on the knowledge that global warming is by no means directly related to CO2, as derived above, but rather to the energies "used" or introduced to the system, some of the proposed measures appear in a completely different light: it is of no use to ban the devil using Belzebub.

Global system and microclimates. Since environmental protection does not only consist of the global energy balance, but also of air pollution, I would also like to go into that in the whole context. It is easily conceivable and also verifiable that microclimates form over urban areas, which may differ significantly in terms

of temperature and, of course, air pollution from smoke, exhaust gases, fine dust and so on, from the values measured in untouched nature, no question about it. Nevertheless, it must be pointed out that, due to the area ratio, these phenomena have a negligible influence on the global system about the energy balance.

Diesel reloaded - the return. Although this topic is not the main goal of this article, I would like to point out that, thankfully, word is slowly getting around that modern diesel vehicles with exhaust gas aftertreatment do not pollute the intake air, especially about fine dust pollution, but on the contrary to clean. Cleaning performance of 90% was measured while driving in Stuttgart and not on the test bench! Here, too, there are sensible approaches to action!

Electromobility. "Measures" such as comprehensive electromobility quickly turn out to be sheer nonsense, as the energy required to charge the battery has to be generated somewhere and transported over long distances. In the very end the result - production and supply system included - is worse than with an ancient diesel that generates its energy on site without loss, even if it does not significantly exceed an efficiency of 30−33%. Other environmental damage, such as lowering the groundwater level due to the extraction of lithium, has not yet been taken into account.

Anyone who calculates the necessary charging capacity for a charging network that does not exist nationwide and then asks where the electricity for the many cars should come from will quickly realize that this is not possible. The consumption of copper cables would be immense, laying them would take decades, the production of the necessary batteries is extremely polluting, and lithium extraction is a disaster.

The city buses in Solingen have been running electrically for more than 30 years, powered by an electrical overhead line as in rail transport. And there is nothing against equipping these buses with batteries that are charged during normal travel and that enable them to supply power to smaller non-electrified routes. Just like the company UPS, Deutsche Post is treading a sensible path with its electrically powered parcel vehicles: wherever calculable routes have to be covered in daily use, electric drives can be used sensibly. But it only gets rid of the exhaust gases that come out of the exhaust; the energy entry remains.

A politically supported will to want to convert a country completely to electromobility is not just technical and scientific nonsense, but rather borders on advanced madness in view of the consequences.

Correct and encouraged would be the production of (a) hybrid vehicles and (b) the strong expansion of mobile hydrogen technology in accordance with the paragraph below!

Economy: Suppliers are already going bankrupt with thousands of jobs lost because electric cars do not need pistons, cylinder heads, filters or other

components. Hybrid vehicles and hydrogen vehicles with piston engines are primarily combustion engines and do not cause this economic damage!

Home office as a contribution to reducing energy consumption. In fact, the home office − for which one party is currently advocating for more social reasons − saves the trip to work and thus actually helps to reduce the input of energy into the system, not insignificantly if it is related to the respective person.

Wind turbines and tidal power plants, nuclear power plants. As already said, these also generate energy, which sooner or later gets into the atmosphere in the form of heat. But at least they do not produce any exhaust gases, since no combustion takes place. But: a power plant is and remains a power plant and these do not save energy, they generate it.

Photovoltaics and solar thermal in the private sector. Due to the limited performance per area and the available areas, it results that these are solutions for the energetically rather "small area", i.e. usually not suitable for industrial applications. But: for new buildings such as private homes or office buildings, combined with good insulation and e.g. LED lighting, they are an excellent alternative, on the one hand to significantly reduce the energy requirement and, on the other hand, to be pollutant-neutral − i.e. to cover without burning fossil fuels.

Regenerative energies for hydrogen production H2 on a large scale - the egg of Columbus? Yes ! In fact, the large-scale industrial production of hydrogen - which would initially withdraw a lot of energy from the atmosphere - precisely because more energy is required for the necessary electrolysis than is subsequently available in the form of combustible hydrogen − is a good idea, as from the envelope system under consideration would be withdrawn a remarkable amount of energy... more than would later be fed back into the system when the hydrogen was burned to water.

The worldwide existing filling station network could also be used after minor modifications and there would be all the advantages of a fuel that can be filled up in tanks!

This is followed by a whole new piece of information that very few people should be aware of: a colleague in Bavaria has succeeded in developing a pressureless method for storing hydrogen in oils, which no longer requires any pressure vessels and the transport capacity of hydrogen in relation to transport − ton is multiplied.

A certain amount of energy is required to move a mass m; you can do that however you want. But due to the described connection between the energy-guzzling electrolysis process and hydrogen production, I consider the hydrogen drive to be the egg of Columbus, provided that either photovoltaics or tidal power plants or wind turbines are used to supply the process.

According to the principle of energy conservation, the initially hopefully poor efficiency of H2 production does not help to cool the environment because, as described above, the loss of usable energy is ultimately returned to the environment in the form of process waste heat. In terms of energy and pollution, there is at least a clean zero balance.

Energy savings in the industrial manufacturing process. From my insights into the state of production chains in companies, I know that many old systems are still in operation and production processes are carried out whose energy requirements could be reduced by 20%, sometimes by 80%, which the companies themselves are mostly not even aware of. There is a lot to be gained from that, which for some companies extends into the megawatt range per year.

Although I am not a fan of additional legal obligations, I have already referred to the need to submit an independent energy report every 5 or 10 years for companies with high energy consumption in connection with an investment plan that must also be submitted.

Economy: I would like to point out that this would not harm companies, but actually benefit them through the savings in energy costs, because, according to our calculations, most of the necessary investments will have paid for themselves after a maximum of two years. After that, the companies permanently save production costs.

The federal government and its CO2 package with influence on the world climate. Like a thoughtless or helpless mantra, I experience the talk of climate protection goals only in the form of x% CO2 savings by year xy. supposedly to save our planet, crowned by the CO2 tax, which can be presented as a political achievement. Don't we already have high taxes on energy and could it not have simply been increased in the same way as one would otherwise do it silently? No, as a political action that can be presented to the outside world, it must of course be a separate fee that can be presented. At this point, the mainly loud environmental screams of certain groups of schoolchildren come to the foreground.

As I already said, it is generally about the energy supply to the system resp. to the imaginary covering layer and its removal in the direction of cold space. Whether this happens with or without CO2, in view of the small amount of CO2 of 0.038% by volume according to literature, I think it doesn't really matter, despite all the radiation curves presented, which allegedly prove a "greenhouse effect" or which are supposed to hinder the transmission of radiation in the direction of cold space. And what about the other 99.962% gas content in the air ... and at what level of Hight measured? And what if the strength of the solar radiation, the so-called solar constant, only changes minimally ... in the calculation or in fact?

The Conclusions. The only thing we can really do is to reduce our energy consumption or the introduction of energy into the shell layer in the form of heat as much as possible.

However, one must be aware that in relation to the global system the influence of Germany alone is not too great and therefore even drastic cost increases only for Germans will bring little benefit to the global system. In addition: living people always add energy to the system through their personal turnover and the earth's population increases. Joint efforts of scientists and society are necessary for a comprehensive study of the global climate problem. Modern research should use an integrated approach and be based on a mathematical and physical calculation model.

JOURNALISM

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PHOTO CONTENT OF COMMUNICATION PLATFORMS AS A MECHANISM OF OPPOSING RUSSIAN PROPAGANDA (ON THE EXAMPLE OF THE UKRAINIAN WAR OF LIBERATION)

Abstract. The Purpose of the Study. To outline the photo content of communication platforms as one of the most powerful levers of opposition to Russian propaganda in the media environment. The Research Methodology. Theoretical analysis (to study scientific views and points of view regarding the formation of the issues of the article), analysis of the content of communication platforms (to understand the practical component of the researched issue). Scientific comparison (for the formation of conclusions and previously unexplored aspects of the subject). The Scientific Novelty. The Scientific Novelty lies in the latest approaches to the visualization of the content of communication platforms as a way of countering the propaganda that the Russian Federation is waging against Ukraine during the information war. The Conclusion. The article offers a vision of mechanisms for countering communication platforms as components of the communication process, capable of resisting Russian propaganda. Photography remains the leading element of creating a visual component of communication. It weighs much less than streams and audio files that may not be uploaded to the user's phone due to a lack of traffic. The photo content of modern communication platforms and channels are the most accessible to the Ukrainian audience due to their efficiency and interactivity has been analyzed in this work. Among them: "This is Kryvyi Rih, baby", "Ukraine online", "Ukraine in shock", "Crimean Tatarian resource center".

Keywords: social networks, communication platforms, propaganda, photo content.

ФОТОКОНТЕНТ КОМУНІКАЦІЙНИХ ПЛАТФОРМ ЯК МЕХАНІЗМ ПРОТИСТОЯННІ РОСІЙСЬКІЙ ПРОПАГАНДІ (НА ПРИКЛАДІ УКРАЇНСЬКОЇ ВИЗВОЛЬНОЇ ВІЙНИ)

Анотація. Мета дослідження − окреслити фотоконтент комунікаційних майданчиків як один із найпотужніших важелів протидії російській пропаганді в медіа-середовищі. Методологія дослідження: теоретичний аналіз (для вивчення наукових поглядів і точок зору щодо формування тематики статті), аналіз контенту комунікаційних платформ (для розуміння практичного складника досліджуваної теми). Наукове порівняння (для формування висновків і раніше не вивчених сторін предмета). Наукова новизна полягає в новітніх підходах до візуалізації контенту комунікаційних платформ як способу протидії пропаганді.

Висновок. У статті запропоновано бачення механізмів протидії комунікаційним платформам як складникам комунікаційного процесу, здатним протистояти інформаційній пропаганді. Провідним елементом створення візуального складника комунікації залишається фотографія. У роботі проаналізовано фотоконтент сучасних комунікаційних платформ і каналів, які є найбільш доступними для української аудиторії завдяки своїй ефективності та

інтерактивності. Серед них: "Це Кривий Ріг, дитинко", "Україна онлайн", "Україна в шоці" , "Кримськотатарський ресурсний центр".

Ключові слова: *соціальні мережі, комунікаційні платформи, проапаганда, фотоконтент.*

The Problem Statement. There are many forms of communication and information influence in the 21st century. Scientists all over the world are actively studying the topic of manipulating consciousness and public opinion through propaganda. The question remains open due to the rapid development of applied social and communication technologies and conducting propaganda in the Internet environment. There are a large number of applied tools contribute to the conduct of information warfare in social networks, messengers and communication platforms.

This issue has also become relevant due to the full-scale invasion of the Russian Federation into Ukraine and the strengthening of the information war in the media environment.

The Analysis of Sources and Recent Researches. Today, many world scientists are engaged in the study of propaganda as an effective mechanism of power. Among them: J. Stanley, de la Brosse, Renaud; Lajmi, Nouri Ekelin, Annelie, Huang Haifeng. Among the Ukrainians who actively study the phenomenon of propaganda, we can name: H. Pocheptsov, O. Kholod, I. Parfenyuk and many others. Less researches are presented specifically on communication platforms and cross-media content.It is worth of noting the works written by: A. Dosenko, O. Sytnyk, V. Sadivnychy, O. Synovets and many others.

The Purpose of Publication. The purpose of the study is to outline the photo content of communication platforms as one of the most powerful levers of opposition to Russian propaganda in the media environment.

The Main Material Statement. Propaganda of the Russian Federation became more powerful in the information space not only of inside their state, but also on the territory of Ukraine and the temporarily occupied Crimea. Russian media also distributed propaganda materials on the territories of other countries. Propagandists began to use applied technologies more and more actively to spread false information, fakes, partially true information resources, falsified videos.

These tools of the Russian Federation's information war led to the strengthening of countermeasures against disinformation in Ukraine. As a result, quite powerful structures were created at the state level, which focused their activities on anti-propaganda and set themselves the goal of clearing the information space from false information resources. The Center for Countering Disinformation was already operating in Ukraine and was joined by the Internet

Army of Ukraine, which was gathered from volunteers from all over the country who wanted to work in the media space.

It is worth delving into the issue of propaganda as an applied tool for conducting an informational anti-Ukrainian war for the deeper study of the relevance of the described problems.

Propaganda is considered as a free, voluntary form of exerting informational and manipulative influence on a person, seeking to bring to his attention information about the activities of people, structures, etc.

Zrazhevska N. notes: "…the term "propaganda" has been used for many years to describe the activities of various religious organizations, election campaigns of political parties, as well as government programs − all of them are involved in the war for people's minds, external support and assistance" (Zrazhevska, 2010). Conducting propaganda activities is always based on psychological and emotional mechanisms, trying to educate the public. It is generally known that propaganda as a technology is divided into oral, visual and media propaganda. Each of these forms has its own arsenal of tools. For oral language, the flavor of the language, the ability to correctly use words close to the understanding of the audience, to break through the projection on one's own vision and the recipient's understanding of the problem.

Visual propaganda uses printed products and audiovisual components. It is possible to use traditional mass media and Internet resources for propaganda through the media. Media experts (Jolos, 2022; Kononenko, 2020; Dosenko, 2020] identify propaganda activity with the AIDA model of attention. This model operates according to the scheme: "1) attention (attention), 2) interest (interest), 3) desire (excitement, desire to do something), 4) action (action)" (Kononenko, 2020). Kononenko V., Lapshin S. single out a number of tasks performed by propaganda. Among them: 1. Education and consolidation of certain desirable and useful ideas, concepts, views, habits and beliefs, etc. 2. Destruction, suppression and change of unwanted ideas, concepts and beliefs. Both of these tasks can be performed by propaganda both through suggestion and through persuasion (Kononenko, 2020).

In general, propaganda must be effective, the achievement of a powerful effect depends on the power of the state, the involvement of a number of media for conducting communicative activities and the involvement of popular media persons who prepare the audience for the perception of information resources.

The audience perceives information that appeals to them (or hurts), which is close and understandable to them. It is worth emphasizing that propaganda is a mechanism working for years and an activity carried out for a long period of time. The information field is formed by the media without leaving anyone indifferent. For example propagandists can use a number of effects, to project into the minds

of the audience those problems and painful issues that are especially relevant for the audience today.

Propaganda techniques has s big influence for audience which does not have a high level of education. This is exactly what we can observe in the 21st century on the example of the Ukrainian-Russian Liberation War. During the racist invasion, an army of non-humans committed grave atrocities and war crimes in the Kyiv region: rape of women, children and the elderly (both sexes), robbery, torture and murder of civilian men, safaris on children. All these actions were carried out by Buryats. The level of education is low in that part of russia. The vast majority of those "soldiers" who came to Ukrainian land have 3-8 grades of education. The standard of living in Buryatia is as low as education, which has caused mass robberies: the theft of both expensive equipment and women's underwear.

Propaganda activities have been carried out on the territory of Russia for many years are absolutely anti-Ukrainian, the imposition of ideas that on the territory of Ukraine there are biolaboratories of unknown origin, NATO bases and the Kyiv regime conducts a neo-Nazi policy − for the entire civilized world. This is obvious lie and justification of its illegal actions. At the same time, propaganda "brainwashing" of Russians led to manipulation of consciousness and atrocities in a foreign country. Among other things should be mentioned that the propaganda material should stand out among other irritants that are currently operating, as follows − possess a sufficient duration of action, sufficient intensity and novelty. The material itself has a great influence on memorization: the more meaningful, logical, emotionally colored it is, the better it is fixed in memory (Carrillo, 2010).

The information is aimed at strengthening already existing beliefs in the audience, and it ignores resources that contradict the picture of the human world. It follows from this that the powerful implementation of propaganda communication technologies in the Russian information space, namely in political activity and the military conflict with Ukraine, has led to a complete mediocracy, the zombification of society and the cultivation of a powerful hatred of everything Ukrainian. At the same time, the actions of the Russian military led to an absolutely mirror reaction in the Ukrainian nation.

After the events that began on February 24, 2022, the Ukrainian people will never again consider the Russian military as brothers, respect Russian culture or literature, listen to music, etc. The vast majority of the Ukrainian population, which before the full-scale invasion spoke Russian, today switch to the Ukrainian language and study it more deeply.

The modern Ukrainian government introduces and uses several communication technologies in the media environment, which contribute to the creation of the latest approaches in communication and conducting propaganda

anti-russe. The Disinformation Counteraction Center at the National Security and Defense Council of Ukraine is active today in Ukraine. It was created on March 11, 2022, and was put into effect by the Decree of the President of Ukraine dated March 19, 2021, The main task is to give an oppose informational influences and fakes entering the Ukrainian media space from the Russian side. Experts emphasize: "...one cannot ignore the negative political consequences of expanding the influence of communication technologies, such as changing the system of representing civil interests in accordance with the media format, turning politics into a media process, virtualization of political space, etc." (Kononenko, 2020). It can be concluded that Ukrainian authorities are implementing several communication technologies built on adequate methods and mechanisms for transmitting relevant information and political messages through existing information channels. Today they are not only traditional media, but also Internet platforms and communication channels.

Ukrainian society is actively developing photo, audiovisual mass media and platforms that generate an actual format of communicative interaction. The latest information technologies create an environment for the functioning of a specific information and communication center.

Today, the use of photo content in public and communication channels as a method of covering true information and a way of resisting Russian propaganda has become relevant for Ukraine. The photo highlights the events in Ukraine, the reactions of Ukrainians to the illegal invasion, shows the events from hot spots and helps to understand the essence of the Ukrainian position towards the Russian Federation. Photo content acts as a mechanism for countering propaganda by providing truthful information resources, focusing on the most important thing for Ukrainians - the defense of rights and freedom.

Ukrainian media publish not only terrify and shock content, but also fosters patriotism, the desire to defend one's country and language. We analyzed the photos and content of Telegram channels: "This is Kryvyi Rih, baby", "Ukraine online", "Ukraine in shock", "Crimean Tatar resource center".

Photos 1 and 2. Photos from telegrams
of the "Ukraine online" channel

The photos show a rocket that, after Eurovision 2022 and the call of the Kalush Orchestra band "Save Azovstal", the Russian army launched at the Azovstal plant, where many the civilian population of the city of Mariupol were in shelters. The photo on the right shows a nuclear explosion, which Russia constantly threatens Ukraine with.

Next selection of real photos of destroyed and damaged buildings from the Russian invasion was made. The photo on the left shows the house that was hit by a shell from tank fire in the city of Irpin. On the photo from the right is a residential building in Kyiv, which was hit by an enemy missile on February 24, 2022, destroying a lot of human lives.
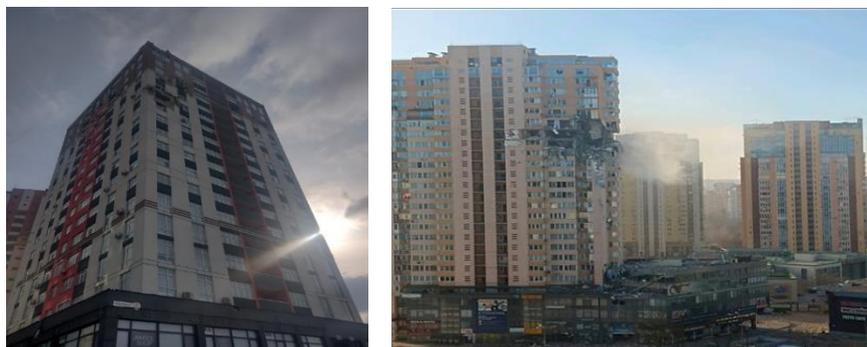
Photos 3 and 4. Photos taken by an unknown author published in the
Telegram channel "Ukraine in shock"

The following photo was taken in the city of Irpin, immediately after the liberation of the city from the Russian military. Irpinski Lypky, a new residential complex that was practically destroyed by the Russian invasion, is depicted. The photo on the left is an image of what was pouring after the shelling, and the photo on the right is an image of what the area was like before the full-scale invasion of the army of "liberators" from the Russian Federation.

Photos 5 and 6. The photos is taken from the Telegram channel "Ukraine in shock"

Photo 7. The photo is taken from the telegrams of the "The Crimean Tatar Resource Center" channel

The photo shows the residents of the city of Energodar who went to rally against the Russian Federation and the seizure of the Zaporizhzhya nuclear power plant. This photo greatly raises the level of patriotism among Ukrainians. It demonstrates that the people do not want to be part of the Russian Federation but seek independence. Propaganda of the Russian Federation and the illegal referendums held there are falsification and illegal seizure of the territories of a sovereign state.

The following images were taken from Kherson city during its occupation. The photo shows rallies of Kherson residents who came out against the seizure of their city by the Russian military. Ukrainians not only go out on the square, but also without weapons go to the equipment and cars trying to stop the army of "liberators".

Photos 8 and 9. The content of Ukrainian publications and social networks with the skeptical signature of the "liberators"

Today, photo content of communication platforms is becoming part of the strategic communication of authorities with the population of the country due to its specificity of being quickly displayed and uploaded to information carriers. Ukraine is under constant shelling and missile strikes from the territories of the Russian Federation and Belarus. It is not surprising that there are interruptions in communication, because the enemy systematically tries to target the objects of the state's critical information structure. Power outages and Internet outages can contribute to Russia's desire to drive the country's population into an information vacuum. This policy has been practiced by the occupiers in the temporarily occupied territories. It is because of that the desire of the state and journalists to keep the correct and truthful vector of information is important. Of all multimedia components of modern content, photography weighs the least and therefore opens

faster. The use of photo content on platforming helps to strengthen civil positions, faith in the armed forces and the state.

The Conclusions. Propaganda has very strong levers of pressure on the world and Ukrainian community. This work is aimed at studying the countermeasures of communication platforms that are currently able to act as components of the communication process and have the strength and resources to resist Russian propaganda. Photography is studied by the authors as a key factor in the visualization of content and the possibility of building counteraction mechanisms in the minds of the audience. Ukraine is subjected to strong rocket attacks, has interruptions with light and communication, photography remains the leading element of creating a visual component of communication, because it weighs much less than streams and audio files, which may not be uploaded to the user's phone due to a lack of traffic. The photo content of modern communication platforms and channels, which are the most accessible to the Ukrainian audience due to their efficiency and interactivity, has been analyzed. Among them: "This is Kryvyi Rih, baby", "Ukraine online", "Ukraine in shock", "Crimean Tatar resource center".

We see the prospects for further exploration in the need to study the photo content of communication platforms in more detail.

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THE CONCEPT 'QUARANTINE' IN RUSSIAN-, UKRAINIAN- AND ENGLISH-LANGUAGE HUMOROUS WORLD VIEW

Abstract. The Purpose of the Study The article is devoted to the analysis of cognitive conceptual features of the concept 'quarantine' in three humorous language world views: Russian, Ukrainian and English. The aim of the investigation is to reveal the peculiarities of conceptualization of the main cognitive features of the concept 'quarantine' on the material of the modern Internet folklore genres, such as memes, anecdotes, aphorisms, jokes. The Research Methodology. Semantic-cognitive method was used to characterize individual categories of the analyzed concept and quantitative method to present statistical data. The Scientific Novelty. The article presents the first cognitive analysis of the concept 'quarantine' on the material of the Internet folklore in three linguistic humorous language world views. The Conclusions. Comparison of cognitive features of the concept 'quarantine' in the studied world views has allowed to deduce general cognitive features of its conceptualization, which include inability of parents to adapt quickly and easily to a new role of the home teacher; and producing dependence on household actions, in particular overeating.
Keywords: quarantine, humorous world view, cognitive feature, Internet folklore.

The Problem Statement. The psychologization of all aspects of modern human life means that increasing number of people are keen to acquire knowledge about this scientific field and learn how to put it into practice. Self-education

includes not only professional literature on a particular issue, but also various sources from which one can logically deduce the psychological characteristics of an individual or an entire nation. We define interactions of Internet users in the literary forms of small genres as actual folklore, which is precisely the additional resource that helps to learn the mental peculiarity of society in an accessible linguistic form.

The initial understanding of folklore as oral folk art, which emerged in the pre-writing period is being replaced today by the realization that the main source of folklore is oral and written communication of the various national segments of the Internet. Although the Internet is a secondary carrier of folklore text (sites hosting unaltered folklore works), it also offers platforms where the mentioned contemporary folklore texts can be generated (forums, social networks and blogs), i. e. it takes over the functions of a creative cross-national association in electronic form. Social media users, in response to any high-profile socio-political event in the country or the world, produce folklore texts, most often of a humorous nature, which reflect their reaction to the actions of the authorities (Arkhipova, 2016).

This "weapon of the weak" (as D. Scott calls folklore) is productive material to assess the main conceptualized aspects of the most relevant concept of 2020 – 'quarantine' – in Ukrainian-, Russian- and English-language humorous world views in Internet folklore. The crisis era of the first half of the year 2020 could not help but be reflected in the writings of our contemporaries: texts of various genres and styles are devoted to it on the World Wide Web.

We interpret the notion of internet folklore following A. Savchenko and T. Suslova as "a means of intercultural communication, preservation of cultural continuity and tradition in the context of globalization". (Suslova, Savchenko, 2012), a tool by which a speaker indirectly describes a socio-political event and expresses his or her opinion by participating in the "chain" of transmission of a folklore text (Arkhipova, 2016).

The Analysis of Sources and Recent Researches. Of the linguistic papers on the pandemic and the Covid, we highlight the article by V. Voronov, who described the COVID-19 as an existential and cultural event (Voronov, 2021) and A. Sarna, who outlined COVID-19 not only as a biological threat, but also as a dominant information cause, or 'media virus' (Sarna, 2020). The issue of media representation of the 2020 pandemic was studied by V. Kotova, who collected a sample of covid-themed memes on the material of the Lentach channel of the Telegram (Kotova, 2021). The material collected allowed the author to get an idea of what the network users were concerned about during the quarantine. The process of quarantine itself, as reflected in the linguistic work of Internet users, has not been analyzed, which makes this study relevant.

The concept 'quarantine' has already been partly explored by the authors of this paper, T. Pavliuk and Z. Dubinets, who presented their observations in the article «Peculiar features of conceptualization of the 'quarantine' notion in modern Internet folklore». The material for this study was humorous texts from the Russian-language segment of the social network Facebook (Pavliuk, Dubinets, 2021). In the present article we will focus on the main points of this publication to be able to compare the results of the conceptualization of 'quarantine' in the languages under study. As a result of the analysis, the authors identified 24 categories of the associative field of the concept under study: they are film memes; advertisements; homeschooling; being at home; forum questions, advice; alcohol; steady phrases, euphemisms, aphorisms; retrospective parody of realities of the Soviet past; anecdotes; fear of death; enrichment on distress; holiday planning; clandestine work; marriage dating; politicians' omnipotence; shopping; slogans; tourism; linguistic jokes; clothes; omens; new social and economic realities; sport; self-isolation. The two most productive groups were "being at home" (15%) and "questions, advice on the forum" (13.3%), which are described in detail in mentioned article (Pavliuk, Dubinets, 2021).

The Purpose of the Article. is to present the features of the conceptualization of the main cognitive features of the concept 'quarantine' in three linguistic humorous world views.

The concept of quarantine was present in the cognitive world view of the modern humanity at an abstract level. Collins English Dictionary defines quarantine as follows: quarantine – noun 1. a <u>period</u> of <u>isolation</u> or <u>detention</u>, esp. of persons or animals <u>arriving</u> from <u>abroad</u>, to <u>prevent</u> the <u>spread</u> of <u>disease</u>, usually consisting of the <u>maximum</u> <u>known</u> incubation period of the <u>suspected</u> disease 2. the place or area where such detention is <u>enforced</u> 3. any period or state of enforced isolation; verb (*transitive*) 4. to <u>isolate</u> in or as if in quarantine 5. *Australian* to <u>withhold</u> (a <u>portion</u> of a <u>welfare</u> <u>payment</u>) from a person or group of people (Collins English Dictionary, 2022). Recent global events, however, have updated the concept and endowed it with a number of cognitive classification features, which we have chosen to explore in humorous social media folklore.

The Main Material Statement. In this article we would like to focus on another productive category of the concept 'quarantine' of the Russian-language humorous world view, which has not been described before. It is the category "alcohol" that takes up 10% of the sample. The hyperbolized need for constant sterilization of everything around is expressed in texts where alcohol acts as an internal antiseptic: *Tip of the day: Stay close to people with excessive booze – it's sterile around them!; The time has come when the smell of alcohol from a companion causes trust and respect!; You have to drink 100 grams of vodka*

before you go to bed in order not to get sick. Yesterday I went to bed six times!!! Alcohol also appears in memes about children's games: *Misha loaded a water pistol with moonshine. Granddad was the first to be shot.*

Among the coronavirus memes, posters in the style of the USSR stand out, with slogans relevant to the current situation. For example: *Comrade, remember! The first shot is for wiping hands after the shop!* This example illustrates such a cognitive feature of the concept 'quarantine' as 'a Russian person will always find a decent excuse to apply his favourite pastime'. The Ministry of Health's recommendations to limit alcohol consumption are sarcastically presented in the following text: *Ministry of Health: Alcohol won't help in the fight against coronavirus. Alcohol: You'd think the Ministry of Health would help.* This text represents the cognitive feature of distrust in Russian-speaking society to the recommendations of the government institutions.

Photo 1. A poster in the style of the USSR

People on self-isolation faced not only the problem of homeschooling or having to stay with family members in the same place for long periods of time, but also the threat of alcoholism. As it turns out free time is filled with unconstructive activities in the form of drinking alcohol, that's why social media users are asking a pertinent question: *What should you do if you are already drunk on quarantine and you still don't have the coronavirus?; After the quarantine, can I get a place in a sanatorium for alcoholism treatment?* The cognitive features of these texts are summarized as follows: a large amount of free time leads a person to develop bad habits.

The conceptual field of 'quarantine' in the Russian-language humorous world view also includes various sub-concepts, among which 'mask', 'ginger', 'self-isolation' was the most frequent. Among the criteria of sub-conceptualism, the authors T. Pavliuk and Z. Dubinets considered a lower percentage of use in texts and chronological derivation from the concept 'quarantine' already discussed online (Pavliuk, Dubinets, 2021).

As a result of the analysis, the authors came to the following conclusions. The concept 'quarantine' in the Russian-speaking segment of the social network Facebook has the following cognitive features:

1) ineffectiveness of self-development and goal-setting in prolonged isolation;

2) an excess of time;

3) increased consumption of food and alcohol;

4) abstinence from infidelity in marriage;

5) pressure of negative information by the media;

6) adaptation to new conditions and possible extrapolation to life outside quarantine;

7) fear of death (Pavliuk, Dubinets, 2021).

Conceptualization of 'quarantine' in the English-speaking worldview, along with the Russian one, was inevitable due to the global scale of the coronavirus pandemic COVID-19. People forced into self-isolation were discovering a new reality and developing new habits of life, which could not help but be reflected in social media texts. The linguistic realities of the 2020 social network allow us to trace which cognitive features of the concept under study are common to speakers of Russian and English, and which are distinctive. A card file of 50 Internet memes and aphorisms in English helped us do this.

Statements of a non-humorous nature is minimal in the number in the sample – a kind of lyrical, philosophical reflection on the issues of the day. For example: *We are reminded that in the fleeting time we have on this earth, what matters is not wealth or status or power or fame, but rather how well we have loved and what small part we have played in making the lives of other people better* (Barack Obama); *Hope they allow us off lockdown by July 4th...So we can celebrate our freedom* (Jim Carry).

The cognitive feature of the first text presents 'quarantine' as a positive phenomenon, contrary to the majority view that it is per se destructive to human society. The second text plays on the historical date of US Independence Day, when the people were given physical freedom from slavery, and appeals to the slavery of the present day, when people are caged up like slaves against their will. The number 2020 itself is present in English-language Internet folklore (as opposed to Russian-language folklore), accounting for 6% of all illustrative material. The year of the catastrophe is represented in the card file by the following texts:

1) *Years from now we're gonna be like 2018, 2019, 2021, 2022. «Hey, you missed....». «NOPE! We don't talk about that one».*

2) *You said 2020 was gonna be like a movie! – Yeah, «Home alone»;*

3) *I'm the unluckiest number! (13).*

 – No, I am, I represent a devil (666).

– Amateurs!

– What was that, punk?

– Amateurs! (2020).
4) *The year 2020 brought to you by the letters w, t and f.*
Let's analyze the examples presented.

In the first, we see people's reluctance to even mention the existence of a year such as 2020, even if it would violate the universal chronology. This text realizes a cognitive feature of the concept 'quarantine' such as a rejection not only of the pandemic phenomenon itself, but also of the whole year, which is not worth leaving any impressions about. The second example presents a moment of disappointment when someone has not kept a promise. In this text, the 'pledge giver' pulls out by giving the example of a film that plays on loneliness, independence, isolation from those you need the most. This text implements the following cognitive feature of the concept 'quarantine': it is inextricably linked to the year 2020 and the loneliness of people.

The third example shows how stereotypes are shifting in people's thinking in 2020. The conversation between the three numbers – 13, 666 and 2020 – shows that the first two numbers have a "reputation" for unhappiness due to tradition, or superstition, while 2020 has become an obvious real number of universal misery. This text realizes the cognitive feature of the negative perception of the year 2020. In the fourth example we are dealing with an abbreviation that hides an obscene phrase from the reader's eyes, which is, however, easily established from the situational context and represents most people's attitudes to the realities of 2020.

The largest group of internet memes and aphorisms about quarantine is "homeschooling" – 12 % of the total material. All of them implement in their majority not a sign of parental fatigue or reluctance to teach children at home, as in the Russian-language examples, but a concern about what neighbors or simply passers-by will think of their teaching methods. For example: *If you see my kids crying outside and picking weeds just keep on driving. They are on a field trip.* Or: *If you see my boys locked outside, mind your business. We're having a fire drill.*

The following texts represent how parents rethink their role as a parent and their behavior as a teacher. Compare: *The best thing about homeschooling is that now I can add «I'll fail you» to my repertoire of empty parenting threats*. In this example, the comicality is seen in the fact that the parent is aware of the ineffectiveness of his/her parenting, as he/she acknowledges the hollowness of the threats. At the same time, they boast of the imagined power to somehow annoy a child through his/her studies.

In the following example: *Homeschooling day 4. Today there was a lot of yelling and crying, things were thrown around, it was anarchy. But I calmed down and apologized to kids and they seemed ok about it*, – the comicality of the phrase is that at the beginning the recipient thinks it is about children's behaviour, but the

denouement of the phrase suddenly reverses roles, and it turns out that the parent is the one who is not coping adequately with his/her new role. Another example that confirms the cognitive feature of quarantine outlined above: *You can either have a nice day or you can help your child with their math homework. You can't have both.* This text realizes the following cognitive feature of the concept under study: homeschooling in quarantine means increased conflicts with children, the impossibility of effectively combining the two roles of a parent and a teacher in one person.

The following example realizes the ability of English-speaking authors to make fun of their incompetence in homeschooling: *Homeschooling day 5. Me: Don't forget to write the date at the top of the page. 7-year-old: Mummy what day is it? Me: um, I think it's Tuesday or maybe July, I don't know.* In the text, the mother's role is limited to managing the child's employment, without getting into the essence of what knowledge is to be imparted to the child.

Among the texts presenting the author's reflections on the situation, the texts addressed to an imaginary, virtual interlocutor stand out. In such appeals, the speaker often tries to "find the culprit" for what is happening, for example: *Remember when you wished the weekend would last forever? You happy now?* That is, a complaint is made to people whose wish for eternal rest seems to have brought the current situation closer. Similar texts are present in the Russian-language segment, where the authors lament the omen that has come true: *I will no longer celebrate the New Year at home! Fuck such signs: how you greet the New Year is how you spend it.* Only in this case the author considers himself to be "at fault". Sarcasm in the phrase *Don't forget the clocks change this weekend. You don't want to be late getting up to sit in your living room* indicates the meaninglessness of those conventions of human communication that are rendered irrelevant by the lack of physical need for social contact.

The sub-concept of 'quarantine' in the English-language humor world view is the frame 'touching the face'. This frame became recurrent after the urgent recommendations of the health authorities to limit any touching of the face in order to avoid possible infection with COVID-19. This has become a kind of obsession for recipients who have expressed it in such texts: *Turns out my top 3 hobbies are: 1. Eating at restaurants. 2. Going to nonessential business. 3. Touching my face; After all the stupid things I've done in my life If I die because I touched my face I'm gonna be pissed.*

In English-language Internet texts, the word "isolated" is not used as often in conceptualizing 'quarantine' as in Russian-language texts (4 %). Some examples present a sceptical attitude towards global isolation, due to the fact that people have led rather secluded lives before: *You realize how isolated you have been when a world pandemic happens, and you need to make almost zero changes*

to your lifestyle. This text realizes the following cognitive feature of the concept under study: quarantine is not scary; it was already latently present in the lives of many people. Attempts to positively perceive self-isolation are presented in texts that indicate that some particularly desirable individuals may still violate the mandatory prescription: *Due to corona virus we are self-isolating. No one may enter except: Andy Beshear, Mathew McConaughy, George Clooney and those firefighters' guys holding puppies who we saw on a calendar.* This text implements the following cognitive feature of the concept under study: quarantine is more pleasant to spend with those who are enjoyable for us.

Another common phrase is "social distancing". It is interpreted in metaphors of music and everyday life. For example: *Social distancing is like asking a string section to play pianissimo: it only works if everyone does it.* Social distance is a sub-concept of the concept of 'quarantine' and implements essentially the same mechanism – limiting people's ability to come into contact with one another. Due to the fact that many violated the regime of social distance and quarantine, this statement was born. The cognitive feature realized by this example: social distance, like quarantine, are only effective means of combating a new disease if there is universal commitment and compliance.

In everyday terms, social distance is an excuse to laugh at your weaknesses, the things you can't cope with: *I need to practice social distancing from the refrigerator.* The situation realized by this example is close to every person who has experienced quarantine in 2020: when a person is locked in four walls, due to lack of special employment, he begins to misuse those actions which cannot have a positive impact on his health. The attitude towards quarantine in the humorous texts of the English-speaking world view of 2020 cannot be described as unequivocally negative. For example, the statement *Knowing me, when all this is over, I'll probably fancy a nice night in* – realizes the sense that people are not bothered by the quarantine at all. And thinking about whether people will mindlessly cancel meetings with friends in the future leads them to realize that they will, because everyone has their own values: *This whole quarantine got me thinking about all the times I cancelled hanging with folks outside. When this is all over, I'm still gonna cancel but just know I did give it a second thought.*

Thus, the cognitive features of the concept 'quarantine' in the 2020 English-language worldview are represented by the following characteristics:

1) the quarantine is closely linked to 2020, which is recognised globally as an unlucky, ominous year;

2) quarantine is not a sudden phenomenon in human life, its signs were evident in the lives of many people even before the world directive to self-isolate;

3) the quarantine showed the inability of parents to adapt quickly and easily to the new role of home teacher;

4) isolation from people generates dependence on household actions, in particular, on overeating;

5) quarantine should preferably be spent with nice people;

6) quarantine has changed people's behavior in such a way that even after it has ended, they do not mind self-isolating further.

As we can see from this analysis, the concept 'quarantine' in the English- and Russian-speaking world views intersect only in one cognitive feature: increased food consumption. Otherwise, this concept is conceptualized differently by users of different languages.

The Ukrainian humorous world view, which has developed on Facebook, also demonstrates similar cognitive features in the conceptualization of 'quarantine'. The most productive memes were about masks during quarantine – 11% of the total sample. The extreme importance of this attribute in the lives of internet users is represented by the following texts: *With those elastic bands from masks, soon we will all look like elves or Cheburashki* (P. Sabo); *And on April 19, we will all go to church to bless masks* (M. Lymarenko); *Please! Write your name on the masks, otherwise you do not know who you are greeting! We came from the supermarket today, took off the masks, I looked – and my husband is not mine.* Cognitively, we deduce that masks are a significant inconvenience to communication, and their cult relegates them to the status of sacred objects.

Penalties for violating the mask regime are presented in jokes: *Get off me, I'm wearing a mask! - Where are your shoe covers?* (meme: a policeman is running after a citizen); *For the first time in my life, I will plant potatoes with a mask and a passport. Maybe the harvest will be better?* (O. Marchuk). The first example hyperbolises the desire on the part of the authorities to impose repressive measures in any case – even if the masked regime is respected, representatives of the law will find something to charge the "offender". The second mocks the state's tight control over individuals who, for certain reasons, find themselves away from home.

The various life hacks for making things with your own hands, including masks, become the subject of humor in texts of sorts: *Well, with masks and antiseptics we understood! Who can tell me how to make a artificial lung ventilation at home???* Cognitive feature: not everything that the state is supposed to provide for citizens, but fails to do so, can be shifted to the individual responsibility of individuals.

A mask that hides the face causes users to want to use it to their maximum advantage: – Hello, baby, I'm in the store. What to take? – Are you wearing a mask? – Yeah. – Take the cash register.

The pandemic agenda has not exactly shifted the attention of Ukrainian citizens away from other internal state and social problems. For example, in the

text *Nothing is heard about amber on 1+1. Are they digging in the forest with or without masks?* the irony is not about the problem of the mask regime, but the illegal extraction of the gemstone.

The next most numerous categories on the index card is "relationships" – 9 %. It is represented by jokes about how people in relationships spend their quarantine: *The end of April: Can you blink your eyes quieter, you bastard?; She: darling, come to me! He: I can't, quarantine. She: but my parents are not at home. He: well, they fucking should be; And now the moment has come for all men who promised their wives what they would do... when they have time for it.* The first text realizes the sign of intolerance towards a family member because of the long interaction in a confined space. The second shows a responsible attitude towards the conditions of quarantine. It is worth noting that jokes from the Ukrainian-speaking Internet community also display the opposite attitude, e. g: *In Ukraine, I see that they adhere to quarantine so much that they will infect the Chinese again (S. Derkach).*

The philosophical conclusion *You should choose people with whom it will be possible to survive quarantine in the same apartment* functions in the Ukrainian sample as an aphorism. We also put the use of the abbreviation COVID-19 as a palindrome in this category: *It is better to think about 19 GIRLS* (DIVOC in Ukrainian) *than about COVID-19.*

The "homeschooling" category is represented by cognitive features: children's reluctance to learn at a distance – *Vovochka started distance learning by blocking all his teachers*; teachers' complaints about children's names on social media which make educational communication difficult – *Hello, dear parents! Talk to your children so that their social network accounts were signed with their surname and name, because it is difficult to determine who is hiding under the nickname King, kitty, pimp, and this happened to me in the 9th grade, and then there will be evaluation, I do not know who I am giving it to*; and the reluctance of parents to take on the role of kindergarten teacher or school teachers for their children – *Who knows where the clandestine kindergarten and school are? I can't take it anymore! (V. Bohach).*

For comparison, the sub-concept 'clandestine, illegal', used in the last example functions in the Russian humor conceptosphere as a category that shows secret visits to work, gyms and beauty salons: *And you know, I wouldn't even be surprised if tomorrow it turns out that your husband is secretly attending WORK!* (A scene from the film "The Diamond Arm")*; I remember sneaking out of work sometimes. But to go to work secretly from the President, I was not prepared for that by life!; Clandestine casinos and brothels have been joined by clandestine gyms, beauty salons and restaurants.*

Ukrainian Internet jokes about quarantine often use the concept of coronavirus. We have separated into a different group examples with this word used in context with names of different countries, e. g: *If the coronavirus is Chinese, it will break soon; A friend from China said it is better not to take the Covid-19 coronavirus, as a new version of Covid-20 will be released in September; Covid 19: If you could sacrifice one country to save the rest, which country would you choose and why Russia?* The cognitive features realized in these texts are: the short-lived nature of the current virus strain, the ability of the virus to mutate quickly, and the dislike of Ukrainians for their eastern neighbors.

The desire to guard against getting sick with an unknown virus has made people quite observant, if not suspicious, of the symptoms of coronavirus. *I heard my neighbors coughing on the balcony. At first, I was scared, but then it smelled like weed and I felt calmer.* In general, the condemnable drug use in this example is perceived positively, as it does not endanger the lives of neighbors. Another example: *On the subway: (Man coughing) – Man, you're coughing, you have coronavirus! – Calm down! I have an open form of tuberculosis! – Huh? Thank God.* Cognitive feature: equally dangerous diseases, such as tuberculosis, have come to be perceived as non-life-threatening compared to the new virus.

The category "being at home" in the Ukrainian-language humor world view also demonstrates the cognitive feature of overeating, which has turned into a bad habit in quarantine: *Don't forget to try on jeans sometimes, because pajamas are a tricky thing; Yesterday, my fridge got 997 views; I don't know about anyone else, but I already have a tan from the light bulb in the fridge.*

Important components of this category are the reality of caring for oneself, one's physical appearance: *Many people in isolation stop taking care of themselves. Moustaches stick out, broom beards, beer bellies. And I'm not even talking about men.* The comic expression assumes that these are men who are notorious for their lack of self-care, but in the end, it turns out that it is women who are condemned for being lax because of their social inactivity. *If the beginning of the pandemic taught everyone to wash their hands, the mask regime forces everyone to brush their teeth regularly to avoid smelling their breath.* In this example, a reluctance to engage in self-care may conflict with hygiene, the lack of which condemns people to serious discomfort.

The category "social distance" is also common to all three linguistic world views and in the Ukrainian one it is perceived unambiguously positively: *Even without quarantine, I do not mind that some people do not come closer to me than 2 meters; I would also not prevent priests and laity of the Moscow Patriarchate from attending mass meetings.* The second text realizes the cognitive feature of dislike for representatives of Russian statehood in the Ukrainian community.

So, cognitive features of the concept 'quarantine' in the Ukrainian-language worldview of 2020 are represented by the following features:

1) quarantine, with its compulsory condition to obey all kinds of social prohibitions, considerably burdens life;

2) the quarantine fails to distract Ukrainians from some pressing civic issues;

3) quarantine reveals problems of interpersonal relations in families;

4) isolation from people generates dependence on domestic activities, in particular the overeating;

5) the quarantine revealed that society is divided into responsible and non-responsible individuals in terms of compliance with socially relevant regulations;

6) quarantine has exacerbated suspicion of the people around them;

7) quarantine has a relaxing effect on people in terms of keeping fit.

Given the fact that all three linguistic world views contain several the same aphorisms and memes, we inevitably conclude that some humorous texts are plagiarized. However, since it is very difficult to identify the original source of a particular anecdote, we focus on the fact that this phenomenon demonstrated particularly relevant characteristics of the studied concept for all three linguistic world views. Some of the most popular international memes appeared to be the following: *Reboot 2020. Because this version is with a virus; Yesterday my fridge got 997 views.*

The Conclusions. Thus, a study of the concept 'quarantine' in three linguistic humorous representations of the world based on jokes, memes and aphorisms from Facebook has led us to knowledge that the material examined does provide grounds for a better understanding of the mental characteristics of the peoples in question; helps to find out the particularities of conceptualization of the universal concept among users of different language groups, and to derive common cognitive features of 'quarantine', which include: the inability of parents to adapt quickly and easily to the new role of home teacher; and the generating of dependency on household actions, in particular overeating.

The prospect for further research is to study this concept more extensively in other literary genres of the languages in question, as well as to engage in a comparative analysis of contemporary Internet folklore in other European languages.

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DEVELOPMENT GAPS BETWEEN EASTERN AND WESTERN EUROPE AS A DERIVATIVE OF RELIGIOUS AND CULTURAL FACTORS

Abstract. *The Purpose of the Study is to sum up the key development gaps between Western and Eastern Europe as seen through the paradigm of these regions' religious development. The Research Methodology includes bibliographic, analytical, comparative methods, field research and polling which allowed us to come up with relevant conclusions about the research topic. The Scientific Novelty is defined by putting a comparison of development of Western and Eastern Europe along the lines of historical evolvement of religious culture in these regions. Applying religious and cultural factors to substantiate the development gaps in various regions of the European continent became a basis for producing results that allow to see these gaps differently. Using history of theology and Church teachings as a basis for explaining the development gaps brings several new perspectives in understanding the European history. The Conclusion. After looking into specific features of Western and Eastern Christianity we may see a set of differences which led to having different lifestyles in these regions of the continent, different ethical priorities and different approach to having a profession and performing a job. This led to substantial development gaps in how Eastern and Western Europe have been performing politically, economically and culturally.*

Keywords: Church, theology, development, labor ethics, religion, religious culture, philosophy of religion, national worldview, Eastern Europe, Western Europe.

The Relevance of the Topic. It's interesting to see how the Christianity shaped European history in a decisive way. There are several ways to see Europe,

but one of the most popular ones is seeing it through East vs West axis – a principle defined by two traditions of Christian faith, Western and Eastern.

Overall, we see countries within the Western Christian tradition enjoying a higher material prosperity, having a larger GDP per capita ratio and better infrastructure development. Meanwhile, countries where the Eastern Christianity has been a prevailing spiritual tradition throughout the ages are behind their Western peers on all of these indicators.

The Formulation of the Problem. Christianity is a religion where ethics plays a crucial role, defining the lifestyle, one's interaction with larger society and with the government. That's why we see gaps and differences in a quality of development within various European regions as a derivative from that place's religious culture.

Let's look at most recent developments. We have Greece, a nation with a traditional Orthodox culture, going through a number of financial crises in 2010s. Cyprus, another Orthodox culture, had the same problems back in 2013. Balkan countries have all kinds of disagreements on their political future – whether it's joining the EU or joining the NATO. Russia, that declares Orthodoxy its official religion, is a big, but rather poor country that's never been able to maintain a sustainably policy of regional development, finally choosing to invade Ukraine to get a hand over this country's vast resources.

Meanwhile, countries of Western Christian tradition have been having a much richer life. Germany was having a fiscal surplus each year before 2022, when the war-related inflation ruined health of economic environment pretty much everywhere on the continent. Norway has its €1-trillion sovereign fund that allows to have much more comfort in planning the future for the coming generations of Norwegians. Sweden provides a social support scheme worth roughly 30% of GDP that creates several layers of economic protection for those who might have all kinds of troubles in their lives.

The Purpose of the article. Now we are going to proceed to analyzing the way religious culture affected societies, countries and economies of Eastern and Western regions of Europe.

The Presentation of the topic. To find the answers to the questions we have, it's needed to look at Medieval Ages and see how the tectonic changes occurring in European culture back then divided the continent along the West-East axis. Post-Roman age was a highly challenging environment, when all the European nations stepped to a teeth-cutting competition, which included classical warfare, but also cultural and economic methods of winning over the peers.

At this point of time, Christian Church received its final division into Eastern and Western churches, which happened in 11th century, but was prepared by two centuries full of disagreements on religious matters that were guiding rules for

how the societies in Europe were developing. Western Church then was sure its liturgy provides a better aesthetics, while is also helping people to have their best instincts developing in a proper way, so it was looking for ways to break with the Eastern Church after too many political scandals in Byzantium Empire involving all kinds of corruption. According to Medieval theologians, political sins, including corruption among judges, was too deadly of a sin, so the Western Church decided it didn't want to have sacramental communication with the Eastern Church for this reason.

Take monasteries. After the Roman Empire broke up and Christian intellectuals started looking for a different cultural infrastructure that would allow them to pursue their studies, Western Europe came up with the idea of monasteries. Celtic Church started having monasteries as early as 5th century AD, followed by France and Germany. Eastern Church had a developed monastic culture at that time but supported spirituality of solitude for those who wanted to devote their life to God. We can see Eastern monasteries operating in Egypt in approximately same time, but in terms of daily comfort of life there were much more challenging than what Western monasteries had.

This is how Western European Christianity produced a new labor ethics. It was somewhat based on Eastern theology – like the writings of St. Basil the Great and his basic ethical principle "work and pray", but St. Basil's teaching remained mostly a theory for the Byzantium Empire, while they became everyday practice for the Western Church.

At a monastery in Western Europe, a monk could spend all day long reading and writing which allowed to produce a totally new European culture. Intellectual work was recognized as an important contribution to the economic and cultural development, while it was still impossible to do intellectual work outside monasteries. We know very few intellectuals among the laity in Medieval Ages, though at a later stage – in 13-14th centuries, more and more people with intellectual vocation were able to establish own way of life without taking monastic vows. Good example for this is Dante Alighieri, an Italian writer (1265−1321).

Meanwhile, in Eastern Europe intellectuals had all kinds of problems. St. Gregory the Theologian, who lived and worked in 4th century, was complaining a lot that his degree obtained at Philosophical Academy in Athens was doubted by many as one produced within the non-Christian tradition (St. Gregory Theologian, 2002). This had an impact on popularity of his writings. Having produced great examples of spiritual poetry of late Hellenism, St. Gregory was pressured all the time for his style of writing and his ideas, full of aesthetical revelations.

Take Pechersk Lavra, a monastery in Medieval Kyiv. From several manuscripts left from that age, including "Journey of Theotokos through Hell" and "Glorification of Father Abraham", we know local monks also felt they were underappreciated by the society, which is why the texts they were writing are mostly focused on having a monastic audience. That was sort of a Medieval snobbism of Kyiv monks.

Also, Kyiv Lavra produced a certain theology on "disagreeing with God". It's a Medieval theological concept that includes several logical arguments about the nature of Holy Mother's ability to pray for the sinners. This theology spread not only around Ukraine, but also in Bulgaria, Poland, Serbia, Greece and Russia. Basically, Kyiv monks back in 11th century believed Theotokos had a moral right to disagree with God and argue with His will. Later, disagreeing with God became an argument for those Eastern Europeans who would live unethical life, but still needed a worldview without serious religious contradictions in it. Western Theotokos theology was somewhat different at that time and was presenting the nature of Holy Mother's relationship with Holy Trinity as an ecosystem where exchange of positive spirituality takes place.

Now I'll share a piece of field research on Eastern monasticism that I conducted in 2004. Then, as a philosophy student who was seeking to obtain a master's degree at the Russian State University for the Humanities in Moscow, I went to a monastery in Northern Russia to find and analyze how the Medieval forms of Eastern monastic life survived through the centuries in that particular place. That was St. Nil Monastery near the town of Ostashkov. That place provided the monks with a high degree of solitude with only a huge lake and woods around, though some small villages were located nearby with people from there coming to the monastery for the Sunday liturgy.

At St. Nil Monastery, I attended a monastic funeral – an interesting religious ceremony, where monks pay tribute to their spiritual brother who died and, according to Church teachings, has good chances to find himself in heaven if his life on earth would be considered worthy of the angelic calling that Eastern monasticism is practicing.

The dead monk's name was Seraphim, and he didn't have a priesthood rank. While carrying his body to the place of burial on monastery's land, younger monks, those aged under 40, were singing all kinds of local spiritual songs. There were several ideas mentioned in those songs and all of them had to do with suffering during the life on earth. The religious ceremony with a tribute to fr. Seraphim was a way to remind the participants these messages:

1) Earthly life is full of temptations, suffering and pain, so fr. Seraphim will have a much better life in heaven compared to what he went through at St. Nil Monastery.

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2) A necessity to do hard daily physical work wouldn't allow monks to pursue serious theological studies, which is why they're asking St. Nil and St. Nektariy, local saints, to pray that their sin of ignorance would be forgiven.

3) A presentation of own pessimism, fears and deficit of spiritual hope which is a request for better life conditions at a monastery that senior monks, present at the ceremony, could have a chance to hear.

St. Nil Monastery is a late Medieval age Russian place with most of the monastic practices left intact throughout the centuries. So, we may conclude that Eastern monasticism and Christian culture in this part of the world had serious problems with creating a fruitful environment for intellectual work which would lead to a better labor ethics.

The conclusion would be this. Western Christian culture managed to create an ethical framework where analytical work, deep expertise and knowledge-based order were considered to be very important virtues. Western theologians wrote a lot of explanations for why one should pay attention to things said by the intellectuals and let himself or herself be led by other people's analysis. Eastern Christianity, at the same time, created an important layer of ethical support for people going through all kinds of suffering, though it didn't create an intellectual foundation for knowledge-based order which would be recognized, respected and accepted by millions.

An important comment on this is needed. It's not that we believe Western Christianity is a "better" or "purer" form of religious culture. Our message is this: for a number of historical reasons, Western monasteries were able to promote a knowledge-based order, while historical realities in Eastern Europe didn't let local monasteries to do the same thing at a comparable scale. Western Christian intellectuals felt they were needed and appreciated by the society, while those working in the Eastern region didn't have such a feeling which was a problem.

Another important thing that Western theology did was a restriction on how Church preaches philosophy of a sin. We'll use this popular example: Pet Shop Boys, a British pop-band, produced the song "It's a sin" in 1987 which was a declaration that the Western ethics considers most conversations about sins as a thing of the past and these should be done only my individuals who conduct a mission within the Church. By 1987, this was a well-established thesis: sin is a secondary theological concept for the Western church, while a person's societal contribution is a much more important factor in terms of living a life inspired by the Christian ethics.

In early 20th century, European intellectual culture was full of opinion leaders whose way of life might have been questioned by classical Christian ethics, but their intellectual contribution to the European development was great. This is why the Western Church – including Roman Catholic Church, Anglican

Church, Lutheran Church and other protestant denominations – changed its ethical narrative, downgrading the importance of the theology of sin.

Meanwhile, Eastern European culture at that time was still driven by old Christian ethics which was restricting many of the individuals who would want to produce intellectual writings and contribute to the Eastern European societies' development. On one hand, this produced an Eastern type of secularism which is an extremely complicated philosophy. On the other hand, this led to bolshevism and communism spreading around the region. It was a deep political instinct in game aimed to step outside the Christian ethical narrative and also do a number of things coming from Russian nationalism, philosophy of "pochvennichestvo" ("worldview driven by closeness to land") and collectivism.

When John Maynard Keynes, a British economist, was producing his great writings – like "The General Theory of Employment, Interest and Money" – he was enjoying this deep intellectual freedom that the British culture in early 20th century was able to provide (Keynes, 1936). We don't see economic writings of such importance produced in Eastern Europe at that time, though several things deserve a serious attention – like "Philosophy of Economy" by Sergey Bulgakov (Bulgakov, 1993), who worked for some time at the Kyiv Polytechnical Institute as a professor of political economy, and articles on economics by Ivan Franko, a professor in Lviv, Western Ukraine (Franko, 1984).

The Western intellectual culture at that time produced a proper understanding of interest rates that became a concept of fundamental importance for how the Western economies started operating. It's not that Eastern Europe didn't have its own understanding of interest rates – it did. In 1910s, the city of Kyiv had a stock exchange that was trading all kinds of financial instruments with interest rates. A little bit later, a stock exchange was organized in the city of Lviv which also had experts on interest rates back than.

The key difference was this. While Thomas Aquinas, a well-known Medieval Western theologian, managed to create a Christian basis for interest rate theory in his writings, Eastern Christianity somehow kept its controversial approach to interest rates. (Aquinas, 2014) In the Bible, you may still notice several ethical teachings that applying interest rates to loans contradicts the standard of what is good and what is bad. Thomas Aquinas developed the interest rate theory and provided a theological foundation to it, while the Eastern Christianity mostly remained silent on the issue, while also using old Biblical narratives on this. Islamic tradition, that was spread in southern Ukraine and Balkan countries and was sometimes interacting with local Christian culture, condemned the interest rates as such.

That's why many Christian believers in Eastern Europe tend to see interest rates either as a sin or a temptation that is better to be avoided. "Don't ever take

any loans" – is quite a popular consumer logic in this part of Europe. That doesn't mean that Eastern European loan markets haven't been developing. This just means these markets sometimes lack proper theological foundation, which has an impact on how Christian faithful see them.

I've conducted field research in Europe, both in Eastern and Western regions, in 2016–2021 for understanding the economic behavior of the locals. These are the countries that I used for my research: Ukraine, Montenegro, Bosnia, Serbia, Albania, Greece which represent the Eastern Europe and Orthodox tradition; Germany, Belgium, Netherlands, Switzerland, Norway, Denmark which represent the Western Europe and Catholic/Protestant tradition. I also include my survey in the U.S. to the second part of polled countries – that's not Europe, obviously, but also a part of the Western Christian tradition.

The method of research was this: I was asking people what kind of criticism they usually get from their employers. This was important to understand the ethics of a professional mistake in these countries and regions which would allow to make wider conclusions on how religious traditions are producing certain labor ethics and economic behavior. I'll give you the answers that I was getting from random people in these countries, both men and women of different age:

Ukraine: "For being late to work", "For being too heavy on asking the promotion or salary increase", "For getting criticism from colleagues that has to do with how I interact with them in the office".

Montenegro: "For not having documents in right order", "For not taking initiative in my hands when needed", "For talking to clients in a personal, not a professional way".

Bosnia: "For making public comments on politics", "For skipping work", "For looking alternative employment while still being employed at a certain company or organization".

Serbia: "For my comments on social media", "For showing little appreciation for the promotion or salary increase", "For prioritizing my family over work and business".

Albania: "For taking too many coffee breaks", "For being too introvert in the office", "For not supporting the government's economic reforms".

Greece: "For spending too much time talking to my friends during work hours", "For unwillingness to work overtime", "For breaking the vacation in several parts which is uncomfortable for the employer".

Germany: "For left wing political views", "For asking an individual approach from the employer", "For having a backward-looking approach instead of a forward-looking one".

Belgium: "For too many smoking breaks", "For complains about Belgian weather", "For the lack of critical thinking".

Netherlands: "For being too demanding to my colleagues", "For oversimplification of my professional approach sometimes", "For unwillingness to participate in all the discussions with colleagues in the office".

Switzerland: "For being too conservative in my work environment", "For posts on social media involving alcohol consumption", "For pretending to be too digital in practical things".

Norway: "For underestimating the company's mission", "For taking career breaks", "For being too demanding to my colleagues".

Denmark: "For being too official in how I cooperate with clients", "For skipping corporate activities like pizza parties", "For working too long hours which demotivates my younger colleagues".

U.S.: "For having conflicts with my colleagues", "For ignoring some of the benefits, like pension plans, as a part of the compensation package", "For unwillingness to arrive to work at 8 am".

From these answers to my question, we may do a conclusion that the Western ethics somehow became able to create a better motivating professional environment, where people are able to cope with more complicated tasks and are not pressured by their employers for things that don't matter much. Part of this culture we may attribute to religious values of Western Christianity.

Again, this doesn't mean at all that Eastern Christianity is worse in any sense, it's just different. For centuries, its main mission was preparing people and nations for unrest, pain and suffering – and it did this mission very well. All the 20th century Christian martyrs in countries who were living through Russia-induced communism are a great example of unique ethical strength that the Eastern Church was carrying.

The Conclusions. After looking into specific features of Western and Eastern Christianity we may see a set of differences which led to having different lifestyles in these regions of the continent, different ethical priorities and different approach to having a profession and performing a job.

Western Church throughout the centuries was focused on preparing a knowledge-based economic and cultural development for having a prosperous life – for each individual and a society as a whole. Meanwhile, Eastern Church had somewhat different historical priorities due to the political complexity and uncertainty of developments in this part of the world.

Culturally, Western Europe evolved around the virtues of individualism which was an ethical derivative of a personal path to accepting Jesus Christ and salvation. Eastern Europe didn't have too many reasons and even opportunities to preach individualism, being obliged to support collectivism to keep heterogeneous societies at a certain degree of cohesion.

Evan the post-Christian secularism looks differently in Western and Eastern parts of Europe. It's very bookish and full of intellectual activity in the West, while being a form of modern-day nihilism in the East. A regular atheist in Kyiv just says he or she doesn't see any reasons to go to Church, because liturgy is too long and boring overall, while baptizing the child doesn't matter metaphysically. A regular atheist, say, in Paris is usually a follower of certain political ideology which churned all the religious models of thinking out of his or her conscience.

We see that these two types of Christianity produced totally different cultural results in Europe, shaping societies and nations in a unique way. While having the same starting position in the 1st century AD, two Churches made different choices and pursued different theologies, different policies. This matters a great deal for creating a better Europe which would have politics, economy and culture that work for all.

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Notes

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