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THE CONCEPT OF CHORNOBYL IN A MULTIMODAL FRAMEWORK

КОНЦЕПТ ЧОРНОБИЛЬ У МУЛЬТИМОДАЛЬНОМУ ВИМІРІ

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The article studies the multimodal metaphors which vividly verbalise the concept of CHORNOBYL in the film "Chernobyl". The investigation focuses on the symbiosis of visual, auditory and verbal modes cuing the target and source domains of the key metaphors. The study deals with the attitudes which are associated with the source domains and are mapped onto the target domain. The perceptions evoked by the target domain CHORNOBYL are established due to the stance-constructive meaning of multimodal metaphors. The research is based on five episodes of the miniseries "Chernobyl". As part of the analysis, the Filmic Metaphor Identification Procedure (FILMIP) is used to identify and select multimodal metaphors, construct and describe key metaphors that are relevant to the target domain of CHORNOBYL. Moreover, the research paper aims at distinguishing the domain modes, interpreting all the meanings and attitudes that map onto the domains. The multimodal metaphors under study combine visual, auditory (sonic and musical) and verbal (written and spoken) cues to define the source domains of such metaphors as CHORNOBYL IS WAR, CHORNOBYL IS DEATH, and CHORNOBYL IS FATAL BEAUTY. In this research the key metaphors in which the source domain is suggested by more than one mode in film scenes are singled out. Multimodal metaphors are constantly developing: throughout the film new potential mapping from source to target are gradually demonstrated, enriching the metaphors. It becomes evident that even if the source domain is cued only through one mode in a series scene, it always strengthens the multimodal metaphor by the amalgamation of various modes which emerge in the the film. The actualisation of the singled out metaphors is rather subjective and the viewers of the same film may construe different multimodal metaphors.

Key words: multimodal metaphor. Chornobyl, target and source domains, modes,

У статті досліджено мультимодальні метафори, які яскраво вербалізують концепт ЧОРНОБИЛЬ у фільмі «Чорнобиль». Дослідження зосереджено на симбіозі візуального, слухового та вербального модусів, що визначають цільовий та вихідний домени ключових метафор. Дослідження аналізує ставлення, які пов'язані з вихідними доменами та відображаються на цільовому домені. Сприйняття, викликані цільовим доменом СНОRNOBYL, встановлюються завдяки позиційно-конструктивному значенню мультимодальних метафор. Дослідження базується на п'яти епізодах міні серіалу «Чорнобиль». Як частина аналізу, процедура ідентифікації метафори в кіно використовується для ідентифікації та відбору мультимодальних метафор, конструювання та опису основних метафор, які мають відношення до цільового домену CHORNOBYL. Крім того, наукова розвідка спрямована на розрізнення домінуючих модусів, інтерпретацію всіх значень і ставлень, які відображаються у доменах. Мультимодальні метафори, які досліджуються, поєднують візуальні, слухові (звукові та музичні) та вербальні (письмові та усні) модуси, щоб визначити джерело таких метафор, як CHORNOBYL IS WAR, CHORNOBYL IS DEATH, I CHORNOBYL IS FATAL BEAUTY. У цьому дослідженні виокремлюються ключові метафори, у яких вихідний домен пропонується більш, аніж одним модусом у кіно сценах. Мультимодальні метафори постійно розвиваються: протягом фільму поступово демонструється нове потенційне мапування від джерела до цілі, збагачуючи метафори. Стає очевидним, що навіть якщо вихідний домен передається лише через один модус у сцені фільму, це завжди підсилює мультимодальну метафору шляхом об'єднання

різних модусів, які виникають у ньому. Актуалізація виділених метафор є досить суб'єктивним явищем, і глядачі одного фільму можуть витлумачувати мультимодальні метафори по-різному.

Ключові слова: мультимодальна метафора, Чорнобиль, цільовий та вихідний домени, модуси.

The Chornobyl disaster continues to have a complex presence in the public's awareness, generating its own set of legends, suppositions, and consequences. Although it was kept concealed for a prolonged period, the repercussions of the Chornobyl tragedy have permeated into worldwide popular culture, depicted through various forms of media. It is reflected in fictional and non-fictional works by outstanding Ukrainian writers [1; 2; 3; 4] and foreign authors [5; 6; 7; 8].

Nowadays, being a visible symbol of lingering environmental threat, political hypocrisy and insufficiency, Chornobyl is also presented in cinematography. While in Ukrainian movies Chornobyl is depicted as a disaster ("Motylki" / "Inseparable" (Vorobyov, 2013)), in Western film culture Chornobyl has mostly served as a background for horror movies, action films and thrillers ("Transformers: Dark of the Moon", 2011; "Chernobyl diaries", 2012) in which the tragic dimensions of the disaster are omitted or stay behind the scenes, the focus being mainly on devastation and horror components.

It was HBO's five-part miniseries "Chernobyl" (2019) that reintroduced the world to the nuclear catastrophe, renewing public interest to Chornobyl memory. The screenwriter Craig Mazin explained that he wanted not only to "educate people" but also make them "feel empathy for human beings that are not even with us anymore" [9]. Thus, the film under study interprets the cultural memory of Chornobyl and contributes to expanding the perception of Chornobyl catastrophe concept. The miniseries features the scrupulous analysis of the events combined with some tragic personal stories. Such a manifistation of the Chornobyl disaster supported by digital imagery makes the film especially gripping.

This article presents a further investigation of how CHORNOBYL concept is construed via multimodal metaphorical expressions which are effective means of studying concepts in films. In our previous research paper Visual, Auditory, and Verbal Modes of the Metaphor: A Case Study of the Miniseries Chernobyl the focus was "on analysing the stance-constructive meaning of CHORNOBYL IS DETECTIVE STORY, CHORNOBYL IS ESPIONAGE, CHORNOBYL IS DISEASE, CHORNOBYL IS HOSPITAL metaphors with a view to establishing a wide range of perceptions evoked by the target domain chornobyl" [10, p. 110]. The current study analyses the metaphor of CHORNOBYL with the WAR, DEATH and FATAL BEAUTY source domains.

The multimodal metaphor theory is highly implemented in studying TV commercials and the Internet memes [11; 12]. The number of papers devoted to multimodal metaphor in cinematography is constantly rising [13; 14; 15; 16]. The

increasing fascination with studying metaphors in films is explicable since movies provide a wealth of material for cognitive studies.

The framework of Conceptual Metaphor Theory (CMT), which was first introduced by Lakoff and Johnson and has since been expanded upon by scholars such as Kövecses and Cammaerts [17; 18], forms the basis of the cognitive approach to analysing metaphors, particularly in multimodal contexts.

Elisabeth El Refaie [19] suggests that multimodality provides distinct possibilities for creating metaphors by utilizing the potential of different modes. Forceville identifies such modes as: 1) pictorial signs; 2) written signs; 3) spoken signs; 4) gestures; 5) sounds; 6) music; 7) smells; 8) tastes; 9) touch [20, p. 4]. By considering the list of modes, it is possible to visually and audibly identify the target and source domains of multimodal metaphors in films through elements such as music, spoken and written language [21, p. 20].

Our study analyses 3 multimodal metaphors found out in 5 episodes of the HBO's miniseries "Chernobyl". The criteria used to select the metaphors included the combination of different elements (presenting the target and source domains in different ways) and the frequency of occurrence (the metaphor was used multiple times in the film). In this article we follow the five-step methodology based on the findings by Lakoff [22], El Rafaie [19], Forceville [21], Bort-Mir [16], which is profoundly described in our previous research [10].

A significant metaphor which occurs through the course of the film is CHORNOBYL IS WAR. At the beginning of Episode 1 "1:23:45" one of the scenes resembles the aftermath of bombing: smoke, hissing steam, collapsing ceiling, torn electrical wires in a dark hallway. The scene is accompanied by the wailing of sirens. These perceptual stimuli are supported verbally by Gorbachenko's assumptions: "Is it war? ...Are they bombing?". A similar scene is set a few moments later when Yuvchenko runs through the dark hallway in search of his friend Victor only to find him badly burnt and covered in blood. The non-diegetic crackling sound reminds the viewer about the lingering radiation threat. The following dialogue evokes associations with the evacuation of the wounded from a battle field: "I'm gonna get you out of here... Can you stand?". This impression is strengthened later in the scene when athletic and soldierlike Yuvchenko carries limp Victor's body over his shoulder. Hence, the overlapping modes (verbal, visual, and sonic) project the attributes of the source domain WAR onto the target domain CHORNOBYL.

That very episode presents a meeting of the Communist Party Executive Committee in a Bunker Command Room,

where they discuss the current situation at the plant. In order to assure everybody that they are safe, Bryukhanov states: "We built this shelter to withstand a nuclear attack by the Americans, so I think we'll be fine". The image of a bunker and the abovementioned lexical units contribute to the creation of multimodal metaphor CHORNOBYL IS WAR, employing both visual and verbal modes.

In Episode 2, the first shot to greet viewers after the opening credits is that of a mosaic panel portraying two men who look like warriors (Fig. 1). This impression is supported by the voice-over reciting the Russian verse about war and sacrifice. The poem "To Alexei Surkov" by Konstantin Simonov describes the horror of war and has a great emotional impact on people. We hear just a few lines in a rebellious and patriotic voice, but they are enough to picture war time due to such key words as кресты (сгоsses), могилы (graves), пожарища (burnt-out sites), умирают товарищи (comrades are dying), пули (bullets). Thus, the visual mode (presented by the mosaic) and the verbal mode (the recited poem) lead to the construal of CHORNOBYL IS WAR metaphor.

The same episode presents a scene where Legasov and Shcherbina discuss the plan of a radiological survey looking at the map of contaminated region (Fig. 2). The shot of the map (visual mode) overlaps with verbal manifestation: "We have to start a radiological survey. Sector by sector. On foot..." The whole scene resembles the situation when war generals devise the strategy of a battle.

The domain of war presupposes human sacrifices. The most vivid manifestations of the CHORNOBYL IS WAR metaphor which implies sacrificing lives and health are in the scenes that show three men volunteering to go into the contaminated water under the reactor to open the valves and the miners agreeing to dig a tunnel under it. The first scene is set in a hotel banquet room where Legasov and Shcherbina try to persuade the plant engineers to open the sluice gate valve. Though at first no one is tempted by a

money reward or promotion, three men volunteer after Shcherbina's inspiring speech: "You'll do it because it must be done. And if you don't, millions will die... This is what has always set out our people apart. A thousand years of sacrifice in our veins". Like soldiers at war they are ready to save their territory from the enemy – radiation in the context of the film. The picture of Ananenko, Bezpalov and Baranov standing up in a complete silence together with Shcherbina's words present a combination of visual, auditory and verbal modes cueing the source domain of sacrifice.

Another example of people sacrificing their health and life is the scene with the miners who were asked to dig a tunnel underneath the reactor. The first mode exploited to cue the metaphor is a verbal one. It is presented by the crew chief's words "Who, if not us?". The miners agree to prevent the threat of water contamination from Kyiv to the Black Sea even without knowing how to implement the plan. Like ordinary soldiers they carry out their commander's order without questioning it. The visual mode supports the verbal one and is deployed in the scene where the miners work completely naked only with shoes and paper hats on. They realise the danger of radiation around them (it is clear from the words "We'll start now. I don't want my men here one second more than they have to be") and still continue working. The picture of radioactive dust floating in the air makes the scene even more striking. Thus, the source domain of the multimodal metaphor CHORNOBYL IS WAR is cued by the verbal mode and visually.

In our research we mainly focus on the metaphors in which the source domain is cued by more than one mode in a scene. However, "multimodal metaphors are open to development: throughout the series new potential mapping from source to target are gradually presented enriching the metaphor"



Fig. 1. Mosaic panel with "warriors"



Fig. 2. Map of the contaminated area

Table 1

The explication of metaphor CHORNOBYL IS WAR in different modes

Metaphor		Verbal	Visual	A 3:4 o
Target	Source	verbai	visuai	Auditory
Target	WAR	The bullet. So, bullets are flying off of the uranium. The immediate danger is over. But now, I am afraid, a long war must begin. Go ahead. Start shooting. You don't have enough bullets for all of us. Kill as many as you can Maybe the miners I've told	Soldiers on the streets during the evacuation. The survey team move in a field holding radiometers in front of them, like soldiers looking for landmines. Mobilisation: soldiers with clipboards walk down the city street, and into apartment buildings to take men as if to war.	The sound of sirens. The ascending sound of the radiometers which resembles the increasing beeping of mine detectors. The constant buzzing
		to dig under the reactor will	Liquidator camp: soldiers,	
		save millions of lives. Or maybe I'm killing them for nothing.	uniforms, tents, new mobilized men arriving.	

(Forceville, 2013, p. 43). We believe that even if the source domain is cued only through one mode in a scene, it still reinforces the multimodal metaphor by the combination of different modes appearing throughout the film. Thus, for the in-depth analysis it is necessary to single out the examples of such modes. The expressive modes cueing the source domain of the metaphor CHORNOBYL IS WAR are presented in Table 1.

The most vivid examples are presented in the table in which the metaphor has negative connotation, mapping the worst features of war onto the target domain CHORNOBYL.

The key metaphor CHORNOBYL IS WAR develops into a sub-metaphor CHORNOBYL IS DEATH which is most vividly presented at the beginning of Episode 1. The scene is set in Legasov's apartment

where everything signals of a planned suicide: the cat food prepared in advance, Legasov's nervous smoking and constant checking the clock (Fig. 3) to make sure the time of death coincides with the time of explosion (1:23) at the Chornobyl Nuclear Power Plant that happened on the same date two years before. The images are accompanied by the diegetic sounds of a ticking clock, a furniture item dragged along the floor, a thud of a fallen chair, a sharp snap of the rope, and ominous music. Though the very process of the suicide is not portrayed fully (only Legasov's legs hanging in mid-air appear in the background) (Fig. 4), the interaction of visual and auditory modes contributes to the understanding of the protagonist's personal drama, thus cueing the source domain of the sub-metaphor CHORNOBYL IS DEATH.



Fig. 3. Time of death



Fig. 4. Legasov's suicide

The metaphor CHORNOBYL IS DEATH clearly expresses the personal consequences of the catastrophe and has an essential persuasive potential. The combination of visual and auditory modes in multimodal metaphors can evoke diverse and intense emotions from the viewers even without a verbal mode. The scene of firemen funeral in Episode 3 "Open Wide, O Earth" can be a vivid example of this effect. The sequence of close-up shots (visual mode) presented in the scene near the hospital in slow motion (plastic-wrapped bodies, nondescript plywood coffins, nails hammered into the lid, welding the larger metal coffins, Lyudmilla overwhelmed with grief) develops into the scene near the municipal cemetery. On the background of a grey sky, farther from the ordinary graves, the mourners stand at the edge of a large trench, holding some personal belongings of the dead. The sound of an approaching cement mixer together with somber music makes up the auditory mode of the DEATH source domain. The visual mode of the scene presented by the shots of a row of metal coffins (Fig. 5) and concrete rising around them (Fig. 6) contribute greatly to the emotional loading of the metaphor CHORNOBYL IS DEATH. The slow-motioned moment of the burial itself is especially dramatic as the submersion of coffins in concrete resembles how the memory about the dead eventually fades away.

Some other modes construing the metaphor CHORNOBYL IS DEATH are given in Table 2.

The multimodal metaphor with the target domain CHORNOBYL gives an unexpected manifestation—CHORNOBYLIS FATAL BEAUTY. This very metaphor can be traced in Episode 1



Fig. 5. Firemen burial



Fig. 6. Concrete covering up the coffins

Table 2
The explication of metaphor CHORNOBYL IS DEATH in different modes

Metaphor		1		1	
Target	Source	Verbal	Visual	Auditory	
CHORNOBYL	DEATH	until the entire continent is dead. The bone marrow dies, the immune system fails, and the soft tissue and organs begin to decompose. And within three days to three weeks, you are dead. In time cancer. Or aplastic anemia. Either way, fatal. if we fly directly over an open reactor core we'll be dead within a week. Dead. There will be deaths. We dig up coal not bodies.	An empty cradle in the maternity ward (Lyudmilla lost her newborn baby). Deserted city (lessons	The song "Chornyi voron (Black Raven)" (the symbol of death in Russian folklore). The whining of wounded dogs. The sound of dripping water in hospital like a clock ticking away the last minutes of life. Akimov's rattling breath of agony. Music "Vichnaya Pamyat"	

"1:23:45" and Episode 5 "Vichnaya Pamyat". In the scene on the bridge (Episode 1) portraying the explosion itself, we can see people admiring the beauty of the distant glow, children having fun and playing, ash flakes falling like snow on people's gleeful faces and hair. The price of watching and trying to touch this beauty is high as some of the people are seen later suffering from radiation burns. This triggers a metaphor CHORNOBYL IS FATAL BEAUTY. Similar to the laws of nature where the brightest species of flora and fauna can be ferocious, the glowing bright blue column of light shooting from the plant into the sky can be fatal for those who dare to approach it. The whole scene is accompanied by ominous music signaling that the situation is dangerous. These two modes (visual and auditory) are reinforced by a verbal one via the words "It is beautiful" uttered by a woman on the bridge (Fig. 7).

A similar combination of visual, verbal and auditory modes compose a metaphor CHORNOBYL IS FATAL BEAUTY in the scene taking place in the court room (Episode 5). Explaining the principles of reactor work and possible reasons for its explosion, Legasov uses red and blue cards to visualise his speech and make difficult scientific matters clear. He emphasises that when they are in order the whole structure looks beautiful but when any structural element falls out of the system (the diegetic sound of a dropping card), this "beauty" leads to fatal repercussions (Fig. 8).

Conclusion. The movie "Chernobyl" provides valuable material for examining conceptual metaphors using a multimodal approach. The analysis of multimodal metaphors involves studying various modes that shape the source and target domains. Our article concentrates on visual, auditory (sound and

music), and verbal (written and spoken) modes. The interplay of these modes helps to convey the complex meanings expressed by the metaphors.

In the article multimodal metaphors CHORNOBYL IS WAR, CHORNOBYL IS DEATH, and CHORNOBYL IS FATAL BEAUTY have been analysed.

The idea of total destruction as well as extinction, struggle, sacrifice, danger and risk is mapped onto the target domain due to the multimodal metaphors CHORNOBYL IS WAR and CHORNOBYL IS DEATH. The metaphor CHORNOBYL IS FATAL BEAUTY is characterised by a high degree of emotional richness of its source domain and it renders such key ideas as everything beautiful in the contaminated zone will die as the Chornobyl plant turns out to be fatal to the environment. Hence, the analysed metaphors of the series have a stance-constructive potential, either enhancing or downgrading the intensity of Chornobyl negative perception.

It is important to highlight that the multimodal metaphors under study rely on both visual and verbal (spoken) modes. The movie provides a diverse range of meaningful visuals, which serve as a vivid representation of the multimodal metaphors. While the verbal mode is present in all the metaphors, its language embodiment varies depending on the context. In some instances, it is conveyed through dialogue or extended sentences, while in others, a simple sentence can be informative on its own. The written mode, on the other hand, is primarily used to actualize the target domain rather than the source domains. The auditory mode, which includes the sonic and musical modes, adds emotional depth to the visuals and makes the multimodal metaphors even more impactful on the audience.



Fig. 7. Admiring "beautiful" explosion



Fig. 8. "Beauty" of order

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