ORIGINALNI RAD / ORIGINAL ARTICLE

UDC: 811.111'276.6:61
DOI: 10.5937/erhs3-55705

METAFORIČKA KONCEPTUALIZACIJA DOMENA *ZDRAVSTVA* I *MEDICINE* U ENGLESKOM JEZIKU

Ivan Milošević[1]
[1]Akademija strukovnih studija Beograd, Odsek Visoka zdravstevna škola, Beograd, Srbija

METAPHORICAL CONCEPTUALISATION OF THE DOMAIN OF *HEALTHCARE* AND *MEDICINE* IN THE ENGLISH LANGUAGE

Ivan Milošević[1]
[1]Academy of Applied Studies Belgrade, College of Health Sciences, Belgrade, Serbia

Sažetak

Uvod: Rad se bavi metaforičkom konceptualizacijom zdravstva/medicine u engleskom jeziku služeći se teorijskim okvirom kognitivne lingvistike. Drugim rečima, na osnovu jezičkog materijala dobijenog iz novinskih članaka/tekstova na polju zdravstva i medicine, ovaj rad istražuje brojne izvorne domene čiji elementi i odnosi konceptualizuju ciljni domen ZDRAVSTVA/MEDICINE.
Cilj: Glavni cilj ovog rada je utvrđivanje potencijalne metaforičke konceptualizacije engleskog jezika na polju zdravstva i medicine, to jest, određivanje izvornih domena koji semantički motivišu ciljni domen ZDRAVSTVA/MEDICINE i pojmovnih metafora koje strukturiraju pojmovno-značenjski okvir metaforičkih izraza koji se ispituju u ovom istraživanju.
Metod: Kvalitativna semantička analiza jezičkih jedinica ekscerpiranih iz korpusa u svetlu metodološkog aparata kognitivne lingvistike.
Rezultati: Semantičkom analizom zabeleženih metaforičkih izraza u vezi sa pojmom ZDRAVSTVA/MEDICINE identifikovano je 15 izvornih domena koji motivišu njihova značenja putem brojnih pojmovnih metafora tako što uspostavljaju pojmovne veze između izvornih domena i pojmova iz ciljnog domena ZDRAVSTVA/MEDICINE.
Zaključak: U radu se zaključuje da jezik zdravstva i medicine koji se koristi u novinarskom diskursu odslikava visok stepen metaforičnosti, što izvire iz dubokoukorenjene kognitivne utemeljenosti jezičkih jedinica koje pripadaju domenu ZDRAVSTVA/MEDICINE koji se ispituje u ovom radu.
Ključne reči: konceptualizacija, izvorni/ciljni domen, metaforički izrazi, pojmovne metafore, ZDRAVSTVO/MEDICINA, novinarski diskurs

Abstract

Introduction: This paper deals with the metaphorical conceptualisation of healthcare/medicine in the English language employing the theoretical framework of cognitive linguistics. In other words, based on the language material obtained from journalistic articles/texts in the field of health, healthcare and medicine, the paper investigates a variety of source domains whose elements and relations conceptualise the target domain of HEALTHCARE/MEDICINE.
Objective: The primary objective of this paper is the determination of the potential metaphorical conceptualisation of the English language for healthcare and medicine, that is, the identification of the source domains which semantically motivate the target domain of HEALTHCARE/MEDICINE and the metaphors which construe the conceptual framework of the linguistic expressions investigated in this research.
Method: A qualitative semantic analysis of the corpus-oriented linguistic units in the light of methodological apparatus of cognitive linguistics.
Results: The semantic investigation of the observed metaphorical expressions relating to the concept of HEALTHCARE/MEDICINE provides a list of 15 different source domains which motivate their semantic dimensions via numerous conceptual metaphors forming systematic mappings between the source domains and the concepts in the target domain of HEALTHCARE/MEDICINE.
Conclusion: The paper concludes that the language of healthcare and medicine used in the journalistic discourse reflects a high degree of metaphoricity, which stems from the profound cognitive entrenchment of the linguistic units belonging to the target domain of HEALTHCARE/MEDICINE under exploration in this paper.
Key words: conceptualisation, source/target domain, metaphorical expressions, conceptual metaphors, HEALTHCARE/MEDICINE, journalistic discourse

Introduction

Employing the theoretical framework of cognitive linguistics, this small-scale investigation focuses on the language of healthcare and medicine in the English journalistic discourse through the prism of metaphorical structuring and conceptualisation. From the perspective of cognitive linguistics, words, phrases and expressions are regarded not only as mere linguistic occurrences, but as the realisations of the human conceptual system. Lakoff and Johnson claim that the human conceptual system is systematically organised and structured by various conceptual metaphors which are deeply implanted not only in the language, but in the human cognition as well [1]. On a more specific level, conceptual metaphors construe both the language elements (words, phrases, etc.) and the cognition elements beyond the language, such as concepts, ideas, activities, attitudes, domains of experience, etc. This view suggests that the semantic dimensions of linguistic units are semantically motivated and as such are in no way a result of language arbitrariness, thereby this approach to the language study has proven to be highly useful and productive in the semantic analysis of metaphorical expressions [2-8].

Even at a first glance, the medicine-related language used in the journalistic discourse appears to be significantly metaphorical, which may be the result of the need for enriching the otherwise bland and strictly professional language of healthcare and medicine via the underlying similarity between the concept/domain of HEALTHCARE/MEDICINE and other domains of experience, which may be accounted for by the profound cognitive system they share.[1]The metaphoricity of the medical language was initially brought into focus by Lakoff and Johnson who claim that utterances such as "*He sank into coma*.", "*He is under hypnosis*.", "*He is at the peak of health*.", etc. are built around the ideas that health is up and sickness is down (HEALTH IS UP, SICKNESS IS DOWN[2]) [1]. In the similar manner, Hodgkin points out to many metaphors construing the language of medicine and stated that these metaphors are pervasive and provide the basis for many of the concepts people form about medicine [9]. The powerful impact of metaphors on medicine is boldly outlined by Bleakly who demonstrates that medical language is not only soaked in metaphor, but is also crucial in shaping the landscape of medicine and medical culture providing many examples which show how metaphors improve doctor-patient communication and even foster diagnostic work and procedures [10].

Given the prominent metaphorical salience of the language data under exploration of this paper, the cognitive linguistic framework seems quite a logical choice. The primary objective of this paper is the determination of the potential metaphorical conceptualisation of the language of healthcare and medicine. More specifically, this paper aims to: 1) identify the source domains which semantically motivate the target domain of HEALTHCARE/MEDICINE; 2) detect and analyse the conceptual metaphors which construe the meaning dimensions of the metaphorical expressions investigated in this paper. The paper is structured as follows: the theoretical assumptions are outlined in Section 2, the linguistic material, methodology and data analysis are presented and explained in Section 3, the research findings are presented and explicated in Section 4, and the results and further research implications are summarised and proposed in the final Section 5.

Theoretical postulates

This small-scale investigation is carried out in accord with the key theoretical underpinnings of cognitive linguistics through the lens of the conceptual metaphor theory introduced by Lakoff and Johnson [1], and further on supported and elaborated by similar cognitive studies [2,3,6-8,11-16,19]. The cognitive-linguistic orientation claims that the lexis and semantics of words and expressions are generally viewed as both language-based and cognition-based manifestations of cognitive mechanisms which are the key tools in constituting and organising their semantic structure. In line with the postulates proposed by Lakoff and Johnson [1] and Lakoff [6], the key cognitive mechanism underlying the semantic dimensions of linguistic units is conceptual mappings, that is, the conceptual metaphor, which they argue to be the major methodological means/tools in the study of language meaning.

In essence, the conceptual metaphor is defined as a conceptual tool which organises different domains of experience in such a way that one domain (which is predominantly abstract) is understood by means of another domain (which is predominantly concrete). The domain which borrows its elements in the structuring process is called the *source domain*, whereas the domain which is orginised via the elements taken from the source domain is called

[1] From the cognitive-semantic point of view, the notions of concept and domain are frequently considered synonymous.

[2] In the cognitive linguistic tradition, conceptual metaphors, as well as the names of the concepts and domains, are stated using *Small caps* font style.

the *target domain*. The establishing of these conceptual links is done through a set of systematic correspondences which involve the mapping of different elements and relations from the source onto the target domain. As a result, a more concrete source domain plays the key role in shaping, structuring and organising a more abstract target domain [16]. In other words, due to the correspondences formed between the source and the target domain, the target domain is understood and conceptualised as the source domain (e.g. ARGUMENT IS WAR, TIME IS MONEY, ANGER IS HEAT, etc.). Kövecses uses the ANGER IS FIRE example in order to illustrate how these correspondences and conceptual mappings work [16]. Namely, he claims that the listed metaphorical units typical of the domain of ANGER, such as *Those were inflammatory remarks. Her ears were burning with rage.The incident set the people ablaze with anger.* and the like, are conceptually structured by a set of correspondences established between the source domain of FIRE and the target domain of ANGER: the fire cause→the anger cause, the burning entity→the furious individual, the fire potency→the anger potency, etc.). He finally concludes that due to these systematic sets of correspondences, it is possible to comprehend the meaning components of the aforementioned metaphorical expressions more clearly [16].

Having in mind the obvious cognitive entrenchment of the corpus-based metaphorical linguistic units belonging to the domain of HEALTHCARE/MEDICINE explored in this paper, the theoretical framework of cognitive semantics appears to be a useful and efficient theoretical and methodological means in the process of investigating and analysing the semantic structure of the health-related metaphorical expressions which are the subject matter of this linguistic research.

Method and linguistic evidence

This study is based on the linguistic evidence excerpted from the newspaper articles of the two native English journalism mass media –*BBC.com* and *CNN.com*. The observation of the article texts and the explored metaphorical expressions taken from the texts spanned a three-month period, from October 2024 to December 2024. In total, 88 articles selected for observation and investigation in this research were taken from the *Healthcare/Medicine* section(s) at either *BBC.com/Heath* or *CNN.com/Health* in accord with the article titles unequivocally indicating that the selected newspaper texts belonged to the domain of HEALTHCARE/MEDICINE. A careful observation of the selected texts pointed out to the fact that a considerable number of them contained numerous metaphors in the domain of HEALTHCARE/MEDICINE. In particular, it was ascertained that 61 (out of the total of 88 texts) featured health-related metaphorical expressions, which was an evident sign of a prominent metaphorical nature of the medical language under exploration in this paper. By investigating the abovementioned 61 article texts, 143 instances of health-related metaphors coming from different domains of experience were recorded. Upon recording the medicine-related metaphorical expressions, they were singled out and grouped based on the source domains they originally belonged to. Finally, the recorded metaphorical expressions were investigated through the lens of the conceptual metaphor theory, that is, various conceptual mappings established between the target domain of HEALTHCARE/MEDICINE and the identified source domains were detected, formulated and analysed.

Research findings

The meaning investigation of the recorded HEALTHCARE/MEDICINE-related metaphors has identified 15 different source domains which organised their meaning via numerous conceptual metaphors constituting conceptual links between the target domain of HEALTHCARE/MEDICINE and the source domains listed below. The source domains that have been ascertained in the research are the following: OBJECTS (*catching a cold*), MAP/TERRITORY (*particular regions in the brain*), FIRE (*outbreaks of vaccine-preventable illness*), WATER/LIQUID (*a huge influx of patients*), WEATHER/CLIMATE (*causing an inflammation storm*), MACHINE (*to activate an enzyme*), BUILDING (*architecture of the brain's neurons*), ROADS/VEHICLES (*to patrol the brain's blood vessels*), TRAFFIC (*transporting the toxic amyloid plaques*), FOOD (*looking for invading pathogens to gobble up*), WASTE/JUNK(*microglia clean up debris*), PLANTS (*pruning of synapses*), MILITARY (*scars are camouflaged*), WAR (*to fight off pathogens*), COMMUNICATION (*they chatted to the other cells*). The upcoming semantic elaboration casts light on the cognitive topology established between the aforementioned source domains and the target domain of HEALTHCARE/MEDICINE primarily focusing on the various conceptual mappings underlying the conceptual-semantic framework of the linguistic units investigated in this research.

- OBJECTS

The linguistic evidence from the corpus suggests that illnesses, medical treatments and the like are conceptualised as objects via the conceptual metaphors AN ILLNESS IS AN OBJECT (1) and MEDICAL PROCEDURES ARE MOVING OBJECTS (2). These metaphors stem from the primary metaphor COMPLEX ABSTRACT SYSTEMS ARE OBJECTS [11]. The following examples have been recorded:

1) There are few experiences as universal as *catching a cold*. And while there are around 200 viruses that cause it, there seem to be almost as many home remedies to combat it. But do any of them work? (BBC.com, December 2024)
2) Cosmetic surgeries to tighten skin are *on the rise* (CNN.com, December 2024)
3) Despite a relatively slow start to respiratory disease season, low vaccination rates threaten that trend and *the rapid rise of some illnesses* is already putting children at increased risk. (CNN.com, December 2024)
4) Wastewater data suggests that flu and respiratory syncytial virus, known as RSV, *are* also *circulating* at low levels but emergency department visits for both viruses have started to rise. (CNN.com, December 2024)
5) "And we know that's not true - we now have our first treatment licensed in the UK that can *slow down the disease progression*." (BBC.com, October 2024)

- MAP/TERRITORY

The target domain of HEALTHCARE/MEDICINE is organised via the source domain of MAP/TERRITORY by means of the conceptual metaphors HUMAN BODY IS A MAP and BODY PARTS ARE GEOGRAPHICAL REGIONS, which is exemplified by the following expressions:

6) In a flurry of announcements, the formation of the human skeleton and the early immune system *have also been mapped out* in detail. (BBC.com, November 2024)
7) Performing a feat of "*human cartography*" requires cutting-edge biology and computer science. (BBC.com, November 2024)
8) The journal Nature has now published a series of 40 scientific discoveries as researchers work towards creating the first draft of the whole *human cell atlas*. (BBC.com, November 2024)
9) "In the early stages of Alzheimer's there are *particular regions in the brain* that seem to accumulate plaques, such as the cortex, the hippocampus, and the olfactory bulb," says d'Errico. (BBC.com, October 2024)

- FIRE

The recorded metaphorical expressions point out that the source domain of FIRE semantically structures the target domain of HEALTHCARE/MEDICINE via the conceptual metaphors MEDICAL CONDITION IS FIRE, MEDICAL INFLAMMATION IS FIRE and A SUDDEN OCCURRENCE OF AN ILLNESS IS FIRE SPREADING.[3] In particular, a sudden occurrence and easy spreading of medical entities such as conditions, illnesses, inflammations or epidemics are typically conceptualised as the outbreak and spreading of fire.

10) "Infants, toddlers, and preschool-age children have smaller airways, which makes it more difficult for them to breathe when *their airways become inflamed*," Choma said. (CNN.com, December 2024)
11) Chronically activated microglia *can engulf* and kill neurons directly, release toxic reactive species that damage them, or start "over-pruning" synapses, destroying the connection between nerve cells. (BBC.com, October 2024)
12) *Outbreaks of vaccine-preventable illness* could be alarming, but would they be enough to boost vaccination again? Ernst of Voices for Vaccines isn't sure. (CNN.com, December 2024)

- WATER/LIQUID

Medical entities such as patients, epidemics, etc. can be understood as WATER/LIQUID. This conceptualisation predominantly stems from the metaphors PATIENTS ARE LIQUID/WATER and AN ONGOING EPIDEMIC IS A TIDAL SURGE OF WATER, which is illustrated by the following recorded examples:

13) "I think we're going to see *a huge influx of patients* who are interested in aesthetic treatments, and we need to know how to treat them best." (CNN.com, December 2024)
14) "Children's hospitals have learned from years past to anticipate *this surge* around this time of year and have the specialists needed to care for kids, particularly those younger children who are more severely impacted by this disease," Mack said. (CNN.com, December 2024)

[3] These metaphors are derived from INTENSITY IS HEAT [18, 16].

- WEATHER/CLIMATE

In keeping with the aforementioned metaphorical structuring, the target domain of HEALTHCARE/MEDICINE can be metaphorically extended by means of the source domain of WEATHER/CLIMATE. The key metaphors triggering this conceptualisation are GETTING SICK IS WEATHER/CLIMATE CHANGE (15) and MEDICAL CONDITIONS ARE WEATHER CONDITIONS (16).

15) Following surgery, patients are often given opioids as pain relief, which unfortunately activates microglia again, *causing an inflammation storm* that eventually causes the destruction of neurons. (BBC.com, October 2024)
16) Some of the symptoms of Alzheimer's, such as forgetfulness and loss of cognitive function, are similar to those suffering from long Covid, and it's possible that errant microglia could be behind "*brain fog*" too. (BBC.com, October 2024)

- MACHINE

The corpus data also indicate that the domain of HEALTHCARE/MEDICINE can be semantically motivated by the domain of MACHINE via the metaphor AN ORGAN SYSTEM IS A MACHINE, as exemplified by the following expressions. In specific terms, a specific system of organs is understood as a machine which is typically activated as a defensive shield against pathogens and harmful agents attacking the body.

17) He explains that existing injection-based vaccines generally "*don't generate* the responses in the nasal tissue and the lungs where the infection occurs. (BBC.com, December 2024)
18) Lead researcher Professor Nigel Hooper said methazolamide had been found *to activate an enzyme* called ACE2 which protects neurons in the brain. (BBC.com, October 2024)

- BUILDING

The metaphorical expressions listed below suggest that the source domain of BUILDING demonstrates a high level of productivity in the semantic structuring of the target domain of HEALTHCARE/MEDICINE. This conceptualisation stems from the metaphors THE HUMAN BODY IS A BUILDING, BODY PARTS ARE BUILDINGS and AN ORGAN IS A HOUSE.[4] Typically, these metaphors are used to describe the form and structure of the human body, body parts, organs, cells, etc.

19) The received wisdom said we *were built* from around 200 types of cell – such as heart muscle or nerve cells. (BBC.com, November 2024)
20) Meanwhile, Hozbor's team is developing vaccines that could be delivered either through the nose or the muscle, focusing on outer-membrane vesicles derived from *Bordetella pertussis*. These spherical buds are naturally produced by them and have similar *components and structure* to the bacteria itself. (BBC.com, December 2024)
21) "Toll like receptors are very ancient receptors *designed* to recognise foreign objects. They're supposed to be there to detect fungi, bacteria and viruses. (BBC.com, October 2024)
22) The microglia change the very *architecture of the brain's neurons*, leading to drug-taking habits that can last a lifetime. (BBC.com, October 2024)
23) Microglia are the brain's *resident immune cells*. Their job is to patrol the brain's blood vessels looking for invading pathogens to gobble up. (BBC.com, October 2024)

- ROADS/VEHICLES

Due to the conceptual metaphors CIRCULATORY SYSTEMS ARE ROADS and BODY PARTS ARE VEHICLES, certain medical entities are understood as ROADS or VEHICLES, which is substantiated by the expressions listed below. On a specific level, the defending body cells are construed as vehicles patrolling the circulatory systems of the body in search of harmful agents with a view to fighting them back.

24) Microglia are the brain's resident immune cells. Their job is *to patrol the brain's blood vessels* looking for invading pathogens to gobble up. Historically they've been overlooked – seen as simple *foot soldiers* of the immune system. (BBC.com, October 2024)

- TRAFFIC

Stemming from the previous case of conceptualisation, illnesses and diseases can be conceptualised as TRAFFIC via the metaphor DISEASE SPREADING IS TRAFFIC.[5]

[4] These metaphors come from the higher-level metaphor SYSTEMS ARE BUILDINGS [11].

[5] The conceptual metaphors relating to the source domains of ROADS/VEHICLES and traffic are modelled on the Grady's metaphors PURPOSES ARE DESTINATIONS, EVENTS ARE VEHICLES [17].

25) In a 2021 study, d'Errico even found that microglia can contribute to the spread of Alzheimer's disease *by transporting the toxic amyloid plaques* around the brain. (BBC.com, October 2024)

- FOOD

The conceptual metaphor PATHOGENS ARE FOOD entails that specific medical entities such as microorganisms, agents and pathogens can be understood as FOOD, which is corroborated by the following corpus-based example:

26) Microglia are the brain's resident immune cells. Their job is to patrol the brain's blood vessels looking for invading pathogens *to gobble up*. (BBC.com, October 2024)

- JUNK/WASTE

Similarly, certain entities in the domain of HEALTHCARE/MEDICINE can be semantically structured as JUNK or WASTE via the conceptual metaphor PATHOGENS ARE JUNK/WASTE, as exemplified by the following metaphorical expression:

27) Throughout our lifetimes, microglia protect our brains from infection by seeking out and destroying bacteria and viruses. They *clean up debris* that accumulates between nerve cells, and root out and destroy toxic misshapen proteins such as amyloid plaques – the clumps of proteins thought to play a role in the progression of Alzheimer›s disease. (BBC.com, October 2024)

- PLANTS

The conceptual metaphors AN ORGAN SYSTEM IS A PLANT/TREE, HARMFUL BODY ELEMENTS ARE PLANTS/WEED and DAMAGING BODY PARTS IS CUTTING TREE BRANCHES unequivocally demonstrate that certain medical entities, activities and processes can be structured via the source domain of PLANTS.[6] The examples mentioned below indicate that the human body and its organs/elements can be structured as plant/tree parts that grow, fall off or get cut/be removed (28), (30). Additionally, certain harmful elements of the body can be perceived as weed which needs to be removed and destroyed (29).

28) First a scaffold of cartilage, like the wobbly bit on the end of your nose, forms. Then bone cells *grow over* it. This happens everywhere except for the very top of the skull to give the brain space *to grow*. (BBC.com, November 2024)

29) Throughout our lifetimes, microglia protect our brains from infection by seeking out and destroying bacteria and viruses. They clean up debris that accumulates between nerve cells, and *root out* and destroy toxic misshapen proteins such as amyloid plaques – the clumps of proteins thought to play a role in the progression of Alzheimer›s disease. (BBC.com, October 2024)

30) "Abnormally activated microglia may start over *pruning of synapses* in the brain, and this may lead to cognitive decline, memory loss, and all those symptoms related to the brain fog syndrome," says Claudio Alberto Serfaty. (BBC.com, October 2024)

- MILITARY

Partly, medical conditions and procedures can be metaphorically extended via the source domain of military due to the metaphors MEDICAL CONDITIONS ARE ARMIES and MEDICAL PROCEDURES ARE MILITARY STRATEGIES, as exemplified by the metaphors below. Specifically, certain medical procedures are construed as military strategies aimed at finding different ways in which the body can be treated healed and cured.

31) "The scars are very strategically placed. Typically, they *are camouflaged* or hidden in areas that are between different body regions," she said. (CNN.com, December 2024)

32) People are rarely inclined to celebrate the absence of *a conquered illness*, making vaccines a hard sell even when they are working well. (CNN.com, December 2024)

- WAR

Analogous to the abovementioned case of metaphorical mapping, the source domain of WAR is seen to semantically extend the target domain of HEALTHCARE/MEDICINE via metaphors A REMEDY IS A WEAPON and BODY HEALING IS FIGHTING A WAR.[7] In particular, illnesses and diseases are conceptualised as an enemy, whereas remedies, cures and different healing procedures are understood as the fighting soldiers whose goal is to defeat the enemy.

33) There are few experiences as universal as catching a cold. And while there are around

[6] These conceptual metaphors stem from the COMPLEX ABSTRACT SYSTEMS ARE PLANTS metaphor [5].

[7] For more details, see Gibbs [13].

200 viruses that cause it, there seem to be almost as many *home remedies to combat it*. But do any of them work? (BBC.com, December 2024)

34) The latter also creates memory cells when it encounters new pathogens, allowing the body to *fight them off* if they return. (BBC.com, December 2024)

- COMMUNICATION

Finally, specific metabolic processes can be structured as different ways/methods of communication, which is substantiated by the following conceptual metaphor, METABOLIC PROCESSES ARE COMMUNICATION. This conceptualisation is recorded in the following corpus-based examples:

35) Researchers looked at the types of cells, where they were located and how *they chatted to the other cells* around them. (BBC.com, November 2024)

36) "They start to release all these *inflammatory signals*, but the point is that since these amyloid plaques continue to be produced, there is constant chronic inflammation that never stops. This is really toxic for neurons." (BBC.com, October 2024)

Conclusion

Exploring different ways in which the domain of HEALTHCARE/MEDICINE is created and structured, this paper highlights and emphasises the cognitive background of the said domain. In other words, the findings of this study point out that the language of healthcare and medicine used in the journalistic discourse is significantly metaphorical and is conceptually structured via 15 sources domains ranging from inanimate entities (e.g. OBJECTS, FIRE), across man-made entities (e.g. MACHINES, BUILDINGS) and the living beings (e.g. PLANTS), all the way to human social interactions (e.g. COMMUNICATION). More specifically, the research data and results demonstrate that the target domain of HEALTHCARE/MEDICINE is conceptualised by means of various conceptual metaphors stemming from the abovementioned source domains, such as MEDICAL CONDITION IS FIRE, AN ORGAN SYSTEM IS A MACHINE, PATHOGENS ARE FOOD, DAMAGING BODY PARTS IS CUTTING TREE BRANCHES, MEDICAL PROCEDURES ARE MILITARY STRATEGIES, METABOLIC PROCESSES ARE COMMUNICATION, etc.Therefore, the findings of this paper imply that the conceptual-semantic dimension of the medicine-related language is highly metaphorical, which stems from various conceptual links established between the aforementioned source domains and the target domain of HEALTHCARE/MEDICINE. Regarding the limitations of this small-scale investigation, they come down to the use of the specific medical language "niche" used by journalists, so the future investigations of the medical discourse used by medical workers both in written and oral communication may additionally support the findings of this paper. Ultimately, this paper may be used as the starting point for future linguistic research in the field of healthcare and medicine focusing on different aspects of the medical language conceptualisation, thereby testing the cognitive potential of the language creation in the domain of HEALTHCARE/MEDICINE.

References

1. Lakoff G, Johnson M. Metaphors we live by. 2nd ed. Chicago: University of Chicago Press; 2003.
2. Langacker R. Foundations of Cognitive Grammar, Vol. I: Theoretical Prerequisites. Stanford: Stanford University Press; 1987.
3. Croft W, Cruse DA. Cognitive Linguistics. Cambridge: Cambridge University Press; 2004.
4. Johnson M. The Body in the Mind: The Bodily Basis of Meaning, Reason and Imagination. Chicago: University of Chicago Press; 1987.
5. Kövecses Z. Metaphor – A Practical Introduction. Oxford: Oxford University Press; 2002.
6. Lakoff G. Women, Fire, and Dangerous Things: What Categories Reveal About the Mind. Chicago: University of Chicago Press; 1987.
7. Talmy L. Cognitive Semantics: An overview. In: Mainenborn C, von Heusinger K, Portener P, editors. Semantics: An International Handbook of Natural Language Meaning. Berlin/Boston: Mouton de Gruyter; 2011. p. 622–42.
8. Taylor J. Linguistic Categorization. 3rd ed. Oxford: Oxford University Press; 2003.
9. Hodgkin P. Medicine is war: and other medical metaphors. Br Med J. 1985;291(6511):1820–2.
10. Bleakly A. Thinking with Metaphors in Medicine: The State of the Art. London: Routledge; 2017. Available from: https://doi.org/10.4324/9781315389448.
11. Lakoff G, Johnson M. Philosophy in the flesh. New York: Basic Books; 1999.
12. Lakoff G, Turner M. More than cool reason. Chicago: Chicago University Press; 1989.
13. Gibbs R. Metaphor wars: Conceptual metaphors in human life. New York, Cambridge:

Cambridge University Press; 2017.
14. Geeraerts D. Cognitive linguistics: Basic readings. Berlin: Mouton de Gruyter; 2006.
15. Kövecses Z. Language, mind and culture: a practical introduction. Oxford and New York: Oxford University Press; 2006.
16. Kövecses Z. Extended conceptual metaphor theory. Cambridge: Cambridge University Press; 2020. Available from: https://doi.org/10.1017/9781108859127
17. Grady JE. Foundations of meaning: primary metaphors and primary scenes [dissertation]. Berkeley (CA): University of California at Berkeley; 1997.
18. Charteris-Black J. Fire Metaphors: Discourses of Awe and Authority. London-New York: Bloomsbury; 2017.
19. Gibbs R. Researching metaphor. In: Cameron L, Low G, editors. Researching and Applying Metaphor. Cambridge: Cambridge University Press; 1999. p. 29–47.

Korespondent / Corresponding author: Ivan Milošević, email: ivan.milosevic@assb.edu.rs