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THE INTELLECTUAL DOMAIN: CONCEPTUALIZING SOME ASPECTS OF MENTAL ACTIVITY IN ENGLISH AND SERBIAN²

The present paper reports on the results obtained in a study that aimed to explore the metaphors of the MIND. Since the complexity of the domain in question exceeds the scope of one paper, this paper's focus is limited to cognition, or more specifically, to the aspects of mental activity such as *learning*, *understanding*, and *knowing*. The main aim is to determine the source domains that structure each aspect in English and Serbian, to formulate the metaphorical mappings, and explain their metaphorical nature. By comparing the results of our cross-cultural research, we also seek to identify the similarities and differences regarding the metaphorical conceptualizations in the two languages, hoping to contribute to the exploration of universality of the identified metaphors. The results indicate that the conceptual metaphors that get utilized in the representation of the given aspects are largely structured by the CONTAINER, TERRITORY, VISION, VALUABLE COMMODITY, and PHYSICAL CONTROL domains, which are understood in terms of the CONTAINER, MOTION, and MANIPULATION image-schemas.

Keywords: MIND metaphors, cognition, Conceptual Metaphor Theory, English, Serbian

1. INTRODUCTION

The understanding of the mind is among the most basic ideas of philosophy. Yet, providing an adequate explanation of what *mind* is requires a deep understanding of the prevailing philosophy and the way in which it views this concept. The turning point in its conceptualization was marked by the development of cognitive science, which led to the revival of problems with ancient roots (Lacey 1996: 211). Namely, the three crucial findings of cognitive science – that the mind is inherently embodied, that thought is mainly unconscious, and that abstract concepts are largely metaphorical – overturned the fundamental assumptions of Western philosophy, which predominantly rested upon the notion of Cartesian dualism that viewed body and mind as separate substances (Blackburn 1996: 74). The findings emphasized the

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need to construct a new, “empirically responsible” philosophy that would acknowledge the importance of the neural structure of the human brain, the body, and bodily experience (Lakoff, Johnson 1999: 14). Such a view helped overcome the limitations on the scholarly study of mental life (Gibbs 2005: 2), subsequently advancing the idea of the *embodiment* of human cognition. In light of this perspective, recent philosophy of mind seeks to find the answers to the following two questions: a) what mind is and how it relates to the body (*The Mind-Body Problem*), and b) how mind relates to the external world (Lacey 1996: 212).

Traditionally, the *mind* is believed to comprise three components: *affect*, *conation*, and *cognition* (VandenBos 2015: 227). The term is commonly, and more narrowly defined as a collection of cognitive activities and functions (ibid.: 495; Matsumoto 2009: 234), placing the more complex types of cognition – the *higher mental processes* – at the center of our interest. Those include: *perceiving*, *learning*, *understanding*, *knowing*, *thinking*, *memorizing*, *reasoning*, *problem-solving*, *decision-making*, *believing*, and *imagining*. Considering the paper’s scope, this discussion has been narrowed to *learning*, *understanding*, and *knowing*³. Because they represent processes in their own right, we shall try to delimit and explore each by applying the Conceptual Metaphor Theory (hereafter, CMT) (Lakoff, Johnson 2003 [1980]), as it continues to be the leading theory among metaphor researchers.

The CMT postulates that the knowledge and inferences of the domain of experience that is often clearly delineated and concrete (*source* domain) are *mapped* onto the other, which is, typically, less concrete and requires definition in order to be understood (*target* domain) (Lakoff, Johnson 1999: 334; Lakoff, Johnson 2003: 6; 118-119). A resulting conceptual metaphor can manifest itself verbally through the *metaphorical linguistic expressions*, or *linguistic metaphors*. For instance, the underlined expression in: *I didn’t see that point in your argument*⁴ represents a verbal manifestation of the UNDERSTANDING IS SEEING conceptual metaphor. By postulating that the words of an utterance evoke a conceptual understanding, whereby that conceptual understanding itself can be metaphorical, the CMT holds that metaphor rests in the mapping on which the utterance is based, not in the words of the utterance, because “metaphorical language is a reflection of metaphorical thought” (Lakoff, Johnson 2003: 6; Lakoff, Johnson 1999: 116). Not only does language activate metaphors, but it also activates cognitive structures known as *frames*, which are composed of roles, the relationships between those roles, and scenarios (Lakoff 2009: 22). The frames use *image schemas* – the recurring structures of our sensory-motor experience – which help us reason about the target (Johnson 2017: 103).

Earlier studies⁵ of MIND metaphors in English (see Lakoff, Johnson 1999; Lakoff, Johnson 2003; Goatly 2007; Kövecses 2010; Sweetser 1990; Johnson

3 The remaining aspects will be the subject of our future work.

4 The example is taken from Lakoff and Johnson (2003: 105).

5 The list of typical source domains is presented on the site MetaNet, a repository of metaphors and frames.

1987; or Jäkel 1995) have established that the typical source domains comprise: BUILDING, COMPUTER, CONTAINER, MACHINE, BODY, and BRITTLE OBJECT. One of the objectives of this paper was to explore diversification, that is, the source domains that structure the selected aspects. The second objective was to explore their metaphorization in Serbian, given that this domain (the MIND) has largely been unanalyzed to date⁶. The final objective was to contrast the way these aspects are represented in the two languages and cultures so as to explore the possible universality of identified metaphors.

2. CORPUS AND METHODOLOGY

In our attempt to explicate the conception of MIND and determine the mind-related lexemes for our data collection, we relied on the definitions provided in the literature belonging to the fields of psychology and philosophy (Lakoff et al. 1991; Blackburn 1996; Rot 2004; Lacey 2005; Matsumoto 2009; VandenBos 2015). A decision was made to conduct the search in English (*The Financial Times*, *Fortune*, and *The Guardian*) and Serbian (*Politika*, *Blic*, *Vreme*, and *Novi magazin*) newspapers. The reasons for such selection were twofold. Firstly, the articles provided the necessary context for determining whether a lexical unit conveyed metaphorical meaning, and for specifying the domain of experience from which the linguistic expression was used. Secondly, they enabled us to analyze a broad range of opinion, given that the articles belonged to different fields (such as politics, economy, psychology, biology, or technology).

The articles were searched for: a) the lexeme E: *mind*, S: *um*, and metonymically related lexemes E: *head* and *brain*; S: *glava* and *mozak*; b) lexemes that mark a certain mental process/state: E: *learn*, *understand*, *know*; S: *učiti*, *razumeti*, *znati*; c) lexemes that denote content believed to reside in one's head: E: *fact*, *hypothesis*, *idea*, *information*, *opinion*, *theory*, *thought*; S: *činjenica*, *hipoteza*, *ideja*, *informacija*, *mišljenje*, *teorija*, *misao*; and d) adjectives E: *mental* and *cognitive*, as well as their Serbian counterparts *mentalni* and *kognitivni*. The list of lexemes generated a vast number of sentences, which needed to be reduced to include solely the ones in which the use of the given lexeme was judged as metaphorical. To achieve this goal, we relied on the method commonly applied among metaphor scholars – *Metaphor Identification Procedure* (MIP), devised by the Pragglejaz Group (2007). Namely, after reading the entire article, we compared the *contextual meanings* of the words with their *basic meanings*, and, when the former (contextual meaning) differed, but could be understood in terms of the latter (basic meaning), we marked the word as metaphorical. After applying the said procedure, our news data constituted 1000 examples, with each data set, English and Serbian, containing 500 citations. The identified linguistic metaphors were classified relative to the source domain on which they are based. The following section gives an overview of the results of our study. By convention, the conceptual metaphors are written in small capitals, while the metaphoric linguistic expressions are italicized.

6 Some of its specifics have been mentioned in Radić-Bojanić, Silaški (2012); Grujić (2018); Klikovac (2004).

3. RESULTS AND DISCUSSION

3.1. The domain of learning

It has previously (Jäkel 1995: 203) been established that some forms of mental activity depend on the image-schematic metaphor the MIND IS A CONTAINER, which serves as their orientational basis. This is especially evident in the *learning* aspect of the mind. That is, by viewing the MIND as a CONTAINER, learning is seen as the process of entities - learned material - going into that container. The linguistic expressions (*goes into*, *saturate*, *absorb*, *filling* and *add*) in the following examples evoke this image:

E:

- (1) Without the distraction of TV, the information *goes into* the hippocampus, where it is organised and categorised in a variety of ways, making it easier to retrieve.
- (2) [...] the synapses that form connections between our brain cells strengthen more and more as we learn and eventually *saturate* our brains with information.
- (3) Intellectual restlessness is one of his hallmarks: his capacity to stretch his mind, to *absorb* new ideas, to see parallels and analogies that jump across the tracks, is constantly on display.
- (4) By *filling* the mind with nonsense, you trigger the sleep switch.
- (5) Why would anyone want to *add* to their daily weight of information processing by trying to multitask?

The examples 1-5 represent instances of the LEARNING IS TAKING IN⁷ metaphor that combines the SOURCE-PATH-GOAL schema and the CONTAINER schema. The motivation most likely comes from the fact that the source of learning, which was expressed in our data predominantly by the lexeme *information* (1-2; 5), is seen as being out in the world, and it is learned once it enters the mind-container. Learning, therefore, involves the mappings: LEARNED MATERIAL IS AN ENTITY, MIND IS A CONTAINER, LEARNING IS TAKING IN, THE AMOUNT OF LEARNED MATERIAL IS THE AMOUNT OF THE CONTENT WITHIN THE CONTAINER, and INCREASING THE AMOUNT OF THE LEARNED MATERIAL IS INCREASING THE CONTENT OF THE CONTAINER. In addition to merely entering the container and in so doing facilitating learning, the information obtained can affect its content, leaving the container *saturated* (2) or *full* (4), often as a result of adding more weight (5) or liquid (2-3). In the latter case, the linguistic metaphors in 2 and 3 represent the surface expressions of the underlying cross-domain mappings THE LEARNED MATERIAL IS LIQUID, LEARNING IS ABSORBING, and MIND IS AN ABSORBENT MATERIAL. Our Serbian data set did not include corresponding linguistic realizations, but we know from daily experience that such verbal realizations are likewise possible in Serbian (as in *upiti nečije reči* (RMS 2011: 1374)).

7 Lakoff et al. (1991: 95-96) indicate that the LEARNING IS TAKING IN metaphor has two sub-cases: LEARNING IS EATING and LEARNING IS ABSORBING metaphors.

Because it represents a process of gaining new knowledge or skill that would serve a particular purpose, it comes as no surprise that the domain of LEARNING is conceptualized by a goal-oriented domain of JOURNEY. The SOURCE-PATH-GOAL schema normally involves the existence of a destination which, when applied to the domain of LEARNING, can highlight the act of obtaining the source of learning, as in S: *Pojedini stručnjaci smatraju da [...] deca do svih podataka mogu da dođu pomoću mobilnih telefona*. As a result, such examples are interpreted as instances of the LEARNING IS MOVING metaphor, which can be specified as LEARNING IS REACHING THE DESTINATION. We also documented other expressions (6-7) which contribute to the overall theme of journey since they belong to the MIND IS A TERRITORY conceptual metaphor:

E:

(6) Going to university is supposed to be a *mind-broadening* experience.

S:

(7) Mnogi na medicini i istoriji koriste *mape uma* da bi učili.

Since the goal normally indicates that the result would be a newly-found skill or knowledge that would aid one's functioning in the world, LEARNING is often perceived as having *value* (8) or bringing *benefits* (9-10) to the learner:

E:

(8) The *value* of learning is no exaggeration [...].

(9) The *benefits* of ensuring that ongoing learning is a part of a care package is hard to deny when one learns of some of the best practice in this area.

S:

(10) Konačno neka *korist* od studija i silnog učenja didaktike i metodike.

Here, we find the mappings of the following sort: THE LEARNED MATERIAL IS A VALUABLE COMMODITY, and LEARNING IS OBTAINING POSSESSION OF THE VALUABLE OBJECT.

The Serbian data set mainly contained expressions which highlighted the complexity of the learned material by making use of the knowledge about the domain of ADVERSARY:

S:

(11) Centar Ruskog geografskog društva u Srbiji izdao je udžbenik ruskog jezika [...] namenjen brzom *savladavanju* početnog nivoa ovog jezika.

(12) [...] u to vreme u našoj domovini bilo više od 25.000 dece „delimičnog vida” za koju je *pogubno* učenje u uobičajenim školskim uslovima i iz knjiga neprilagođenih ostacima i poremećajima vida.

The linguistic metaphors indicate that learning is achieved by gaining control over the material or field of study (*overcome* in 11). Based on what we know about our physical manipulation of objects, combined with our common understanding of mind as a body, we equate physical control with mental control, for which there is a homonymous metaphor (i.e. MENTAL CONTROL IS PHYSICAL CONTROL). The domain of LEARNING is, in the like manner, explicable in terms of

the following mappings: DIFFICULT SUBJECTS ARE ADVERSARIES and LEARNING THE SUBJECT IS DEFEATING THE ADVERSARY. On the grounds of these mappings, the process is understood via LEARNING IS GAINING PHYSICAL CONTROL OVER THE MATERIAL conceptual metaphor. Although our study of the English newspapers did not yield results which could confirm the presence of this metaphor in English, we know from past research (Lakoff et al. 1991: 83) that the same conceptual metaphor is present in that language. The LEARNING domain, therefore, is largely goal-oriented for the express purpose of acquiring skills and knowledge that will facilitate future learning and functioning in the world.

3.2. *The domain of UNDERSTANDING*

The projection of the container schema from our body onto the mind is also prevalent in the case of the domain of understanding. The process is accounted for by the use of lexical units that usually express the direction of motion:

E:

(13) This is the second time Tóibín has used fiction to imagine his *way into* the mind of a past novelist.

(14) In 2004's *The Master* he took his readers *inside* Henry James. Now he has chosen Mann.

(15) With Galileo, our understanding moved *outwards* to an infinite universe.

S:

(16) Pereljmanu jednostavno nije *ulazilo* u glavu da mu u matematičkoj hijerarhiji ne dodeljuju ono mesto koje on, po vlastitom mišljenju zaslužuje [...].

These show that the concept is understood in orientational terms. That is, UNDERSTANDING is seen as an act of going inside the mind of the cognizer (13–14) which helps us comprehend the meaning, cause, or significance of their actions and beliefs. Understanding thus includes the combination of the general MIND IS A CONTAINER and UNDERSTANDING IS MOVING metaphors, from which we get the specific-level metaphor UNDERSTANDING IS GOING INTO THE CONTAINER (MIND). In complementary fashion, surpassing one's level of understanding is expressed by the opposite spatial concept - OUT (*outwards* in example 15). Examples such as these (13–15) show that imposing boundaries provides the necessary prerequisite for this domain's conceptualization. Therefore, it is possible to correlate the degree to which one is said to comprehend something with the *volume* of the container, or its *depth*:

E:

(17) By adding an extra premise to make an invalid argument valid, we can gain a *deeper* understanding of why the argument is flawed.

(18) People confuse their current *level* of understanding with their peak knowledge.

(19) Thanks to the illusion of explanatory depth, many political arguments will be based on false premises, spoken with great confidence but with a *minimal* understanding of the issues at hand.

The Serbian counterparts of the above-mentioned mappings (17–19) were not observed in our data.

The notion of boundedness, or more specifically being in a bounded region in space (location), is generally recognized as one that is utilized in conceptualization of STATES. A wide range of examples in our data sets were based on such an understanding:

E:

- (20) What has become increasingly clear to me in my practice is that diagnosis is not a particularly informative *way* of understanding behaviour.
- (21) [...] he's willing, when necessary, to abandon that genre's fixation on materialist explanation as the only *path* to understanding.
- (22) And the prospect of properly understanding what is happening in cases of mental illness is even *further away*.
- (23) Ghebreyesus said the mission had not been expected to find all the answers, but had found important information that takes us *closer* to understanding the origins of the virus.
- (24) I have *come* to understand that deep existential processes can be involved in creating and caring for a garden.
- (25) Despite the vast number of facts being accumulated, our understanding of the brain appears to be *approaching an impasse*.
- (26) Global understanding, when it *comes*, will likely take the form of highly diverse panels loosely stitched together into a patchwork quilt.

S:

- (27) [...] Konstantina Satina biram jer je to možda *put* za razumevanje Borisa Komnenića, glumca stanja celovitosti.
- (28) To je nova *staza* u razumevanju našeg promišljanja svakodnevnog iskustva [...].
- (29) Ipak, zahvaljujući tehnologiji, sada smo *korak* bliže razumevanju pozadine ovih enigmatskih tekstova.
- (30) Glavni uzroci – u našoj su sopstvenoj slabosti, i oni su mnogo složeniji, njihovom razumevanju tek se *primičemo*.

As a process, understanding can be seen as a movement along a *path* (20–26; 27–30) which leads to a destination – the achieved state of understanding. Thus, in order to say that one understands a phenomenon, one must reach the point (destination) that represents a given state. For this reason, the linguistic expressions include verbs denoting movement towards the location (e.g. *come* in 24 and 26, or *approach* in 25 and 30), with the slight difference in the agent. Namely, the agent can either be a person, in which case the desire to gain understanding enables us to think of this state as something that *we* seek, at the same time allowing us to judge the proximity (22–23; 29–30) to that location (state); or understanding in itself could be seen as possessing the ability to move (25–26). In English, both representations were present, while UNDERSTANDING was seldom represented as autonomous in Serbian. In either case, the metaphorical conceptualization of UNDERSTANDING AS MOVING depends on the generic metaphors STATES ARE LOCATIONS and CHANGE IN STATE IS

MOTION. Their underlying conceptual mappings: UNDERSTANDING IS THE DESTINATION/LOCATION, GOING INTO THE DESIRED STATE (UNDERSTANDING) IS MOVING TOWARDS THE DESTINATION/LOCATION, APPROACHING THE STATE (UNDERSTANDING) IS BEING IN THE PROXIMITY TO THE LOCATION.

The previously documented metaphor MIND IS A TERRITORY that structured the process of *learning*, was observed in the English data set for *knowing* and *understanding* as well: E: [...] *people are generally much more rational in their arguments, and more willing to own up to the limits of their knowledge and understanding, if they are treated with respect and compassion.* The productivity of this conceptual metaphor in Serbian should be explored in more detail in future research as no Serbian counterpart was documented in the study.

Both English and Serbian data contained citations which showed that the domain can be structured by the domain of VISION (UNDERSTANDING IS SEEING metaphor). Such cross-domain mapping allows us to reason and speak of intellectual “vision” in the following way:

E:

- (31) Or new comparative evolutionary studies will show how other animals are conscious and provide insight *into* the functioning of our own brains.
- (32) Writing has always been *seen* as expressing our personality.
- (33) Much of his book is quite compatible with the “no-self” *views* found in traditions such as Buddhism and philosophers such as David Hume, who famously *looked inside* his mind and found no “there” there, just “a bundle or collection of different perceptions”.

S:

- (34) *Zavirivanje* u mozak postaće tradicionalna procedura u raznim oblastima.
- (35) S neke *tačke gledišta*, odnekud iz kosmosa, taj sistem upravljanja se može shvatiti kao jedinstven centar.
- (36) Ovakvo *viđenje* budućih odnosa s Vašingtonom dele mnogi analitičari [...].
- (37) U tom kontekstu, celokupnu politiku NATO-a *vidim* kao kritičnu [...].

The metaphorical linguistic expressions relating to VISION suggest that the mappings occur between the concept one is trying to grasp (understand) and the object in one’s line of sight. Namely, it allows us to talk about UNDERSTANDING as a *perspective* or (*point of*) *view* (33; 35–36). Similarly, the differences in understanding become the differences in perspectives, given that the position from which one views the object can affect their perception and subsequent understanding of that entity. Hence the metaphors: ATTITUDE/APPROACH IS PERSPECTIVE and THE OBJECT OF UNDERSTANDING IS THE OBJECT OF SEEING.

Having an unobstructed view appears to be a prerequisite for this process (38–39; 40–41), which possibly motivates the use of the vocabulary (*shed light on; appear in different light; clear*) from the domain of LIGHT since, given our common knowledge, we know that poorly lit objects are hard to discern (e.g. *hidden* in 39). This fact accounts for the mapping AN EXPLANATION (that leads to understanding) IS A RAY OF LIGHT (that makes the object visible).

E:

- (38) Or some radical new approach integrating physiology and biochemistry and anatomy will *shed* decisive *light on* what is going on.
 (39) [...] the connectomes will reveal principles of brain function that are currently *hidden* from us.

S:

- (40) Biće svakome *jasno* da je cena struje neopravdano povećana.
 (41) Čitao sam naučnu literaturu i mnogo toga *pojavilo se* sad već *u drugom svetlu*, postajalo shvatljivije.

The examples analyzed so far confirm the similarity in conceptualizing the domain of UNDERSTANDING in these two languages. There were, however, some discrepancies between the two languages regarding other source domains that structure this target. Firstly, the search conducted in English newspapers generated examples belonging to the domain of GRASPING:

E:

- (42) Understanding even the simplest of such networks is currently beyond our *grasp*.
 (43) Seb could not *grasp* a clear meaning, but there was an undertone of danger.
 (44) They are simple in this one respect – but are otherwise extremely enigmatic and *slip away* just when you think you *have a grip on* them.

Understanding an idea or its meaning therefore correlates with having a grip on the object. We could argue that the UNDERSTANDING IS GRASPING metaphor is related to the generic-level metaphor MENTAL CONTROL IS PHYSICAL CONTROL, or more specifically, in Jäkel's (1995) terms, to the MENTAL ACTIVITY IS MANIPULATION OF OBJECTS metaphor. There seems to be no Serbian equivalent for this realization, but further research is necessary to fully support this claim.

On the other hand, the citations belonging to our Serbian data indicated that its other commonly utilized domain of experience is that of COMMUNICATION, suggesting that our everyday experiences with texts, i.e. the interpretation of their meaning, provide the knowledge structures which get transferred to other contexts and entities, such as EVENTS (45), TERMS (46), OR THOUGHT (47), all of which can in turn be *read* (47) (UNDERSTANDING IS READING) OR *interpreted* (45–46) (UNDERSTANDING IS INTERPRETING):

S:

- (45) Zlostavljač agresivno nameće svoje *tumačenje* događaja, a ako se žrtva s njima ne slaže, on to neslaganje uzima kao dokaz da s njim nešto nije u redu.
 (46) Pojam "Sloveni" različito se *tumači* u raznim naukama.
 (47) Uređaj je uspeo da *pročita* misao.

The differences in the domains which solely appear in one of the languages, but not the other, could be a result of our search. These observations are of considerable importance because the differences might either be caused by the aspect of the target that is highlighted in a particular article, resulting in the higher frequency of a given source domain in one language; or they could

actually point to culture-specific views. We shall attempt to answer these questions more fully in a more extensive corpus search to verify whether these are indeed culture-specific metaphors.

3.3. *The domain of KNOWING*

The literature of the field (Kövecses 2010 [2002]: 24) categorizes the *knowing* aspect as “less active”, as opposed to other functions of the MIND (such as *problem-solving*, *decision-making*, or *reasoning*). In contrast to *learning* and *understanding*, which are mental processes, *knowing* represents a mental state. Yet, just like *learning* and *understanding*, it also draws on the MIND IS A CONTAINER conceptual metaphor:

E:

- (48) Although the overall *level* of knowledge is equal on both sides, there is little overlap in the details.
- (49) The problem is that we confuse a *shallow* familiarity with general concepts for real, *in-depth* knowledge.
- (50) By revealing the *shallowness* of their existing knowledge, this prompts a more moderate and humble attitude.

S:

- (51) I, što je još gore, na osnovu *površnog* poznavanja jednog jezičkog sistema.

The conceptual understanding which is linguistically expressed here by words that chiefly pertain to a spatial primitive - verticality (48-50; 51), confirms that the understanding of this state relies on the CONTAINER schema, and that it is mediated by the conceptual mappings: MIND IS A CONTAINER, KNOWLEDGE IS THE LIQUID INSIDE THE CONTAINER (e.g. *shallow* in 49 and 50), and LEVEL OF THE CONTENT INSIDE THE CONTAINER IS THE LEVEL OF KNOWLEDGE.

Other realizations, listed below, pointed to the MIND/KNOWLEDGE IS A TERRITORY conceptual metaphor, which accounts for the mappings: STATES ARE LOCATIONS, CHANGE IN STATE IS MOTION, GOING INTO THE DESIRED STATE (KNOWING) IS MOVING TOWARDS THE LOCATION (55; 57), as well as KNOWLEDGE IS A TERRITORY (53-54; 56), and BECOMING MORE KNOWLEDGEABLE IS BROADENING THE TERRITORY (52).

E:

- (52) However, it was not the case that university *broadened* minds. Rather, work seemed to *narrow* them.
- (53) They were subsequently more willing to accept the *limits* of their knowledge and to listen to alternative viewpoints [...].
- (54) Fill their knowledge *gap* with a convincing story.

S:

- (55) Istražujući u toj oblasti, *tragao* sam za zakonitostima mešanja ukusa [...].
- (56) Tako je i tokom predstavljanja engleskog izdanja knjige Bivor naveo da smo “predugo imali crne *rupe* u znanju o Drugom svetskom ratu”.
- (57) Potrebno je detaljnije nas *uputiti*, organizovati više rasprava o tome zašto je

važna vakcinacija s relevantnim sagovornicima koji bi razjasnili nedoumice.

Much like the *learning* aspect, or domain, KNOWLEDGE as a VALUABLE COMMODITY highlights its potential benefits because it can be put to a practical use. Hence, we reason about it just as we act and talk about goods. That is, we *exchange* (63) or *gain* (60–61) it, because we recognize its *worth* (58–59; 60–63).

E:

(58) This knowledge is almost entirely *useless* for our survival [...].

(59) Amazon wants to make knowledge *worthless* and to kill the traditions that nurture creativity, culture and complex thought.

S:

(60) *Kvalitet* stečenog znanja ipak, kaže on, nije trpeo.

(61) Možda i nije neobično što *stečeno* znanje ponekad može da se *upotrebi* u korist sopstvene štete.

(62) “Znanje nije *roba*”, jeste mantra koja kruži poslednjih dana.

(63) [...] interdisciplinarni onlajn kurs “Epidemija”, gde je više nastavnika istovremeno “upleteno” u *razmeni* znanja, dobra [je] alatka za učenje kroz razumevanje.

The LEARNING frame, according to the existing cognitive linguistic studies of metaphor, employs the KNOWING frame⁸. This becomes especially evident if we compare examples 6 and 53, both of which contain a similar linguistic metaphor (i.e. *mind-broadening* in example 6, and *broadened minds* in example 52). Instances such as these support the claim that delineating the mind’s various aspects proves to be quite challenging because they are, more often than not, co-dependent. Given such interdependence, any similarities in the conceptualization of these two domains is anything but striking.

The beneficial qualities of KNOWLEDGE were further highlighted (only) in the Serbian data by the domain of FOOD, equating it with “mental food”, on basis of which THE DESIRE FOR KNOWLEDGE is seen as APPETITE: *Kako se, dakle, sprema taj obrok saznanja koji pojedemo s apetitom, a inače bismo ga bez kulinarske obrade teško zagrizli, a još teže sažvakali?* The underlying mappings would include the following: KNOWLEDGE IS FOOD and LEARNING IS EATING.

Another realization (KNOWING IS SEEING) which was documented only in the Serbian data set showed that the contributing factor to conceptualizing KNOWING as “less active” appears to lie in its utilization of the VISION domain as its primary, and most reliable source of data: S: *Treba imati u vidu da kapi virusa u mikronima mogu da lebde u vazduhu dugo, or Video⁹ sam da ne mogu ništa da promenim i polako sam se povlačio.* In fact, Sweetser (1990) claims that the connection results from “the ability to focus our mental and visual attentions, to monitor stimuli visually and mentally” because of the shared structural properties of the two domains. This has been confirmed for a number of Indo-European languages (see Lakoff, Johnson 1999), and our study

⁸ <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Learning>

⁹ This example is rather ambiguous as it can be a verbal realization of both KNOWING and UNDERSTANDING.

established that Serbian is no exception. The presence of the KNOWING IS SEEING metaphor in Serbian news discourse confirms the universality which is attributable to this metaphor.

4. CONCLUSION

In this paper we sought to explore the diversification of some aspects belonging to the intellectual domain in English and Serbian. The overarching goal of our contrastive study was to explicate *learning*, *understanding*, and *knowing* in terms of the most frequent conceptual metaphors and domains that structure them. We present the overview of our results in Table 1 below. The language-specific metaphors are marked with superscript (E) if they occur only in English, or (S) if they appear in Serbian.

Table 1: *Conceptual metaphors that structure a given aspect of the mind*

Aspect	Source	Target	Generic-level metaphor	Specific-level metaphor
LEARNING	CONTAINER	MIND	<ul style="list-style-type: none"> • MIND IS A CONTAINER • LEARNING IS TAKING IN 	<ul style="list-style-type: none"> • MIND IS AN ABSORBENT MATERIAL • LEARNING IS ABSORBING
	TERRITORY	MIND	MIND IS A TERRITORY	
	VALUABLE COMMODITY	LEARNED MATERIAL	<ul style="list-style-type: none"> • THE LEARNED MATERIAL IS A VALUABLE COMMODITY • LEARNING IS OBTAINING POSSESSION OF THE VALUABLE COMMODITY 	
	MOVING	LEARNING	LEARNING IS MOVING	LEARNING IS REACHING THE DESTINATION
	PHYSICAL CONTROL	MENTAL CONTROL	MENTAL CONTROL IS PHYSICAL CONTROL	<ul style="list-style-type: none"> • MIND IS A PERSON AT WAR • LEARNING IS GAINING PHYSICAL CONTROL OVER THE SUBJECT MATTER • DIFFICULT SUBJECTS ARE ADVERSARIES • LEARNING THE SUBJECT IS DEFEATING THE ADVERSARY

UNDERSTANDING	CONTAINER	MIND	<ul style="list-style-type: none"> • MIND IS A CONTAINER • UNDERSTANDING IS MOVING 	UNDERSTANDING IS GOING INTO THE MIND-CONTAINER
	TERRITORY	MIND	MIND IS A TERRITORY ^E	
	LOCATION	STATE	<ul style="list-style-type: none"> • STATES ARE LOCATIONS • UNDERSTANDING IS MOVING 	UNDERSTANDING IS THE DESTINATION/LOCATION
	VISION	UNDERSTANDING	UNDERSTANDING IS SEEING	<ul style="list-style-type: none"> • ATTITUDE/APPROACH IS PERSPECTIVE • THE OBJECT OF UNDERSTANDING IS THE OBJECT OF SEEING • AN EXPLANATION IS A RAY OF LIGHT
	PHYSICAL CONTROL	MENTAL CONTROL	MENTAL CONTROL IS PHYSICAL CONTROL	UNDERSTANDING IS GRASPING ^E
	COMMUNICATION	UNDERSTANDING	UNDERSTANDING IS COMMUNICATION	<ul style="list-style-type: none"> • UNDERSTANDING IS READING^S • UNDERSTANDING IS INTERPRETING^S
KNOWING	CONTAINER	MIND	MIND IS A CONTAINER	KNOWLEDGE IS THE LIQUID INSIDE THE MIND-CONTAINER
	TERRITORY	MIND	MIND IS A TERRITORY	
	TERRITORY	KNOWLEDGE	KNOWLEDGE IS A TERRITORY	BECOMING MORE KNOWLEDGEABLE IS BROADENING THE TERRITORY
	LOCATION	STATE	<ul style="list-style-type: none"> • STATES ARE LOCATIONS • KNOWING IS MOVING 	GOING INTO THE DESIRED STATE (KNOWING) IS MOVING TOWARDS THE LOCATION
	VALUABLE COMMODITY	KNOWLEDGE	KNOWLEDGE IS A VALUABLE COMMODITY	
	FOOD	KNOWLEDGE	KNOWLEDGE IS FOOD	<ul style="list-style-type: none"> • LEARNING IS EATING^S • THE DESIRE FOR KNOWLEDGE IS APPETITE^S
	VISION	KNOWING	KNOWING IS SEEING ^S	

The two data sets (English and Serbian) show a great degree of similarity in respect of the generic-level metaphors observed for the learning process: LEARNING IS TAKING IN, LEARNING IS MOVING, LEARNING IS OBTAINING POSSESSION OF THE VALUABLE OBJECT, and LEARNING IS GAINING PHYSICAL CONTROL OVER THE MATERIAL. These, in turn, have their specific instantiations, which specify the domain of MIND either as a CONTAINER, an ABSORBENT MATERIAL, a TERRITORY, or a PERSON AT WAR. The domain of UNDERSTANDING, although displaying a significant degree of overlap in terms of the generic-level metaphors, contained realizations which appeared solely in one of the languages. The CONTAINER domain, when part of the generic-level metaphor MIND IS A CONTAINER, manifests itself verbally in both languages. Yet, the specific-level metaphor THE LEVEL OF UNDERSTANDING IS THE AMOUNT OF CONTENT WITHIN THE CONTAINER was observed only in English. The same was true of the MIND IS A TERRITORY and UNDERSTANDING IS GRASPING

metaphors, which were not documented in our Serbian data set. On the other hand, the cross-domain mappings between UNDERSTANDING and COMMUNICATION were marked with a superscript (⁶), which means that they only appeared in examples extracted from Serbian newspapers. The domain of KNOWING utilizes, according to the results obtained from both data sets, the same general domains (CONTAINER, TERRITORY, and VALUABLE COMMODITY) like the two mental processes. The differences were observed in the examples taken from Serbian newspapers, given the prominence of the domains of FOOD and VISION. Further research is needed to account for such mappings, since no definite conclusions could be drawn based on a small number of examples.

Looking for some form of generalization over them, we could argue that learning, understanding, and knowing are structured by the prototypical representatives such as the CONTAINER domain, which is chiefly utilized to represent the achieved mental states of the said processes (e.g. the mental state such as KNOWING). Their active sense is almost invariably mediated by the SOURCE-PATH-GOAL schema since they present ongoing processes. In addition, they tend to be structured by the domain of PHYSICAL CONTROL that correlates with MENTAL CONTROL on the basis of the MANIPULATION image-schema. The identified conceptual metaphors, therefore, clearly highlight the embodied conception of the MIND.

References

- D'Andrade 1987: R. D'Andrade, A folk model of the mind, *Cultural models in language and thought*, in Holland (ed.), Cambridge: Cambridge University Press, 112-148.
- Gibbs 2005: R. Gibbs, *Embodiment and Cognitive Science*, Cambridge: Cambridge University Press.
- Grujić 2018: T. Grujić, *Pojmovne metafore zasnovane na izvornom domenu mašine u engleskom i srpskom jeziku*, Beograd: Filološki fakultet. [orig.] Т. Грујић, *Појмовне метафоре засноване на изворном домену машине у енглеском и српском језику*, Београд: Филолошки факултет.
- Jäkel 1995: O. Jäkel, The metaphorical conception of mind: "Mental activity is manipulation," In J. Taylor, R. MacLauray (eds.), *Language and the Cognitive Construction of the World*, Berlin: Mouton de Gruyter, 197-229.
- Johnson 2012: M. Johnson, Action, Embodied Meaning, and Thought, *Action, Perception and the Brain: Adaptation and Cephalic Expression*, in J. Schulkin (ed.), New York: Palgrave Macmillan, 92-117.
- Johnson 2017: M. Johnson, *Embodied mind, meaning, and reason: how our bodies give rise to understanding*, Chicago: The University of Chicago Press.
- Klikovac 2004: D. Klikovac, *Metafore u mišljenju i jeziku*, Beograd: Biblioteka XX vek.
- Lakoff et al. 1991: G. Lakoff, J. Espenson, A. Schwartz, *Master Metaphor List*, Second Edition, Berkeley: University of California at Berkeley.
- Lakoff, Johnson 1999: G. Lakoff, M. Johnson, *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*, New York: Basic Books.

- Lakoff, Johnson 2003 [1980]: G. Lakoff, M. Johnson, *Metaphors We Live By*, Chicago and London: University of Chicago Press.
- Lakoff 2009: G. Lakoff, *The Political Mind: A Cognitive Scientist's Guide to Your Brain and Its Politics*, New York: Penguin Group (USA) Inc.
- Pragglejaz Group 2007: MIP: A Method for identifying metaphorically used words in discourse, *Metaphor and Symbol*, 22 (1), 1–39.
- Radić-Bojanić, Silaški 2012: B. Radić-Bojanić, N. Silaški, Metaphoric and Metonymic Conceptualizations of the Head – A Dictionary-based Contrastive Analysis of English and Serbian, *Facta Universitatis: Linguistics and Literature*, 10 (1), 29–39.
- Rot 2004: N. Rot, *Opšta psihologija*, Beograd: Zavod za udžbenike i nastavna sredstva. [orig.] Rot 2004: Н. Рот, *Општина психологија*, Београд: Завод за уџбенике и наставна средства.
- Sweetser 1990: E. Sweetser, *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*, Cambridge: Cambridge University Press.
- Violi 2008: P. Violi, Beyond the body: Towards a full embodied semiosis, in R. Frank, R. Dirven, T. Ziemke, E. Bernardez (eds.), *Body, Language and Mind: Socio-cultural Situatedness*, Berlin: Mouton de Gruyter, 53–77.

Sources

- Blackburn 1996: S. Blackburn, *The Oxford Dictionary of Philosophy*, Oxford: Oxford University Press.
- Lacey 2005: A. R. Lacey, *A Dictionary of Philosophy* – 3rd ed., London: Routledge & Kegan Paul Ltd.
- Matsumoto 2009: D. Matsumoto, *The Cambridge Dictionary of Psychology*, Cambridge: Cambridge University Press.
- RSJ 2011: *Rečnik srpskoga jezika*, Novi Sad: Matica srpska. [orig.] PCJ 2011: Речник српског језика, Нови Сад: Матица српска.
- VandenBos 2015: G. VandenBos, *APA Dictionary of Psychology*, Washington: American Psychological Association.

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ИНТЕЛЕКТУАЛНИ ДОМЕН: МЕТАФОРИЧНОСТ ПОЈЕДИНИХ АСПЕКТА УМА

Резиме

У раду износимо резултате пилот истраживања које је за циљ имало испитивање концептуализације домена ума у енглеском и српском језику. Будући да дати циљни домен одликују како појмовна тако и језичка сложеност, његова подробна анализа превазилази оквире једног рада. Стога смо овај рад ограничили на испитивање учења, разумевања и знања. Основни циљеви јесу испитати распон изворних домена чија се структура пресликава на одабране аспекте, затим издвојити језичке метафоре и формулисати метафоричка мапирања, како би се утврдила њихова мотивисаност и начин

на који су дати аспекти представљени у српском и енглеском новинском дискурсу. Кон-трастивном анализом добијених резултата испитана је потенцијална универзалност забележених појмовних метафора које припадају интелектуалном домену. Резултати показују да се наведени аспекти ума, то јест ментални процеси (УЧЕЊЕ И РАЗУМЕВАЊЕ) и стање (ЗНАЊЕ), понајвише поимају путем следећих изворних домена: САДРЖАТЕЉ, ТЕРИТОРИЈА, ВИД, ВРЕДАН ПРЕДМЕТ И ФИЗИЧКА КОНТРОЛА, у чијој реализацији учествују сликовне схеме САДРЖАВАЊА, КРЕТАЊА И РУКОВАЊА ПРЕДМЕТИМА.

Кључне речи: метафоре ума, когниција, теорија појмовне метафоре, енглески језик, српски језик

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