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Sara Marković

CONCEPTUAL METAPHOR THEORY: AN EXAMPLE OF THE 'TIME IS
SPACE' METAPHOR

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Mentori: dr. sc. Mateusz-Milan Stanojević, doc.

dr.sc. Mirjana Tonković, doc.

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UNIVERSITY OF ZAGREB
FACULTY OF HUMANITIES AND SOCIAL SCIENCES

Department of English

Sara Marković

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Advisors: Assistant Professor Mateusz-Milan Stanojević

Assistant Professor Mirjana Tonković

Zagreb, September 2017

Povjerenstvo:

dr. sc. Mateusz-Milan Stanojević, doc.

dr.sc. Mirjana Tonković, doc.

dr.sc. Marina Grubišić, v. asist.

Committee in charge:

Assistant Professor Mateusz-Milan Stanojević

Assistant Professor Mirjana Tonković

Teaching assistant Marina Grubišić

Abstract

Time is often thought about and spoken about in terms of space and correspondingly, motion. This paper investigates the relationship between the language people use to describe time and the way people think about time, particularly the influence of fictive motion words on temporal reasoning in Croatian speakers. The paper focuses on comparing experimental data from previous research conducted in English to data gained from a similar, modified experiment conducted in Croatian. The experiment was conducted on 85 students of the Faculty of Humanities and Social Sciences at the University in Zagreb using a questionnaire. The findings of the study showed no significant effect of fictive motion words on temporal conceptualization in Croatian speakers. The conducted research did not find evidence of fictive motion language impacting the temporal reasoning of Croatian speakers.

Keywords: language and thought, Conceptual Metaphor Theory, temporal reasoning, fictive motion, Croatian language

Sažetak

Ljudi često o vremenu razmišljaju i govore koristeći riječi vezane uz prostor i kretanje. Ovaj rad istražuje odnos između jezika kojeg ljudi koriste kako bi opisali vrijeme i načina na koji razmišljaju o njemu. Točnije, rad se osvrće na utjecaj riječi koje opisuju fiktivno kretanje na vremensku konceptualizaciju govornika hrvatskog jezika. Rad je fokusiran na usporedbu eksperimentalnih podataka iz ranijih istraživanja provedenim na engleskom jeziku s eksperimentalnim podacima dobivenima u sličnom, modificiranom eksperimentu provedenom na hrvatskom jeziku. Eksperiment je proveden na 85 studenata Filozofskog fakulteta Sveučilišta u Zagrebu putem upitnika u kontroliranim uvjetima. Rezultati provedenog istraživanja nisu u skladu s očekivanjima te eksperiment nije pronašao značajni utjecaj riječi koje opisuju fiktivno kretanje na vremensku konceptualizaciju govornika hrvatskog jezika. Provedeno istraživanje nije pronašlo dokaze da jezik koji opisuje fiktivno kretanje utječe na vremensku konceptualizaciju govornika hrvatskog jezika.

Ključne riječi: Jezik i misao, teorija konceptualnih metafora, vremenska konceptualizacija, fiktivno kretanje, hrvatski jezik

Table of Contents

1. Introduction	1
2. Theoretical Overview	2
3. Aim and hypotheses	5
4. Method	6
<i>4.1. Participants</i>	6
<i>4.2. Instruments</i>	6
<i>4.3. Procedure</i>	6
5. Results and discussion	7
6. Conclusion	12
7. Works cited	13
Appendix	15

1. Introduction

People often find themselves needing to explain imperceptible or intangible phenomena to others. What makes these types of endeavors possible is language. One such instance, which is an everyday occurrence for most people, is talking about the elusive domain of time. Although we experience the passing of time in our lives by observing the changing of the seasons, the exchange of day and night or our own aging, the general concept of time is rather vague. Thus, we employ language that typically describes more concrete domains to reference and define our relationship to time.

There are many different domains from which we can borrow characteristics and apply them to time to make talking or thinking about time easier. One such domain is space, and the TIME IS SPACE metaphor is one of the primary metaphors humans use to not only reference time but also conceptualize it. If we take a moment to reflect on the way we reference time, we can easily notice that we often talk about the past as being *behind* us and the future lies *ahead*. Not only do we talk about time in this manner, but we also conceive of it this way.

The study in this paper investigates the relationship between language rooted in the TIME IS SPACE metaphor and the way people conceptualize time in Croatian. Its aim is to show whether language related to space, more specifically fictive motion, the metaphorical motion of an object or abstraction otherwise incapable of literal motion, can change the way people think about time. The study is set within the theoretical framework of cognitive linguistics, and will test the effect that processing fictive motion language has on temporal conceptualization. Similar studies were conducted in English and this paper aims to provide comparative cross-linguistic data in order to highlight possible differences and similarities between English and Croatian.

The following section gives a theoretical overview which is the foundation of the study and is followed by the aim and hypotheses employed in the experiment. Section 3 provides an account of the method used for the experiment detailing the participants, instruments and procedure of the experiment. It is followed by a presentation of the results and a discussion on the findings. The final section is the conclusions with suggestions for possible further research.

2. Theoretical Overview

Reasoning about abstract domains and its relationship with language has been the topic of scientific inquiry for a long time. At the heart of the matter lies the question of how people conceptualize and represent vague domains when even sensory information is scarce and how people organize and find consensus between mental representations of such domains. One explanation was offered by George Lakoff and Mark Johnson in their seminal work *Metaphors We Live By* (1980). Lakoff and Johnson proposed that the human conceptual system was rooted in a small set of experiential concepts – concepts formed by experience that are defined in their own terms. That is, the experience of living in a body in the world, having an embodied mind gives rise to fundamental concepts which are comprised of basic spatial relations (e.g. front/back), physical ontological concepts (e.g. entity) and sets of basic actions or experiences (e.g. eating). That is, the body we live in and the physical world we inhabit give rise to our conceptual system. What Lakoff and Johnson suggest is that all other concepts, which are not derived from immediate physical experience are in their nature metaphorical. They are metaphorically structured and inferred from this small set of concrete and basic experiential concepts. This is known as the Conceptual Metaphor Theory. Lakoff and Johnson posited that metaphors were pervasive in everyday life – they structure, at least in part, our thoughts, language and actions. This intertwined connection between the conceptual system and language implies that we can gain insight into the underlying conceptual system by exploring language and vice versa.

What this theoretical framework also claims is that people reason about and give structure to vague domains by borrowing structure from more concrete domains. If we adopt this view, then we can talk about *source domains* and *target domains*. The source domain provides the structure which is applied to the target domain. These metaphorical structures give rise to corresponding metaphorical expressions. Consider the following, in the LOVE IS MAGIC metaphor (where MAGIC is the source domain and LOVE is the target), we can easily conceive of sentences such as “He was *entranced* by her charm” or “She is *bewitching*” where love is explained in terms of magic. In this instance, we can detect the metaphorical expression, however metaphorical structuring is so convenient in language and conceptualization that we are rarely aware of the presence of a metaphor. Consider the GOOD IS UP metaphor and sentences such as “Things are looking *up*” or “He does *high* quality work”. In these instances, the metaphorical expression is much less obvious as being metaphorical as such expressions and conceptualization are highly conventional.

The domain of time is very scarce when it comes to sensory information and thinking and talking about time presupposes a metaphor. Vague domains such as time need some concrete (and artificial) boundaries so that we may employ and reference them properly. One of the domains from which the domain of TIME borrows its structure is from the more concrete domain of SPACE which is part of the fundamental experiential concepts. To help organize and express our reasoning about temporal matters, spatial relations and spatial schemas are employed in terms of time. The TIME IS SPACE conceptual metaphor is one people are less aware of and it is a primary metaphor. “Each primary metaphor has a minimal structure and arises naturally, automatically, and unconsciously through everyday experience by means of conflation, during which cross-domain associations are formed. Universal early experiences lead to universal conflations, which then develop into universal (or widespread) conventional conceptual metaphors” (Lakoff and Johnson, 1999). This is why the metaphor of TIME IS SPACE is present in many languages around the world.

In Croatian and English, the past is often referenced as being behind or in the back while the future is ahead or in front (e.g. Christmas is behind us / Božić je iza nas). Another extension of this metaphor is TIME IS MOTION as motion is the moving of objects through space (e.g. the time to act has arrived / došlo je vrijeme za akciju). When we consider the TIME IS MOTION metaphor, we can notice that while conceptualizing time two distinct perspectives may be adopted with regard to the speaker. One is that time is stationary and we are moving through the landscape of time (e.g. I am approaching the deadline/ Bližim se četrdesetj). This is the ego-moving perspective in which the focus of the motion is on the speaker. The other perspective is the time-moving perspective in which the speaker or ego is stationary and time is moving towards them (e.g. Easter is approaching us / Uskrs nam se bliži). The key difference in these two perspectives is the directionality of time with regard to the speaker. Either the speaker is moving forward or time is moving towards the speaker (see Evans, 2005).

In recent decades researchers have been working on providing empirical backing to the theory that Lakoff and Johnson posited in 1980. If the human thought system is metaphorically structured and defined because human thought processes are largely metaphorical, then we need to test the psychological reality of such a relationship.

Experimental research on English speakers has indeed provided evidence that speakers employ spatial schemas when conceptualizing time. Research also showed that space and time share enough relational structure to allow spatial schemas to be used as successfully as temporal

schemas when organizing events in time (see Boroditsky, 1999). More recent research by Boroditsky and Cassanto (2008) also showed that spatial information influenced temporal reasoning but temporal information had no effect on spatial reasoning. This was presupposed by the asymmetry that exists in language in the TIME IS SPACE metaphor which is unidirectional from the domain of space to the domain of time. In simpler terms, we talk about time through spatial language and not the other way around which in turn means that we think about time in terms of space and not vice versa. As an aspect of the TIME IS SPACE metaphor, a lot of research was conducted exploring the relationship between motion and space.

The existence of two temporal perspectives was confirmed in a study by Boroditsky (2000) which showed that people were equally likely to adopt an ego-moving or time-moving perspective when spontaneously processing temporal information. To determine which perspective was adopted, participants were presented with an ambiguous time sentence “Next Wednesday’s meeting has been moved forward two days” followed by the question of which day the meeting was rescheduled. This question is referred to as the ambiguous *move forward* question. If participants adopted the ego-moving perspective the answer would be Friday and if they adopted a time-moving perspective the answer would be Monday.

In a study by Gertner et al. (see Gertner, Imai and Boroditsky, 2002), researchers provided further evidence that two distinct systems for processing space → time metaphors were psychologically real in English speakers. Participants did in fact either adopt an ego-moving or time-moving perspective when processing temporal information. That study also showed that when manipulated with spatial primes which included forward movement, participants were more likely to adopt an ego-moving perspective than a time-moving perspective. However, backward moving primes did not cause participants to adopt a more time-moving perspective.

Further research on fictive motion – the metaphorical motion of objects or phenomena otherwise incapable of movement through space – found that even fictive motion can cause an effect in temporal conceptualization of English speakers (see Matlock, 2010; Matlock, Holmes, Srinivasan and Ramscar 2011). Moreover, experiments also showed that English speaking participants are more likely to provide a Friday response to the ambiguous time question when primed with sentences containing fictive motion words than those exposed to sentences without fictive motion (Matlock, Ramscar and Boroditsky, 2003; Matlock, Ramscar and Boroditsky,

2005). In order to test whether this holds true for Croatian speakers, an adaptation of the experiment by Matlock et al. (2005) was developed.

The participants in the original experiment (Matlock et al., 2005) were primed with fictive motion containing the phrase ‘runs along’ in sentences such as “The tattoo runs along his spine” in the fictive motion (FM) condition. In the non-fictive motion (NFM) condition ‘runs along’ was replaced by ‘next to’, an example being “The tattoo is next to his spine”. The participants were asked to read a series of similar sentences either containing fictive motion or not, sketch the image the sentences conveyed to them and then asked to answer the *move forward* question. The results of the original experiment showed that participants induced with fictive motion had significantly more ego-moving responses than the control group which answered the ambiguous time question without a priming context.

The experiment in Croatian was modified to account for the possible effect that hand movement by sketching images had on participants in the original experiment. The experiment had a control group without any priming which expected an equal distribution of ego-moving and time-moving answers to the *move forward* question as was previously confirmed on English speakers. One experiment conducted previously in Croatian showed the equal distribution of Monday and Friday responses to the *move forward* question among participants. This was the recent work of Croatian researchers (Tonković and Štrkalj Despot, 2017) which found that half of the participants opted for an ego-moving perspective and half opted a time-moving perspective. An earlier study (Mikša and Tonković, 2016) found that 65% of participants opted for a time-moving perspective while 35% opted for an ego-moving perspective. The difference between the studies is that the 2017 study used a single ambiguous time question to determine the participants’ perspective while the 2016 study used five ambiguous time questions. The modified Matlock et al. experiment in this paper also used five rather than a single *move forward* question.

Given this previous research in English and Croatian, there were indications that similar findings would arise from analogous fictive motion experiments in Croatian.

3. Aim and hypotheses

The aim of the experiment was to test whether participants conceptualize time differently after being exposed to sentences containing fictive motion. More precisely, the experiment sought to determine whether fictive motion words could prime subjects to adopt an

ego-moving temporal perspective in Croatian and to provide comparative data for a similar experiment in English. We expected more participants responding with an ego-moving answer than a time-moving answer in the FM condition and an equal distribution of ego-moving and time-moving responses in the NFM condition.

4. Method

4.1. Participants

A total of 85 students at the Faculty of Humanities and Social Sciences at the University of Zagreb participated in the experiment, 27 graduates and 58 undergraduates.

4.2. Instruments

The study materials were comprised of a single three-page questionnaire containing either the NFM or FM condition. The questionnaire contained a single page with NFM or FM sentences and two pages with a total of eight simple computing questions. The FM or NFM sentences were printed in block letters and the words comprising each sentence were given in random order for the participants to assemble correctly. The questions on the remaining two pages of the questionnaire consisted of five ambiguous time questions and three filler questions (see Appendix).

4.3. Procedure

Given that the participants were students of English at the undergraduate level and students of linguistics at the graduate level, they were told that they were taking part in a study investigating how adults solved tasks aimed at elementary school students. It was necessary to mask the aim of the study because prior knowledge of linguistics might have led to some participants figuring out the manipulation in the experiment and influencing the results. They were first asked to assemble sentences using the provided words without altering them and then proceed to the rest of the questionnaire. The first task was the manipulation, while the second task involved answering five ambiguous time questions and three filler questions which were not used in the analysis of the results. The questionnaires were distributed randomly among students, 45 were given the NFM questionnaire and 40 were given the FM questionnaire.

In order to provide an analogous prime in the FM condition for the experiment in Croatian, the verb *vodi* ‘runs along’ (leads) was chosen and tested in the Croatian Language Corpus (<http://riznica.ihjj.hr/philologic/Cijeli.whizbang.form.hr.html>) for frequency to assure that it provided a representative fictive motion word for Croatian speakers. The lexical environment

of the verb, i.e. the noun phrase and the prepositions of the sentences was also chosen by testing the verb *vodi* in the corpus for its ten most common collocations. Therefore, in the Croatian experiment the subjects were primed with sentences containing the verb *vodi* in fictive motion sentences such as “Put vodi kroz šumu.” The other verbs used for the FM sentences were *teče* ‘runs along’ (flows) and *prolazi* ‘runs along’ (passes)¹. The no-motion sentences in the NFM condition were translated to Croatian closely following the scheme of the original experiment.

However, since the aim of this study was to test whether fictive motion language alone could influence temporal conceptualization, the experiment focused only on the linguistic primes without sketching, which was part of the original experiment. This eliminated the potential effect of actual motion of the hand of the participants while drawing. Instead of reading either fictive motion or non-motion sentences, sketching them and answering a single ambiguous time question, the experiment was modified in such a way that participants first had to construct grammatically and semantically viable sentences in Croatian (either FM or NFM) given a set of randomized words and then answer a number of simple computing questions among which were five ambiguous time questions.

5. Results and discussion

The participants were given five ambiguous time questions to answer. While analyzing the responses of the participants, they were divided into two categories, those that were in the ego-moving perspective and those that were in the time-moving perspective. A response was considered to be in the ego-moving perspective if three or more responses (out of five) to the ambiguous time questions were in the ego-moving perspective. Accordingly, a response was considered to be in the time-moving perspective if three or more responses (out of five) to the ambiguous time questions were in the time-moving perspective.

Contrary to our expectations, the experiment yielded similar results both in the FM and NFM condition. Firstly, in the NFM condition, where we expected participants to be equally likely to answer in both perspectives, the distribution of responses to the move forward question was mostly in favor of the ego-moving perspective with 31 participants or 68.9 % responding in the

¹ The verbs used are three possible translations of ‘runs along’ which was used in the original experiment and their literal translations are listed in the brackets.

ego-moving perspective and 14 participants or 31.1 % responding in the time-moving perspective.

Within the FM condition the participants showed comparable responses with 26 participants or 65% answering in the ego-moving perspective and 14 or 35% answering in the time-moving perspective. Overall, across both conditions participants answered the ambiguous time questions mostly using the ego-moving perspective with 57 or 67.1 % answering using the ego-moving perspective and 28 answering using the time-moving perspective.

There was no difference in responses between the NFM condition and the FM condition. Both groups answered largely in the ego-moving perspective and overall showed an almost equal distribution in both conditions. The lack of difference between the NFM and FM groups was confirmed by a chi-square test ($\chi^2 = 0,145$; $df = 1$; $p > 0,05$).

Table 1 FM or NFM (time or ego) contingency table

			Time or Ego		Total
			TM	EM	
FM or NFM	FM	Count	14	26	40
		Expected Count	13,2	26,8	40,0
		% within FM or NFM	35,0%	65,0%	100,0%
	NFM	Count	14	31	45
		Expected Count	14,8	30,2	45,0
		% within FM or NFM	31,1%	68,9%	100,0%
Total		Count	28	57	85
		Expected Count	28,0	57,0	85,0
		% within FM or NFM	32,9%	67,1%	100,0%

Given that the experiment has not yielded the expected results based on our hypotheses we may conclude that the chosen fictive motion words used in the experiment, the verbs *prolazi* ‘runs along’ (passes), *vodi* ‘runs along’ (leads) and *teče* ‘runs along’ (flows) do not cause participants to adopt an ego-moving perspective when thinking about time. A more general assumption may be that priming with fictive motion words simply does not cause a more ego-

moving perspective in temporal reasoning of Croatian speakers. Since there were no significant differences between our control group and experimental group, we may conclude that no effect was proven. However, the experiment itself has certain limitations that must be accounted for.

There is a possibility that the effect exists but was not visible in our experiment. If that is the case, a possible explanation may be that the sample was too small to show the effect of the fictive motion words on temporal reasoning. With a larger sample we may possibly observe a significant difference in responses between the control group and experiment group that was not apparent in our sample. Recreating the experiment with a larger sample might provide insight into whether this was the case.

Furthermore, we can attribute the lack of significant difference between the control group and experimental group displayed in the results to the possibility that the chosen prime simply does not cause an effect in the participants. The original experiment used not only a linguistic prime but the stimulation was reinforced by having participants draw images that the fictive motion sentences conveyed to them. The participants in our experiment were exposed only to fictive motion language before answering the ambiguous time questions. This would suggest that perhaps the effect was not achieved because a solely linguistic prime was not strong enough to cause an effect in Croatian. This does not eliminate the possibility that a combined linguistic prime and drawing prime might cause a distinguishable effect in Croatian speakers. However, it is important to note that American researchers have gotten positive results with experiments eliminating the effect of drawing (see Matlock et al. 2010, Experiment 3). Additionally, the lack of effect may be accounted to the type of linguistic task the participants were primed with. A plausible option may be that the task of assembling grammatically and semantically viable sentences in Croatian does not cause deep processing of the meaning of the words used. In order to assemble correct sentences only syntax is required without deliberating the meaning of the words involved.

At this point it is necessary to address a significant, and potentially crucial, difference in the design of the two experiments. The original experiment and the above mentioned experiment by Matlock et al. both had participants read sentences containing fictive motion and then answer the *move forward* question. On the other hand, our experiment had participants first assembling viable sentences in Croatian given a set of randomized words. The experiment was modified in this way to test whether only the presence of fictive motion words could prime subjects in Croatian. The task was also formulated in this way to provide a viable cover story

used to mask the true aim of the experiment to avoid participants cultivating assumptions about the aim of the research. Since the Croatian language allows for a great deal of inversion, there are several different ways the sentences could have been assembled (e.g. “Put vodi kroz šumu.” or “Kroz šumu vodi put.”). This means that the sentences need not begin with a subject but a preposition and emphasis was placed on the adverb of place instead of the subject. There is a distinct semantic difference between the two sentences which may cause varying effects. In order to test the possibility that word order was significant for causing an effect in the participants, the data from the experiment was then revised and the questionnaires were again divided into the NFM and FM condition. They were then divided into two additional groups within the conditions – those where the sentences began with the subject and those that began with the preposition. Those mostly (three out of five) beginning with the preposition were discarded and only those with a majority beginning with the subject were taken into consideration. A total of 48 questionnaires were taken into consideration, 23 in the NFM condition and 25 in the FM condition. A crosstabulation analysis confirmed that the distribution of ego-moving and time-moving answers among both conditions was in line with the distribution of answers in the original sample. In the NFM condition 17 participants or 73.9% answered in the ego-moving perspective and 6 or 26.1 % answered in the time-moving perspective. In the FM condition 17 participants or 68% answered in the ego-moving perspective and 8 or 32% answered in the time-moving perspective. Overall, the participants answered 70.8% within the ego-moving perspective and 29.2% in the time-moving perspective. The lack of difference between the NFM and FM groups was again confirmed by a chi-square test ($\chi^2 = 0,203$; $df = 1$; $p > 0,05$) Albeit the sample was rather small, the consistency of the data suggests that word order was not responsible for the observed effect.

Table 2 FM or NFM (time or ego) contingency table for subsample

			Time or Ego		Total
			TM	EM	
FM or NFM	FM	Count	8	17	25
		Expected Count	7,3	17,7	25,0
		% within FM or NFM	32,0%	68,0%	100,0%
	NFM	Count	6	17	23
		Expected Count	6,7	16,3	23,0
		% within FM or NFM	26,1%	73,9%	100,0%
Total	Count	14	34	48	
	Expected Count	14,0	34,0	48,0	
	% within FM or NFM	29,2%	70,8%	100,0%	

Although the study did not provide the results expected by our hypothesis, it did provide insight into the relationship of the fictive motion words and temporal processing of Croatian speakers. Participants were immune to the manipulation of the experiment and overall showed consistency in their spontaneously adopted temporal perspective. It has been shown that fictive motion language alone does not cause a change in the temporal reasoning of Croatian speakers under the tested circumstances. This suggests that contrary to findings collected from experiments with English speakers, fictive motion is not an important component for temporal reasoning of Croatian speakers. Consequentially, if we take the results as substantial, we can make a broader assumption that the relationship between the domains of time and space in the Croatian language are not as analogously connected as they are in English, and that the TIME IS SPACE metaphor is potentially less pervasive in the temporal cognition of Croatian speakers.

However, this hypothesis needs to be further tested on a larger sample of participants with more verbs to get accurate and representative results. It is more likely that the testing methods for Croatian speakers need to be more refined and finely tuned to the specific relations between the domain of time and space in the Croatian language to get accurate findings.

6. Conclusion

The aim of the study in this paper was to provide details of the metaphoric structuring of the TIME IS SPACE metaphor in Croatian speakers. More specifically, the study was conducted to gain insight into the relationship of fictive motion language and temporal conceptualization of Croatian speakers.

Our hypothesis was that participants would conceptualize time differently after being exposed to fictive motion language. Particularly, we hypothesized that participants would be more likely to adopt a more ego-moving perspective when exposed to fictive motion language and would be equally likely to adopt a time-moving or ego-moving perspective without being primed. The results of the experiment showed that a purely linguistic fictive motion prime had no effect on the temporal reasoning of Croatian speakers. The obtained results were explained in terms of the differences between English and Croatian and the respective speakers of both. While both languages employ structures from space to conceptualize time, the experiment showed that the relationship between the two domains appears to be different between languages in analogous conditions.

Overall, this points to the conclusion that the TIME IS SPACE metaphor, when it comes to fictive motion, is not as pervasive in Croatian as it is in English. The bond between the domains of time and space is weaker in Croatian than English. Although the domain of time borrows some of its structure from space both in language and conceptualization of Croatian speakers, it is relatively independent.

While there is a significant amount of experimental research in cognitive linguistics, more precisely research pertaining to conceptual metaphor theory and the TIME IS SPACE metaphor, there is still a lot to be achieved with comparative cross-linguistic research. Further research is needed to comprehensively probe into the boundaries and scope of the TIME IS SPACE metaphor within Croatian and other languages. Contrasting data between different families of languages and individual languages will provide basis for more refined conclusions that apply to general human conceptualization and its relationship to language as a shared human faculty.

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Appendix

NFM questionnaire

Pred Vama se nalazi nekoliko nizova riječi. Složite smislene rečenice koristeći zadane riječi te ih zapišite na predviđene linije.

1. ŠUMI PUT NALAZI U SE

2. IZMEĐU I POLICA KAMINA VRATA JE

3. SE SELU NALAZI U POTOK

4. OBALE JE AUTOCESTA PORED

5. LIVADE PORED GRANICA JE

Pred Vama se nalazi nekoliko kratkih pitanja. Molim Vas da na crtu ispod svakog pitanja upišete svoj odgovor. Odgovarajte čim brže bez puno razmišljanja.

1. Sastanak se trebao održati sljedeću srijedu, ali je pomaknut naprijed za dva dana. Koji dan će se održati sastanak?

2. Ako zgrada ima 5 katova, a na svakom katu se nalaze po dva stana, koliko stanova ima u zgradi?

3. Autobus koji obično dolazi na stanicu svaki dan u 13 h je pomaknut 15 minuta naprijed. U koje vrijeme sada dolazi autobus?

4. U prvom dućanu vidjeli ste majicu koja košta 100 kn, no snižena je za 50 %. U drugom dućanu vidjeli ste majicu koja košta 80 kn, no snižena je za 25%. Koja majica je jeftinija?

5. Otvaranje izložbe zakazano za 17. ožujka pomaknuto je tri dana naprijed. Na koji je datum sada otvaranje izložbe?

6. Plan za dovršetak gradnje novog nebodera je rujan 2020. godina. Međutim, zbog vanjskih okolnosti investitori su morali pomaknuti plan mjesec dana naprijed. Kada se po novom planu treba dovršiti gradnja nebodera?

7. Ako jedna bočica vode sadrži pola litre tekućine, koliko litara sadrži pet takvih bočica?

8. Međunarodna smotra folklora održava se svake dvije godine. Iduća smotra trebala se održati 2018., no zbog poklapanja s drugim događajem, organizatori su iduću smotru pomaknuli godinu dana naprijed. Koje godine će se održati iduća smotra?

FM questionnaire

Pred Vama se nalazi nekoliko nizova riječi. Složite smislene rečenice koristeći zadane riječi te ih zapišite na predviđene linije.

1. KROZ PUT ŠUMU VODI

2. OD PROLAZI POLICA KAMINA VRATA DO

3. CIJELO KROZ TEČE SELO POTOK

4. UZ PROLAZI OBALU AUTOCESTA

5. LIVADE GRANICA DUŽ VODI

Pred Vama se nalazi nekoliko kratkih pitanja. Molim Vas da na crtu ispod svakog pitanja upišete svoj odgovor. Odgovarajte čim brže bez puno razmišljanja.

1. Sastanak se trebao održati sljedeću srijedu, ali je pomaknut naprijed za dva dana. Koji dan će se održati sastanak?

2. Ako zgrada ima 5 katova, a na svakom katu se nalaze po dva stana, koliko stanova ima u zgradi?

3. Autobus koji obično dolazi na stanicu svaki dan u 13 h je pomaknut 15 minuta naprijed. U koje vrijeme sada dolazi autobus?

4. U prvom dućanu vidjeli ste majicu koja košta 100 kn, no snižena je za 50 %. U drugom dućanu vidjeli ste majicu koja košta 80 kn, no snižena je za 25%. Koja majica je jeftinija?

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