

Treating time as space in Polish: Metaphors and metaphorical expressions

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Abstract

Situating itself within the long-standing tradition of conceptual metaphor studies, the present paper seeks to analyze the means through which Polish exhibits linguistic manifestations of the conceptual metaphor TIME IS SPACE. From the Polish National Corpus, selected metaphorical expressions are retrieved and analyzed, taking into consideration their frequency, collocative environment and semantic scope. The results indicate that the metaphorical variations of TIME IS SPACE in Polish align with the variations in spatial conceptualization and employ similar linguistic tools, such as prepositions and cases. The level of productivity and conventionalization of the metaphor in question speaks to its prominent role within the Polish conceptual system.

Keywords

conceptual metaphor, corpus linguistics, metaphors of time, Polish linguistics

Traktowanie czasu jako przestrzeni w języku polskim: Metafory i wyrażenia metaforyczne

Abstrakt

Wpisując się w wieloletnią tradycję badań nad metaforą pojęciową, niniejszy artykuł ma na celu analizę środków, za pomocą których język polski buduje językowe wyrażenia metafory pojęciowej CZAS TO PRZESTRZEŃ. Za pomocą narzędzi Narodowego Korpusu Polskiego, przeanalizowano wybrane wyrażenia metaforyczne, z uwzględnieniem ich częstotliwości, kontekstów i zakresu semantycznego. Rezultaty wskazują, że metaforyczna różnorodność wyrażenia CZAS TO PRZESTRZEŃ w języku polskim odpowiada różnorodności konceptualizacji przestrzennej i wykorzystuje analogiczne środki językowe, takie jak przyimki i przypadki. Poziom produktywności i skonwencjonalizowania omawianej metafory świadczy o jej znaczącej roli w polskim systemie pojęciowym.

Słowa kluczowe

metafora pojęciowa, badanie korpusowe, metafory czasu, językoznawstwo polskie

1. Introduction

Human society is structured around many fundamentally abstract concepts, one of the most prominent of which is the idea of time. Temporality organizes and, in turn, determines many of the social and personal experiences across different cultures around the world (for further elaboration on the social functions of time see: Adam 1995, Hallowell 1937, Luhmann 1976). To think and talk about time in a manner that reflects the scope of subjective perceptions of temporality without using metaphor is difficult, which is why there exists a plurality of languages that employ a range of different conceptualizations, such as TIME IS MONEY (Lakoff and Johnson 1980, Johansson 2007, Mueller 2016) or TIME IS A CHANGER (Piata and Pagán Cánovas 2017, Golfam, Ghorbanpour and Mahdipour 2019). The precise

reason why such a difficulty should arise is subject to debate, with Lakoff (1993) suggesting that its explanation lies in the lack of a temporal sensory device in the human body: a claim which is refuted by Evans (2004), who in turn highlights the neurological evidence of temporal subjectivity embedded in the embodied experience. However, the experimental psycho-physical research conducted by Casasanto and Boroditsky (2008) suggests that the metaphorical transfer of concepts between the spatial and the temporal domain does contribute to the general human cognitive system.

Whatever the roots of this temporal metaphoricity may be, different linguistic communities form diverging conceptual paths toward the imaging of time (Radden 2004, Kövecses 2006, Máthé 2021, Chen 2014, Reali and Lleras 2017, Pamies-Bertrán and Yuan 2020, Khatin-Zadeh, Banaruee, Reali et al. 2023). In light of this fact, the importance of a thorough description of such metaphorical expressions cannot be understated, as it is an indispensable tool for the exploration of the potential embodied systematicity of language, and in turn thought across cultures. Integral to this path of inquiry is examining languages whose speakers, beyond accessing the superordinate TIME IS SPACE metaphor, also use a variety of submetaphors. One of such languages is Polish with its metaphor CZAS TO PRZESTRZEŃ, which the present paper aims to characterize in order to discern the kinds of dominant cognitive strategies of conceptualizing temporality employed by Polish speakers.

The metaphor in question entails a robust set of submetaphors, covering all of which is an impossible task due to its cognitive productivity. It is therefore necessary to restrict the inquiry to the most frequent and conventionalized submetaphors. The analysis below will primarily focus on the following:

- TIME IS A CONTAINER
- SOON IS NEAR
- DURATION IS MOVEMENT THROUGH SPACE
- THE FUTURE IS A SURFACE YOU CAN PLACE OBJECTS ON
- THE NIGHT IS A SPACE TO BE WALKED UPON

- THE PAST IS AN ABYSS
- FORSEEABLE EVENTS ARE DOWN
- THE EVENING IS ABOVE A SURFACE etc.
- THE MORNING IS BELOW A SURFACE etc.

2. Theoretical background

The exact character of temporal metaphors has been subject to many intellectual investigations utilizing the general framework of analysis known as the Conceptual Metaphor Theory, pioneered by Lakoff and Johnson (1980). The development of CMT marks a break with the previous tradition, wherein the study of metaphor was confined to the domain of poetic inquiries (Johnson 1981). A conceptual metaphor, as Deignan (2008: 14) maintains, is a mode of thinking, functioning within the mind, rather than a purely linguistic phenomenon. While linguistic evidence of conceptual metaphor abounds, most speakers do not pay attention to its roots, which can perhaps be interpreted as testimony of the depth of the conceptual metaphor's entrapment within the human cognitive device (Lakoff and Turner 1989, Kövecses 2010).

The structure of conceptual metaphor is based on a cognitive mapping of concepts from two different domains, traditionally referred to as the *source* and the *target* domains; with the latter used to describe the object understood and conceptualized through the domain of the former (Lakoff and Turner 1989). It is possible to point to a general directional tendency of cross-domain mappings originating from a physical, sensory-dependent source towards a more abstract target (Gibbs 1996: 311, Deignan 2008: 17). An analysis of spatial metaphors of time may be aided by the theory of image schemata (Langacker 1982, 1987, Lakoff 1987, Johnson 1987), which are "recurring, dynamic patterns of our perceptual interactions and motor programs that give coherence and structure to our experience" (Johnson 1987: 14). In other words, the linguistic expressions of temporality should be considered in relation to the deeply

ingrained gestalt image patterns and their connection with the conceptual metaphors in the speakers' minds.

This study investigates one of such metaphors, the TIME IS SPACE metaphor, which appears to be a way of conceptualizing temporal events across many languages, with relational links between the two domains (Boroditsky 2000). For the purposes of the present paper, spatial relations will be primarily defined as the directly perceived static or dynamic orientational positioning of an object relative to another object or a geometrically defined landmark. This means that metaphors such as MOVING OBSERVER and MOVING TIME (Lakoff and Johnson 1980: 42) were also included in the dataset of TIME IS SPACE.

The particular focus on Polish metaphorical linguistic phenomena has been previously taken up by a number of researchers, who investigated metaphors of computers (Zabawa 2018), metaphors from the Polish political discourse (Gieroń-Czepczor 2013), and metaphors related to the European Union (Zbierska-Sawala 2004), among many others. The way Polish temporal utterances reveal different conceptualizations of space has also been investigated by scholars such as Dąbrowska (1996), Kochańska (1996), Bacz (1997) and Stanulewicz (2010).

3. Methodology

The following analysis of how Polish utilizes this metaphor seeks to explore the question of potentially systematic characteristics of metaphorical temporal conceptualization. Given the relatively small size of the body of literature based on Polish spatio-temporal conceptual metaphors, the following examples were compiled with the aid of the balanced 300 million-segment National Corpus of the Polish Language (*Narodowy Korpus Języka Polskiego*, later referred to as NKJP) (Górski and Łaziński 2012: 33), employing the PELCRA search engine (Pęzik 2012: 253).

The data was based on items that form a balanced corpus and include inflectional variability in instances where the application of the lemma setting was possible. Data searches were

generally set to a maximum word span of two. There were environments where these rules were adjusted in an effort to produce a more metaphorical sample of items, such as in (12a) and (12b), which required the omission of all collocations with the words *patrzeć* ‘to see’, *na dół* ‘downwards’, *traktować* ‘to treat’, as well as no additional distance between the preposition *z* and the noun *góry*. The aforementioned adjustments proved necessary in eradicating utterances based on non-temporal metaphor and physical experience meanings. The corpus searches were conducted in a manner that prioritized the elimination of irrelevant data and guided by the searches based on items from the target domain of the analyzed metaphor.

4. Analysis

4.1. The metaphor TIME IS A CONTAINER

According to Przybylska (2002: 205), the preposition *w* ‘in’ is the most frequent of all prepositions found in the Polish language. It is therefore not surprising that it also forms the most frequently listed spatial metaphorical expression in the NKJP, with time being conceptualized as a CONTAINER (Przybylska 2002: 231). Some of the most common nominal collocations of the preposition *w* include the words *dekada* ‘decade’, *rok* ‘year’, *miesiąc* ‘month’, *dzień* ‘day’, *noc* ‘night’, *godzina* ‘hour’ and *minuta* ‘minute’. The most frequent (per both T-Score and Z-Score) collocate is *rok* ‘year’, but all of the seven aforementioned nouns are used often (Table 1).

Table 1

Expressions exemplifying the metaphor TIME IS A CONTAINER

Expression	Mutual Information	T-Score	Z-Score
w + dekada (decade): <i>w dekadę</i> 'in a decade'	4.447	30.830	144.003
w + rok (year): <i>w rok</i> 'in a year'	4.517	413.605	1 979.412
w + miesiąc (month): <i>w miesiąc</i> 'in a month'	3.352	102.082	326.214
w + dzień (day): <i>w dzień</i> 'in a day'	3.880	211.459	811.337
w + noc (night): <i>w nocy</i> 'at night'	4.779	133.346	698.629
w + godzina (hour): <i>w godzinę</i> 'in an hour'	3.036	85.547	245.031
w + minuta (minute): <i>w minutę</i> 'in a minute'	3.645	78.947	279.192

What may prove to be of particular interest is that the CONTAINER image schema supplied by this metaphor appears in two forms in Polish: a dynamic form and a static form. The distinction is marked by the different case endings: the accusative and the locative, respectively.

The two patterns occur in mutually exclusive semantic environments when paired with proper nouns and specific temporal markers. Thus, one would talk about year dates and names of the month by using a static metaphor of events inside a time-container:

- (1)(a) Nieoczekiwanie, w roku 1879, po wojnie z Turkami, porzucił karierę wojskową [...]¹

¹ All corpus-based examples are provided according to their original spelling and punctuation, and followed by a literal and non-literal English translation.

‘Unexpectedly, in the year of 1879 , after the war with the Turks, he gave up his military career [...]’

(Marek Krajewski, 2003, *Koniec świata w Breslau*, WAB)

(1)(b) W styczniu 1944 r. otrzymałem list [...]

‘In January 1944, I received a letter [...]’

(Teresa Torańska, 1985, *Oni*, Świat Książki)

However, references built upon the names of the week, or the times of day and night utilize a conceptual structure that assumes that events are put into a time container, a pattern established via the usage of the accusative noun form:

(2)(a) W poniedziałek listonosz przyniósł mi list [...]

‘On Monday, the postman brought me a letter [...]’

(Sławomir Mrożek, 1965, *Opowiadania 1960-1965*, Noir sur Blanc)

(2)(b) Zawsze w południe go widzisz.

‘You always see him at noon.’

(Andrzej Stasiuk, 1955, *Opowieści galicyjskie*, Znak)

This rigid structural divide does not find full application in instances of durational references to non-specific temporal markers amounting to a duration between a second and an hour, where both the accusative and the locative noun forms may appear. However, there does appear to be a set of possible contrastive semantic environments, according to which Polish speakers show preference for a given conceptualization. One of such cases to take into consideration may be the application of this metaphor with the singular noun for minute; while *w minucie* (the locative form) appears in many different semantic contexts (see: 3a), its major collocative pairings are related to sports (*bramka* – 2030, *mecz* – 339, *gol* – 187):

(3)(a) W minucie na pewno się zmieszczę.

‘A minute is going to be enough for me.’

(Biuro Administracyjne Kancelarii Senatu RP, *Sprawozdanie z 39. Posiedzenia Senatu RP w dniu 7 maja 2003 r.*)

- (3)(b) W 64 minucie Grunwald mógł zdobyć bramkę.
 'During the 64th minute, Grunwald could have scored a goal.'
 (Tomasz Hucal, 2000, *II liga: Grunwald – Polar 1:2 Polar odetchnął*, Gazeta Wrocławska 18/01)
- (3)(c) Iwan opuścił boisko w 70 minucie [...]
 'Iwan left the football court during the 70th minute [...]'
 (*Metropol* nr 9/04, 2001)

This is not true in relation to the accusative form of the discussed noun, the major collocations of which are not necessarily connected with any one particular semantic domain:

- (4)(a) W minutę jestem na placu Villa Fiorelli.
 'In a minute I am in the Villa Fiorelli square.'
 (Tadeusz Breza, 1960, *Urząd*, PIW)
- (4)(b) W minutę później otrzymał odpowiedź [...]
 'In a minute he received an answer [...]'
 (Edmund Nizurski, 1954, *Księga urwisów*, WK Agencja)

The Accusative-Locative realization divide is further complicated by the irregularity of the lexicalized markers of the times of day (see: 13a and 13b). However, if one were to draw a generalized pattern, there is a strong tendency for Polish to utilize dynamic conceptualizations in more immediate temporal contexts, such as references to the days of the week, and more static ones for longer lasting periods, such as names of the months or years.

It is worth mentioning that dynamic conceptualizations of time are also common outside of the TIME IS A CONTAINER metaphor. Polish generally allows for linguistic manifestations of both MOVING TIME and MOVING OBSERVER metaphors in a manner similar to the English examples considered by Lakoff and Johnson (1980: 42), where the figure conceptualized as undergoing relative movement is either the deictic ego or time itself. The exact ratio of appearances of the two possible general dynamic scenarios may prove to be fertile ground for future research.

4.2. The metaphor SOON IS NEAR

Spatial relations in the Polish language are mostly established through prepositions (and the accompanying cases). This tendency is carried over to metaphorical expressions in the treatment of time as space. However, there are also linguistic manifestations of TIME IS SPACE that do not employ prepositions. The most frequent of such non-prepositional expressions in the NKJP is rooted in the conceptual metaphor SOON IS NEAR:

- (5)(a) W najbliższą niedzielę jedziemy do Aburatsubo [...]

‘Next Sunday, we’re going to Aburatsubo [...]’

(Andrzej Urbańczyk, 1985, *Dziękuję ci, Pacyfiku*, Muza)
- (5)(b) Nie planujemy też w najbliższym czasie ślubu.

‘We’re also not making any short-term plans of marriage.’

(Kinga Dunin, 1998, *Tabu*, W.A.B)
- (5)(c) W najbliższych dniach kupimy trzecie.

‘In the upcoming days we will buy a third one.’

(Anna Bojarska, Maria Bojarska, 1996, *Siostry B., Twój Styl*)

A particularly relevant feature of the Polish linguistic realization of the discussed metaphor is the predominant usage of the superlative form of the adjective *najbliższy* ‘nearest’. Its basic form (*bliski* – ‘near’) does appear in the NKJP corpus, but much less frequently (Table 2).

Table 2

Collocation strength of expressions related to SOON IS NEAR

Measure	najbliższy + przyszłość (‘nearest + future’)	bliski + przyszłość (‘near + future’)
Mutual Information	8.429	5.269
T-Score	32.463	9.241
Z-Score	602.652	57.378

This could suggest that the broader range of approaching future events is conceptualized as deictically near, and the speakers use the superlative to more precisely specify the immediacy of their temporal references.

4.3. Durational metaphors

Expressions of duration in Polish tend to build on the preposition *przez*, denoting a movement *through* space:

- (6)(a) Na razie będę spał przez cały tydzień [...]

‘For now, I will be sleeping for the week [...]’
 (Henryk Worcell 1936, *Zakłete rewiry*, Dolnośląskie)
- (6)(b) Tak powinno być jeszcze przez jakiś czas [...]

‘It should remain so for some time [...]’
 (Józef Banaszak, 2008, *Czas nie przeszedł obok*, Oficyna Wydawnicza Branta)

The vast majority of collocative relationships that the phrases in (6a) and (6b) form with verbs are based on the imperfective aspect of verbs, which marks a given situation as not completed, yet to be finalized (Sadowska 2012: 311). The imperfective aspect may therefore be connected to the transitory nature of the metaphor of DURATION IS MOVEMENT THROUGH SPACE, which highlights the act of advancing through a given temporal space (duration), rather than arriving at a specific temporal destination (point in time).

4.4. Metaphors of future plans

The preposition *na* in isolation can be translated as both *on* and *onto* (the latter signifying an event involving movement). In this case, however, the temporal nouns which collocate with *na* appear in their accusative form, thus constituting a dynamic schema (*onto*) often paired with the verb *przełożyć* (to move something from one place onto another surface):

- (7)(a) czy dużo zadano na poniedziałek
 ‘if there were a lot of assignments for Monday’
 (Jan Parandowski, 1936, *Niebo w płomieniach*, Czytelnik)
- (7)(b) można by s przełożyć to seminarium na wtorek
 ‘the seminar could be postponed to Tuesday’
 (Rozmowa o sile oraz innych zagadnieniach, PELCRA)

This conceptualization of the future in Polish may therefore be described as realizing a metaphor of THE FUTURE IS A SURFACE YOU CAN PLACE OBJECTS ON.

Przybylska (2002: 295) suggests that metaphorical expressions that pair *na* with the locative inflectional endings are related to peripheral, outermost part of a temporalized space. Examples of such usage found in the NKJP include instances where *na* collocates with nouns such as *koniec* ‘end’, *przełom* ‘turning point’, or *początek* ‘beginning’:

- (7)(c) Tak samo wyglądały na początku, tak samo będą wyglądać na końcu
 ‘They looked the same at the beginning, they’ll look the same at the end’
 (Olga Tokarczuk, 1996, *Prawiek i inne czasy*, W.A.B.)

4.5. The metaphor NIGHT IS A SPACE TO BE WALKED UPON

In Polish, repeated events set at night acquire spatial prepositions referencing a two-dimensional movement on a temporal surface. This metaphor is only manifested in linguistic expressions with the plural form of the noun *noc*, thus remaining in contrast with the phrase *w nocy*, which always includes a singular noun:

- (8)(a) Już przed wojną śniła się Pawełkowi po nocach.
 ‘Even before the war, Pawełek would dream of her at night.’
 (Andrzej Szczypiorski, 1986, *Początek*, Kantor Wydawniczy SAWW)

- (8)(b) Dziś w nocy śniły mi się psy.
 'I dreamt about dogs last night.'
 (Stanisław Kowalewski, 1961, *Czarne okna*, Siedmioróg)

It is worth noting that the metaphorical expression in the (8b) occurs almost 18 times more frequently than the one in (8a) and may also be implemented in contexts denoting repetitiveness. The NIGHT IS A SURFACE TO BE WALKED UPON metaphor has stronger collocations connected with undesirable behaviors such as *płakać* 'to cry' or *hałasować* 'to make loud noise', as opposed to primarily neutral collocative verbs accompanying the NIGHT IS A CONTAINER metaphor, for example: *obudzić* 'to wake' or *spać* 'to sleep'. The former may highlight the repetition aspect of a given action, which perhaps in the context of nocturnal events Polish speakers most often connect with negative associations.

4.6. The metaphor THE PAST IS AN ABYSS

A spatial image that can be attributed to the Polish metaphorical conceptualizations is one that can be broadly described as THE PAST IS IN AN ABYSS. The context of this metaphor's primary occurrence is that of events from a distant past, which is highlighted through the image of visually impenetrable vastness, thus utilizing the SEEING IS KNOWING metaphor as well. History (and the past that is perceived as historical, or distant) is therefore conceptualized as a temporal state so far removed from the current state of things, that it disappears in an *otchłań* 'an abyss, a void':

- (9)(a) [...] w procesie stworzonym przez przyrodę, gdzieś w otchłaniach czasu.
 '[...] in a process created by nature in the midst of time.'
 (Maciej Kuczyński, 2005, *Podróż*, Wydawnictwo Kos)

- (9)(b) Jak od ciemnych otchłani wspólnej historii przejść do wspólnego porządku wolności?
 'How to move on from the shared dark pages of history towards a common order of freedom?'
 (1994, *Cieężar jedności*, in: *Gazeta Wyborcza*, Agora)

It is worth noting that this particular expression can be characterized as one of low frequency in comparison to preposition-based manifestations of metaphors such as TIME IS A CONTAINER. This attests to a relatively lower level of conventionalization.

4.7. "In the space of" constructions

Perhaps the most noticeable TIME IS SPACE mapping in Polish is that which is manifested through the direct usage of the phrase *in the space of* and followed by a given temporal unit:

- (10)(a) Akcja filmu rozgrywa się na przestrzeni kilkudziesięciu lat.
 'The plot of the film unfolds over the course of dozens of years.'
 (2001, *Zagmatwane losy przyjaciół*, in: *Metropol* no. 19/02)
- (10)(b) [...] trenerów zespołów ekstraklasy, którzy na przestrzeni kilkunastu godzin stracili posady .
 '[...] of the Premier League coaches who lost their jobs in the space of a couple of hours.'
 (2010, *W Wiśle Kraków, Legii Warszawa skończyła się cierpliwość*, in: *Gazeta Pomorska*)

This expression, while literally rooted in spatial meanings, appears to be more frequent in a temporal context than in a spatial one. For example, all of the inflected forms of the noun *kilometr* 'kilometer' only appear 64 times in the NKJP following the phrase *na przestrzeni* 'in the space of'. Contrastively, the inflected forms of the noun *rok* 'year' appear as many as 1042 times in this position.

4.8. Metaphors of change

To express the ability to undergo change alongside subsequent changes to one's broad environment, Polish deploys a prepositional phrase that exemplifies the TIME IS SPACE metaphor without the image of movement:

- (11)(a) Kościół musi iść z duchem czasu albo stanie się anachroniczną instytucją
 'The Church needs to keep up with the time, or it'll become an anachronistic institution'
 (Maria Nurowska, 2009, *Niemiecki taniec*, W.A.B.)

In (11b) the phrase *na czasie* is meant to indicate that something is in line with the fashions and trends of the present. No symmetrical expression of being out of fashion or not aware of what is in fashion exists in Polish. The speakers seem to instead directly negate the aforementioned phrase:

- (11)(b) Dziewczyny uswiadomcie mnie jak wygląda sukienka typu bombka bo ja jestem w sprawach mody troche nie na czasie
 'Girls, explain to me what a bauble dress looks like, because I'm not entirely up to date with the world of fashion'
 (User Tangerine, 2005, *Sukienka Na Studniówkę, studniówka*, Forumowisko.pl)

4.9. Metaphors of foreseeable events

Following Lakoff and Johnson (1980), FORSEEABLE FUTURE EVENTS ARE UP is a metaphor rooted in the physical experience of observing an incoming object within the subject's field of vision. With the shortening of the distance between the aforementioned subject and object, the object visually appears to grow in height. This metaphor can be observed through expressions that appear, for example, in languages like English, such as: "I'm afraid of what's up ahead of us" (Lakoff and Johnson 1980).

Polish employs a different deictically centered metaphor, which presupposes the subject's positioning *above* the foreseeable event:

- (12)(a) Od samego początku Północny realizował z góry obmyślony plan.

'Północny was executing a plan that was devised in advance.'

(Mariusz Sieniewicz, 2003, *Czwarte niebo*, W.A.B.)

- (12)(b) [...] z góry zakłada, że parlament będzie znajdował się w opozycji do prezydenta [...]

'[...] assumes in advance that the Parliament will be in opposition to the President [...]

(Piotr Kozarzewski, 1994, *Dokąd zmierza Rosja*, In: *Gazeta Wyborcza*)

This particular metaphor highlights the ability to predict a future event through the mapping of a physical experience of looking from up above at an easily visible terrain, into which the observer is advancing. Being able to see is conceptualized as being able to predict or know via the SEEING IS KNOWING perceptual metaphor. The foreseeability of a given event is thus facilitated by the act of approaching something *z góry*, from up above.

4.10. The metaphors THE EVENING IS ABOVE A SURFACE and THE MORNING IS BELOW A SURFACE

A Polish set of expressions worth considering is one used in reference to approaching the evening or morning hours:

- (13)(a) Pod wieczór już tak nie bolało [...]

'By the evening, it didn't hurt so much [...]

(Igor Newerly, 1952, *Pamiętka z Celulozy*, Czytelnik)

- (13)(b) Nad ranem mężczyźni wrócili z jakimiś ludźmi.

'Early in the morning, the men returned with some people.'

(Olga Tokarczuk, 1996, *Prawiek i inne czasy*, W.A.B.)

As evidenced by (13a) and (13b), the presence of these expressions – *pod wieczór*, lit. under evening-ACC, and *nad ranem*, lit. above morning-INST – in Polish points to the opposing orientational metaphors of time. While the evening is near, the events and the subject are placed below it, as opposed to being situated above the morning in the hours preceding it.

A possible physical explanation of the discussed contrast could be found in relation to the visible astronomical bodies culturally connected with day and night: that is, the Sun and the Moon, respectively. As midnight approaches, the most prominent feature of the prototypical sky is the Moon, seen above the position of the observer, who is thus situated *below the evening*. On the other hand, dawn is preceded by sunrise, the visual perception of the Sun rising. Anticipating the event in question, the observer might mark their temporal position as above the sun, or *above the morning*. This recurring experience could potentially function as a physical explanation for the presence of the two opposing metaphors mentioned beforehand. Elaborating upon the accuracy of this hypothetical experiential explanation would necessitate conducting further research which falls outside the purview of this paper.

5. Discussion

The presented corpus data stands as evidence that there is internal variety within one metaphorical mode of conceptualization. This implies a high level of productivity of the conceptual metaphor TIME IS SPACE, which, as predicted by Clausner and Croft (1997), in turn relates to its high conventionalization. Although the overall discussed type of metaphorical expression is undoubtedly very frequently used among Polish speakers, the individual submetaphors vary in their frequency. For instance, the phrase listed in (9a) only appears in the NKJP 34 times, while the one in (2a) is listed 12,286 times.

It may prove worthwhile to discuss the individual temporal submetaphors which are most often accessed by speakers. The most frequent metaphor in Polish is TIME IS A CONTAINER, which can be divided into two separate schemata: a dynamic schema (2a) or a static schema (1a), marked by using either the accusative or locative inflectional morpheme, respectively. The two schemata appear in mutually exclusive collocative pairings. Perhaps the reason for this could be the difference in the level of abstraction, given the fact that a smaller time unit may be easier to access on a cognitive level. This could be connected with the way that the knowledge of different units of conventionalized time is acquired at different stages of cognitive development (Friedman 1978). Alternatively, the shared division may result from the fact that days of the week are entirely rooted in social convention, whereas months and years constitute experiential cycles. Another possible reason may be the frequency of everyday spoken usage: references to days and weeks constitute a more immediate mode of temporal organization than references to years, hence their greater utility in organizing the everyday experience.

To elaborate further on the most frequent metaphors, spatial metaphors of time are most often manifested in prepositional phrases, which reflects the linguistic patterns associated with space. For example, the most frequent of such Polish phrases – (1a) – appears 187,046 times in the balanced corpus, while the most frequent non-prepositional metaphorical phrase (*mieć czas* ‘to have time’, rooted in TIME IS MONEY) is only listed 11,530 times. There is, therefore, a tendency to follow linguistic patterns connected with expressing concepts from the source domain while referring to the target domain, a fact which suggests that conceptual metaphors manifest not just in the speakers’ choice of lexical items, but also in their choice of grammatical categories.

Furthermore, some metaphorical expressions appear to be conventionalized to a degree that their frequency of use is greater than that of their literal, spatial counterparts, as is

evidenced by (10a). This example showcases a deictically anchored SOON IS NEAR metaphor, through which the speakers conceptualize upcoming events as physically close to them. The NKJP corpus shows that the primary manner of expressing this is the usage of the superlative form of the adjective *bliski* ('near'). Thus, a graded conceptualization of space, and in turn time, is implied, which creates the need for a reference to a more specific restriction.

The TIME IS SPACE metaphor is also often co-activated with other cognitive metaphors. The schema from (11a), for example, demonstrates the manner in which Polish linguistic expressions may manifest both the discussed orientational metaphor of time, and the experiential KNOWING IS SEEING metaphor simultaneously. Similarly, Stanulewicz (2010) points out that the Polish prepositions *przed* (before) and *za* (after, behind) activate at least four conceptual metaphors in reference to events of the past and future (two of which overlap with the ones in 12a). This speaks to the fact that the analyzed metaphor is not always found in isolation, a feature that Polish speakers seem to exploit often.

6. Concluding remarks

In analyzing Polish conceptual metaphors of time, TIME IS SPACE is not only of particular interest because of its prevalence, but also due to the fact that it is found in connection with a variety of submetaphors. This rich internal diversity may be rooted in the metaphor's productivity, level of conventionalization, and the diversity of linguistic tools usually used to describe concepts the source domain. The individual metaphorical expressions vary in their frequency, the other accompanying co-activated metaphors and the categories of the words they select. The most commonly utilized conceptual metaphor – TIME IS A CONTAINER – further varies in its selection of either the accusative or the locative case.

The preceding findings might be worth contextualizing through a comparative cross-linguistic analysis, especially one with a focus on languages from culturally distant regions. This could illuminate the extent of universality and individual specification of the Polish spatio-temporal expressions found in the NKJP. It may also be worthwhile to pursue a further quantitative analysis of other temporal metaphors expressed in Polish, as it might demonstrate the specific role and significance of TIME IS SPACE within the cognitive system of the speakers.

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Corpus

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