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Inesa Šeškauskienė Vilnius University

Eglė Žilinskaitė-Šinkūnienė Vilnius University

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INESA ŠEŠKAUSKIENĖ Vilnius University

EGLĖ ŽILINSKAITĖ-ŠINKŪNIENĖ Vilnius University

### ON THE POLYSEMY OF THE LITHUANIAN Už. A Cognitive Perspective

ABSTRACT: Adhering to the principle of motivated polysemy, this paper sets out to demonstrate how the principle works in interpreting numerous senses of the Lithuanian preposition už 'behind, beyond'. The present investigation relies on the cognitive linguistic framework employed, first of all, by Lakoff (1987); Langacker (1987); Talmy (2000); Tyler & Evans (2003); Tyler (2012), who mainly worked on English, and such linguists as Tabakowska (2003, 2010) and Shakhova & Tyler (2010), who attempted to investigate inflecting languages, such as Polish and Russian. Based on such semantic principles as types of Figure and Ground, their relationship (geometric, functional, etc.), contextual clues and pattern of usage, etc., the present paper demonstrates that the polysemy of už used with two cases, Genitive and Accusative, is not an array of arbitrary senses, but rather a motivated network. It posits a central sense of  $u\check{z}$  based on Figure located in the back region of Ground. All other senses, namely, those of function, control, obstacle, sequential location, hiding and covering, boundary or border, spatial distance, temporal distance, quality distance, replacement, retribution and remuneration, and benefactive, are directly or indirectly derived from the central sense.

#### 1. INTRODUCTION. MAIN PRINCIPLES OF PREPOSITIONAL SEMANTICS

During the last decades, space and spatial relations have generated an enormous amount of interest as seen in numerous publications in different fields, especially in the cognitive framework. Linguists are no exception in this respect. When dealing with space, they often have focused on "small" words, or closed-class forms, such as prepositions, whose meanings are not so easy to define. However, such words perform a crucial role in organizing conceptual content. As rightly pointed out by Talmy,

"(...) the closed-class forms of a language taken together represent a skeletal conceptual microcosm. Moreover, this microcosm may have the fundamental role of acting as an organizing structure for further conceptual material (including that expressed by the open-class elements) as if it were a framework that the further material is shaped around or draped over." (Talmy 2000, p. 179)

Elements of the "skeletal conceptual microcosm", such as prepositions, pose a number of problems from the semantic point of view. One of them is concerned with a rather abstract prepositional meaning, which is very different from the meaning of open-class elements such as nouns or verbs. Another problematic issue, frequently discussed in many papers, refers to extensive prepositional polysemy, which varies across languages resulting in numerous language-specific idiosyncrasies. The treatment of prepositional polysemy has been largely controversial with some, usually more traditional, researchers focusing on clearly delineated arbitrary senses, while those working within a cognitive framework emphasize motivated polysemy (cf. Talmy 2000; Regier 1996; Tyler & Evans 2003; Tabakowska 2010, among others). Motivation in the cognitive linguistic framework is mainly understood as explainability of meaning (see, for example, Matlock 2004), where the mechanisms of explanation might in each case be rather different.

There has been ample evidence on the metaphoric motivation of prepositional meaning (see Lakoff & M. 1980/2003; Radden 1985; Taylor 1993; Haspelmath 1997, among others). For example, when we say *before the altar* and *before Christmas* (examples taken from Haspelmath

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1997, p. 6), in the first case we refer to spatial orientation of objects and in the second to their sequence in (temporal) space. The two meanings are related through the metaphor TIME IS SPACE. The idea that more abstract senses retain some aspects of the physical senses of a preposition has been proved by experimental evidence by Jamrozik & Gentner (2011). They focused on the prepositions in and on and established that in more abstract senses on and in retain the element of control; however, on is concerned with greater control than in. The finding accounts for the usage of very idiomatic expressions such as in love and on a roll. Such a process of abstraction is in line with the theory of grammaticalization, according to which, in the course of time, some more concrete semantic elements bleach out while some more abstract elements are retained in the (more) grammatical senses of the word (cf. Heine & Kuteva 2002). As claimed by Luraghi (2009, p. 140) in reference to cases, elements of another closed class, "one specific feature of the original meaning is magnified, with a gestalt effect". Interestingly, relational words, such as relational nouns and verbs, tend to more aptly develop and retain metaphorical meanings (cf. Jamrozik et al. 2013). Presumably, prepositions as relational words (or relational grams, as referred to by Svorou 2008) are also likely to more easily develop metaphorical meanings.

Further we will focus on the problem of prepositional polysemy; more precisely, on the overall organisation of (related) meanings of a preposition and the principles underlying this organisation. As already mentioned, in the cognitive linguistic view, it is generally agreed that multiple senses of a single word are arranged into a network, while there are different approaches as to what is considered the main, prototypical, sense and how other senses are rendered in relation to the main sense. Lakoff (1987) introduces the notion of a radial category and argues for the idea that "lexical items are natural categories of senses" (ibid., p. 418). Lakoff illustrates his approach by describing multiple meanings of the preposition over largely relying on Brugman's work (1981, discussed in Lakoff 1987, p. 418ff). Despite his attempts to analyse the types of elements of the spatial scene in detail, all together, and arranged into a coherent network of senses, it is not entirely clear how he decides upon one or another sense of over. As pointed out by Gries, in this approach "every usage event even minimally different from another constitutes a different sense" (2006, p. 59). Lakoff's approach is often criticized for relying on intuition-based analysis and on data generated by the linguist himself (ibid.; see also Sandra & Rice 1995). Such uncritical use of a polysemy model that results in too "fine-grained distinctions between related uses" in cognitivists' analyses is sometimes referred to as the *polysemy fallacy* by Sandra (1998; see also Tyler & Evans 2003, p. 38; Shakhova & Tyler 2010, p. 274).

Attempting to solve the problem, Tyler and Evans (2003; also see Tyler 2012) take a further step in this direction. They specifically focus on the multiplicity of senses of some English prepositions. Taking a more systematic approach, they suggest that the senses are derived from the primary, or central, sense following some well-established principles (Tyler & Evans 2003, p. 45; Tyler 2012, p. 132). On this approach, all senses are defined in reference to spatial scenes designating a relationship between Figure (more foregrounded element of the scene) and Ground (reference object, or more backgrounded element of the spatial scene)<sup>1</sup>, with the central sense being defined by reference to a proto, or central, spatial scene (Tyler & Evans 2003, p. 52; Tyler 2012, p. 133). Following this framework, usually referred to as the Principled Polysemy Model, each preposition posits its own conceptually salient spatial relation. It takes into consideration the relationships between Figure (also F) and Ground (also G) and/or between F and G and the viewer/conceptualizer, which are defined in terms of geometry (usually relying on such features as size, configuration, trajectory of movement of F and G, etc.), the function of F and/or G (e.g. he was standing at the stove can be accounted for by reference to the stove's immediate function of preparing food) or some more loosely interpreted function, such as warmth exerted by one of the objects, for example, a fireplace. The approach focuses on the idea that various meanings are derivable from the central scene and thus polysemy is accounted for in a principled, systematic way (Tyler & Evans 2003, p. 47; Tyler 2012, p. 133). The central scene, according to the authors of the Principled Polysemy Model, is determined on the basis of linguistic and empirical evidence. The linguistic evidence includes such criteria as earlier attested meaning, predominance in the semantic network, use in composite forms, etc. (for more details see Tyler & Evans 2003, p. 47). Following this approach, any meaning extension can be explained on the

basis of a usage-based model with reference to general cognitive principles, including real-world force dynamics, embodiment, metaphorical thinking, and different construal operations (Tyler 2012, p. 134).

English prepositions and multiple intricate space conceptualizations have spurred a large number of publications, particularly by researchers working within the cognitive framework. Other languages have been studied, usually with reference to English, for example, German (Durrel & Bree 1993; Bellavia 1996), French (Schepping 1991; Vandeloise 1991), Dutch (Cuyckens 1991; Geeraerts 1992), Italian (Taylor 1988), Russian (Maljar & Seliverstova 1998), Slovene (Lipovšek 2014), Russian and Polish (Cienki 1989), and Lithuanian (Šeškauskienė 2001, 2003, 2004, 2007). Many of them have focused on one or several meanings, physical versus non-physical meanings, etc. Despite multiple publications, inflecting languages have received much less attention. Especially scarce for such languages are more systemic accounts of prepositional polysemy. These languages seem to pose very specific problems, first of all, concerned with multiple nominal inflections, often expressing what in English is expressed by a preposition. Also, inflecting languages have rich derivational morphology (prefixes and suffixes) often correlating with prepositions in actual usage.

An attempt to apply the Principled Polysemy Model to the Russian data has been made by Shakhova & Tyler (2010). Their paper focuses on the Russian preposition za 'behind, beyond'. Like in some other languages, the preposition is used with two case forms: the Instrumental and the Accusative. Following Tyler and Evans's model (2003), Shakhova & Tyler (2010) attempt to define the primary sense based on the proto-scene, or the central scene, of za. As claimed by the authors and following Tyler & Evans (2003), it is established on the basis of three principles: examining the spatial configuration, examining sentences that use contrasting spatial particles, and taking into account the frequency in the polysemy network (Shakhova & Tyler 2010, p. 270). All or most of the other senses are derived from the proto-scene on the basis of several cognitive mechanisms, such as background and encyclopaedic knowledge, embodiment (cf. Johnson 2007), real world force dynamics (Talmy 2000), etc. Since the preposition is used with two different cases, the Instrumental and the Accusative, the authors demonstrate the Principled Polysemy Model on a single "shared" network and then offer a more detailed network for each case. Capturing a number of very important intricacies of the meaning of the preposition za, the authors have produced a coherent network demonstrating the polysemy of the preposition. The physical senses in the network are fairly consistently motivated and described; the abstract senses, even though posited in the network, are much less so. Their relationship to the physical senses often remains unexplained.

Shakhova & Tyler (2010) admit that the prefix za and the preposition za are semantically very close. However, they only focus on the analysis of the preposition. Another scholar Tabakowska (2003, 2010), working in the cognitive linguistic framework, demonstrates how the Polish preposition and the prefix za 'behind' can be integrated into a single network. It is criticised by a Polish scholar Pawelec (2009), who adheres to the view that the preposition should be treated separately from the prefix. Moreover, he claims that despite Tabakowska's very insightful analysis, her approach focuses too much on synchronic aspects, leaving out many elements of diachronic development, especially pertaining to the prefix za-. Pawelec adheres to the "cognitive diachrony" within synchrony" view. Polish prepositions are treated with no reference to prefixes in Przybylska's (2002) comprehensive research, where she treats za + Instr., za + Acc. and za + Gen. as three separate networks of meanings positing a very large number of senses/usage-types. Her treatment can hardly withstand the criticism of having resulted in too fine-grained a network, which has also been made against Lakoff's analysis of over (see Lakoff 1987 and the criticism in Tyler & Evans 2003).

Lithuanian prepositions have mostly been studied in the traditional framework focusing on distinct arbitrary senses (cf. Fraenkel 1929; DLKG 1997; Valiulytė 1998). Most linguists attempt to describe the prepositional meaning by first considering the case form the preposition occurs with. Thus  $u\check{z}$  is discussed in two patterns, since it governs two cases:  $u\check{z}$  + Genitive and  $u\check{z}$  + Accusative (DLKG 1997, p. 453).<sup>2</sup> In the *Lithuanian Grammar* (DLKG 1997), the different meanings of  $u\check{z}$  are listed according to this formal criterion by first enumerating the meanings of  $u\check{z}$  + Gen. and then giving  $u\check{z}$  + Acc. In dictionaries, an attempt is made to define the meanings more systematically. Thus in the *Dictionary of the Lithuanian Language* (LKŽ 2005) some semantic

criteria are employed to classify the meanings into different semantic groups:  $u\check{z}$  denoting space and time, expressing object relations and comparison. The list ends with the meanings of  $u\check{z}$  that can replace other prepositions. Despite a seeming comprehensiveness, the above approach is limited to the enumeration of distinct arbitrary senses with no explicit motivation given to the senses and their sequence. Moreover, some data in the LKŽ is rather archaic: there are meanings which are no longer used in contemporary Lithuanian or that only sporadically appear in certain dialects. The latter case can be illustrated by an utterance found in the LKŽ and registered in the district of Alytus in southern Lithuania below:

 Buv-o at-ej-ę dar už švies-os.
 Be-PST.3 PFV-go-PTCPACT.PST.NOM.PL still už light-GEN.SG 'They came when it was still light.'

In the example above,  $u\check{z}$  is used with the Genitive case and has the meaning 'during, when something happened or occurred'. However, no such sentence would ever be comprehended and adequately interpreted by a Lithuanian speaker nowadays, especially in big cities and by the younger generation.

Interestingly, the diachronic perspective and the etymology of the prepositional meaning have received more attention (cf. Fraenkel 1929; Endzelīns 1971; Schmalstieg 1987; Ambrazas 2006). Some researchers have described all the Lithuanian prepositions in the tradition of structural linguistics applying rigorous componential analyses (Kilius 1977, 1980) or focusing on a prescriptive perspective (especially Šukys 1998). Valiulytė (1998) concentrated on the synonymy of prepositions and in some cases provided some valuable insights into their semantic distribution and conceptualization. However, so far a more systemic cognitive approach to the polysemy of Lithuanian prepositions has not been consistently applied.

Therefore, the present paper attempts to fill in the niche and examine the polysemy of the Lithuanian preposition  $u\check{z}$  'behind, beyond' positing a network of semantically motivated senses. An attempt will be made to account for a link between concrete, physical, and abstract senses. In this paper, the link between  $u\check{z}$  as a preposition and a prefix is only taken into account when they co-occur together; no exhaustive description of the polysemous prefix  $u\check{z}$  - will be provided.

Before proceeding to the data, procedure, key notions, results and discussion of our investigation, we will briefly overview the origin of the preposition under study and discuss the prototypical semantics of the two cases.

#### 2. THE ORIGIN OF UŽ. THE GENITIVE AND THE ACCUSATIVE

As seen in the diachronic accounts of the preposition (Zinkevičius 1981, p. 189; Ambrazas 2006, p. 294; also cf. Endzelīns 1971, pp. 319-330, 409-413; Endzelīns 1951, paras 497-500; Fraenkel 1929, pp. 166–174); the present-day Lithuanian  $u\check{z}$  with two cases has actually developed from two prepositions:  $a\check{z}u + Gen$ . ir  $u\check{z} + Acc$ . The first,  $a\check{z}u$  + Gen., was derived from the Indo-European \* $\hat{g}h\bar{o}$  'behind, under'. Originally, it was associated with the meaning of locating object A 'behind, on the other side of object B'. Its cognates are identifiable in present-day Latvian (aiz 'behind', also az in Latvian dialects) and Russian (za 'behind'). The other preposition,  $u\check{z} + Acc.$ , was derived from the Indo-European  $*\bar{u}d/\bar{u}d$  'up, on' and was used to denote movement towards and onto an object; cf. Old Church Slavonic v z 'upward, onto, for, in exchange for' and Latvian uz 'on, towards'. The presentday Lithuanian preposition  $u\check{z}$  + Gen./Acc., however, has eventually merged the forms of the two Old Lithuanian prepositions into one and has taken over most of their senses. Such development accounts for a large number of senses of the Lithuanian už governing two cases, the Genitive and the Accusative, which are discussed further.

In the cognitive linguistic framework, the Genitive case is prototypically linked to the meaning of possession or its multiple metaphoric extensions (Luraghi 2009). In Slavic languages its underlying concepts include *source* (withdrawal), *goal* (approach), *whole* (possession/'of', quantification), and *reference* (lack, comparison, near) (Janda 2002; Janda & Townsend 2002), while in Latvian it is described using two basic concepts – *reference point* and *intrinsic relationship* (Berg-Olsen 2005). Some of them, however, are rather ambiguous.

If the Genitive case posits multiple meanings which are not so easy to link in a motivated network of senses derived from the umbrella notion of possession, the Accusative case is prototypically described through the concept of destination, which is consistently preserved in

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many of its further senses (Janda 2002, Janda & Townsend 2002, p. 76) and is hardly questioned by authors working on different languages. Some authors (cf. Luraghi 2009, p. 145) claim that the underlying key notion of the Accusative is *total affectedness*, which could be interpreted as a broader term, instrumental in accounting for such spatial uses of the Accusative as direction or destination.

Further on in the paper, we will briefly introduce our investigation, which attempts to describe the central sense of the Lithuanian preposition  $u\check{z}$  and its multiple extensions. The distinction between the two cases will feature in some of the senses and will be explicated in the overall description. All of them, irrespective of the case marking, are arranged into a single network given in the Appendix. There the senses given in transparent/white boxes are realized by  $u\check{z}$  + Gen., and the senses given in colored boxes are realized by  $u\check{z}$  +Acc. (see Appendix).

#### 3. DATA

The data for this research has been collected from the fiction section of the *Corpus of the Contemporary Lithuanian Language* (CCLL). Fiction has been selected as a register which presumably demonstrates the largest array of meanings, from concrete to abstract. Other registers, such as documents or media, are usually confined to very specific, mostly abstract, meanings. In the CCLL there are 54,873 occurrences of  $u\check{z}$ ; it is used both as a prefix and a preposition. 50,593 instances of prefixal usage account for 92.2% of all cases of  $u\check{z}$ . 4,280 instances of prepositional usage make up 7.8% of all cases. In the latter sub-corpus, we have randomly selected 1000 utterances and annotated them for their senses. The procedure of assigning the senses and their description will be explained further. All Lithuanian examples given further in the paper have been taken from our corpus.

#### 4. PROCEDURE

Our qualitative research is based on identifying different senses of the preposition  $u\check{z}$ . Four criteria of sense identification are employed. First, we take into account different types of both Figure, an object whose location or movement is described in reference to Ground, and Ground

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itself, which as an object which serves as a reference for a Figure (the terms adopted from Talmy 2000). In addition, we take into consideration their interrelationship (geometrical, functional, etc.; see Maljar & Seliverstova 1998; Talmy 2000; Tyler & Evans 2003; Shakhova & Tyler 2010; Tyler 2012). Second, in the course of investigation, several key principles of cognitive linguistics have been adopted, such as the experiential approach and embodiment that allows understanding complex domains in terms of familiar physical or experiential knowledge, relying on our human experience of interacting with the surrounding world and the way we as humans perceive and comprehend it (cf. Lakoff & M. 1980/2003: Lakoff 1987: Johnson 2007). One of the more specific principles of this type is what Langacker refers to as *focal adjustments* (1987) and Talmy calls attention phenomena (2007). Another important principle applicable in polysemy is also employed in some studies into metaphor (see, for example, Steen et al. 2010); this principles states that the primary sense is usually more physical, closer to our bodily experience, for example, expressing the way some concrete objects are located in relation to each other and/or humans, the way those objects move, etc. Further meanings extend from the primary physical meaning and usually express temporal relations, refer to other more abstract domains, such as emotions, communication, teaching, etc. These extensions are usually explicated in the framework of metaphor and metonymy (cf. Lakoff & M. 1980/2003; Lakoff 1987) and/or focal adjustments (Langacker 1987), as well as in other construal operations. Third, in the course of investigation, the frequency of use and/or the stability of the pattern are also considered an important factor. Finally, as an additional argument for the motivation of meanings, especially with other parameters being equal, the diachronic criterion is taken into account. This seems to be in line with other cognitive-based papers dealing with inflecting languages, such as Shakhova & Tyler (2010); Pawelec (2009); Tabakowska (2003, 2010).

#### 5. KEY NOTIONS. THE SPATIAL SCENE OF THE PREPOSITION UŽ

Conceptually, space is divided into *stasis* and *kinesis*. The latter is represented by the means to mark motion while the former encompasses topological and projective expressions. Topological prepositions mark

coincidence or close proximity of F and G and are non-angular, but projective prepositions require angular information in their interpretation (see Levinson 2003, 62ff for theoretical framework). The Lithuanian  $u\check{z}$  + Gen. is a typical projective preposition whose search domain is a back region of Ground.<sup>3</sup>

Angular information is rendered through certain frames of reference (FoR) or coordinate systems that are comprehensively described by Levinson (2003). In this paper, we adopt his typology of FoR and make use of his terms *intrinsic* and *relative* frames of reference (ibid., p. 74ff).<sup>4</sup> The intrinsic FoR is binary: it consists of F and G while the vantage point matches with G. The coordinate system is determined by G's inherent or functional parts, e.g. *She lets herself out, and bangs the door shut behind her* (BYU-BNC). In this situation, the back is given; it is understandable as the speaker's body part opposite to his/her face. It does not change when the speaker moves and changes his/her position.

The relative FoR is more complex than the intrinsic FoR. It is ternary, as it encompasses F, G and the vantage point which is the third entity, the viewer/conceptualizer of the spatial scene. The coordinate system coincides with the vantage point, e.g. *As she spoke, she disappeared behind a large green plant* (BYU-BNC). As the vantage point prototypically is the speaker, this FoR is sometimes referred to as *deictic* (cf. Dirven & Verspoor 1998, pp. 6–7; Shakhova & Tyler 2010; Diessel 2013), but this term is inaccurate as it does not cover all possible situations of the relative FoR (Levinson 2003, pp. 34–38).

#### 6. RESULTS AND DISCUSSION

#### 6.1. Defining the central sense of $u\check{z}$

In Lithuanian, the preposition  $u\check{z}$  + Gen. confines F in the back region of G, whereas the back region can be conceptualized through one of the two FoR: intrinsic and relative. When the intrinsic FoR is employed, G is asymmetric and its back region is identified through its inherent or functionally salient parts, e.g.

(2) Dur-ys už-si-trenk-ia man už nugar-os. Door-NOM.SG PFV-REFL-close-PRS.3 I.DAT.SG už back-GEN.SG 'The door shuts behind my back.' In this sense, as attested by our data, G is usually a human explicitly rendered by reference to body parts, with *nugara* 'back' being the most frequent. Occasionally also *galva* 'head', *ausys* 'ears', *lūpa* 'lip', *pečiai* 'shoulders' are employed. Inanimate objects, mainly referring to furniture, some appliances and other objects of everyday use, such as *bufetas* 'cupboard', *namas* 'house', *pečius* 'stove, heater', *prekystalis* 'counter', *kėdė* 'chair', *sėdynė* 'seat' have also been found in our corpus, e.g.

 (3) Monika pra-vėr-ė už prekystal-io es-anč-ias Monica PFV-open-PST.3 už counter-GEN.SG be-PTCPACT.PRS-ACC.PL dur-is įvaistin-ės užkulis-ius. door-ACC.PL to drugstore-GEN.SG wing-ACC.PL
 'Monica opened the door located behind the counter, which led to the wings of the drugstore.'

In sentence (4)  $u\dot{z}$  + Gen. is understood through the relative FoR where the coordinate system is based on the third entity, the viewer/conceptualizer:

(4) Vaik-ai pa-si-slėp-ė už medž-io.
 Child-NOM.PL PFV-REFL-hide-PST.3 už tree-GEN.SG
 'The children have hidden behind the tree.'

In such cases G is usually inanimate with no inherent front and back, or these sides are assigned by the viewer. Such Gs as *durys* 'door', *siena* 'wall', *tvora* 'fence', *kampas* 'corner', *langas* 'window', *vartai* 'gate', *krūmai* 'bushes', *medis* 'tree', *barjeras* 'barrier', *gatvė* 'street' are very frequent in our corpus, especially in descriptions of everyday situations. In large-scale descriptions of nature, such natural objects as *miškas* 'forest', *upė* 'river', *kalnai* 'mountains', *laukas* 'field' are also often employed, e.g.

- (5) Už lang-o lyj-a...
   Už window-GEN.SG rain-PRS.3 'It is raining behind the window.'
- (6) Pamišk-ėj, (...), už kanal-o, į-si-žieb-ė Šemet-ųžibur-ys. Outskirts-LOC.SG už canal-GAN.SG PFV-REFL-go on-PST.3 Šemeta-GEN.PL

#### light-NOM.SG 'Near the forest, behind the canal, the light was switched on in Šemeta's house.'

(7) Viln-iaus plent-as, tuoj už tų Amal-ių
 Vilnius-GEN.SG highway-NOM.SG just už these Amaliai-GEN.PL per-ein-ąs į paprasčiaus-ią vieškel-į...
 PFV-go-PTCPPRS.ACT.NOM.SG to simplest-ACC.SG road-ACC.SG
 'Vilnius highway, just beyond Amaliai, [is] turning into a simple dirt road (...). '

Some utterances in the corpus are ambiguous as they can be interpreted by employing either intrinsic or relative FoR, e.g.

(8) Iš-si-gand-usi Anel-ė PFV-REFL-be frightened-PTCP.ACT.PST.NOM.SG Anelė-NOM.SG Vinciūnien-ė pri-tūp-ė už kėd-ės. Vinciūnienė-NOM.SG PFV-squat-PST.3 už chair-GEN.SG 'The frightened Anel-ė Vinciūnien-ė squatted down behind the chair.'

This definition would roughly correspond to the *primary sense* referring to the *proto scene* by Tyler & Evans (2003) and Shakhova & Tyler (2010), *central sense* referring to the *central scene* by Tyler (2012), *ideal meaning* by Herskovits (1986) or Langacker's *super-schema* (1987), all defining the most abstract schematic, and also least elaborate, content of the preposition. Further in the text, we will demonstrate how other senses are derived from the central sense and describe in each case the underlying principle of motivation. We will start with the senses of  $u\breve{z}$ + Gen. in most cases confined to concrete, physical senses and then proceed to  $u\breve{z}$ +Acc. expressing more abstract senses.

#### 6.2. Function

Function is a notion frequently employed in many descriptions of prepositions (see, for example, Tyler & Evans 2003; Shakhova & Tyler 2010, also Tyler 2012, among others). Though it might subsume different aspects of human experience, in this case we refer to the interaction between F, usually a human, and G, usually an artifact, according to G's intended purpose. The purpose is determined by the lexical meaning of G, which is either a table (also counter) or a (steering) wheel. More specifically, the following lexemes were found in our corpus: *stalas* 'table', *skobnys* 'old-time table' (still used in some dialects), *prekystalis* 'counter' and *vairas* 'wheel'. Tables are intended for writing or eating, counters are usually found in shops or bars and are meant for serving people, while wheels are meant for steering vehicles. In all the cases, the realization of this sense is confined to two verbs – *sèdėti* 'sit' in situations involving tables and wheels, and *stovėti* 'stand' in situations referring to counters. It seems important that F and G in this sense still preserve the physical configuration of the central sense – F is located in the back region of G. The back is imposed by F's and/or the viewer/conceptualizer's point of view and limited to very few Gs lending themselves to functional conceptualization, e.g.

(9) Vis-i su-sėd-o už stal-o.
 All-NOM.PL PFV-sit-PST.3 už table-GEN.SG 'All sat at the table.'

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(10) Zig-is, pa-leis-t-as iš cyp-ės, Zigis-NOM.SG PFV-release-PTCPPASS. PST.-NOM.SG from lockup-GEN.SG vėl sėd-o už vair-o. again sit-PST.2SG už wheel-GEN.SG 'After being released from the lockup, Zigis got behind the wheel again.'

Interestingly, a very frequent Lithuanian word *už-stalė* 'the place at the table' is derived from the word *stalas* 'table' by attaching to it the prefix *už-* carrying the same functional meaning. The word is frequent in folklore, especially in songs referring to abundant eating and sometimes also drinking. The word *prekystalis* 'counter' is a compound composed of two nouns: *prek-ė* 'a thing to be sold' and *stal-as* 'table' and means 'a table concerned with the function of selling'.

The functional sense of the Lithuanian  $u\check{z}$  is similar to one of the senses of the projective preposition za in many Slavic languages (see Shakhova & Tyler 2010; Przybylska 2002, pp. 342–343; Cienki 1989, pp. 115–117; Lipovšek 2014). However, Gs in Slavic languages are much more varied and include tables, steering wheels, pianos, computers and some other objects. According to Przybylska (2002, p. 343), a person, using such objects as chairs, armchairs, tables, cars, etc. for their intended purpose, assigns the front/back sides according to his/her own body. Moreover, the objects in use are conceptualized as constituting a single whole with the human body. In the case of the *table*, its side, which is sometimes located further away from a person, can be seen as the front, but the side which is closer to the person, despite the fact that it is at the forefront of the human, is seen as its back. Przybyl-ska (ibid.) interprets situations with people sitting at a table or a driver sitting behind the wheel within the intrinsic FoR.

Other scholars in principle interpret functional situations in the same way, referring to Gs as objects of activity (Lipovšek 2014; Cienki 1989, pp. 114–118) and admitting that in the functional sense, za in Slovene, Russian and Polish are equivalent to the English *at*. F in these situations is functionally related to G's inherently functional side; F is usually facing it. However, unlike Przybylska, Cienki explains functional senses of Russian and Polish za + Instr. through the relative FoR. For example, in the utterance sidet' za pis'mennym stolom 'to sit behind a writing table' F is sitting at the functional side of the desk (G), but the remaining part of G is seen as a reference point (Cienki 1989, p. 116). The same typical Russian expression *sidet' za stolom* 'sit behind the table' is discussed by Shakhova and Tyler (2010, 269f), who emphasize the purposefulness of the sitting process and the specific position of the Figure so that the lower part of F's body is covered by G. Interestingly, the Russian za may also appear before a piano in the expression on sidel za rojalem ir razučival novuju p'esu 'he was sitting at the piano and practicing a new piece', meaning that someone was sitting at the piano with his/her legs under its functional part and was probably playing the instrument, in other words, using it according to its main purpose (the example and its interpretation from Maljar & Seliverstova 1998, p. 122). The usage of the Lithuanian  $u\ddot{z}$  with a piano as G is not possible.

An attempt at some functional interpretation of the Lithuanian  $u\check{z}$  + Gen. can be found in some works of Lithuanian scholars. For example, Šukys (1998), who is mainly concerned about the normative status of most expressions, notes that  $u\check{z}$  stalo 'at a table' originated through the relative FoR in the sense that places to sit at a table several centuries ago were seen as located behind the table from the point of view of someone who has just entered the house/room and is standing at the door (ibid., p. 522). Nowadays, however, the parameter of this viewpoint does not seem to be relevant, for example:

(11) Kai nu-bud-au, už stal-o, sprendž-iant iš When PFV-wake up-PST.SG1 už table-GEN.SG judge-Gerund from bals-ų, sėdėj-o tik moter-ys. voice-GEN.PL sit-PST.3 just woman-NOM.PL 'When I woke up, there were only women sitting at the table, since I could only hear female voices'. According to the same Lithuanian scholar, the functional usage of  $u\check{z}$  is only possible with *table*; other utterances with the phrase  $u\check{z} + \text{Gen.}$ , such as  $u\check{z}$  vairo 'behind the wheel', appeared in the Soviet period under the influence of Russian (ibid., p. 522). This approach is debatable, since such utterances nowadays are not infrequent, particularly in spoken Lithuanian. They were also attested in our corpus. Moreover, *behind the wheel* is a regular expression in English (cf. 151 utterances found in the BYU-BNC) or German (for more see Przybylska 2002, p. 343).

#### 6.3. Control

In this sense, as attested by our data, F is usually a human who exerts force in reference to G, which subsequently falls within F's sphere of control. Naturally, verbs employed in such utterances either refer to force and control or are compatible with this meaning; they include *paliesti* 'touch', *imti, paimti, suimti* 'take, grasp', *(nu)tverti, stverti, stvertis* 'snatch, grasp, snap', *kabintis* 'cling', *pakabinti* 'hang', *tqsyti* 'drag', *pešti* 'pull, pluck', *griebti* 'grab', *čiupti* 'grasp', *vesti* 'lead', *vilkti, tempti* 'drag, pull', *prilaikyti, laikytis* 'hold', *ištraukti* 'pull out', *pakelti* 'raise, lift', etc. The verbs range from very little force exerted by F (cf. *touch*) to F's pressure resulting in strong impact on G. F usually affects G through its part which is prototypically inalienable. So G may be an artifact, like a door or a window, which can only be opened by using its handle, or exerting some kind of control via its part, e.g.

(12) Pri-ėj-usi prie dur-ų, (...) pa-trauk-iau
 PFV-go-PTCP.ACT.PST.NOM.SG near door-GEN.PL PFV-pull-PST.1SG
 už ranken-os ir dur-ys at-si-vėr-ė.
 už handle-GEN.SG and door-NOM.PL PFV-REFL-open-PST.3
 'I came to the door, pulled it by the handle and the door opened.'

In many cases in our data Gs are (domestic) animals or humans. Notably, animals are normally controlled by humans, who harness them, keep them locked in, tied to a tree or pole, etc., e.g.

Jaut-į už grandin-ės ved-ė pirkl-ys.
 Bull-ACC.SG už chain-GEN.SG take-PST.3 merchant-NOM.SG
 'The merchant led the bull by a chain.'

16

(14) Su-si-rauk-e brol-iai pa-stvėr-ė PFV-REFL-scowl-PTCP.ACT.PST.NOM.PL brother-NOM.PL PFV-grab-PST.3 kišk-į už aus-ų ir ding-o pro dur-is. hare-ACC.SG už ear-GEN.PL and disappear-PST.3 through door-ACC.PL 'The brothers, scowling and annoyed, grabbed a hare by the ears and disappeared behind the door.'

When control is extended to humans, in most cases Gs refer to body parts (mostly hands or arms) or clothes, thus we usually employ such Gs as *ranka* 'hand, arm', *petys, pečiai* 'shoulder, shoulders', *pažastys* 'armpits', *kojos* 'legs', *gerklė* 'throat', *sprandas* 'nape, neck', *plaukai* 'hair', *rankovė* 'sleeve', *atlapai* 'lapels', *megztinis* 'sweater', as in the following:

(15) J-is pa-ėm-ė j-q už rank-os. He-NOM.SG PFV-take-PST.3 her-ACC.SG už hand-ACC.SG 'He took her by hand.'

The notion of control employed in the explication of this sense does not always imply a long-term control or control extending over a larger area, especially in contexts with humans. Rather, it is temporary and in many cases applied only locally. Sometimes it is exerted to attract attention, for example, by touching or grabbing someone's hand.

The sense of control, in other sources referred to as *contact* (Shakhova & Tyler 2010, p. 277) or *accessibility*, when the Ground becomes accessible via its part (Tabakowska 2003, p. 166), is one of the most frequent patterns in Slavic languages. Inconsistent terminology and confusing interpretation in works focusing on Slavic languages is sometimes misleading. In our understanding, contact is a consequence rather than a cause of controlling relationships.

#### 6.4. Obstacle

The sense of an obstacle may be interpreted as derived from the central sense and via the sense of control. However, in the sense of an obstacle the roles of F and G are reversed: F is controlled by G, which is perceived as an obstacle preventing a mobile F from further activity or movement. Interestingly, the preposition  $u\check{z}$  in this sense often appears together with an identical prefix attached to a verb, such as  $u\check{z}$ -kliūti,  $u\check{z}$ -klibū 'to trip over', to hook', etc., e.g.

 (16) Ev-a pa-šok-a nuo kėd-ės ir Eva-NOM.SG PFV-jump-PRS.3 from chair-GEN.SG and už-kliuv-usi už stal-o iš-bėg-a.
 PFV-trip-PTCPACT.PST.NOM.SG už table-GEN.SG PFV-run-PRS.3 'Eva jumps from the chair and tripping over the table runs out of the room.'

Prototypically, in this sense, as attested by our data, Fs are humans and Gs are chairs, stones, any natural objects or artifacts found around us. Humans in the position of G are less frequent. In utterances realizing this sense of  $u\tilde{z}$ , F and G are usually in physical contact, which is the result of the relationship between F and G described above.

Researchers of Slavic languages (e.g. Tabakowska 2010) interpret this meaning employing the notion of passable barrier. However, the notion is extended to cover what we term as the senses of hiding and covering (see section 6.6). Considering the nature of the relationship between F and G and their types, these two senses in Lithuanian are seen as distinct.

#### 6.5. Sequential location

In this sense, F and G are typically humans, located one behind another in a row, both facing the same direction. In such situations, in addition to directionality, a secondary reference object, or secondary Ground (also referred to as *encompassive secondary Reference Object* by Talmy 2000, p. 203), is paramount, even though it may be not explicitly given. In the examples below, the secondary G is a row, line or queue which encompasses the primary G, e. g.

- (17) J-ie stovėj-o vien-as už kit-o... They-NOM.PL stand-PST.3 one-NOM.SG už another-GEN.SG 'They were standing one behind another.'
- J-is stov-i eil-ėje už manęs...
   He-NOM.SG stand-PRS.2SG line-LOC.SG už me.GEN.SG
   'He is standing in a line behind me.'

The meaning of the preposition in the above contexts is exclusively concerned with a specific spatial arrangement, where F and G are usually of equal status and frequently realized by the pronouns *vienas* 'one' and *kitas* 'another, other'. The contexts where this sense is realized are prototypically static and often found in the descriptions of everyday situations, like standing in a queue/line for some goods or at the cashier's desk. The idea that F and G in this sense are of equal status is reinforced by a stable expression *eiti koja už kojos* (*lit.* 'go [one] foot behind [the other] foot') meaning that someone is (deliberately) walking very slowly, if at all. The focus is on the configuration of feet put one behind/after another rather than movement; also F and G are identical and both refer to feet.

Another expression referring to walking and either directly or indirectly (metaphorically) expressing slow movement is *žingsnis po žingsnio* 'step by step', where the preposition po + Gen., rather typical of temporal expressions, is employed. However, in the latter, the focus is on motion and temporal development rather than the configuration of feet placed on the ground. Moreover, the expression with feet is used in situations expressing the speaker's negative attitude, stressing slow movement, when a much faster development is expected. The 'step by step' expression focuses on someone's progress, albeit rather slow, and is given positive evaluation by the speaker.

The two situations above (*koja už kojos* and *žingsnis po žingsnio*) illustrate the fact that  $u\tilde{z}$  in some senses competes with *po* 'after'. The latter is employed when the focus is on temporal development, especially when either F or G or both of them are in motion. In Russian, however, temporal development is unequivocally expressed by the same spatial preposition za + Instr. Shakhova & Tyler (2010) refer to this sense as 'in-tandem', which expresses what we call the equal status of F and G. Even though the spatial organization is almost the same as in the stable sense of sequential location, it evokes a slightly different conceptualization – mainly of multiple participants on the spatial scene moving in a recurrent pattern, e. g.

(19) Fūr-os vien-a po kit-os vež-ė mar-ias Trailer-NOM.PL one-NOM.SG po another-GEN.SG carry-PST.3 lots-NOM.PL bulv-ių, rod-ė-s, gal-o ne-bu-s. potatoe-GEN.PL seem- PST.3-REFL end-GEN.SG NEG-be-FUT.3 'Trailers loaded with a huge amount of potatoes were moving one after another, there was no end to them.'

Static spatial and mobile, temporal, situations in Lithuanian are sometimes not very distinct, especially when both  $u\check{z}$  and po are possible. For example, one might hear people ask each other standing in a

queue/line: Kas  $po/už j\bar{u}su$ ? 'who is after/behind you?'. In this situation, temporal and spatial interpretations are equally possible. The temporal interpretation gives preference to po, whereas the interpretation of sequential location is linked to  $u\check{z}$ . The sense of sequential location was identified in our corpus; however, no such sense is included in the Lithuanian Dictionary (see LKŽ 2005). The sense of temporal sequence of po +Gen. is found in both the LKŽ and the *Lithuanian Grammar* (DLKG 1997), which suggests that the temporal sequence features in Lithuanian more prominently.

#### 6.6. Hiding, covering

In some cases,  $u\check{z}$  + Gen. suggests the idea of hiding or covering, either explicitly given in the text or inferred from the overall interpretation of the situation. The sense stems from the central sense realized in the relative FoR. F in this case is typically animate and is located or moves in physical space in such a way that G covers it completely from sight. G is of specific configuration, often a fairly large solid object, like *siena* 'wall', *širma* 'screen' or *medis* 'tree', especially if F is human or a large animal. However, as attested by our data, we may also come across situations where G is *apykaklė* 'collar', *maišas* 'sack', etc. Other contextual clues of this sense of  $u\check{z}$  are frequently used verbs *slėptis*, *slapstytis* 'hide', *išnykti* 'disappear' or some other verbs often referring to rapid movement, e. g.

- (20) Vaik-ai pa-si-slėp-ė už medž-io. Child-NOM.PL PFV-REFL-hide-PST.3 už tree-GEN.SG 'The children have hidden behind the tree.'
- [Jie] šmurkštelėj-o už milt-ų maiš-ų.
   [They] slip-PST.3 už flour-GEN.PL sack-GEN.PL
   'They slipped behind the sacks of flour.'

In the above example (21), there is no explicit mentioning of hiding. However, we do understand the overall situation as an attempt to hide. The verb *šmurkštelėti* 'slip' suggests a rapid movement, especially by someone who is small and capable of moving fast.

The sense of hiding gives rise to a number of fixed expressions and catchphrases. Their meaning is usually metaphorical, resulting from thinking about abstract things in terms of concrete, for example: *sleptis* 

 $u\check{z}$  gražių žodžių 'to hide behind nice words' (~ 'to lie trying to look truthful and polite'); kalbėti už akių 'to talk/speak behind one's eyes' (~ 'to gossip about someone without that person's presence'); daryti ką nors už kieno nors nugaros 'to do smth. behind someone's back' (~ 'to do something unfavorable to someone who cannot see it'), etc. All these cases preserve the element of hiding, which is seen as negative, since hiding in such cases refers to communicative situations where friendliness and sincerity are associated with openness while animosity is associated with hiding and evasion.

#### 6.7. Boundary, border

The sense of boundary or border is rendered in situations where G is perceived as a certain area or region characterized by some features and perceived by F as distinct from other areas and regions. The sense is derived from the central sense referring to the back region and realized within the relative FoR. Explicit or implicit juxtaposition of the areas/regions is, presumably, the key element of this sense of  $u\check{z}$ . Most situations where the sense of border is realized suggest motion or activity on the part of F concerned with transgressing the border between the areas or just moving beyond G, for example:

(22) [Jis] buv-o iš-ėj-ęs net už miest-o,
 [He] be-PST.3 PFV-go-PTCPACT.PST.NOM.SG even už town-GEN.SG at-si-dūr-ęs nepažįstam-ose viet-ose.
 PFV-REFL-find oneself-PTCPACT.PST.NOM.SG unknown-LOC.PL place-LOC.PL 'He has once been even beyond the town and found himself in a strange place.'

In this sense, G is usually expressed by lexemes referring to a larger area, such as *miestas* 'city, town'. However, we frequently come across the word *riba*, *ribos* 'border(s)' in G, which explicitly points at this sense. Interestingly, two Lithuanian words derived with the help of the pre-fix  $u\check{z}$ - can be interpreted in the framework of this particular sense. Thus  $u\check{z}$ -sienis 'abroad' is the result of derivation, when the prefix is attached to the noun siena 'wall'. The area beyond the border of the country could be metaphorically interpreted as an area behind the wall. The word  $u\check{z}$ -miestis 'countryside' has been made by attaching  $u\check{z}$ - to the noun *miestas* 'city, town'. In both cases the juxtaposition of G and some other area is identifiable. In some cases the inside of a particular

area/region and the outside of it are juxtaposed. Additional connotations attached to this sense are concerned with either positive or negative emotions (known vs. unknown, therefore unfriendly, foreign, etc.) attached to G and the area beyond it. This further conceptualization of the border situation is identifiable in the following utterance, referring to the juxtaposition of dreams and reality and the border between them:

(23) Tik t-ai buv-o rib-a, už kur-ios Just this-NOM.SG be-PST.3 boudary-NOM.SG už which-GEN.SG sapn-as ne-si-skir-ia nuo realyb-ės. dream-NOM.SG NEG-REFL-differ-PRS.3 from reality-GEN.SG 'That was the border beyond which a dream can hardly be distinct from reality.'

The sense of border attached to  $u\check{z}$  also accounts for a very stable Lithuanian expression  $u\check{z}$  *istatymo ribų* 'beyond the boundary of the law' often employed in the media. In this case, what is within the law is understood as legal and therefore acceptable; what is beyond the law is unlawful, illegal or even criminal. Like in metaphorical expressions resulting from other senses (see the sense of hiding in section 6.6), the expression referring to overstepping the boundary of the law suggests negative evaluation by the speaker: what is within the law is treated as acceptable, what is beyond it is not.

The notion of boundary also strongly features in the analyses of the Slavic preposition za, often termed as 'beyond' or 'on the other side', or 'passability' senses (see Tabakowska 2010; Shakhova & Tyler 2010). In Russian the preposition in this sense is used with several case forms. However, the usage of the preposition in this sense in Lithuanian only partially overlaps with Russian or Polish.

#### 6.8. Spatial distance

In this sense, it is not the location of F in reference to G that is identified, but rather the physical distance of F in reference to G that is highlighted. Such 'transfer' from location to distance seems to be due to attention phenomena, what Langacker refers to as focal adjustments, more precisely, *level of abstraction* (Langacker 1987, pp. 132-133). Adhering to the relative FoR, the sense is realized by lexemes expressing distance in meters or kilometers or any other units of length, as in the

#### following:

- (24) T-ai ne per toli nuo Ventuv-os, maždaug už dešimt-ies It-NOM.SG not too far from Ventuva-GEN.SG about už ten-GEN.SG kilometer-ų.
   kilometer-GEN.PL
   'It is situated not a long distance from Ventuva, approximately 10 kilometers away.'
- (25) J-is gyven-a netoliese, tik už kel-ių šimt-ų He-NOM.SG live-PRS.3 not far away just už some-GEN.PL hundred-GEN.PL metr-ų. meter-GEN.PL

'He lives not a long distance away from here, just a few hundred meters.'

The locative meaning of spatial distance is also closely linked to the meaning of sequential location. This idea could be supported by the fact that F and G could be reversed so that F denotes distance and G marks the reference point, e. g.

(26) Vien-q tok-į nam-q rad-ome keliolik-a One-ACC.SG such-ACC.SG house-ACC.SG find-PST.1PL some-NOM.SG kilometr-ų už Viln-iaus. kilometer-GEN.PL už Vilnius-GEN.SG 'We have found one such house at several kilometers from Vilnius.'

Thus the two constructions *keliolika kilometrų už Vilniaus* ('some kilometers behind Vilnius') as given in the above example and *Vilnius už keliolikos kilometrų* ('Vilnius behind some kilometers') are equally possible. Such reversal may be interpreted as indicative of F's and G's equal status in the spatial scenes of sequential location (see section 6.5 above) and the sense of physical distance, which allows us to see such situations from different points of view.

#### 6.9. Temporal distance

The preposition *už* is also used to express temporal distance, which is motivated by a deeply entrenched metaphor TIME IS SPACE. As claimed by Haspelmath (1997, 56ff), the temporal anterior and posterior is often based on the spatial front and back, the notion of 'front' or 'in front of' in many languages being associated with 'before' and the notion of 'back' or 'behind' with 'after' (for similar results based on a different language sample see Svorou 1994, pp. 140–143, 158–161). Moreover,

these sequential markers are often identical with the temporal distance markers. In Lithuanian this principle holds for the anterior marker: prieš + Acc., which covers the meanings of spatial anterior ('in front of'), temporal anterior ('before') and distance-past ('ago') (see also Table 4 on p. 57 and Table 13 on p. 81 in Haspelmath 1997). However, the coding of posterior in Lithuanian is quite different from many languages of the world, which keep the same coding for spatial and temporal posterior.

As already discussed, spatial posterior, or sequential location in space, is expressed by the preposition  $u\check{z}$ . Temporal posterior, which is a sequential location in time, when one event follows another, is usually rendered by the preposition po + Gen. meaning 'after'. The Lithuanian po governing the Instrumental case is a projective preposition of the vertical axis whose search domain is a down region of G. But when it takes the Genitive case, it first of all refers to a sequence in spatial and temporal domains (see (19), (27) and (28)). It is also used to specify the time of the day (29), or temporal distance, e. g.

- (27) Gér-ė gurkšn-is po gurkšn-io, pat-s vien-as. Drink-PST.3 sip-NOM.SG po sip-GEN.SG himself-NOM.SG alone-NOM.SG 'He was drinking sip after sip, all alone.'
- (28) **Po** kelion-ès pa-si-kalbè-s-ime daug-iau. **Po** trip-GEN.SG PFV-REFL-talk-FUT-PL.1 many-COMP 'We will talk more after the trip.'
- (29) Vakar, gal dešimt, gal penkiolik-a minuč-ių po penk-ių (...) Yesterday maybe ten or fifteen-NOM.SG minute-GEN.PL po five-GEN.PL 'Yesterday, maybe at ten or fifteen minutes past five.'

However, the meaning of temporal distance in Lithuanian is not confined to po + Gen. Sometimes we may also come across  $u\check{z} + Gen$ . They both mark a certain amount of time after the moment of speech and remaining until an expected event, as in the following two sentences:

- (30) Nei po pusvalandž-io, nei po valand-os Povil-as Not po half\_an\_hour-GEN.SG not po hour-GEN.SG Povilas-NOM.SG ne-grįž-o.
   NEG-come back-PST.3 'Povilas did not come back either after half an hour or after an hour.'
- (31) Maždaug **už** pusvalandž-io su-stoj-o mikriuk-as. About **už** half\_an\_hour-GEN.SG PFV-stop-PST.3 minibus-NOM.SG

'The minibus stopped after approximately half an hour.'

As noted in reference to the sense of sequential location,  $u\check{z}$  in temporal expressions competes with po ('after'). The latter in this sense is much more common. A simple search of a frequent phrase po met u ('in a year') produced 228 hits in the fiction section of the CCLL.  $U\check{z}$  metu, which to us, native speakers of Lithuanian, looks less acceptable than po metu, produced 7 hits in the same corpus. Interestingly, in some derivatives referring to temporal distance referring backward, such as  $u\check{z}$ -vakar 'the day before yesterday',  $u\check{z}$ -pernai 'the year before last year', or referring forward, such as  $u\check{z}$ -poryt 'the day after tomorrow' temporal distance is expressed by  $u\check{z}$ , the less frequent element encoding this sense.

#### 6.10. Quality distance

In present-day Lithuanian, most expressions with  $u\ddot{z}$  + Acc. are closely linked to abstract senses. The senses of  $u\ddot{z}$  + Gen. and those of  $u\ddot{z}$  + Acc. are related in different ways. One important conceptual element is distance. As already mentioned, in one of the senses of  $u\check{z}$  + Gen., spatial distance gives rise to temporal distance and the underlying motivation is the metaphorical conceptualization of time in terms of space (cf. Lakoff & M. 1980/2003; Haspelmath 1997). Another sense linked to the sense of spatial distance is concerned with what we call the sense of quality distance. In this sense, F and G are compared according to physical parameters, such as height, width, overall size, texture, temperature, age; character features, such as pride, reason; feelings and emotions, such as love, hatred; positive/negative evaluation, etc. In Lithuanian, this very stable pattern is typical in comparisons; adjectives and adverbs employed in comparisons are used in the comparative degree. As attested by our corpus, F and G include a variety of natural objects, artifacts, humans, and abstractions, e.g.

(32) Srūv-a ketur-ios up-ės, gal kiek Flow-PRS.3 four-NOM.PL river-NOM.PL maybe slightly siaur-esn-ės už Len-q ar Angar-q. narrow-COMP-NOM.PL už Lena-ACC.SG or Angara-ACC.SG 'Four rivers are flowing; still slightly narrower than the Lena and the Angara.'

- (33) Ko gero, j-is jaudin-o-si ne maž-iau už Anupr-q. Probably he-NOM.SG worry-PST.3-REFL no little-COMP už Anupras-ACC.SG 'Probably he worried no less than Anupras.'
- (34) Ger-esn-io maist-o už lietuvišk-q vis-ame Good-COMP-GEN.SG food-GEN.SG už Lithuanian-ACC.SG whole-LOC.SG pasaul-yje ne-ra-s-i. world-LOC.SG NEG-find-FUT-2SG 'You will not find food better than Lithuanian—not in the whole world.'
- (35) Vilt-is, kad ir bergždž-ia, kartais sald-esn-ė
  Hope-NOM.SG even ungrounded-NOM.SG sometimes sweet-COMP-NOM.SG
  už teisyb-ę.
  už truth-ACC.SG
  'Hope, even ungrounded, is sometimes sweeter than the truth.'

The idea that comparison as a juxtaposition of two entities can be based on local meanings of front and (possibly) back regions can be found in the works of several authors. Svorou claims that there are languages where "the grams of FRONT are used to express comparison" (Svorou 1994, pp. 137–139). She does not mention the back region employed in comparative constructions though. This unusual model, originating from a spatial sense and attested in Lithuanian, Latvian and some Russian dialects, is discussed by Stassen (1985 discussed in Koptjevskaja-Tamm and Wälchli (2001, pp. 684–685). He notes that from the typological point of view this model is an interesting case (ibid.).

Naturally, the sense involving physical qualities such as size are more aptly related to physical distance and/or the central sense of  $u\ddot{z}$  employing the relative FoR, since the entities can be perceived as located physically. Some such comparative constructions are obviously metaphorical; they must have evolved on the basis of physical comparison. For example, hope in example (35) is described as sweeter than truth. However, the conceptual element that gives rise to this meaning is not hope or any other emotion conceptualized as food (even though it is not excluded), but rather a concrete or abstract quality conceptualized as measurable. Therefore, F and G are perceived as different, or situated at some quality distance from each other – different in height and/or width, amount, attractiveness, etc.

#### 6.11. Replacement: value and role

This sense of  $u\ddot{z}$  + Acc. seems to have been derived from a very stable and presumably deeply rooted sense of the sequential location 'one behind the other', where the objects are identical or of equal status (see section 6.5). Therefore, in some situations they are seen as capable of replacing each other in terms of value. In our corpus, this sense is frequent in utterances referring to situations of buying; hence the high frequency of verbs like *pirkti* 'buy', *parduoti* 'sell', *mokėti* 'pay' or simply *duoti* 'give' and *imti* 'take', e.g.

(36) Už tok-ius pinig-us galė-s-i (...) nu-si-pirk-ti šilkin-ę Už such-ACC.PL money-ACC.PL can-FUT-2SG PFV-REFL-buy-INF silk-ACC.SG suknel-ę. dress-ACC.SG 'For such money you will be able to buy a silk dress.'

In this sense, like in the sense of spatial distance (see section 6.8), F may be swapped with G. In other words, F could refer to money and G to objects of buying or vice versa, depending on the verb; thus both *mokėti 100 litų už suknelę* 'pay 100 litas for the dress' and *pirkti suknelę už 100 litų* 'buy a dress for 100 litas' are equally possible.

Similarly, in some other situations  $u\check{z} + Acc.$  is used to express a more abstract relationship of replacement, which is interpretable in terms of roles, e. g.

(37) Kai dar mok-iau-si mokykl-oje, ne-žinoj-au, When still learn-PST.1SG-REFL school-LOC.SG NEG-know-PST.1SG k-o nor-iu iš ateit-ies, todėl tėv-ai what-GEN.SG want-PRS.1SG from future-GEN.SG so parent-NOM.PL nu-sprend-ė už mane. PFV-decide-PST.3 už me.ACC.SG
'When I was still at school, I did not know what I wanted to do in the future, so my parents decided for me.'

In this sense, as seen in our corpus, F and G are typically humans and verbs employed in such situations are concerned with different activities, such as speaking, playing, performing, decision taking: *nuspręsti* 'decide', *pasakyti* 'say, tell', *groti* 'play music', *žaisti* 'play games, also sport, like basketball', etc. G is usually someone who for some reason is incapable or unwilling to do something; therefore, F replaces him/her in a particular activity. As noted by Pott in reference to Slavic languages

(mentioned in Endzelīns 1971, p. 329 and Fraenkel 1929, p. 182), in many languages the expression of substitution is based on the relationship of spatial anterior, whereas in Slavic languages attention is often focused on the back region, or a person located behind another. So if someone in front is unable to perform his/her function, the one that follows replaces him/her. The sense featuring in Slavic is also salient in Lithuanian.

#### 6.12. Retribution and remuneration

Further extension is linked to the causal interpretation of F located in the back region of G and the sequential location of F and G. We thus assume that if F is located behind G, it could give rise to (cause) F. Such a relationship has been pointed out by Endzelīns (1971) in reference to the Latvian *aiz*, and by Radden (1985) in a discussion about a number of English spatial prepositions. As noted by Ambrazas (2006, pp. 302–303), it is natural to interpret entities located one after/behind another in space or time as linked causally.

As found in our data, the sense is realized in two types of contexts, having to do with retribution and remuneration. Presumably, they posit no obvious differences in terms of the relationship between F and G, which provides grounds for treating the two types of utterances as realizing the same sense. In the first type, the sense of retribution comes to the fore. In such utterances, Gs are usually abstractions like pain or sorrow, or anything concerned with actual or potential wrongdoing, often not devoid of negative evaluation as seen from the point of view of the viewer/conceptualizer, and F is usually retribution, often punishment, e. g.

(38) Už pa-dary-t-q skausm-q atpild-as
 UŽ PFV-do-PTCPPASS.PST.-ACC.SG pain-ACC.SG retribution-NOM.SG vis-iems prival-o bū-ti.
 all-DAT.PL must-PRS.3 be-INF
 'There should be retribution against all for the pain caused.'

Such expressions are frequent in texts related to wrongdoing and punishment, either physical or moral.  $U\tilde{z}$  + Acc. in this sense is also found in situations referring to interpersonal relationships, for example, when parents scold their children for something they have done.

In our data, contextual indicators of this meaning include verbs of verbal activity like *barti* 'scold', *priekaištauti* 'reproach', *kaltinti* 'accuse', also *pykti* 'be angry', *keršyti* 'take revenge' and *atleisti* 'excuse', dovanoti 'forgive' (similar usage patterns can be found in Valiulytė 1998, pp. 400–403), e. g.

(39) Vis-i j-ūs tok-ie – už žod-į pykst-at. All-NOM.PL you-NOM.PL such-NOM.PL už word-ACC.SG be angry-PRS.2PL 'You are all like this – get angry just for words'.

As already noted, most utterances realizing this sense refer to emotions and/or explicit or implicit evaluation. In cases where G is wrongdoing, retribution is naturally seen as an adequate measure for what has been done. In some cases, excuse or forgiving seems to be more appropriate.

In the other type of utterances G is usually an act evaluated by a person or the society as good, beneficial and worth appreciation. The causal relationship in such contexts consists of a beneficial act and remuneration, either financial or moral. Typically, in such utterances the verb *dekoti* 'be grateful' or the word *ačiū* 'thank you' are employed, e.

g.

- (40) Dėkoj-u j-ums už nuoširdum-ą ir gebėjim-ą Thank-PRS.1SG you-DAT.PL už sincerity-ACC.SG and ability-ACC.SG iš-klausy-ti ligon-į.
   PFV-listen-INF patient-ACC.SG
   'I am grateful for your sincerity, for your ability to listen to the patient.'
- (41) Ačiū, direktor-iau, už ger-ą šird-į. Thank you director-VOC.SG už good-ACC.SG heart-ACC.SG 'Thank you, director, for your good heart.'

Remuneration comes in other forms as well. For example, artists are usually thanked by applauding to them, hence the verb *paploti* 'applaud' is also employed in utterances realizing the sense: *paploti uz spektaklį* 'applaud for the performance'. In most cases benefactors of remuneration are explicitly given, usually expressed by the Dative case (40) or given in the text as an addressee (41).

Another pattern of usage of  $u\check{z}$  + Acc., which falls within the sense of retribution and remuneration, is concerned with responsibility. Situations where a person feels responsible for something he/she has or

has not done also involve the relationship of replacement, even though less obvious than in the previous cases, e. g.

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- (42) Aš bū-s-iu vien-as atsaking-as už mūsų pralaimėjim-ą.
   I be-FUT-1SG alone-NOM.SG responsible-NOM.SG už our defeat-ACC.SG 'I alone will be responsible for our defeat.'
- (43) Vaik-ai visada atsak-o už tėv-ų nuodėm-es. Child-NOM.PL always respond-PRS.3 už parent-GEN.PL sin-ACC.PL 'Children are always responsible for their parent's sins.'

As attested by our data, utterances realizing the sense of retribution or remuneration have an overall projection to the past; in other words, people are punished or thanked for what they have done rather than for what they intend or plan to do. So in most cases the sequence of cause and effect is preserved.

#### 6.13. Benefactive

The sense of benefactive is linked to the abstract relationship of support between F and G derived from the central sense of F being in the back region of G and/or the sense of sequential location. As noted by Svorou (1994, p. 158), in some languages 'posterior' and 'under' are closely linked to support so that the supporter is under or behind the supported. Thus in Lithuanian this type of support from behind, as seen in this sense of  $u\check{z}$ , is realized in utterances, where G becomes a potential benefactor due to F's supportive activities, mainly projected to the future. As attested by our data, Gs are usually people we love, respect and care for, or values, such as homeland, freedom or independence. Fs in such utterances are humans who perform such actions and activities as fighting and going to war, or voting for someone, also less explicitly active undertakings such as prayers and good wishes, e. g.

(44) Mint-yse meldž-iuo-si už tėvyn-ę. Thought-LOC.PL pray-PRS.1SG-REFL už homeland-ACC.SG 'In my mind, I am praying for my homeland.'

The projection to the future in this sense goes together with positive emotions, intentions and plans – voting for someone, fighting for some values, praying for the well-being of a person, even drinking to the success of a person, some future plan or deed. The verbs frequently employed in utterances realizing this sense include *melstis* 'pray', *gerti* 'drink [alcohol]', *balsuoti* 'vote', *kovoti* 'fight', etc. No contexts referring to negative evaluation or emotion have been identified.

The sense is compatible with the prototypical meaning of the Accusative, especially the meaning of total affectedness and destination. The sense of benefactive is also entrenched in Slavic languages (called the purpose sense by Shakhova & Tyler 2010).

#### 7. SUMMARY AND CONCLUSION

The paper has attempted to demonstrate how the motivated polysemy principle works on multiple meanings of the Lithuanian preposition  $u\check{z}$ . The preposition is used with two cases – the Genitive and the Accusative, with each of them in many inflecting languages positing its own conceptual content.  $U\check{z}$  + Gen. is a projective preposition aimed at locating objects and/or specifying certain relationships between them or abstract notions.  $U\check{z}$  + Acc. in contemporary Lithuanian is confined to abstract senses. However, the abstract senses bear clear relationships with some physical meanings of  $u\check{z}$ . Therefore, both varieties,  $u\check{z}$  + Gen. and  $u\check{z}$  + Acc., are treated in a single network of senses (see Appendix).

The central sense of the preposition  $u\check{z}$  is based on F located in the back region of G. The region is identifiable within intrinsic or relative FoR. The other twelve senses are directly or via other senses derived from the central sense.

F located/moving in the back region of G interpretable within the intrinsic FoR gives rise to the senses of function, control, obstacle and sequential location. Interestingly, the functional sense of the preposition, even though very stable, is realized with a very limited number of objects conceptualized as used according to their purpose with F located in their back region. It thus only partially overlaps with a similar functional sense identifiable in some Slavic languages. The senses of control and obstacle are realized in contexts presupposing physical contact between F and G. The most interesting sense stemming from the back arrangement involving the intrinsic FoR is the sense of sequential location. It is not very varied in its realization; however, the equal status of F and G and their configuration one after another give rise to a number of other, more abstract, senses, such as spatial distance, replacement,

retribution and remuneration, and benefactive.

Three of four senses realized with the Accusative case are linked to the central sense of  $u\check{z}$  and the sense of sequential location. One of them expresses the meaning of replacement, or substitution, conceptualized in terms of value (monetary, moral, etc.) and role (occupational, emotional, etc.) of F and G. Another is concerned with the causal relationship between F and G realized as retribution and remuneration. The third sense realizes the idea of F (spiritually, morally) supporting G; as a result, G becomes F's potential benefactor. The latter meaning, carrying projection to the future, is compatible with the prototypical meaning of the Accusative – total affectedness or direction.

F located/moving in the back region of G interpretable within the relative FoR gives rise to the senses of hiding, boundary, spatial distance, temporal distance and a more abstract quality distance. Conceptualizing G as a partition providing a place to hide is logically linked to the central sense and is strengthened by numerous stable expressions with the element of hiding engrained in their metaphorical meaning. The sense of boundary presupposes a kind of juxtaposition between several regions or areas, in and out, further translating into what is one's own and what is foreign, hence closer, more acceptable, and further, less acceptable. Interestingly, the sense of physical distance is concerned with very concrete distances and locations expressed in meters, kilometers, etc. Moreover, these situations could be viewed from several points of view as the distance might be expressed as either F or G. The sense of temporal distance can be interpreted as derived from the central sense within the relative FoR and/or the sense of spatial distance. This is one of the senses interpretable within the deeply rooted metaphor TIME IS SPACE. However,  $u\ddot{z}$  + Gen. in this sense competes with *po* +Gen.; the latter in most cases is given preference.

The sense of quality distance refers in Lithuanian to typical expressions of comparison. The preposition in this sense appears with the Accusative case. The expression of comparison with reference to the back region is rather unusual in many languages of the world; however, in Lithuanian it seems to be linked not only to the back region but also to spatial and temporal distance. The senses of spatial and quality distance are among the senses not attested in neighbouring Slavic languages. Further study of the semantics of this preposition could extend into some very stable idiomatic expressions, such as  $u\check{z} \operatorname{grot} u$  'behind bars', traukti  $u\check{z}$  liežuvio 'pull by the tongue' (~ 'take effort to make someone speak'), kabintis  $u\check{z}$   $\check{z}od\check{z}iu$  'cling by the words' (~ 'be unhappy with anything uttered by the interlocutor, questioning each of his/her expression'), possibly derivable from our network of the senses of  $u\check{z}$ . Another vastly unexplored area of study would be concerned with the relationship of the preposition with a corresponding prefix  $u\check{z}$ -.

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#### DATA SOURCES

BYU-BNC—Davies, Mark. (2004-) *BYU-BNC*. Based on the British National Corpus from Oxford University Press. Available at: http://corpus.byu.edu/bnc/

CCLL – *Corpus of the Contemporary Lithuanian Language*. Available at: http://donelaitis.vdu.lt/main\_en.php?id=4&nr=1\_1

#### Notes

<sup>1</sup>Other terms roughly corresponding to *Figure* and *Ground* are *Trajector* and *Landmark* (Langacker 1987; Taylor 1995), also *the reference object* and *the entity to be located* (Lang 1991), or simply X, or *localized object*, and Y, or *relatum* (see Maljar & Seliverstova 1998, etc.).

<sup>2</sup>In some Lithuanian dialects, it is also found with the Dative and the Instrumental (Zinkevičius 1966, p. 429).

<sup>3</sup>The term *search domain* is used according to Langacker (1993) and the *region* is given conceptual priority as in Svorou (1994, p. 14ff): "regions are conceptual structures which are determined by our knowledge about physical, perceptual, interactional, and functional attributes of entities" (ibid., p. 15).

<sup>4</sup>In Talmy's terminology, Levinson's *intrinsic* frame of reference corresponds to a certain type of *Ground based* localization, while the *relative* frame of reference corresponds to *projector based* frame of reference (see Talmy 2000, p. 212f).

#### References

- Ambrazas, V. 2006. Lietuvių kalbos istorinė sintaksė [Syntax of Lithuanian on historic principles]. Vilnius: Lietuvių kalbos institutas.
- Bellavia, E. 1996. 'The German über'. In M. Pütz & R. Dirven (eds.) 'The Construal of Space in Language and Thought', 73–107. Berlin, New York: Mouton de Gruyter.
- Berg-Olsen, S. 2005. The Latvian Dative and Genitive: A Cognitive Grammar Account. Ph.D. thesis, University of Oslo.
- Cienki, A. 1989. Spatial Cognition and the Semantics of Prepositions in English, Polish and Russian (Slavistische Beiträge, 237). München: Verlag Otto Sagner.
- Cuyckens, H. 1991. The Semantics of Spatial Prepositions in Dutch. A Cognitive-Linguistic Exercise. Antwerpen: Universiteit Antwerpen.
- Diessel, H. 2013. 'Commentary: Is there a deictic of frame of reference?' In P. Auer, M. Hilpert & A. Stukenbrock (eds.) 'Space in Language and Linguistics: Geographical, Interactional, and Cognitive Perspectives', 687–692. Walter de Gruyter.
- Dirven, R. & Verspoor, M. 1998. *Cognitive Exploration of Language and Linguistics*. Amsterdam, Philadelphia: John Benjamins Publishing Company.
- DLKG. 1997. Ambrazas, V. (ed.) Dabartinės lietuvių kalbos gramatika [Grammar of Contemporary Lithuanian], 3rd edition, Vilnius:Mokslo ir enciklopedijų leidybos institutas.
- Durrel, M. & Bree, D. 1993. 'German temporal prepositions from an English perspective'. In C. Zelinsky-Wibbelt (ed.) 'The Semantics of Prepositions. From Mental Processing to Natural Language Processing', 297–325. Berlin, New York: Mouton de Gruyter.
- Endzelīns, J. 1951. Latviešu valodas gramatika [Grammar of Latvian]. Rīga: Latvijas valsts izdevniecība.
- ——. 1971. 'Latyšskije predlogi. 1 čast' [Latvian prepositions. Part 1.]'. In 'Darbu izlase [Selected works]', vol. 1. 307–520: Rīga: Zinātne.
- Fraenkel, E. 1929. *Syntax der Litauischen Postpositionen und Präpositionen*. Heidelberg: Carl Winter's Universitätsbuchhandlung.
- Geeraerts, D. 1992. 'The semantic structure of Dutch over'. Leuvense Bijdragen 81: 205–229.
- Gries, S. 2006. 'Corpus-based methods and cognitive semantics: the many senses of to run'. In S. Gries & A. Stefanowitsch (eds.) 'Corpora in Cognitive Linguistics. Corpusbased Approaches to Syntax and Lexis', 57–100. Berlin, Boston: Walter de Gruyter.
- Haspelmath, M. 1997. From Space to Time. Temporal Adverbials in the World's Languages. München, Newcastle: Lincom Europa. Available at: http://email.eva.mpg.de/~haspelmt/SpaceTime.pdf, accessed January 2015.
- Heine, B. & Kuteva, T. 2002. World Lexicon of Grammaticalization. Cambridge: Cambridge University Press.
- Herskovits, A. 1986. Language and Spatial Cognition. An Interdisciplinary Study of Prepositions in English. Cambridge: Cambridge University Press.
- Jamrozik, A. & Gentner, D. 2011. 'Prepositions in and on retain aspects of spatial meaning in abstract contexts'. In L. Carlson, Ch. Hoelscher & T. F. Shipley (eds.) 'Expanding the Space of Cognitive Science. Proceedings of the 33rd Annual Meeting of the Cognitive Science Society', 1589–1594. Austin, TX: Cognitive Science Society. Available at: http://csjarchive.cogsci.rpi.edu/Proceedings/2011/papers/0358/index.html, accessed 11 January 2015.
- Jamrozik, A., Sagi, E., Goldwater, M. & Gentner, D. 2013. 'Relational words have high

metaphoric potential'. In 'Proceedings of the First Workshop on Metaphor in NLP', 21–26. USA, Stoudsburg: The Association of Computational Linguistics. Available at: http://www.aclweb.org/anthology/W13-0903, accessed 18 January 2015.

- Janda, L. A. 2002. "Concepts of case and time in Slavic". *Glossos* 3: 1–22. Available at: https://slaviccenters.duke.edu/uploads/media\_items/3janda.original.pdf, accessed 13 February 2015.
- Janda, L. A. & Townsend, Ch. E. 2002. Czech. SEELRC.
- Johnson, M. 2007. *The Meaning of the Body. Aesthetics of Human Understanding*. Chicago: The University of Chicago Press.
- Kilius, J. 1977. "Orientacinių reikšmių struktūra lietuvių kalboje (Apie vietos prielinksnių ir linksnių reikšmes)' [The structure of orientational meanings in Lithuanian (on the meanings of locative prepositions and cases) ]'. *Kalbotyra* 28, no. 1: 40–49.
- —. 1980. "Slankumo reikšmių struktūra lietuvių kalboje (Apie vietos prielinksnių ir linksnių reikšmes)' [The structure of dynamic meanings in Lithuanian (on the meanings of locative prepositions and cases) ]'. *Kalbotyra* 31, no. 1: 34–56.
- Koptjevskaja-Tamm, M. & Wälchli, B. 2001. 'The Circum-Baltic languages: An arealtypological approach'. In Ö. Dahl & M. Koptjevskaja-Tamm (eds.) 'Circum-Baltic Languages. Vol. 2: 'Grammar and Typology'', Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Lakoff, G. 1987. Women, Fire and Dangerous Things. What Categories Reveal about the Mind. Chicago: The University of Chicago Press.
- Lakoff, G. & M., Johnson. 1980/2003. *Metaphors We Live By*. Chicago: The University of Chicago Press.
- Lang, E. 1991. "A two-level approach to projective prepositions". In G. Rauh (ed.) 'Approaches to Prepositions', 127–168. Tübingen: Gunter-Narr.
- Langacker, R. W. 1987. Foundations of Cognitive Grammar 1: Theoretical Prerequisites. Stanford, California: Stanford University Press.
- Langacker, R. W. 1993. 'Grammatical traces of some "invisible" semantic constructs'. *Language Sciences* 15, no. 4: 323–355.
- Levinson, S. C. 2003. Space in Language and Cognition. Explorations in Cognitive Diversity. Cambridge: Cambridge University Press.
- Lipovšek, F. 2014. 'Prepositional use with the object-of-activity function of the landmark in English and Slovene'. *Jezikoslovle* 15, no. 2–3: 153–171.
- LKŽ. 2005. Naktinienė, G. and Paulauskas, J. and Petrokienė, R. and Vitkauskas, V. and Zabarskaitė, J. (eds.) *Lietuvių kalbos žodynas* (Vol. 1–20, 1941–2002): *elektroninis variantas* [Electronic Version of the Dictionary of the Lithuanian Language] Vilnius: Lietuvių kalbos institutas Available at: http://www.lkz.lt/.
- Luraghi, S. 2009. 'Case in Cognitive Grammar'. In A. Malchukov & A. Spencer (eds.) 'The Oxford Handbook of Case', 136–150. Oxford: Oxford University Press.
- Maljar, T. N. & Seliverstova, O. N. 1998. Prostranstvenno-distancionnyje predlogi i narechija v russkom i anglijskom jazykach [Prepositions and adverbs of space and distance in Russian and English] (Slavistiche Beiträge, 362). München: Verlag Otto Sagner.
- Matlock, T. 2004. 'The conceptual motivation of fictive motion'. In G. Radden & K.-U. Panther (eds.) 'Studies in Linguistic Motivation', 221–248. Berlin, New York: Mouton de Gruyter.
- Pawelec, A. 2009. Prepositional Network Models. A Hermeneutical Case Study. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

- Przybylska, R. 2002. Polisemia przyimków polskich w świetle semantyki kognitywnej [The polysemy of Polish prepositions in the cognitive semantic framework]. Kraków: Universitas.
- Radden, G. 1985. 'Spatial metaphors underlying prepositions of causality'. In W. Paprotte
  & R. Dirven (eds.) 'The Ubiquity of Metaphor: metaphor in language and thought', 177–207. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Regier, T. 1996. The Human Semantic Potential: Spatial Language and Constrained Connectionism. Cambridge, MA: MIT Press.
- Sandra, D. 1998. 'What linguists can and can't tell you about the human mind: A reply to Croft'. *Cognitive Linguistics* 9, no. 4: 361–378.
- Sandra, D. & Rice, S. 1995. 'Network analyses of prepositional meaning: mirroring whose mind—the linguist's or the language user's?' *Cognitive Linguistics* 6, no. 1: 89–130.
- Schepping, M.-T. 1991. 'The lexical meaning of the French preposition *contre*'. In G. Rauch (ed.) 'Approaches to Prepositions', 225–252. Tübingen: Günter-Narr.

Schmalstieg, W. R. 1987. *A Lithuanian Historical Syntax*. Columbus: Slavica Publishers. Šeškauskienė, I. 2001. 'Cross-linguistic variation of space conceptualization'. In 'Transla-

- tion and Meaning, Part 5', 26–29. Hogeschool Maastricht. (Proceedings of the Maastricht Session of the 3rd International Maastricht-Lodz Duo Colloquium on "Translation and Meaning", held in Maastricht, the Netherlands, 26–29 April 2000).
- ——. 2003. "Proximity in English and Lithuanian". Kalbotyra 53, no. 3: 117–125.
- 2004. 'The extension of meaning: spatial relations in English and Lithuanian'. In B. Lewandowska-Tomaszczyk & A. Kwiatkowska (eds.) 'Imagery in Language. Festschrift in Honour of Professor Ronald W. Langacker [In the series Łlódź Studies in Language, vol.10]', 373–384. Frankfurt am Main, Berlin, Bern, Bruxelles, New York, Oxford, Wien: Peter Lang.
- 2007. "Artumo santykiai anglų ir lietuvių kalbose: kai kurie perkeltinės lokatyvų reikšmės ypatumai" [Relations of proximity in English and Lithuanian: meaning extension of some locatives]". *Filologija* 12: 85–94. http://www.su.lt/bylos/mokslo\_leidiniai/filologija/2007\_12/seskauskiene.pdf.
- Shakhova, D. & Tyler, A. 2010. 'Taking the principled polysemy model of spatial particles beyond English: the case of Russian *za*'. In V. Evans & P. Chilton (eds.) 'Language, Cognition and Space: The State of the Art and New Directions', 267–291. London, Oakville: Equinox.
- Steen, G. J., Dorst, A. G., Herrmann, J. B., Kaal, A. A. & Krennmayr, T. 2010. 'Metaphor in usage'. Cognitive Linguistics 21, no. 4: 765–796.
- Šukys, J. 1998. Lietuvių kalbos linksniai ir prielinksniai: vartosena ir normos [Lithuanian prepositions and cases: usage and norm]. Kaunas: Šviesa.
- Svorou, S. 1994. *The Grammar of Space*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- ——. 2008. 'Relational constructions in cognitive linguistics'. In D. Geeraerts & H. Cuyckens (eds.) 'The Oxford Handbook of Cognitive Linguistics', 726–752. Oxford: Oxford University Press.
- Tabakowska, E. 2003. 'Space and time in Polish: the preposition za and the verbal prefix *za*-'. In H. Cuyckens, Th. Berg, R. Dirven & K.-U. Panther (eds.) 'Motivation in Language. Studies in Honor of Günter Radden', 153–177. Amsterdam/Philadelphia: John Benjamins Publishing Company.

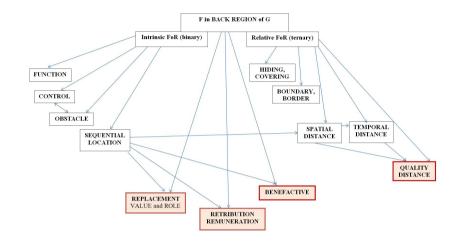
-----. 2010. 'The story of ZA: in defense of the radial category'. Studies in Polish Linguistics

5: 65–77.

- Talmy, L. 2000. Toward a Cognitive Semantics, vol. 1. Cambridge, MA: MIT Press.
- . 2007. 'Attention phenomena'. In D. Geeraerts & H. Cuyckens (eds.) 'The Oxford Handbook of Cognitive Linguistics', 264–293. Oxford: Oxford University Press.
- Taylor, J. R. 1988. 'Contrasting prepositional categories: English and Italian'. In B. Rudzka-Ostyn (ed.) 'Topics in Cognitive Linguistics', 299–326. Berlin, New York: Mouton de Gruyter.
- 1993. 'Prepositions: patterns of polysemization and strategies of disambiguation'. In C. Zelinsky-Wibbelt (ed.) 'The Semantics of Prepositions: from mental processing to natural language processing', 154–175. Berlin, New York: Mouton de Gruyter.
- ------. 1995. *Linguistic Categorization. Prototypes in Linguistic Theory*. Oxford: Clarendon Press.
- Tyler, A. 2012. Cognitive Linguistics and Second Language learning. Theoretical Basics and Experimental Evidence. New York/London: Routledge.
- Tyler, A. & Evans, V. 2003. *The Semantics of English Prepositions*. Cambridge: Cambridge University Press.
- Valiulytė, E. 1998. Dabartinės lietuvių kalbos sintaksiniai sinonimai [Syntactic synonyms in contemporary Lithuanian]. Vilnius: Mokslo ir enciklopedijų leidybos institutas.
- Vandeloise, C. 1991. Spatial prepositions. A Case Study in French. Chicago: The University of Chicago Press.
- Zinkevičius, Z. 1966. Lietuvių dialektologija [Lithuanian dialectology]. Vilnius: Mintis.
- —. 1981. Lietuvių kalbos istorinė gramatika [Grammar of Lithuanian on historical principles]. Vol. 1. Vilnius: Mokslas.

#### APPENDIX

A Network Of Senses Of  $U\check{z}$  'Behind' ( $U\check{z}$  + Gen. And  $U\check{z}$  + Acc.)



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