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When the search domain is back region in Baltic: The Latvian *aiz* as compared to the Lithuanian *už*

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Abstract. The paper sets out to examine prepositional polysemy in the Baltic languages. More precisely, the investigation focuses on the semantic structure of the Latvian preposition *aiz* + Gen. 'behind, beyond' as compared to the Lithuanian *už* + Gen. / Acc. 'behind, beyond, for' discussed in our previous paper (Šeškauskienė & Žilinskaitė-Šinkūnienė 2015). The methodology of research relies on the cognitive linguistic framework, mainly on the principle of motivated polysemy. Its key idea is that in the semantic network of the preposition all senses are seen as directly or indirectly linked to the central sense. In the case of *aiz* and *už,* the central sense encodes information about spatial configuration of Figure and Ground with the former located in the back region of the latter. A number of other senses, mostly concrete, derived from the central sense, overlap in Latvian and Lithuanian but demonstrate a differing degree of entrenchment. The most distinct differences are identifiable in the abstract senses.

Keywords: prepositions, semantics, cognitive framework, Latvian *aiz*, Lithuanian *už*

1 Introduction. Scope of the problem

Prepositional semantics has received considerable attention from linguists working in different languages. Linguists have generated an enormous amount of literature about space and prepositions in particular. Talmy's idea (2000, 179) that closed-class elements, such as prepositions or affixes, help organise the conceptual material has been largely agreed and verified on the data of many languages (see, for example, Cienki 1989; Cuyckens 1991; Taylor 1993; Haspelmath 1997; Maljar & Seliverstova 1998; Geeraerts 1992; Bellavia 1996; Levinson 2003; Tabakowska 2003; Berg-Olsen 2005; Przybylska 2002; Pawelec 2009; Lipovšek 2014; Šeškauskienė & Žilinskaitė-Šinkūnienė 2015, among others). The cognitive linguistic framework has been particularly effective when dealing with the semantic intricacies of "small" words, such as prepositions.

Prepositions are known to conceptualise spatial relations in language-specific ways; moreover, they are notoriously polysemous. In addition, in inflecting languages, such as Lithuanian (further also LT) or Latvian (further also LV) they are inevitably linked to cases and sometimes also to prefixes, which often coincide with prepositions and are used together, for example, *Jis* ***užlindo už*** *spintos* 'He slipped behind the wardrobe'. It is therefore understandable that some scholars tend to treat prepositions together with prefixes and include them into a single semantic network. On the other hand, prefixes have their own semantics, which does not in all cases overlap with prepositions (for the debate over the Polish preposition *za* and a corresponding prefix in Polish see Tabakowska 2003; 2010; Pawelec 2009; Przybylska 2002; for the overview of the semantics of the Latvian verbal prefix *aiz-* see Deksne 2019).

We adhere to the view that despite some semantic overlap, prepositional meaning is rather distinct and should be treated separately from prefix. Such view is in line with Langacker's claim that prepositions are not the best examples of "closed-class" forms and that they have "definite conceptual meanings which are sometimes fairly elaborate" (Langacker 2010, 13). We would also adhere to the view that if a preposition governs several grammatical cases, they should be joined into a single semantic network (see Šeškauskienė & Žilinskaitė-Šinkūnienė 2015 for the Lithuanian *už*; Shakhova & Tyler 2010 for the Russian *za*; Tabakowska 2003 for the Polish *za*).

The network is based on the motivated meaning approach whereby motivation is understood as explainability (Matlock 2004) advocated by a number

of linguists working in the cognitive linguistic framework (e.g. Radden 1985; Lakoff 1987; Taylor 1993). Motivation underlies the idea of radiality in polysemy, which is often contrasted with the approach of distinct multiple senses usually found in structural linguistics. In interpreting prepositional meaning, a number of Lithuanian and Latvian scholars posit independent senses providing a traditional description of prepositional semantics or lay emphasis on diachronic links among the senses (Grabis 1959; Endzelīns 1971[originally, 1905]; Nītiņa 1978; Ambrazas 1997; 2006; Valiulytė 1998). Some scholars working in the cognitive linguistic framework have attempted to establish motivated links between senses of selected prepositions, mainly in Lithuanian (see Šeškauskienė 2001; 2004; 2007; Mikulskas 2009; Šeškauskienė & Žilinskaitė-Šinkūnienė 2015).

Our previous paper (ibid.) gives an account of a motivated semantic network of one selected preposition in Lithuanian, *už* + Gen. / Acc. 'behind, beyond, for', which primarily expresses the idea of a back region of one of the participants in the local scene. Latvian *aiz* + Gen. in the expression of the back region overlaps to a large extent with Lithuanian. Differing senses are mostly concerned with the accusative case governed by the Lithuanian *už* and with some language-specific synchronic and diachronic features. To verify the hypothesis, we will further focus on the analysis of the Latvian *aiz* and compare its senses to those established in Lithuanian.

2 Key notions and methodological framework

Scholars working on prepositional semantics usually make use of at least two key notions: Ground (further also G, see Talmy 2000; also referred to as Landmark, see Langacker 1987; 2010), which is a more backgrounded element of a spatial scene, a reference point, and Figure (further also F, see Talmy 2000; also referred to as Trajector, see Langacker 1987; 2010), a more foregrounded element of the spatial scene, which is or has to be located. The two notions are illustrated in example (1) below:

(1) *There is a bicycle* (F) *behind the tree* (G).

Like the English *behind*, as illustrated in the above example, the Latvian *aiz* and the Lithuanian *už* refer to the back region, which is understood as area to

G or its part "in which a specific description is valid" (Svorou 1994, 13). The items chosen for this investigation are typical projective prepositions, i.e. they require angular information in their interpretation (Levinson 2003, 62–69). Angular information is rendered through certain frames of reference (further also FoR): *intrinsic* and *relative* (ibid.). The former is binary and consists of F and G with the vantage point matching with G. In other words, G has its inherent or functional parts, such as front or back primarily identifiable in humans and also in some artefacts to which human fronts and backs are transferred, such as in a car whose front coincides with the part which the driver and the passengers are facing and the back which is opposite to the front and coincides with the back of the driver and the passengers. When the speaker changes his / her position, the front and / or back of a human or a car does not change. The relative FoR is more complex in that it is ternary and consists of F, G, and the viewer, or conceptualiser, of the spatial scene. As seen in example (1), the tree does not have its own back; rather, it is imposed by the conceptualiser and may change when the speaker's position changes.

In our analysis, we adhere to the framework suggested by Tyler and Evans (2003; also see Tyler 2012), who attempt to systematize the multiplicity of some English prepositions suggesting that all senses are derived from a proto-schema, or conceptual schema (Navarro i Ferrando 1998; also see Langacker 2010), primarily realised in the central sense. All other senses are derived from the central sense according to some established principles. Collectively, they are referred to as *principled polysemy approach* (Tyler & Evans 2003, 45–53; Tyler 2012, 132f.). According to the approach, the identification of central, or primary, sense is based on linguistic and empirical evidence. The first type of evidence includes such criteria as earlier attested meaning, predominance in the semantic network, use in composite forms, relation to other spatial particles and grammatical predictions (Tyler & Evans 2003, 47). Empirical evidence is concerned with the evidence derived by experimentation; it supplements linguistic evidence. Without questioning the relevance of the criteria, we assume that some of them are more important than others, depending on a concrete preposition.

Other senses directly or indirectly derived from the central sense may also provide information on the relationship between F and G defined in terms of geometry (such features as size, configuration, trajectory of movement,

etc.), relationship to the conceptualiser, G's function, which is interpreted as immediate purpose for which G is used, such as driving in the expression *behind the wheel*, or any other relationship, such as container in the interpretation of the preposition *in* and support in the interpretation of the preposition *on* (see Langacker 2010; Jamrozik & Gentner 2011). What seems to be no less important includes more general principles, such as encyclopaedic knowledge, embodiment, real-world force dynamics, fictive motion, metaphor and different construal operations (see, for example, Tyler 2012, 134). For example, the principle of embodiment is important when identifying the back region in respect to the conceptualiser or identifying the central sense as more physical, closer to our bodily experience, metaphor is paramount in defining more abstract senses referring to emotions, values, etc. (for more on metaphor identification see Steen et al. 2010). Most of the principles are described in detail in our previous paper (Šeškauskienė & Žilinskaitė-Šinkūnienė 2015).

Shakhova and Tyler (2010) have applied Tyler and Evans's model in the analysis of the Russian preposition *za.* The paper may be worth a detailed discussion; however, for the reasons of space we would only point out that in the overall semantic network of the preposition, some senses, mostly concrete, physical, were described in more detail and their relationship to other senses has been well-motivated. Some other senses, mostly abstract, were only briefly sketched. The motivation of abstract senses of *za* and their relationship to the concrete senses is not very explicit. However, where possible, we are going to compare the interpretation of the Latvian *aiz* with the results of the Russian *za* (idem.) and also refer to other studies of back region prepositions in inflecting (mostly Slavonic) languages (Tabakowska 2003; Przybylska 2002; Cienki 1989; Lipovšek 2014).

3 Previous research on the Latvian *aiz*

The largest dictionary of Latvian (LLVV 1972, 50f.) distinguishes three senses of *aiz* + Gen. according to semantic domains: 1) spatial (includes five submeanings): location on the other side or in the back, motion to that region, boundary, sequence; 2) interactional (indicates what is touched, captured, led, held); 3) abstract (reason). In LVV 1987 (p. 21) four senses of *aiz* + Gen. are provided: 1) spatial (refers to a place where sb or sth is located, takes place

or is moving to, which is on the other side or in the back region of the object, expressed by the word following the preposition); 2) refers to the object which is touched by embracing or grasping it; 3) sequence; 4) reason. The same senses are also found in LVV 2006 (p. 22).

In all the above dictionaries the senses of *aiz* are arranged starting with the spatial sense. In some studies focusing on Latvian prepositions, links between the senses are identified (Endzelīns 1971; Nītiņa 1978). Endzelīns (1971, 326–329) describes the semantics of *aiz* starting from the spatial sense and relating other senses thereto. The spatial sense of *aiz* underlies syntagmata with the verbs referring to grasping, catching, holding, pulling, etc. The temporal meaning is also based on the spatial understanding of *aiz*. The spatial meaning develops into comparative and further into the meaning of 'more' where *aiz* is frequently used with numerals, still further development results in the causal sense, or *aiz causale*. The meaning of substitution 'instead of' is also explained as having its roots in the spatial meaning.

Nītiņa (1978, 40–46) discusses the development of *aiz* from the beginning of the Latvian written language and identifies several senses: spatial (on the other side, or behind), direction, type of fastening, grasping, catching, taking, etc., spatial and temporal sequence, reason, purpose, substitution and comparison, also separately lists formulaic expressions with *aiz*. She also attempts to account for the semantic relationships between the senses and points at the entrenchment of some senses during certain periods of language development.

Rozenbergs (1975) focuses on adverbal constructions with genitive used with the preposition *aiz*; his main question is the treatment of the so-called prepositional cases on a syntactic level. The scholar offers some important insights into the semantics of *aiz*; he rightly points out that some senses of *aiz* (temporal, comparative, "instead of") are non-existent in contemporary Latvian.

The semantics of *aiz* has been discussed fairly extensively in Latvian linguistics, albeit mostly in the framework of diachronic or structural linguistics. We adhere to a more cognitively-oriented approach and aim to provide a motivated network of the senses of the Latvian *aiz* comparing it to the network of the Lithuanian *už*. Before we proceed to the analysis, we will discuss the diachronic development of the Latvian preposition and describe the data and the procedure of the investigation.

4 The Latvian *aiz* from a diachronic perspective as compared to the Lithuanian *už*

Diachronic evidence in many cases helps explain certain phenomena which cannot be accounted for by a purely synchronic approach. It is therefore important to refer to certain facts of diachronic development of the preposition referring to the back region of G in the two Baltic languages. The Latvian *aiz* stems from IE **ĝhō* 'behind, under', cf. LT *až*, *ažù* 'behind', Slav. *za* 'idem'. According to Endzelīns, the present-day form *aiz* is the result of merging *az* and *iz* (Karulis 2001, 59). LV *aiz* governs genitive in singular and dative in plural, the latter case being generalised with all prepositions in plural (Endzelīns 1951, 632–635).

The Lithuanian *už* is more complex, from both formal and semantic points of view (Zinkevičius 1981, 189; Ambrazas 2006, 294; also cf. Endzelīns 1971, 319–330, 409–413; Endzelīns 1951, paras 497–500; Fraenkel 1929, 166–174). Firstly, it governs two cases: genitive and accusative in both singular and plural. Secondly, the diachronic development seems to be more complicated. In Old Lithuanian, there were two prepositions which eventually evolved into *už* 'behind, for': *ažu* + Gen. 'behind' < IE **ĝhō* 'behind, under', cf. LV *aiz*, dial. *az* 'behind', Slav. *za* 'idem', and *už* + Acc. 'direction: onto the surface' < IE **ūd- / ŭd-* 'up, on', cf. LV *uz* 'on, towards', OCS *vъz*(ъ) 'upward, onto, for, in exchange for' (Zinkevičius 1981, 189; Ambrazas 2006, 294). As a result of merging, the contemporary Lithuanian preposition *už* governs two cases and is highly polysemous, which was demonstrated in our previous paper (Šeškauskienė & Žilinskaitė-Šinkūnienė 2015) and will be used for reference in subsequent sections in this paper.

5 Data and procedure

The data for the analysis of the Latvian *aiz* has been collected from the Lithuanian-Latvian, Latvian-Lithuanian parallel corpus (LILA, ca 8.8 m running words) specifically focusing on the sub-corpus of direct translations (ca 1.7 m running words; for more information about the LILA corpus see Rimkutė et al. 2013). Further in this paper, LILA refers to this sub-corpus of Latvian-Lithuanian.

In LILA, the total number of the occurrences of *aiz* was 768; all of them were manually annotated for various semantic predictors that might help delin-

eate different senses of the preposition under study, namely, types of F and G (animate, inanimate, body part, abstract), type of verb (static / dynamic), meaning (spatial vs other). In addition, as the data of the parallel corpus provides a possibility to compare the Latvian *aiz* with its correspondences in Lithuanian, all Lithuanian translation equivalents were listed as well.

Some senses in LILA were not represented properly because of their low frequency or lack of context required to understand a specific sense. In such cases we added examples from the Corpus of Contemporary Latvian (LVK 2018) where *aiz* occurs 3,187 times. For the purposes of this investigation, we randomly selected 1,000 concordance lines.

As already mentioned, when deciding upon a concrete sense of the preposition, we adhered to the general cognitive linguistic principles and the principled polysemy approach outlined above. In addition, we also followed steps of prepositional sense identification, which are partially based on the principles of metaphor identification procedure (see Steen et al. 2010). First, we examined each context trying to identify types of F and G as well as their relationship. Then we tried to identify a (possible) metaphorical transfer into the domains of time, emotions, social relations, etc. Third, we took into consideration the frequency of use with very rare cases attributed to marginal usage or usage bordering extinction. Fourth, the diachronic development and typological data were referred to, especially in cases where other criteria were not helpful.

6 Results and discussion

This section is structured as follows: as Latvian is our main focus, we primarily describe the Latvian *aiz*; at the same time, we compare the Latvian data with Lithuanian, also providing examples from the parallel corpus. We start with the central sense of the preposition LV *aiz*, then discuss other overlapping senses of LV *aiz* and LT *už* and, finally, outline the differences.

6.1 Overlapping senses

As a result of our analysis, eight senses turned out to be overlapping in Latvian and Lithuanian. In addition to the central sense of location in the back region, both languages share the sense of function, support, control, obstacle, hiding and covering, boundary and border, and sequential location. Trying not repeat what has been written in our previous paper about the Lithuanian *už*

(Šeškauskienė & Žilinskaitė-Šinkūnienė 2015), most examples included in our further analysis and discussion are from Latvian.

6.1.1 The central sense of the Latvian *aiz*: location in the back region

Like the Lithuanian *už,* the Latvian *aiz* posits a central sense with F located in or moving into the back region of G. The back region is conceptualised through either intrinsic or relative FoR. In case of intrinsic FoR, G is asymmetrical, which means that its back region is identified through its inherent or functionally salient parts, such as G's, who is human, back, for example:

(2) LV *Mēs* *stāvam* *ielas* *malā,* *mums*
LT *Mes* *stovime* *gatvės* *pakrašty,* *mums*
1PL.NOM stand.PRS.1PL street.GEN.SG side.LOC.SG 1PL.DAT
LV ***aiz*** ***muguras*** *zila* *neona* *reklāma* […]
behind back.GEN.SG blue.NOM.SG neon.GEN.SG advertisement.NOM.SG
LT ***už*** ***nugaros*** *mėlyna* *neoninė*
behind back.GEN.SG blue.NOM.SG neon.NOM.SG.F
reklama […]
advertisement.NOM.SG
'We are standing on the side of the street, **behind our backs** there is a blue neon advertisement.'

The expression *aiz muguras* metonymically refers to a person and is quite frequent in our data. Both languages give preference to lexemes referring to persons; typically, in the context where *door* features as F closing behind someone (G), e.g.:

(3) LV *Durvis* ***aiz*** ***viņa*** *aizcirtās*.
LT *Durys* ***už*** ***jo*** *užsitrenkė*.
door.NOM.PL behind 3.GEN.SG.M shoot.PST.3
'The door slammed shut **behind him**.'

However, in the realisation of the central sense, Latvian and Lithuanian demonstrate certain differences. In contexts like (3), Latvian employs lexemes

denoting animate Gs, whereas Lithuanian highlights G's body part, mainly back, for example:

(4) LV *Durvis* ***aiz*** ***Ingunas*** *noklaudzēja*.
door.NOM.PL behind PN.GEN bang.PST.3
LT ***Už*** ***Ingunos*** ***nugaros*** *sutrinksėjo* *durys*.
behind PN.GEN back.GEN.SG bang.PST.3 door.NOM.PL
'The door **behind Inguna** has banged.'

One of contextual features in Latvian is the phrase *aiz sevis* 'behind oneself', which is hardly ever found in the Lithuanian translation:

(5) LV *Ārija* *aizver* ***aiz*** ***sevis*** *ārsta* *kabineta*
PN.NOM close.PRS.3 behind RFL doctor.GEN.SG office.GEN.SG
durvis […]
door.ACC.PL
LT *Arija* *užveria* *gydytojo* *kabineto* *duris* […]
PN.NOM close.PRS.3 doctor.GEN.SG office.GEN.SG door.ACC.PL
'Arija closes the door to the doctor's office [**behind herself**].'

Apparently, contexts with the door closing behind someone are sometimes rendered into Lithuanian by adopting a different windowing of attention (Talmy 2000, 271–274). As can be attested in (6), the resulting sub-event in Latvian is rendered as a causative clause in Lithuanian or a different viewpoint is chosen swapping the agent with the patient, e.g.:

(6) LV *Kad* ***aiz*** ***Jāņa*** *aizvērušās* *durvis* […]
when behind PN.GEN close.PST.PA.NOM.PL.F.RFL door.NOM.PL
'When the door **behind Janis** closes […].'
LT *Kai* *Janis* *išeidamas* *uždaro* *duris* […]
when PN.NOM go_out.CVB.SG.M close.PRS.3 door.ACC.PL.
'When leaving Janis closes the door […].'

In the central sense, *mugura* 'back' is not the only lexeme in the position of G. The back region through intrinsic FoR is also referred to by other body parts, such as *plecs* 'shoulder', *auss* 'ear', *galva* 'head', *plakstiņi* 'eyelids', *kakls*

'neck', the latter usually meaning 'collar'. A clearly identifiable front-back distinction is also valid for clothes or fabrics, such as *krekls* 'shirt', *džīnas* 'jeans', *apkakle* 'collar', *dekolte* 'décolleté', *padrēbe*, *odere* 'lining', *pārvalks* 'covering', or human-worn artefacts, such as *brilles* 'glasses', e.g.:

(7) LV *Sniegs* ***aiz*** ***apkakles***.
snow.NOM.SG behind collar.GEN.SG
LT ***Už*** ***apykaklės*** *pilna* *sniego*.
behind collar.GEN.SG full.NA snow.GEN.SG
'Snow **behind the collar**.'

Another group of Gs includes inanimate objects with the front / back distinction according to their functional parts, such as direction of movement for vehicles or entrance for buildings.

As already discussed, in case of relative FoR, the back region is identified in reference to the conceptualiser and may change when the conceptualiser's position changes, e.g.:

(8) LV *Viņa* *ierauga* *pelēku* *seju*
LT *ji* *pamato* *pilką* *veidą*
3.NOM.SG.F see.PRS.3 grey.ACC.SG face.ACC.SG
LV ***aiz*** ***restota*** ***loga***.
LT ***už*** ***grotuoto*** ***lango***.
behind barred.PST.PP.GEN.SG.M window.GEN.SG
'She notices a grey face **behind a slatted window**.'

When the back region is imposed through relative FoR, Gs are more varied. The most frequent are lexemes denoting different plants, sections of a house or a yard, such as *siena* 'wall', *durvis* 'door', *logs* 'window', *rūts* 'pane', *žogs* 'fence', *dzīvžogs* 'hedge' and other objects lacking intrinsic front or back. These sides are identified depending on the position of the viewer / conceptualiser.

6.1.2 Function

In the function sense, F and G interact in physical space in a specific way according to G's main function: table is used for writing or eating, counter for customer service, wheel for driving. In both Baltic languages, a limited number

of lexemes are employed as Gs. This sense seems to be more firmly established in Slavonic languages (Cienki 1989, 115–117; Prybylska 2002, 342f.; Shakhova & Tyler 2010; Lipovšek 2014), since a larger variety of objects are employed as Grounds used according to function (in Cienki's and Lipovšek's terminology, *objects of activity*). They include tables, driving wheels, pianos, computers, etc. In our Latvian corpus, only *lete* 'counter' (also *reģistratūras lete* 'reception desk') and *galds* 'table' (also *rakstāmgalds* 'desk', *karšu galds* 'card table') have been attested, e.g.:

(9) LV *viņš* […] *sagaidīja* *pircējus* *stāvēdams* ***aiz*** ***letes*** […]
3.NOM.SG.M meet.PST.3 buyer.ACC.PL stand.CVB.SG.M behind counter.GEN.SG
LT *jis* […] *sutikdavo* *pirkėjus* *stovėdamas* ***už*** ***prekystalio*** […]
3.NOM.SG.M meet.PST.3 buyer.ACC.PL stand.CVB.SG.M behind counter.GEN.SG
'He met his customers standing **behind the counter**.' [=working as a salesperson]

(10) LV *Kapteinis* *Mordāns* *sēdēja* *krēslā* ***aiz***
captain.NOM.SG PN.NOMsit.PST.3 sit.PST.3 chair.LOC.SG behind
LT *Kapitonas* *Mordanas* *sėdėjo* *krėsle* ***prie***
captain.NOM.SG PN.NOM sit.PST.3 chair.LOC.SG at
LV ***liela*** ***karšu*** ***galda*** *un* *kūpināja*
LT ***didelio*** ***kortų*** ***stalo*** *ir* *papsėjo*
big.GEN.SG.M card.GEN.PL table.GEN.SG and smoke.PST.3
pīpi.
pypkę.
pipe.ACC.SG
'Captain Mordan sat in a chair **behind a large card table** and smoked a pipe.'

Even though in (10) LT employs the preposition of proximity *prie* 'at' (*prie stalo* 'at the table'), *už stalo* 'behind the table' is also possible. It is assumed that *už* with the table as G originates from the relative FoR as the table in

traditional Lithuanian houses was placed opposite the door, and looking from the point of view of a person entering the room people were seen as sitting behind the table; later such usage became entrenched for all positions around the table (Šukys 1998, 522). Other Gs as objects of activity, especially the driving wheel, are explained by more traditional Lithuanian linguists as a result of Russian influence and replaced by *prie vairo* 'at the driving wheel'. However, sitting *behind* the wheel when driving is rather common in spoken Lithuanian. Interestingly, in Latvian the only possibility is *pie stūres* 'at the driving wheel'. It is worth mentioning that the functional use of the back region prepositions is possible not only in Slavonic, but also in Germanic languages, e.g. German (*Er saß hinter dem Lenkrad*, Przybylska 2002, 343) or English (albeit not productive, e.g. *the man behind the wheel / the computer screen / the desk / the counter*, Lipovšek 2014, 166).

In older texts, as attested by Fraenkel (1929, 175), not only tables, but also plates and cutlery as objects of activity were possible; however, such usage is not attested in contemporary Lithuanian. Interestingly, in our corpus, we found one LV example with a glass as an object of activity:

(11) LV *Arī Florenci Bronte pieveda pie galda, kur*
also PN.ACC PN.NOM take.PST.3 at table.GEN.SG where
viešņa bija nosēdināta ***aiz*** ***pilnas***
guest.NOM.SG PST.3 seat.PST.PP.NOM.SG.F behind full.GEN.SG.F
glāzes.
glass.GEN.SG

LT *Ir Florenciją Brontė nusivedė prie stalo,*
also PN.ACC PN.NOM take.PST.3 at table.GEN.SG
kur ***prie pilnos vyno taurės***
at where full.GEN.SG.F wine.GEN.SG glass.GEN.SG
buvo pasodinta viešnia
PST.3 seat.PST.PP.NOM.SG.F guest.NOM
'Bronte also brought Florence to the table, where the guest was seated **behind a full glass**.'

There was one utterance found where G was a camera used according to its function, i.e. for the purpose of filming. As revealed by a broader context, the situation is taking place on a filming site:

(12) LV *Es* *ēdu,* *metu* *grozā* *un* *pēc*
1SG.NOM eat.PST.1 throw.PST.1 basket.LOC.SG and after
tam nesu tiem, kas
DEM-DAT.SG.M bring.PST.1 DEM-DAT.PL.M INT.NOM
atradās ***aiz*** ***kamerām***.
be.located.PST.3 behind camera.DAT.PL
'I ate it, threw it into the basket and then carried it to those **behind the cameras**.'

Researchers working on Slavonic languages explain the function sense either through intrinsic (Przybylska 2002, 343) or relative (Cienki 1989, 116) FoR. A few years ago, we proposed an intrinsic interpretation for Lithuanian (Šeškauskienė & Žilinskaitė 2015, 13–16) and would adhere to it when interpreting the Latvian *aiz*. Despite that the sense may have originated from the relative FoR with the table as G, for decoding the meaning, the third member, the observer, of the spatial scene, is not necessary.

6.1.3 Support

In the sense of support, G is conceptualised as a line capable of holding F and preventing it from falling down. G is indeed a linear object in most utterances, such as *josta* 'belt, waistband', *aukliņa* 'cord', *gumijiņa* 'rubber band', *piedurknes atloks* 'sleeve flap', *gredezens* 'ring', *durvju kliņķis* 'door handle', in some cases the object's edge is profiled: *slēģis* 'shutter', *austiņa* 'ear', etc. Typical contexts include Figures-weapons (*cirvītis* 'ax', *duncis* 'dagger', *zobens* 'sword', *nazis* 'knife', *pistole* 'pistole'), which are located, squeezed or pushed behind Gs. In such contexts contact between F and G as well as G's force-dynamic properties are crucial, for example:

(13) LV *Gruntem* ***aiz*** ***jostas*** *somu* *duncis*.
PN.DAT behind belt.GEN.SG Finn.GEN.SG dagger.NOM.SG
LT *Gruntei* ***už*** ***juostos*** *suomiškas* *peilis*.
PN.DAT behind belt.GEN.SG Finnish.NOM.SG dagger.NOM.SG
'There is a Finnish dagger **behind Gunte's belt**.'

In the sense of support, other Fs are also possible (e.g. *naudas zīme* 'banknote', *zariņš* 'twig / branch', *lapiņa* 'leaflet', *vedeklis* 'hand fan'). As

a rule, Fs often exceed Gs in size (and thus do not conform to the typical F–G properties defined by Talmy 2000, 183); however, the property does not preclude a specific relation between F and G, e.g.:

(14) LV *Kadiķis noņēma* ***aiz*** ***vecā*** ***durvju***
PN.NOM remove.PST.3 behind old.GEN.SG.M.DEF door.GEN.PL
kliņķa *aizsprausto* *zariņu,* *kas*
handle.GEN.SG stick.PST.PP.ACC.SG.DEF twig.ACC.SG INT.NOM
pieturēja *durvis* […]
hold.PST.3 door.ACC.PL
LT *Kadugys* *ištraukė* ***už*** ***senos*** ***rankenos***
PN.NOM remove.PST.3 behind old.GEN.SG.F handle.GEN.SG
užkištą *šakelę,* *kuri* *prilaikė* *duris* […]
stick.PST.PP.ACC.SG twig.ACC.SG INT.NOM hold.PST.3 door.ACC.PL
'Juniper removed the twig stuck **behind the old door handle** which held the door.'

G's types of objects employed in this sense are in conformity with the interpretation of the intrinsic FoR. However, relative FoR cannot be entirely excluded.

6.1.4 Control

In the sense of control, animate F exerts force onto G thus making contact inevitable. The sense is realised in utterances with verbs referring to actions and activities indicating pressure or other strong impact on G (e.g. (*iz-/*)*raut* 'pull (out)', (*no-/*)*satvert*, (*sa-/pa-*)*noķert* 'catch', *grābt* 'grasp', *purināt* 'shake', *izmest* 'throw away', *paraut* 'hitch', (*pa-/*)*vilkt* 'drag', *raustīt* 'twitch', *pakampt* 'snatch', *celt* 'lift'); in some cases, more neutral verbs are also possible (e.g. (*pa-/no-/pie-*)*turēt* 'hold', *ņemt* 'take', *saņemt* 'get'). Gs range from artefacts to plants to humans. G is usually affected through its (inalienable) part, which is often linear or pipe-like, such as body parts (15), pieces of clothing or their parts (e.g. *stērbele* 'hem' or *poga* 'button': *saķert aiz svārku malas* 'catch by the edge of the skirt'), sides or parts of plants (e.g. *saņemt sēni aiz cepures* 'to pick a mushroom behind its head (*lit.* cap)', also artefacts or their parts (e.g. *iemaukti* 'bridle', *pavada* 'bridle rein', *virve* 'rope', *diegs* 'thread', *stiprinājumi* 'strapping'; *satvert glāzi aiz kājiņas* 'grab the glass by the stem'), e.g.:

(15) LV *Paņemu* *aitu* ***aiz*** ***sāniem***.
take.PRS.1 sheep.ACC.SG behind side.DAT.PL
LT *Paimu* *avį* ***už*** ***šonų***.
take.PRS.1 sheep.ACC.SG behind side.GEN.PL
'I take the sheep **by (lit. behind) its sides**.'

In LILA, there are quite a few idiomatic expressions, which are motivated by the sense of control, such as *raustīt aiz ūsām* 'pull sb by his moustache'[='annoy, tease sb'], *vazāt aiz deguna* 'lead sb by his / her nose' ['make a fool of sb'].

In our data, the sense of control is the second most frequent sense and, apparently, is deeply entrenched in usage. The sense has been derived from the spatial sense and may have originated from situations requiring instantaneous reaction, hence the frequency of the verbs of grab or snatch type. Interestingly, situations where F exerts control over G by, primarily, putting his / her hand so that it reaches behind the back region of G's part, like grabbing a handle of a refrigerator, may be interpreted within the intrinsic as well as relative FoR. The latter is preferred by Tabakowska (2003, 166), who explains the situation through the notion of accessibility of G via its part, a secondary reference object. Shakhova and Tyler (2010) see such situations within the binary FoR highlighting contact between F and G.

6.1.5 Obstacle

The sense of obstacle is derived from the central sense and is related to the sense of control. However, in the sense of control, F affects G, whereas in the sense of obstacle F is affected by G. F is prototypically human or refers to a body part, mainly a leg or a hand, which sometimes metonymically stands for a person. A moving hand or leg contacts G, which is a natural or artificial obstacle or barrier, such as *sliede* 'rail', *siksna* 'strap', *ķēde* 'chain', *āķis* 'hook', *krampis* 'a hook for the door', *paksis* 'corner of the house', *sakne* 'root', *dzeloņstieples* 'barbed wires', or *zars* 'branch'. G changes the course of movement of a volitional F and / or prevents a mobile F from further activity or movement. The sense is realised in contexts where verbs reiterate the sense by expressing the idea of hitching, catching or hooking, e.g. *aizķerties*, *aizmesties* 'catch in / on', *aizāķēties* 'hook up'; the verbal prefix coincides in form with the preposition. F is usually larger than G, e.g.:

(16) LV *Atkāpjos* *no* *krants* *malas,* *bet* *kāja*
step_back.PRS.1 from ravine.GEN.SG edge.GEN.SG but leg.NOM.SG
aizmetas ***aiz*** ***vaļējas*** ***saknes***.
catch_in.PRS.3RFL behind open.GEN.SG.F root.GEN.SG
LT Žengiu *atatupsta* *nuo* *pakriūtės* *krašto,*
step.PRS.1 jibbing.NOM.SG.F from ravine.GEN.SG edge.GEN.SG
bet *koja* *užkliūva* ***už*** ***atsikišusios***
but leg.NOM.SG get_stuck.PRS3 behind protruding.GEN.SG.F
šaknies.
root.GEN.SG
'I step back from the edge of the ravine, but my foot gets stuck **behind the open root**.'

In the corpus, there are also cases of fictive motion attested. In such utterances, nouns referring to sight or gaze appear as Fs (LV *skatiens*, LT *žvilgsnis*), and G is realised through any object that is perceived as a goal of visual search. Naturally, in such utterances verbs of stumble or catch type are frequent.

6.1.6 Hiding and covering

The sense of hiding and covering is usually realised through the relative FoR. In most utterances, G is larger than F and expressed through a variety of objects, such as *koks* 'tree', *akmens* 'stone', *mākoņi* 'clouds', also solid artefacts, such as furniture, buildings or their parts (*skapītis* 'locker', *šķūnis* 'shed', *kolonāde* 'colonnade', *stūris*, *paksts* 'corner'), fabrics (e.g. *aizkars* 'curtain', *sega* 'blanket', *palags* 'sheet', *padrēbe* 'cloth', *odere* 'lining', *vēdeklis* 'hand fan') or artefacts used to protect oneself (e.g. *vairogs* 'shield'), also persons or their body parts (e.g. *mugura* 'back', *plaukstas* 'hands'). Despite considerable diversity, G is conceptualised as a two-dimensional plane used to cover or hide F. Thus G in this sense is not just a reference point with its back region to locate F. It also functions as a hiding place or protection. In our data, F is frequently human, but could be almost any living being or object, as long as F's profiled part is smaller than G and hidden or covered by it. F may be visible, but more often it is not, depending on context, and typically appears in contexts with the verbs *slēpt* (*noslēpt*) 'hide', *slēpties* (*aizslēpties*, *paslēpties*) 'hide oneself', *patverties* 'find shelter', *pietupties* 'hunker down', *aizkrist* 'fall behind', *aizbāzt* 'push behind', *nobāzt* 'shove', e.g.:

(17) LV *Emīlija* [...] *cenšas* *saskatīt* *zemnieku*
LT *Emilija* [...] *stengiasi* *suskaičiuoti* *ūkininkų*
PN.NOM try.PRS.3RFL count.INF farmer.GEN.PL
sodybas, *bet*
sētas, *bet*
homestead.ACC.PL but
LV *tās* *visas* *paslēpušās* ***aiz***
DEM.NOM.PL.F all.NOM.PL.F hide.PST.PP.NOM.PL.F.RFL behind
kokiem.
tree.DAT.PL
LT *jos* *visos* *pasislėpusios* ***už***
3.NOM.PL.F all.NOM.PL.F hide.RFL.PST.PP.NOM.PL.F behind
medžių.
tree.GEN.PL
'Emilija tries to count the farmsteads, but they are all hidden **behind the trees**.'

(18) LV *Telefona* *būdā* ***aiz*** ***plastmasas***
phone.GEN.SG booth.LOC.SG behind plastic.GEN.SG
aizsargstikla *palika* *glezna*.
protective_cover.GEN.SG stay.PST.3 painting.NOM.SG
LT *Telefono* *būdelėje* ***už*** ***plastmasinio***
phone.GEN.SG booth.LOC.SG behind plastic.GEN.SG.M
apsauginio ***stiklo*** *liko* *paveikslas*.
protective.GEN.SG.M glass.GEN stay.PST.3 painting.NOM.SG
'In the telephone booth, the painting was left **behind the plastic protective glass**.'

It seems that inaccessibility is the main consequence of the hiding and covering sense; invisibility is only one of its realisations (see examples (17) and (18)). Inaccessibility is also identifiable in idiomatic expressions, such as LV *aiz slēgtām durvīm*, LT *už uždarų durų* 'behind the closed door' [='secretly'], also in different contexts rendering any action, such as sneering or mocking, performed behind someone's back (LV *aiz muguras*, LT *už nugaros*) where being invisible or inaccessible is paramount.

The sense of hiding and covering apparently gives rise to various expressions motivated by conceptual metaphors, the most prominent being LANGUAGE IS A COVER OF MEANING. Notably, Latvian and Lithuanian abounds in utterances where (true) meaning is hidden behind his / her words, nice phrases, etc.

6.1.7 Boundary or border

In the sense of boundary, G is conceptualised as an area with a salient boundary separating two different sub-areas. The back region of the Ground is transformed into an outer sub-area, which is profiled against the inner sub-area. The outer sub-area is conceptualised via relative FoR; however, the intrinsic interpretation is not completely ruled out. F is usually human, sometimes indirectly referred to by an action or activity, e.g.:

(19) LV – *Cauri* *zonai* *braukt* *maksimālā* *ātrumā,*
through zone.DAT.SG drive.INF maximum.LOC.SG speed.LOC.SG
aiz ***zonas*** – *minimālā*.
behind zone.GEN.SG minimum.LOC.SG
LT – *Per* *zoną* *važiuoti* *didžiausiu* *greičiu,*
across zone.ACC.SG drive.INF biggest.INSTR.SG speed.INSTR.SG
už ***zonos*** – *lėčiausiai*.
behind zone.GEN.SG slowest.ADV
'Drive across the zone at maximum speed, **beyond the zone** at minimum speed.'

G is expressed by lexemes denoting areas (*ciems* 'village', *zona* 'zone') where the boundary is implied or by lexemes denoting boundaries, such as *žogs* 'fence', *strīpa* 'line', *polārais loks* 'arctic circle', *pilsētiņas*, *mājas*, *ciema*, *valsts robeža* 'border of a town, home, village, country', *pilsētas vārti* 'gates or wall of a town', *mūris*, *siena* 'wall', *falšborts*, *botrs* 'board', *finiša lente* 'finish line'. The boundary may be imposed onto a multiplex object, which is usually perceived as a continuous line, e.g.:

(20) LV – *Pilsoņi,* *nepeldiet* ***aiz*** ***bojām****!*
citizen.VOC.PL NEG.swim.IMP.2PL behind buoy.DAT.PL
LT – *Piliečiai,* *neplaukit* ***už*** ***plūdurų****!*
citizen.VOC.PL NEG.swim.IMP.2PL behind buoy.GEN.PL
'Citizens, do not swim **beyond buoys**!'

Some utterances give rise to metaphorical expressions motivated by the sense of boundary. For example, LV *aiz realitātes*, LT *už realybės* 'beyond reality' both refer to situations where a state or emotion is described as very pleasant, beyond the boundary of dreary reality.

6.1.8 Sequential location

In the sense of sequential location, both F and G are typically humans located one after another in a row, all facing the same direction. According to Talmy (2000, 203), such spatial situations evoke an encompassing secondary reference object, which becomes paramount for the overall conceptualisation of the spatial scene. Secondary G is a row or a line (*rinda* 'queue, row', *ierinda* 'formation', *pajūgs* 'team', *kolonna* 'column'), which encompasses the primary G, e.g.:

(21) LV *Linmeijers atgriežas ierindā un nostājas*
NP.NOM return.PRS.3RFL rank.LOC.SG and stand.PRS.3RFL
kolonnas beigās ***aiz kapteiņa Melnbārža***.
column.GEN.SG end.LOC.PL behind captain.GEN.SG NP.GEN
LT *Linmejeris grįžta į rikiuotę ir stoja*
NP.NOM return.PRS.3 to rank.ACC.SG and stand.PRS.3
kolonos pabaigoje ***už kapitono Melbardžio***.
column.GEN.SG end.LOC.SG behind captain.GEN.SG NP.GEN
'Linmeijer returns to the line-up and joins the column at its end **behind Captain Blackbeard**.'

In (21), F is standing behind G in a row; both participants may be in motion (22), following one another along the same path, which is inferred from context and situation and not explicitly mentioned, e.g.:

(22) LV […] *viņš nogrudzināja tieši tik skaļi,*
3.NOM.SG.M laugh.PST.3 exactly so laud.ADV
lai to
in_order DEM.ACC.SG

LT […] *jis* *nusižvengė* *gana* *garsiai,* *kad*
3.NOM.SG.M laugh.RFL.PST.3 rather laud.ADV because
LV *dzirdētu* *arī* ***aiz*** ***viņa*** *ejošais*
LT *išgirstų* *ir* ***už*** ***jo*** *einantis*
hear.IRR also behind 3.GEN.SG.M go.PRS.PA.NOM.SG.M
LV *Sērmūkša* […]
LT *Šermukšnis* […]
NP.NOM
'He laughed out loud, enough to be heard by Sērmūkša, who was walking **behind him**.'

F's trajectory of motion behind G is expressed through motion verbs, mostly *sekot* 'follow' and *soļot* 'march, walk'. F is usually conceptualised as a point moving behind the moving G, but it can also be a multiplex object producing a line of imaginary, or fictive, motion, e.g.:

(23) LV *Melnas* *pēdas* ***aiz*** ***sevis*** *atstādama,*
black.ACC.PL.F footprint.ACC.PL behind RFL leave.PRS.CVB.SG.F
Zalktiene […] *devās* *ārā.*
NP.NOM go.PST.3RFL out
LT ***Už*** ***savęs*** *palikdama* *ryškius* *pėdsakus,*
Behind RFL leave.PRS.CVB.SG.F distinct.ACC.PL.M footprint.ACC.PL
Žaltienė […] *išėjo* *laukan.*
NP.NOM go.PST.3 outside.ILL.SG
'Leaving black footprints **behind herself**, Zalktiene went outside.'

Sequential location (or motion resp. the sense of following) is also expressed by such phrases as *cits aiz cita*, *vienas aiz otra* 'one after another' or the same lexemes in F and G, e.g.: *Pēdu aiz pēdas, plaukstu aiz plaukstas lika Džimsons* (LKV2018) '*lit.* Jimson put his foot behind his foot, his hand behind his hand'. However, utterances with the same lexemes in F and G are rendered into Lithuanian through *po,* mostly preferred in temporal sequences, rather than *už* (for more details, see Šeškauskienė & Žilinskaitė-Šinkūnienė 2015) or by other means, e.g.:

(24) LV [*viņi*] ***viens*** ***aiz*** ***otra*** *abi*
3.NOM.PL.M one.NOM.SG behind another.GEN.SG both.NOM.PL.M
pazuda *virtuvē.*
disappear.PST.3 kitchen.LOC.SG
LT [*jie*] ***vienas*** ***po*** ***kito*** *dingo*
3.NOM.PL.M one.NOM.SG after another.GEN.SG disappear.PST.3
virtuvėje.
kitchen.LOC.SG
'**One by one** they disappeared in the kitchen.'

(25) LV *Lēzenā* *traukā* *liek* *tomātu* *un*
shallow.LOC.SG bowl.LOC.SG put.PRS.3 tomato.GEN.PL and
sīpolu *ripiņas* ***citu*** ***aiz*** ***citas*** […]
onion.GEN.PL slice.ACC.PL other.ACC.SG behind other.GEN.SG
LT Į *negilų* *indą* *dėkite* *pomidorų* *ir*
to shallow.ACC.SG bowl.ACC.SG put.IMP.2PL tomato.GEN.PL and
svogūnų *griežinėlius* ***sluoksniais*** […]
onion.GEN.PL slice.ACC.PL layer.INSTR.PL
'Put the slices of tomatoes and onions **one after another** into
a shallow bowl.'

The pattern where the same lexemes are employed in F and G is an indication that arranged in a row or line all participants are of equal size or rank. There are no radical changes in the situation if F and G are reversed.

6.2 Differing senses

This section gives an overview of the senses attested only in one of the two languages: three in Latvian (sequential time, hierarchy, and cause and reason) and six in Lithuanian (spatial, temporal and quality distance, replacement, retribution, and benefactive). The senses of the Latvian *aiz* are described in more detail.

6.2.1 Sequential time in Latvian

Spatial expressions are often used to talk about time in many languages of the world (Haspelmath 1997; Svorou 1994; Heine & Kuteva 2002). The Latvian *aiz* as a marker of spatial sequence can acquire the meaning of temporal sequence

(posterior). However, such usage is not frequent; in Latvian, posterior is prototypically expressed by the preposition *pēc* + Gen. In Lithuanian, posterior is also primarily expressed through *po* + Gen., with *už* taking a somewhat peripheral position.

In the sense of sequential time, F and G are usually events located one after another, motivated mainly by the sense of sequential location. The Latvian *aiz* is attested in some entrenched temporal expressions, especially when the same lexeme is employed in F and G (*dienu aiz dienas* 'day by day', *minūti aiz minūtes* 'minute by minute'), e.g.:

(26) LV *Dienas ritēja **cita** **aiz** **citas**,*
day.NOM.PL roll.PST.3 other.NOM.SG.F behind other.GEN.SG.F
LT *Dienos slinko **viena** **po** **kitos**,*
day.NOM.PL drag.PST.3 one.NOM.SG.F after another.GEN.SG.F
LV *vienādas un nemainīgas*.
LT *vienodos ir monotoniškos*.
same.NOM.PL.F and unchanging.NOM.PL.F
'The days **followed one another**, identical and unchanging.'

Moreover, the sense is identifiable in set expressions like *atstāt kaut ko aiz sevis* / *muguras, būt aiz muguras* 'leave sb / sth after oneself / one's back', e.g.:

(27) LV *Viņa ir jauna un stipra –*
LT *Ji yra jauna ir stipri –*
3.NOM.SG.F be.PRS.3 young.NOM.SG.F and strong.NOM.SG.F
LV ***aiz** **muguras** vēl tikai gadsimta ceturksnis*.
behind back.GEN.SG yet only century.GEN.SG quarter.NOM.SG
LT *nugyventa tik ketvirtadalis šimtmečio*.
live.PST.PP.NA only quarter.NOM.SG century.GEN.SG
'She is young and strong, with only a quarter of a century **behind her back**.'

As can be seen in examples (26) and (27), Lithuanian prefers the temporal *po* + Gen. where the same lexeme is employed in F and G. In such utterances the expression *behind one's back* in a temporal sense is left out altogether.

6.2.2 Hierarchy in Latvian

The sense of hierarchy is derived from the sense of sequential location, possibly motivated by the metaphor MORE IMPORTANT IS FIRST IN LINE. The difference in status of F and G can be captured in the utterances of sequential location, especially in spatial scenes describing a military line-up with the leader going in front and his / her subordinates following him behind, e.g.:

(28) LV *Katrai* *priekšgalā* *virsnieks,* ***aiz*** ***viņa***
each.DAT.SG.F front.LOC.SG officer.NOM.SG behind 3.GEN.SG.M
kareivji *rindā* *pa* *četri*.
soldier.NOM.PL row.LOC.SG PREP four.NOM.PL.M
LT *Kiekvienam* *priekyje* *karininkas,* ***už*** ***jo***
each.DAT.SG.M front.LOC.SG officer.NOM.SG behind 3.GEN.SG.M
kareiviai *gretomis* *po* *keturis*.
soldier.NOM.PL row.INSTR.PL PREP four.ACC.PL.M
'At the front of each line there is an officer, **behind him** – soldiers, four in a row.'

Despite the fact that example (28) is interpreted as spatial, the first person in line is perceived as a leader; the Latvian *aiz* is rendered into Lithuanian through *už*. However, the latter is not used to express hierarchy.

In the sense of hierarchy, F and G are usually humans, defined by rank or position, e.g.:

(29) LV *Pēc* *ranga* *firsts* *bija* ***aiz*** ***hercoga***. (LVK 2018)
by rank.GEN.SG earl.NOM.SG be.PST.3 behind duke.GEN.SG
'By rank, an earl went **after a duke**'. [= was lower than a duke]

Other contexts where the sense of hierarchy is realised include phrases *atstāt aiz sevis* 'leave after oneself', *palikt*, *sekot aiz kāda* 'leave behind, follow someone', especially in a more competitive discourse, such as sports news, e.g.:

(30) LV *Triumfēja* *"Ventspils"* *komanda,* ***aiz*** ***sevis***
triumph.PST.3 PN.NOM team.NOM.SG behind RFL

atstājot *“Skonto”.* (LVK 2018)
leave.PRS.CVB PN.ACC
‘The team of “Ventspils” triumphed, **leaving “Skonto” behind**.’

Such usage has its roots in sequential location, namely, in situations with F and G moving in a line where F falls behind G (*atpalikt aiz* ‘fall behind’) and, consequently, G becomes first in line (resp. more important in status) and the (social) distance between them increases.

6.2.3 Cause and reason in Latvian

The rationale behind the sense of cause lies in the spatial alignment of F and G: objects located one behind / after another in space and time can be conceptualised as linked causally (*post hoc, ergo propter hoc*), e.g.:

(31) LV *Pieliec* *soli,* *Melnīt,* ***aiz*** ***paugura***
take.IMP.2PL step.ACC.SG PN.VOC behind hill.GEN.SG
viņi *mūs* *neredz.*
3.NOM.PL.M 1PL.ACC NEG.see.PRS.3
LT *Sparčiau* *žingsnį,* *Juodi,* ***už*** ***kalvos***
faster.ADV step.ACC.SG PN.VOC behind hill.GEN.SG
jie *mūsų* *nemato.*
3.NOM.PL.M 1PL.GEN NEG.see.PRS.3
‘Take a step, Black, they can’t see us **behind the hill**’.
[= over the hill]

In (31), the hill (G) is a location behind which F cannot be seen, but at the same time G can be treated as a cause for F’s invisibility.

In the sense of causation and reason, F is prototypically human; G usually refers to emotions (*laime* ‘happiness’, *uztraukums* ‘excitement’, *skaudība* ‘envy’, etc.), bodily condition or state (*nogurums* ‘fatigue’, *vecums* ‘age’, also boredom, e.g. *aiz gara laika* ‘because of boredom’, etc.) or different circumstances of rather general character (*apsvērumi* ‘grounds’, *pārklausīšanās* ‘mishearing’, *pārpratums* ‘misunderstanding’). Collocations such as *aiz ko* ‘why’, *aiz ieraduma* ‘by force of habit’ are also attested. For example:

(32) LV – *Viņi* *būs* ***aiz*** ***bailēm*** *paslēpušies*.
3.NOM.PL.M be.FUT.3 behind fear.DAT.PL hide.PST.PA.NOM.PL.M.RFL
LT – *Jie* *bus* ***iš*** ***baimės*** *pasislėpę.*
3.NOM.PL.M be.FUT.3 from fear.GEN.SG hide.RFL.PST.PA.NOM.PL.M
'They might have hidden **out of fear**.'

Such contexts are also related to the sense of hiding and covering, because F can be seen as overwhelmed by an emotion in the same way as F is occluded by G in the sense of hiding and covering.

6.2.4 Spatial, temporal and quality distance in Lithuanian

The three senses of the Lithuanian *už* were described in our previous paper (Šeškauskienė & Žilinskaitė-Šinkūnienė 2015); therefore, here we will only give a brief overview illustrated by examples from CCLL. In the sense of spatial distance, G usually specifies distance measured in quantifiable units (steps, metres, kilometres), but F is more often an artefact, object of nature or landscape, e.g.: *Siena buvo* ***už kelių žingsnių*** 'The border was **in** (lit. **behind**) **a few steps**'.

The sense of temporal distance is derived from the sense of spatial distance via the conceptual metaphor TIME IS SPACE. In the sense of temporal distance, Fs are objects, persons or events perceived as occurring in a temporal sequence where G is a period of time, e.g.: *Darbas prasideda* ***už pusvalandžio*** 'Work starts **in** (lit. **behind**) **half an hour**'.

In the sense of quality distance, the location of F behind G is a prerequisite for comparing both participants with G functioning as a standard of comparison, e.g.: *Jis buvo aukštesnis* ***už mane*** 'He was taller **than** (lit. **behind**) **me**'. Endzelīns (1971, 327f.) mentions the comparative meaning as relevant for Latvian as well (*Anna smukāka* ***aiz Trīnas*** 'Anna is more beautiful than Trina'); however, he is only familiar with such usage from folk songs.

6.2.5 Replacement and retribution / remuneration in Lithuanian

In this sense, F is thought of as replacing G in terms of value and role, e.g. money given for an item, decision taken for another person, etc. The sense is derived from the sense of sequential location, e.g.: *Aš esu nepilnametė. Dabar jie viską* ***už mane*** *sprendžia* 'I am a minor. Now they decide everything **for me**

[=instead of me]'. Endzelīns (1971, 329) provides three examples meaning 'instead of' in Latvian (e.g.: ***aiz māmiņas*** *maltu gāju ne* ***aiz brāļa līgaviņas*** 'I went to grind **for my mother** [=instead of my mother], but not **for the brother's bride**'). He also refers to Pott's explanation about the Slavic *za* in the same sense: if the front-man cannot fulfil his obligations any more, the one who is behind him steps in and gets the attention, and overtakes the obligations.

In the sense of retribution, Gs are abstractions like pain or sorrow, wrongdoing or acts worth appreciation and gratitude (e.g.: *Ačiū* ***už viską****, Akseli!* 'Thank you for everything, Axel!').

6.2.6 Benefactive in Lithuanian

The benefactive sense can be understood as derived from the sense of sequential location. If F is following G, the distance between them may vary. When F catches up with G from behind, in the abstract domain this action can be interpreted as support provided for G who thus becomes a benefactive (for cross-linguistic data, see Svorou 1994, 158). Gs are usually humans and abstractions (people we love, respect and care, values, such as homeland, freedom or independence), but Fs are humans performing 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.: *Geriu* ***už jus****, maestro* 'I am drinking to you, maestro'.

7 Concluding remarks and a way forward

We have proposed a network of related meanings of the Latvian preposition *aiz* + Gen. and the Lithuanian preposition *už* + Gen. / Acc. and tried to explain their meaning extensions. All senses are directly or indirectly derived from the central sense 'F in the back region of G' and are motivated by different types of F and G, their spatial configuration, functional relationship, conceptual metaphors; change in distance between the F and G may lead to change in their status in abstract domains. The senses are not always clear-cut; rather, they form a continuum and the boundaries between them in many cases are fuzzy. Notably, there are senses, such as support, control, obstacle, which can be equally based on both FoRs: intrinsic and relative.

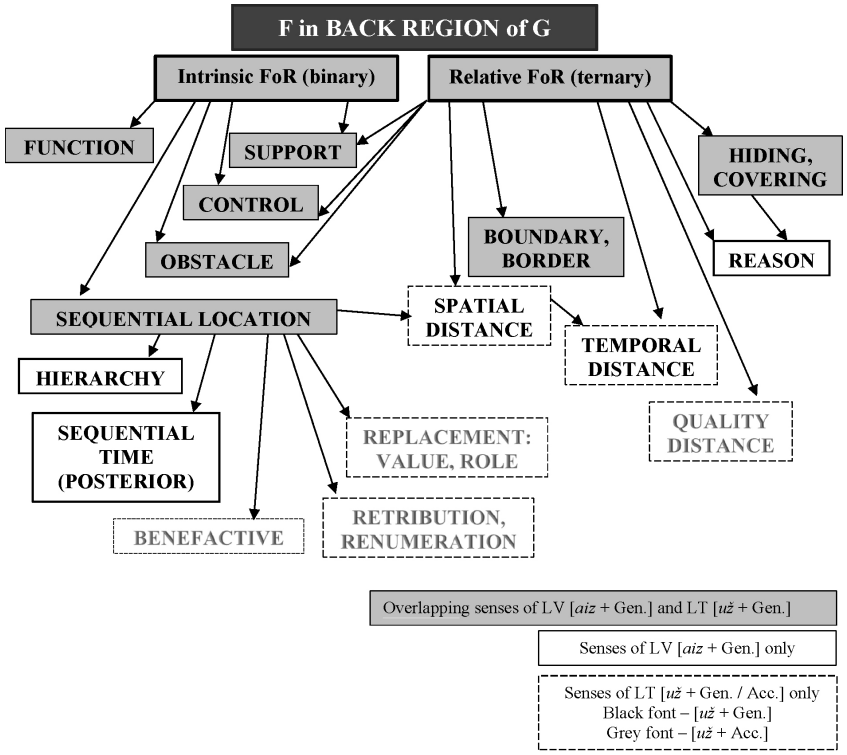

FIGURE 1. Overlapping and differing senses

As can be seen from Figure 1, offering a full view onto the senses of the two prepositions, the semantic network of the Latvian *aiz* is not as complex as that of the Lithuanian *už*. This may be due to a specific diachronic evolution of the Lithuanian *už*, which developed by merging Old Lithuanian *už* and *ažu*. As a result, in contemporary Lithuanian *už* governs two cases (genitive and accusative) and is extremely polysemous.

Our analysis has demonstrated that most senses of *aiz* and *už* overlap. Some senses have rather limited realisation; for example, temporal sequence in Latvian and temporal distance in Lithuanian are prototypically expressed by other prepositions (LV *pēc* + Gen. and LT *po* + Gen.).

Figure 2 demonstrates the quantitative distribution of all senses of the Latvian *aiz* in LILA corpus. It is most frequently used in its central sense (47%), which is mainly expressed via the relative FoR. The sense of control is

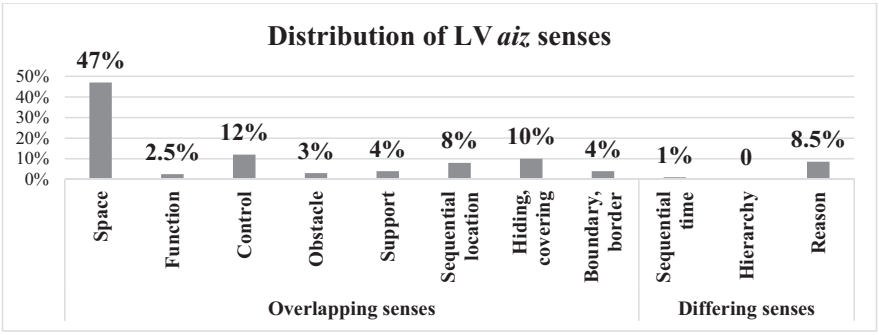

FIGURE 2. Frequencies of the senses of Latvian *aiz*

the second most frequent (12%). The sense of hiding and covering also features rather prominently (10%) in the data and is the one that tends to be frequently employed in metaphorical expressions. It is also related to the sense of cause and reason (8.5%); for example, emotions may be perceived as a cover and as a cause of some action or activity. Sequential location is attested in 8% of the cases and is semantically entrenched: it gives rise to the senses of hierarchy and sequential time, which are found rather scarcely in LILA but nevertheless have specific contexts of usage, for example, the sense of hierarchy clearly features in ranking and competitive contexts, whereas the sense of sequential time—in fixed temporal expressions. The remaining senses (boundary and border, support, obstacle and function) are closely linked to the spatial *aiz*, but they do not exceed 5% of all cases.

In the Lithuanian corpus of 800 concordance lines, *už* + Gen. occurs 335 times (42%) and *už* + Acc. 465 times (58%). Apparently, abstract senses (replacement, retribution and remuneration, benefactive, and quality distance (comparative constructions)) are more frequent. Spatial contexts appear in 18% of all occurrences of *už*, and, like in Latvian, this sense is followed by a deeply entrenched sense of control (14%).

Most abstract senses (replacement, retribution and remuneration, benefactive, quality distance) are only found in Lithuanian. They are derived from sequential location. In Lithuanian, spatial distance gives rise to temporal distance and quality distance, not attested in Latvian. However, as can be seen from earlier accounts of Latvian prepositions, some of the senses were attested

in Old Latvian (e.g., replacement, quality distance); they seem not to have survived until today.

The paper has been based on a parallel Lithuanian-Latvian and Latvian-Lithuanian corpus, which helped us consistently compare the data in both languages. However, not all senses were well attested in it due to limited data. Further expansion of the Latvian corpus would be very important.

Further research in the field could focus on tendencies of translation attempting to verify the extent of equivalence of the senses established in investigating language-specific datasets. Moreover, bearing in mind a very productive verbal prefixation in both Baltic languages and prefixes often formally coinciding and semantically overlapping with prepositions, further research into prefixes would be a challenging yet very interesting task.

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Abbreviations

1, 2, 3—first, second, third person; ACC—accusative; ADV—adverb; CVB—converb; DAT—dative; DEF—definite; DEM—demonstrative pronoun; DIAL—dialectal; F (in text)—Figure, F (in glossing)—feminine; FUT—future; FOR—frame of reference; G—Ground; GEN—genitive; IE—Indo-European; ILL—illative; IMP—imperative; INF—infinitive; INSTR—instrumental; INT—interrogative pronoun; IRR—irrealis; LOC—locative; LT—Lithuanian; LV—Latvian; M—masculine; NA—nonagreement, neutral; NEG—negation; NOM—nominative; OCS—Old Church Slavonic; PA—active participle; PL—plural; PN—proper name; PP—passive participle; PREP—preposition; PRS—present; PST—past; RFL—reflexive marker (in verbs), reflexive pronoun; SG—singular; SLAV—Slavonic; VOC—vocative.

Data Sources

CCLL—Corpus of the Contemporary Lithuanian Language. Available at: http://donelaitis.vdu.lt/main_en.php?id=4&nr=1_1

Leskien & Brugman—Litauische Volkslieder und Märchen aus dem preussischen und dem russischen Litauen, gesammelt von A. Leskien und K. Brugman, Strassburg, 1882.

LILA—Lithuanian–Latvian, Latvian–Lithuanian Parallel Corpus. Available at: https://klc.vdu.lt/lila-lygiagretusis-tekstynas/

LLVV 1972—Latviešu literārās valodas vārdnīca, 1. sējums. Rīga: Zinātne. Pirmā sējuma atbildīgais redaktors L. Ceplītis.
LVK 2018—Līdzsvarots mūsdienu latviešu valodas tekstu korpuss [Ballanced corpus of contemporary Latvian]. Available at: http://www.korpuss.lv/id/LVK2018
LVV 1987—Latviešu valodas vārdnīca, Rīga: Avots. Atbildīgā redaktore Dainuvīte Guļevska, Irēna Rozenštrauha, Dorisa Šnē.
LVV 2006—Latviešu valodas vārdnīca, Rīga: Avots. Redaktore Dainuvīte Guļevska.

References

Ambrazas, Vytautas, ed. 1997. *Dabartinės lietuvių kalbos gramatika*, 3rd ed. [A grammar of contemporary Lithuanian]. Vilnius: Mokslo ir enciklopedijų leidybos institutas.
Ambrazas, Vytautas. 2006. *Lietuvių kalbos istorinė sintaksė*. [Syntax of Lithuanian on historical principles]. Vilnius: Lietuvių kalbos institutas.
Bellavia, Elena. 1996. The German über. *The Construal of Space in Language and Thought*. Martin Pütz & Rene Dirven, eds. Berlin, New York: Mouton de Gruyter. 73–107.
Berg-Olsen, Sturla. 2005. *The Latvian Dative and Genitive: A cognitive grammar account*. *Doctoral dissertation*. Oslo: University of Oslo, Faculty of Arts.
Cienki, Alan. 1989. *Spatial Cognition and the Semantics of Prepositions in English, Polish and Russian*. (Slavistische Beiträge, 237). München: Verlag Otto Sagner.
Cuyckens, Hubert. 1991. *The Semantics of Spatial Prepositions in Dutch. A Cognitive-linguistic Exercise*. Antwerpen: Universiteit Antwerpen.
Deksne, Daiga. 2019. Priedēkļa *aiz-* nozīmju klasifikācija: no Jāņa Endzelīna atziņām līdz mūsdienām. [Classification of meanings of the prefix *aiz-:* from Janis Endzelins to the present day]. *Valoda: nozīme un forma* 10, 25–35. https://doi.org/10.22364/vnf.10.04
Endzelīns, Jānis. 1951. *Latviešu valodas gramatika*. [Grammar of Latvian]. Rīga: Latvijas valsts izdevniecība.
Endzelīns, Jānis. 1971[1905]. Latyšskije predlogi. 1 čast. [Latvian prepositions. Part 1]. J. Endzelīns *Darbu izlase*, vol. 1, 307–520. Rīga: Zinātne.
Fraenkel, Ernst. 1929. *Syntax der Litauischen Postpositionen und Präpositionen*. Heidelberg: Carl Winter's Universitätsbuchhandlung.
Geeraerts, Dirk. 1992. The semantic structure of Dutch *over. Leuvense Bijdragen* 81, 205–229.
Grabis, Rūdolfs. 1959. Prievārds. *Mūsdienu latviešu literārās valodas gramatika 1: Morfoloģija*. [Preposition. The grammar of contemporary Latvian literary language: morphology]. Rīga: LPSR Zinātņu akadēmijas izdevniecība. 720–748.

Haspelmath, Martin. 1997. *From Space to Time. Temporal Adverbials in the World's Languages.* München, Newcastle: Lincom Europa. http://email.eva.mpg.de/~haspelmt/SpaceTime.pdf, accessed January 2020.

Heine, Bernd & Tania Kuteva. 2002. *World Lexicon of Grammaticalization.* Cambridge: Cambridge University Press.

Jamrozik, Anja & Dedre Gentner. 2011. Prepositions *in* and *on* retain aspects of spatial meaning in abstract contexts. *Expanding the Space of Cognitive Science. Proceedings of the 33rd Annual Meeting of the Cognitive Science Society*. Laura Carlson, Christoph Hoelscher & Thomas F. Shipley, eds. Austin, TX: Cognitive Science Society. 1589–1594. http://csjarchive.cogsci.rpi.edu/Proceedings/2011/papers/0358/index.html, accessed January 2020.

Karulis, Konstantīns. 2001. *Latviešu etimoloģijas vārdnīca.* [Dictionary of Latvian etymology]. Rīga: Avots.

Lakoff, George. 1987. *Women, Fire, and Dangerous Things*. Chicago: The University of Chicago Press.

Langacker, Ronald. 1987. *Foundations of Cognitive Grammar.* Vol. 1. Stanford: Stanford University Press.

Langacker, Ronald W. 2010. Reflections on the functional characterization of spatial prepositions. *Corela* HS-7, 1–19. URL: http://corela.revues.org/999; DOI: 10.4000/corela.999

Levinson, Stephen C. 2003. *Space in Language and Cognition. Explorations in Cognitive Diversity*. Cambridge: Cambridge University Press.

Lipovšek, Frančiška. 2014. Prepositional use with the object-of-activity function of the landmark in English and Slovene. *Jezikoslovlje* 15 (2–3), 153–171.

Maljar, Tatyana N. & Olga N. Seliverstova. 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, Teenie. 2004. The conceptual motivation of fictive motion. *Studies in Linguistic Motivation.* Günter Radden & Klaus-Uwe Panther, eds. Berlin, New York: Mouton. 221–248.

Mikulskas, Rolandas. 2009. Kognityvinė lingvistika ir leksikografijos problemos. [Cognitive linguistics and problems of lexicography]. *Kalba ir žmonės*. Artūras Judžentis, ed. Vilnius: Vilniaus universiteto leidykla. 39–80.

Navarro i Ferrando, Ignasi. 1998. A multimodal system for the description of spatial semantics: the preposition *on*. *Estudios de Lingüística Cognitiva II.* José Luis Cifuentes Honrubia, ed. Alicante: Universidad de Alicante, Departamento de Filología Española, Lingüística General y Teoría de la Literatura. 767–787.

Nītiņa, Daina. 1978. *Prievārdu sistēma latviešu rakstu valodā*. [A system of prepositions in the Latvian written language]. Rīga: Zinātne.

Pawelec, Andrzej. 2009. *Prepositional Network Models. A Hermeneutical Case Study.* Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Przybylska, Renata. 2002. *Polisemia przyimków polskich w świetle semantyki kognitywnej*. [The polysemy of Polish prepositions in the cognitive semantic framework]. Kraków: Universitas.

Radden, Günter. 1985. Spatial metaphors underlying prepositions of causality. *The Ubiquity of Metaphor in Language and Thought.* Wolf Paprotte & René Dirven, eds. Amsterdam/Philadelphia: John Benjamins. 177–207.

Rimkutė, Erika, Andrius Utka & Kristīne Levāne-Petrova. 2013. Lietuvių–latvių ir latvių–lietuvių kalbų lygiagretusis tekstynas LILA. [Lithuanian–Latvian and Latvian–Lithuanian parallel corpus LILA]. *Kalbų studijos* 23, 70–77. http://dx.doi.org/10.5755/j01.sal.0.23.4582

Rozenbergs, Jānis. 1975. Par dažiem inovācijas jautājumiem pieverba ģenitīva konstrukcijās ar prepozīciju *aiz*. [On some innovations of the adverbial genitive constructions with the preposition *aiz*]. *Inovācijas dažādos valodas līmeņos*, Antonija Ahero et al., eds. Rīga: Latvijas Valsts universitāte. 94–130.

Šeškauskienė, Inesa. 2001. Cross-linguistic variation of space conceptualization. *Translation and Meaning, Part 5*. (*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). Maastricht: Hogeschool Maastricht. 85–95.

Šeškauskienė, Inesa. 2004. The extension of meaning: spatial relations in English and Lithuanian. *Imagery in Language. Festschrift in Honour of Professor Ronald W. Langacker*. Barbara Lewandowska-Tomaszczyk & Alina Kwiatkowska, eds. [In the series *Lodz Studies in Language,* vol.10]. Frankfurt am Main [etc.]: Peter Lang. 373–384.

Šeškauskienė, Inesa. 2007. Artumo santykiai anglų ir lietuvių kalbose: kai kurie perkeltinės lokatyvų reikšmės ypatumai. [Relations of proximity in English and Lithuanian: some aspects of figurative meanings of locatives]. *Filologija* 12, 85–94.

Šeškauskienė, Inesa & Eglė Žilinskaitė-Šinkūnienė. 2015. On the polysemy of the Lithuanian UŽ: a cognitive perspective. *The Baltic International Yearbook of Cognition, Logic and Communication* 10, 1–38. https://newprairiepress.org/biyclc/vol10/iss1/9/

Šukys, Jonas. 1998. *Lietuvių kalbos linksniai ir prielinksniai: vartosena ir normos*. [Lithuanian cases and prepositions: usage and norms]. Kaunas: Šviesa.

Shakhova, Darya & Andrea Tyler. 2010. Taking the principled polysemy model of spatial particles beyond English: the case of Russian *za. Language, Cognition and Space: The State of the Art and New Directions.* Vyvyan Evans & Paul Chilton, eds. London: Equinox. 267–291.

Svorou, Soteria. 1994. *The Grammar of Space.* Amsterdam/Philadelphia: John Benjamins.

Tabakowska, Elżbieta. 2003. Space and time in Polish: the preposition *za* and the verbal prefix *za-*. *Motivation in Language. Studies in Honor of Günter Radden.* Hubert Cuyckens, Thomas Berg, Rene Dirven & Klaus-Uwe Panther, eds. Amsterdam/Philadelphia: John Benjamins. 153–177.

Tabakowska, Elżbieta. 2010. The story of ZA: in defense of the radial category. *Studies in Polish Linguistics* 5, 65–77.

Talmy, Leonard. 2000. *Toward a Cognitive Semantics.* Vol. 1. Cambridge: MIT Press.

Tyler, Andrea. 2012. *Cognitive Linguistics and Second Language Learning. Theoretical Basics and Experimental Evidence.* New York/London: Routledge.

Tyler, Andrea & Vyvyan Evans. 2003. *The Semantics of English Prepositions*. Cambridge: Cambridge University Press.

Taylor, John R. 1993. Prepositions: patterns of polysemization and strategies of disambiguation. *The Semantics of Prepositions: From mental processing to natural language processing.* Cornelia Zelinsky-Wibbelt, ed. Berlin/New York: Mouton de Gruyter. 154–175.

Valiulytė, Elena. 1998. *Dabartinės lietuvių kalbos sintaksiniai sinonimai: Vietos, laiko ir priežasties raiška*. [Syntactic synonyms in Modern Lithuanian: Local, temporal and causal relations]. Vilnius: Mokslo ir enciklopedijų leidybos institutas.

Zinkevičius, Zigmas. 1981. *Lietuvių kalbos istorinė gramatika*. [Grammar of Lithuanian on historical principles]. Vol. 1. Vilnius: Mokslas.

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