A COGNITIVE MODELLING OF THE SEMANTIC RELATION BETWEEN PREPOSITIONS AND PREVERBS IN BULGARIAN: V AND IZ

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ABSTRACT

The paper presents a cognitive semantic analysis of the Bulgarian verbal prefixes and prepositions v-/v- ‘in’ and iz-/iz- ‘out of’. It aims to reveal the meaning carried by these units themselves and not by contextual, knowledge or any other type of information. We propose a formalization using topological representation. We show that the different meanings of the prefix and preposition have an invariant meaning. We also deal with the apparent synonymy between some meanings of the prefixes v- and iz-.

KEYWORDS

verbal prefixes, preverbs, prepositions, cognitive semantics, spatio-temporal representation, quasi-topology, Bulgarian

INTRODUCTION

We present a cognitive semantic analysis of the Bulgarian verbal prefixes and prepositions v-/v- ‘in’ and iz-/iz- ‘out of’.17 We propose a formalization using topological representations. The relation between the prefixes and the prepositions has been underlined by many authors (Rousseau 95 among others). In Bulgarian their similitude seems evident – 15 from all the 18 verbal prefixes function as a preposition (Andrejčin 87, Andrejčin & alii 93, Georgiev 91, Stojanov 77, Feuillet 96, etc.) However, this relation has not been developed within a formal model where cognitive representations are related to linguistic forms. From a syntactical viewpoint (cf. phenomena like transitivation of an intransitive verb basis: instr. skoča ‘I jump’ -> tr. preskoča ogradata ‘I jump over the wall’), we may show that preverbs are constitutive of a complex predicate by using the tools of Combinatory Logic (Desclés 2001a,b, Guentchéva 2001). This matter won’t be discussed in this paper, here we focus on the semantic relation by analyzing v-/v- and iz-/iz- in Bulgarian. However, the problem of the relation between preverbs and prepositions from syntactical and semantic viewpoint is more general not only for Bulgarian and Slavic languages but also for Roman languages like French (Desclés 2001a,b, Desclés&alii 2001a,b).

In this communication we firstly present the theoretical framework of the Cognitive and Applicative Grammar [C&AG] (Desclés 1990, etc.) and the Abstract Topological Loci [ATL] that gives the conceptual tools to describe the meaning of prepositions and preverbs. In the next section we analyze the semantic meanings of the preposition v- in different constructions and then the meanings of the preverb v- as a prefix with different kinds of verbs. The section 3 presents the same approach for iz/iz-.

This presentation is a study in progress for different prepositions and preverbs in Bulgarian (cf. v(ă)-, vâz-, do-, za-, iz-, na-, nad-, o(b)-, ot-, po-, pod-, pre-, pred-, pri-, pro-, raz-).

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17 The authors express their gratitude to Zlatka Guentchéva for reading an early version of this paper and her useful remarks.
s(ā),u-) in order to give sound arguments in favor of cognitive view of languages. Other studies are also in progress on data in Polish and French. Our approach is comparable to other cognitive approaches, for instance (Dabrowska 96, Kochanska 96, Pütz 96, Flageul 97, Descles 2001b).

1. THEORETICAL FRAMEWORK

Our work is situated within the framework of the theory of the Cognitive and Applicative Grammar [C&AG] (Desclés 1990, etc.). This is a polystratal model where different levels of representation are related by using the tools of typed λ-calculus and Combinatory Logic (H.B.Curry 1958). In a top-down description the three levels are the following: (i) the level of the semantico-cognitive representations generated from cognitive schemes, each scheme is a structure built from semantic primitives - anchoring relation, movement, change, control, etc. (Desclés 90, 96); (ii) the predicative level where are expressed the logical and grammatical operations in terms of operators and operands; (iii) the morpho-syntactic configurations level, where the grammatical operations and SCS from the previous two levels are encoded in a language specific syntax structures. In a bottom-up description, morpho-syntactic configurations are analyzed by means of Extended Categorial Grammar. The predicative representations are broken into schemes (λ-expressions) and entities of different types (individual, collective, locus, massive, ...). The meanings of v/v- and iz/iz- will be presented inside the level (i) semantico-cognitive representations level.

In order to define the cognitive primitives we are using concepts inherited from topology. A lot of linguists (Talmy 88) use topological notions. However, the elementary topology defined in mathematics is not enough flexible, so we introduce some quasi-topological operators with specific properties defined on abstract loci. A locus is characterized by topological operators like IN, EX, FR, FER (respectively take interior, exterior, boundary and closure (interior + frontier)). In opposition to the elementary topology, in the ATL the operator IN is not idempotent and the boundary is not always empty. We may define for a given locus LOC the interior of a LOC [IN (LOC)], the exterior of LOC [EX (LOC)], the internal boundary of LOC [FR_int (LOC)] and the external boundary of LOC [FR_ext (LOC)]. It is possible to specify the domain of a locus - for instance - spatial domain, temporal domain or activity domain, etc. In a formal theory of aspect the loci with topological determination are intervals with open and closed boundaries. (Desclés 90b, Desclés & Guentchéva 1995, Guentchéva 90)

To describe the meanings of prepositions and preverbs and to study the relations between them, we will give abstract representation in terms of concepts from the ATL. The aim of the description is to test whether there is an invariant meaning obtained from different observed meanings by means of abduction. (Pottier 92, Desclés & alii 98). The invariant meaning is analog to the Guillaume’s "signifié de puissance".

2. SEMANTIC AND COGNITIVE ANALYSIS OF V/V-

2.1. Preposition V

Let us take the following examples:

(1) Knigata e v čantata. ‘The book is in the bag’
(2) Rabotja v gradinata. ‘I work in the garden’
(3) Otidox v gradinata. ‘I went in(into) the garden’

In its spatial uses the preposition v means the interior of a locus. This meaning is unanimously underlined by each grammar. According to different used verbs, the preposition v means in (1) “static location of an object inside of a place”; in (2) “location inside of a place where a process is going on”; or “interior of a place reached by the process” in (3).

V is also used in the expression of time. In such cases it means that the process is held in the interior of a time period as in (4). We propose a representation using aspecto-temporal intervals (Figure 1). This representation can be resumed as: the event (closed interval) <he left> is located in the interior of the state designated by <early morning> (open interval).
The preposition \( v \) has various other uses that can be represented as being encoding a single invariant meaning related to **interiority**. We present briefly some of the abstract uses.

**A.** In the following examples:

1. **Example 5:**
   
   \( T\)ija \( ne\)šta sa \( v\)rja\(ž\)ani \( v\) pamet\(ta\) mi.
   
   ‘These things are embedded in my memory.’

2. **Example 6:**
   
   Mnogo idei se \( v\) \( á\)rt\(j\)at \( v\) glav\(a\)ta mi.
   
   ‘Many ideas are turning around in my head.’

3. **Example 7:**
   
   Posle otnovo pot\(v\)axa \( v\) \( m\)isl\(ite\) si.
   
   ‘Then, they were immersing themselves again in their thoughts.’

   The preposition \( v \) means an abstract locus where an entity is located inside (example 5), where a process is held (example 6) or a process arrives (example 7).

**B.** In the following examples:

1. **Example 8:**
   
   Toj \( s\)e namira\(š\)e \( v\) onova \( s\)\(â\)stojanje na \( p\)\(â\)lno \( b\)ezra\(ž\)l\(č\)e k\(â\)m v\(s\)i\(č\)k\(o\).
   
   ‘He was in that state of total indifference to everything.’

2. **Example 9:**
   
   Ti\(a\) \( v\) \( á\) prosi izm\(â\)č \( v\) \( g\)lav\(a\)ta \( n\)a Benc, \( p\)rev\(r\)\(š\)t\(x\)a \( n\)o\(št\)\(ite\) \( m\)u \( v\) \( k\)o\(š\)mar.
   
   ‘These questions were worrying Benc, were turning his nights in nightmare.’

   The preposition \( v \) is related to a mental state that is a locus where an entity has entered or is located, e.g. (8). This meaning of \( v \) is often used with verbs like \( p\)rev\(r\)\(š\)t\(a\)m, \( p\)re\(b\)ra\(ž\)jav\(a\)m (se) ‘to transform in’, e.g. (9).

**C.** In the sentences (10) and (11):

1. **Example 10:**
   
   Ti si naprednal \( v\) \( r\)abot\(a\)ta.
   
   ‘You’ve done progress in your work.’

2. **Example 11:**
   
   Dob\(â\)r si \( b\)il \( v\) \( z\)nanijata i mnogo \( t\)i \( s\)e \( n\)ade\(v\)al.
   
   ‘It seems you are good in your knowledge and he is counting much on you.’

   The preposition expresses the interiority of an abstract locus of activity (e.g. the work, the knowledge) regarding someone.

From the above examples emerges the invariant meaning **interiority of a locus**, the locus being spatial, temporal or activity.

**2.2. Prefix \( v\)-**

The prefix \( v\)- has some of the meanings already held in the preposition. It is so about its spatial use. Let us consider the verbs: \( v\)le\(z\)na – ‘enter’; \( v\)na\(s\)a – ‘to import, to carry in’; \( v\)m\(â\)k\(n\)a – ‘insert, to pull in’; \( v\)k\(a\)ram- ‘to bring in, to push in’; \( v\)\(â\)\(v\)\(d\)a - ‘to take in, to lead in’; \( v\)le\(j\)a (se) – ‘to pour in (to flow into)’:

1. **Example 12:**
   
   Toj \( v\)le\(z\)e \( v\) \( s\)tajata.
   
   ‘He entered the room.’

2. **Example 13:**
   
   Toj \( v\)\(â\)\(v\)\(d\)e \( g\)osta \( v\) \( s\)tajata.
   
   ‘He led the guest in the room.’

3. **Example 14:**
   
   Toj \( v\)\(k\)ara \( k\)olata \( v\) \( g\)ara\(č\)a.
   
   ‘He entered the car in the garage’

4. **Example 15:**
   
   Toj \( v\)\(n\)ese \( m\)asata (v \( s\)tajata).
   
   ‘He brought the table in (in the room).’

5. **Example 16:**
   
   Tazi \( f\)irma \( v\)na\(š\)ja \( l\)aleta \( o\)t \( H\)olandija.
   
   ‘This company imports tulips from Holland.’

In these examples, it is always said that a movement is done towards the interior of a place. We consider that the idea of movement is carried by the verb basis (cf. nu\(š\)ja ‘carry’) and the prefix specifies that this movement ends inside of a place (\( v\)- in \( v\)na\(s\)a).
The verbal prefixes in Slavic languages have a perfectivizing effect on the basis; when a preverb, considered as an operator, is applied to an imperfective verb then the new complex verb is generally perfective. To take that change into account we make use of bi-dimensional representation. The horizontal axis is the time line where the fundamental aspectual value of predicates is represented by an open interval (value of state) or a closed interval (value of event), or a closed to the right and open to the left interval (value of process). The other dimension is spatial. Every point on this dimension is a spatial location of an entity. The predicate *vnesa* expresses a movement towards the interior of a spatial locus (see Figure 2). This bi-dimensional representation allows us to take into account the aspectual change as well as the change of the meaning of the verb.

![Figure 2. Diagram representation of the verb *vnesa*.
](image)

We consider another group of prefixed verbs (cf. *vgradja*, *vzdam* ‘to build in’; *vkopaja* – ‘to bury in’; *vpleta* – ‘to intertwine’; *všija* – ‘to sew in’; *vtrija* ‘apply (an ointment) by scrubbing’; *vtåka* ‘to weave in’). Although the meaning of *v* seems to be quite similar to the spatial use here above, the way that prefix and verb basis combine is not similar. The verb basis is always a change verb (*gradja* ‘to build’, *trija* ‘to rub’, etc.) We can give the following more detailed paraphrase for the verb *vgradja* : ‘while constructing, someone puts an object in what is constructed’. We can generalize the meaning as <an object is put inside the object that the process builds>. For these verbs we consider, that the verb basis expresses a process that is held (*gradja* ‘build, construct’) and the prefix specifies that an object is transferred inside of an object.

(17) *Momičeto vtåka zlatna niška v platnoto.* ‘The girl weaved a golden thread in the cloth.’

(18) *Vgradix delvi v stenata.* ‘I put pots in the wall (as a hiding place).’

Another quite frequent abstract use of the prefix *v*- is like in verbs *vloša se* – ‘to worsen, make bad/worse’; *vbesja* – ‘to make angry’; *vludja* – ‘to make mad, crazy’; *vdetinja* – ‘to make childish’; *vgorča* – ‘to make bitter’; *vkamenja* – ‘to make (hard) as stone / to turn in stone’; *vdärviya* – ‘to make (hard) as wood / turn in wood’. The paraphrase of those verbs is always : ‘make / become such’. We interpret it as an entity enters into the interior of a state (cf. *besen* ‘angry, furious’, *lud* ‘crazy’,...). In (19), (20) the entity is passing from a state where the property <good> is validated to a state where the property <bad> is validated (vertical axis). This transition is oriented towards the interior of the different properties that affect an entity.

(19) *Neredovnijat život vlošava zdraveto.* ‘The bad lifestyle worsens the health.’

(20) *Sästojanieto mu se vloši.* ‘His state (of health)worsened.’

We would like to underline that the translation of the prefixed verbs is not always easy-going and one should often make use of paraphrase to give their meaning. By explaining the composition between prefix and verb we wish to facilitate, among others, human/automatic translation and foreign language learning.
We also call that use “acquisition of a property”. Using a bi-dimensional diagrams we have the representation given on Figure 3.

![Bi-dimensional diagram showing the representation of a property acquisition](image)

**Figure 3.** (20) 'His state of health worsened.'

Finally, in all the meanings of the preposition and the prefix we studied, we always find the same invariant feature – **interiority**, either inside of a spatial locus or inside of a zone of a notional dimension or towards the interiority of the domain of validation of properties categorized by salient zones (e.g. good towards bad). The feature of stativity or dynamicity is carried by the verb basis and not by the preverb.

**3. SEMANTIC AND COGNITIVE ANALYSIS OF IZ/IZ-**

**3.1. Preposition IZ**

Bulgarian grammars and dictionaries give generally two or three meanings for the preposition *iz*: movement towards the exterior or non oriented movement inside of a place and disparate position inside of a place. As a preliminary remark, we would like to underline that the preposition *iz* is not very used in Bulgarian, especially with its spatial meaning ‘movement towards the exterior’ which is considered as having a “strongly archaic character” (Šaur 64)

This use is the opposite of the spatial meaning of *v* (though it may not be fully converse to it). Nowadays Bulgarian uses the preposition *ot* instead of *iz* (*izlizam* *ot* *stajata* ‘get out of the room’). Even if that meaning is not in use any more, we would like to study it, because it can still be found in poetry and dialects and is also present in the uses of the prefix *iz-*.

That’s why we consider it revealing about the sense representation and the evolution of the preposition and as well as the prefix. Let us consider the examples:

<table>
<thead>
<tr>
<th>Example</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(21) <em>Izlizam iz stajata</em></td>
<td>'I go out of the room.'</td>
</tr>
<tr>
<td>(22) <em>Izlivam vodata iz čašata</em></td>
<td>'I pour the water out of the glass.'</td>
</tr>
<tr>
<td>(23) <em>Ptčkata izletja iz kletkata</em></td>
<td>'The bird flew out of the cage.'</td>
</tr>
</tbody>
</table>

*iz* has few abstract uses with the meaning of ‘out of’.

<table>
<thead>
<tr>
<th>Example</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(24) <em>Izmāknax se iz racete mu.</em></td>
<td>'I slipped out of his hands'</td>
</tr>
<tr>
<td>(25) <em>Izleze iz tāmninata.</em></td>
<td>'He went out of the dark'</td>
</tr>
<tr>
<td>(26) <em>Stranici iz našata istorija.</em></td>
<td>'Pages out of our history.'</td>
</tr>
</tbody>
</table>

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19 (Šaur 64) underlines that at the beginning of the 20th century it was still normal to use the preposition *iz* with its meaning ‘movement towards the exterior’. The author gives some statistics regarding the use of the preposition *iz*: in the D. Talev’s trilogy (1950) from the 390 occurrences of *iz* only 4 have this spatial meaning.

20 The examples from (21) to (26) are given also in (Šaur 64). We agree that they are considered today as dialectal or archaic.

21 This example can be interpreted in two ways depending to context – the first is the translation given here below and the second is one of the following meanings of *iz*: ‘he went into the dark’.
Considering the other uses of *iz* we are confronted to an apparent paradox - the preposition can specify the opposite of the spatial meaning like in (27) and (28):

(27) *Iz*limam *iz* gorata  
‘I go out in the forest (for a promenade, for example).’
(28) *Razo*ždam se *iz* gorata  
‘I go for a walk / I’m walking in the forest.’

But a closer look shows that all these uses mean that the subject gets out of a place to do something outside. The sentence *izlizam iz gorata* means that one gets out, for example out of the town, out of its home, for going for a walk in the forest. It is the second and not the first place of the movement which is explicit in language, but still the meaning of the preposition remains the same: going out of somewhere, movement towards the exterior with a specific place located in the exterior. We propose the following “intuitive drawing” given here to highlight this description.

And there is an other meaning that seems opposite to the first meaning ‘movement towards the exterior’ and synonymous to *v*. *Iz* can express “disparate position inside of a place”.

This is a very common use in contemporary Bulgarian. Let us give some examples:

(29) Knigite mu sa razxvăreli *iz* bjuroto.  
‘His books are scattered all over the desk.’
(30) *Razo*ždam se *iz* parka.  
‘I have a walk in the forest.’
(31) Razprăsnaxa se *iz* gorata.  
‘They scattered all over the forest’
(32) Tezi bilki rastat *iz* gorata.  
‘These herbs grow in the forest’

![Figure 4. 'His books are scattered all over the desk.'](image)

In the example (29) we have a semantic dimension where each position expresses a state of an entity. The scheme of the Figure 4 represents the vertical axis of a bi-dimensional diagram where is represented the state of an entity. We consider that the notion of going to the exterior is still perceived even if it is quite slight. The books that are scattered all over the desk (29) are not in their supposed usual or normal state. So, using *iz*, the speaker implies that they are not anymore in their normal state, they are outside of this state. In the scale, we have three zones: “not yet”, “normal” and “no more” that concern the “tidiness” of the books. The preposition *iz* focuses on the exteriority (EX₂) that is after the normality. This conceptualization of the movement towards the exteriority is compatible with disparateness and allows us to claim that *iz* is correlated to verbs like, *razprăsvam se* ‘to dissipate, to scatter’, *razxoždam se* ‘to have a walk around’, *sa razxvărjani* ‘(they) are spread around’ etc.

3.2. Prefix *IZ-*

The prefix *iz-* has much more various and numerous uses than the preposition in contemporary Bulgarian. Dictionaries and grammars usually describe its primary spatial value as “movement towards the exterior, moving away, separation”. In these meanings *iz-* is antonymous to the spatial value of *v*-.

22 This example is intermediate between the first value of *iz* ‘movement towards the exterior’ and the next one ‘situation inside of a place’ for it can be interpreted in two ways: 1) ‘pages taken out of (from) our history’ or 2) ‘pages in our history’, for example, seen as important moments in our history.
23 An example in context is given by (Šaur 64): *Lilijana smelo skačaše ot skala na skala, kogato izlizaxa [Lilijana i Mladenov] iz gorata, i părneše bukaka s bezgrižnija si smjaj. (X.Rusev).*
izveda ‘to take out, to lead out’; izkaram ‘to bring out, to push out’; iznesa ‘to export, to carry out’; izleja ‘to pour out’; izpadna/izpadam - ‘to fall out (of), etc.

A lot of verbs doesn’t seem to express directly a considerable change of the meaning of the verb basis except perfectivation: izmina, izvavrja- ‘to go/ to walk to the end of’; iztoča – ‘to draw completely out’; izgriza – ‘to gnaw to the end’; izkaram – ‘to go/to follow to the end’; etc. This aspectual meaning is usually classified by dictionaries as “completing an action to the end” as in the following examples:

(33) Iztoča vinoto ot băčvata. ‘I drew (all the) wine out of the barrel.’
(34) Izvavrja păţja do Universiteta peša. ‘I walked all the way to the University on foot.’

Figure 5. (34)‘I walked all the way to the University on foot.’

For the example (34) we use the representation given by the Figure 5. The vertical dimension expresses different places in space. One goes from a departure point location (home or any other place) walking to an aim – the University. The verb izvavrja means that the “walking” is over, is completed, i.e. the subject is not anymore in the activity of walking. He is already out of the route that leads to the university, i.e. in the exterior of the path. So, we find again the notion of exteriority, although it doesn’t seems evident in a first glance.

In (33) the verb iztoča means that after the process of the verb basis toča ‘to draw’ is completed (i.e. achieved), the movement can not be continued any more, so all the wine is outside the barrel.

A considerable number of verbs with iz- are presented in dictionaries as expressing that the action of the verb basis is done “only once”. The definitions often underline that the action can be done once or several times. Cf. izplača- ‘to cry once, to give a cry’; izvikam – ‘to shout once or several times’; izbrāmča, – ‘to buzz once or several times’; etc.

(35) V rodiľnute otdelenie otvono izplaka dete.
‘In the maternity house there was again a baby cry (when born).’

This meaning of the prefix iz- is always with verbs of some voice/noise expression (e.g. cry, shout, buzz, ...) We consider that the idea of the sound going out of the “body” of the one that produces it is guiding for this presentation. It is comparable to verbs like izdišam ‘to breathe out’ (cf. lat. expirare) where the language expression follows the breath going out of the lung. Thus, here iz- is expressing the movement towards the exterior. The idea that it is produced only once is not carried by the prefix, but it relies in our knowledge that it is a short noise which, combined to the perfective meaning of the prefixed verb, constructs this impression. For example, the verb izplača used for the baby when it is born (example 35) doesn’t necessarily
imply that the cry is short or only one. Thus, we claim that the meaning of *iz-* is essentially ‘movement towards the exterior’.

The prefix *iz-* can express that the “action is distributed all over a surface”: *izrisuvam* – ‘paint all over’ (36); *izgazja* - ‘to trample (all the lawn)’ (37) as well as that “the action is distributed over all/most of the entities” concerned: *izbija* - ‘to kill all/most of, exterminate’ (38); *izbesja* - ‘to hang all /most of”; *izlovja* – ‘hunt all / most of/ a lot of (e.g. animals) (39)”; *izpadams/izpadvam* – ‘fall in its majority’ (40);

(36) Deteto *izrisuva* cjalata stena. ‘The child did paintings on all the walls.’
(37) Gostite *izgazja* cjalata poljana. ‘The guests trampled all the lawn.’
(38) Banditite *izbija* cjaloto semejstvo. ‘The bandits killed all the family.’
(39) Lovcite *izlovja* vscičite zajci. ‘The hunters caught all the hares.’
(40) Listata na đarvetata *izpadaxa*. ‘The leaves of the trees have all fallen.’

A first remark regarding these uses is that they are usually used with some collective or plural nouns and even more often with quantifiers like “all of, all the, the whole” (cf. *listata* ‘the leaves’, *cjaloto semejstvo* ‘all the family’, *cjalata stena* ‘all the wall’). Thus, the idea that a lot of objects or the whole surface is concerned by the action is not carried by the prefix, but by other terms in the context. As in the case of the verbs *iztoča, izvāryja*, the prefix means the achievement of the process. Cf. in (40) the process of <falling> is completed: all the potential entities that take the place of subject for it, e.g. the autumn leaves, have all fallen. It is a discreet interpretation and the class of discreet events is closed and completed: there are no more leaves to fall. When used with process verbs like *risuvam* ‘to paint*, *gazja* ‘to trample’, the explanation follows the same pattern, but the change is continuous.

And finally, one could be surprised to see that *iz-* can express an “acquisition of a property” (like the prefix *v-*): *izvexteja* ‘to become old, worn out’; *izbledneja* – ‘to become hungry’; *izglupeja* – ‘to become silly/begin to behave in a stupid way’; *izdălaža* – ‘to make long’; etc. It is sometimes related to the achievement of the process of the verb basis which leads to a state or property according to different categorial zones: *izčistja* ‘to make clean, to clean’, *izmokrja* ‘to make wet, to wet’.

(41) *Tja izpravi* padnalata vaza. ‘She raised up the fallen vase.’
(42) Mnogo si *izdăžil* za edin mesec. ‘You’ve grown too much in a month.’
(43) Tolkova mi *izvextjaxa* drehite, če njama s kakvo da xodja na rabota. ‘My clothes are so worn that I have nothing to put to go working.’

We give the following representation (Figure 6):

![Figure 6. (41)‘She raised up the fallen vase.’](image-url)
In (41) the entity goes from a state to an other. In this example the first state <the vase is fallen> is a state different from its <right state> and the vase is moved until its right state is reached. So, if the entity $x$ is to acquire the property $P$, the first state is marked as <Non $P$ ($x$)> and the second will be <$P(x)$>. According to the invariant meaning of iz- and the topological representations we gave to its other uses, it is about a change going from the interior to the exterior of an abstract locus. But why do we consider the first as the interior and the second as the exterior? Looking over the list of verbs one is impressed that most of those verbs carry the idea of “more that the normal”(izdāļa se in (42)) or “it is not normal” (izvexteja in (43)). We see that, by using iz-, the speaker insists on the leaving of the previous (non mentioned) state and the basis (which is often an adjective or a noun) specifies the state that is reached.

The analysis of iz/iz- showed that, although its uses are very different, they still keep an invariant meaning – going towards the exterior. But the way the exterior is seen is not always so simple. Iz can specify that one is going outside its home and in the forest by specifying the second situation which is the exterior (izlizam iz gorata). Expressing the “acquisition of a property” is a more abstract use of the prefix iz- and it deals with states that affect the entity.

CONCLUSION AND PERSPECTIVES

When we look at the meaning “acquisition of property” we are confronted to an a apparent synonymy between the prefixes v- and iz-, but our approach using diagrams led us to the conclusion that the synonymy between iz- and v- is only apparent. Indeed, the prefix v-highlights the passage towards the interior of a state while iz- underlines the going towards a state by leaving a previous state. With v- the entity enters a state, with iz- it goes out of a state to reach an other. Thus, with these two preverbs, the notion of “acquisition of a property” is different.

The analysis presented here showed that prefixes and prepositions do have meanings in common and one can reach an invariant semantic representation. V/v- focuses on the interiority or the movement towards interiority and iz/iz-, although the invariant meaning is not as clear as with the latter, focuses on exteriority. Studies of other prepositions and correlated preverbs are in progress in Bulgarian and other Slavic and Roman languages. We use the same topological tools with iconic representation to explain and to find a semantic invariant for each couple of prefix/preposition.

This approach contributes to examine the deep connection between language activity and cognitive representations by also taking into account certain diachronic transformations anchored on cognitive processes.

REFERENCES


