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## **A Cognitive Linguistic Analysis** **of the Bulgarian Verbal Prefix *Pre-* ‘across, through, over’**

### **1. Introduction**

This article presents a cognitive semantic analysis of the Bulgarian verbal prefix *pre-* ‘across, through, over’. In line with cognitive linguistic research, this article assumes that conceptual information about a lexical item is understood against broader cognitive structures, and that word meaning reflects how people interact with, perceive or conceptualize the world (Cuyckens 1993). This approach uses family resemblance structures where category members share different sets of attributes with each other, and allows for fuzzy boundaries among concepts, and for more and less prototypical senses (see, for example, Langacker 1987, Lakoff 1987, Cuyckens 1993, Holden 1989, Deane 1993, Dewell 1994, Tyler and Evans 2003). This article also uses image schemas, which specify trajectories, shapes, and containers (Lakoff 1987), reflect abstract patterns in experience and understanding, and can be manifested in rich images, perceptions, and events (Johnson 1987). The image schemas depict two basic entities, a trajector (TR) and a landmark (LM), defined by Langacker (1987) respectively as the figure within a relational profile, and another salient entity in a relational predication, prototypically providing point of reference for locating the TR. The main objective of this article is to account for the polysemy of *pre-* by presenting a semantic network which establishes links among the various senses and explains why *pre-* has the meanings that it has, and to show that revision of traditional accounts is necessary.

There are a number of problems with the treatment of *pre-* in traditional Bulgarian reference books. The Dictionary of the Contemporary Bulgarian Literary Language (1957:749) suggests that the verbal prefix *pre-* has the following meanings: 1) to direct the action through some space or object, e.g., *prelitam* ‘fly over’; 2) to perform an action which splits something into two, e.g., *prečupvam* ‘break in two’; 3) to perform an action in many places, everywhere, e.g., *prebroždam* ‘wander all over’; 4) to perform the action

again or in a new way, e.g., *prepečatvam* ‘type again, publish anew’; 5) to exceed, perform the action to a higher degree or achieve a state higher than normal, usual, etc., e.g., *prejaždam* ‘overeat’; 6) to perform an action of short duration, e.g., *prevaljava* ‘rains briefly’; 7) to stop doing the action, e.g., *preboljavam* ‘stop being sick’; 8) to spend a certain period of time doing something, e.g., *prezimuvam* ‘spend the winter’; 9) to make a perfective form of the verb, e.g., *prežālteja* ‘turn yellow’. This dictionary puts together under the first meaning verbs like *preskačam* ‘jump over’ and *prepluvam* ‘swim through’, which, according to other sources, e.g., Georgiev (1999), illustrate two separate meanings, “overcome an obstacle” and “direct the action through some space or object” (see Table 1). Like other references, the dictionary’s greatest problem is that it presents the meanings of *pre-* as a random collection of unrelated senses.

The Academy Grammar (Vol. 2:2, 1998:19-20) also provides nine senses for verbs with the prefix *pre-* and points out which patterns are productive and which are not. Although the wording of the definitions suggests that meanings such as “spread all over the object”, e.g., *prebrodja* ‘wander all over’, and “spread all over the surface of the object”, e.g., *premreža* ‘cover with a net/veil, throw a net over’, are related, the Academy Grammar never explicitly refers to the link between them. There are also discrepancies in the ordering of the meanings of *pre-* in these sources (see Table 1). The dictionary, for example, gives “action through space or object” as its first meaning, while the first meaning provided by the grammar is “do the action again or in a new way”. These choices reflect different criteria: “through space or object” is supposedly the oldest, most basic, spatial meaning of the preposition *prez*, inherited by the prefix *pre-*<sup>1</sup>, while “again” is now one of the most productive and frequent patterns of verbs with *pre-*. All other meanings, except one, differ in the order assigned to them by the two sources. An exception is “perfectivity/resultativity”, which is, in my opinion, correctly ranked last by both sources, since it is the least salient of all meanings. Note that, unlike the dictionary, the Academy Grammar groups together “going through space” and “going through time”.

Acknowledging the enormous semantic complexity of *pre-*, Georgiev (1999:212) is the only one who posits a general meaning for it, “overcome” in a spatial or abstract sense, and a number of separate other meanings: 1) “change of location”, which may also involve directing the action to a new location by overcoming some definite space,

e.g., *preletja* ‘fly over’; 2) “overcoming an obstacle”, either physical or abstract, e.g., *preskoča* ‘jump over’; 3) “stopping” which may be the result of coming across obstacles, e.g., *presreštna* ‘purposefully run into/intersect one’s way’, etc. It is noteworthy that Georgiev not only identifies a core meaning, but also establishes connections among some of the secondary meanings, e.g., for him, the connection among the first three meanings is that overcoming space can involve overcoming obstacles, which sometimes leads one to a stop. However, he does not pursue this line of thought further, and his chain of links breaks there, leaving the impression that the other meanings (e.g., “excess”, “period of time”, etc.) are unrelated. He does not explain how each subordinate meaning stems from the core meaning either.

Ivanova (1974:49-53) gives primacy to the “repetition” meaning of *pre-*, which she calls the Recursive Aktionsart<sup>2</sup> (“the action is performed again in the same or a modified way”), e.g., *prepisvam* ‘copy’. I argue later that while “repetition” may be one of the most productive meanings of *pre-*, it is not the most central one in a cognitive sense because it does not generate any of the other meanings. Among the many verbs Ivanova provides as examples of this Aktionsart, she includes some verbs whose most salient meaning is not “repetition” but rather “excess”, e.g., *prečitam* ‘read too much’, or “physical or abstract transfer from one entity to another”, e.g., *prepodavam* ‘teach’. In other cases, related verbs are treated as separate; for example, *pretărkulvam* ‘roll over’ is given as an example of the Transgressive Aktionsart (“the action is performed above some area or divides the spatial area into two”), suggesting that its most salient feature is that the action divides some space into two, yet a semantically closely-related verb, *preobráštam* ‘turn over, overturn’, is listed under the General-resultative Aktionsart (“the action is brought to a result or is characterized by goal- or result- orientation”). I argue later that these verbs belong to the *reflexive* schema characterized by an arc-shaped path. More importantly, one loses sight of the similarities among the various meanings listed by Ivanova, and the question of what holds them together is never addressed.

It should be mentioned that Scatton (1983) tries to find order in the chaos by grouping together movement through space, time, and across boundaries. He is the only one who identifies “crossing a boundary” as a meaning of *pre-*, which in my analysis is a salient one. He also puts “repetition” at the end of his list, in sharp contrast with Ivanova

and the Academy Grammar, which give it as the first meaning of *pre-*. Finally, Alexander (2000) provides only two meanings for *pre-*, which precludes a more detailed comparison to the other sources. Acknowledging that by design her book is only a short text and grammar of Bulgarian for L2 learners, one, nonetheless, wonders if such an oversimplified and unrealistic picture of the semantic network of *pre-* will be useful to L2 learners.

Table 1 summarizes the meanings of *pre-* according to the reference books on Bulgarian discussed above.

Meanings of the prefix <i>pre-</i>	Dictionary of the Contemporary Bulgarian Literary Language 1957	Academy Grammar (Vol.2:2) 1998	Georgiev's Morphology 1999	Ivanova's Aktionsarten 1974	Alexander's Intensive Bulgarian text and grammar 2000	Scatton's Grammar 1983
through space or object/ change of location	1	3	1	3	2	1
split in two	2	4		4		2
in many places, everywhere	3	6		6		
again, or in a new way	4	1	7	1	1	3
Excess	5	2	4	2		
short duration	6					
stop doing the action	7	5	3	5		
time period	8	3	5	3.a.		1
perfectivity	9	9	9	9		
all over the surface		7		7		
achieve better results		8		8		
overcome an obstacle			2			
have an effect on			6			
change of state			8			
across boundary						1

Table 1 Meanings of the prefix **pre-** in reference books on Bulgarian

The table shows the inconsistencies among the sources. It is unclear which the most salient meaning of **pre-** is since the references give different meanings as first: “through object/space”, “repetition”, “time period” and “across boundary”. Also, a given meaning, e.g., “repetition” is listed as the first, third, fourth, and seventh meaning of **pre-** depending on the source.

The remainder of this article presents a cognitive semantic analysis of the spatial (section 2) and metaphorical meanings of **pre-** (section 3) which shows the connections among the senses and suggests directions for revision of the traditional accounts.

## 2. Spatial meanings of **PRE-**

### 2.1. The *across* schema

The following examples illustrate what I claim is the most prototypical sense of the prefix **pre-**, ‘across, to the other side of’:

- (1) *Togava* *reka* *Jantra e* *pālnovodna,* *nezavisimo*  
 then river Jantra be-3SG high-water regardless
- če našte lodki – turističeskite kajaci mnogo plitko*  
 that our boats tourist-the kayaks very shallow
- gazjat,* *no samo togava možeše* *ot edinija*  
 wade-3PL but only then could-3SG from one-the
- kraj do drugija kraj čovek da premine*  
 end to other-the end man to go-across-3SG
- bez da nosi lodkata ili da se*  
 without to carry-3SG boat-the or to REF
- udrja po kamānite i da se prebie.*  
 hit-3SG on stones-the and to REF kill-3SG

‘At this time the river Yantra has high waters; our boats, tourist kayaks, can run in low waters; nonetheless, only at this time (of the year) one could **go across** from one end (of the river) to the other without having to carry the boat or hit the stones or kill oneself.’ (CSB<sup>3</sup> 2001:229)

- (2) *I dvata dena prekosixme naprečno*  
 and both-the days went-across-1PL across-the-width
- cjalata planina prez Tennessee i*

whole-the	mountain	through	Tennessee	and
<i>North Carolina,</i>	<i>nad</i>	<i>50 km</i>	<i>v ednata posoka,</i>	
North Carolina	over	50 km	in one direction	
<i>kato često spiraxme</i>	<i>za da</i>	<i>gledame</i>	<i>božestvenite</i>	
as often stopped-1PL	in order to	watch-1PL	divine-the	
<i>prirodni gledki.</i>				
natural sights				

‘Both days we **crossed** the entire mountain across its width through Tennessee and North Carolina, over 50 km one way, and we often stopped to watch the divine natural sights.’ (CEMB<sup>4</sup> 2004:249)

These examples show two verbs which share the meaning ‘go across/to the other side of’. Despite the mention of the water depth in (1), I argue that this dimension is irrelevant in the relation profiled by *pre-* in *preminavam*, ‘go across’, which focuses on the crossing of the river from one side to the other, and therefore the LM (the river) is perceived as a two-dimensional entity. The same applies to the LM (the mountain) in (2); although mountains are three-dimensional entities, only two dimensions are highlighted in the context of (2), where the speaker crosses the mountain from one side to the other. The mountain range in question has a longer side (length) and a shorter side (width), and as the word *naprečno* ‘across (the width)’<sup>5</sup> clarifies, the crossing here refers to movement across the LM roughly parallel to its shorter side (which happens to go through territories of two states, Tennessee and North Carolina).

The verbs with *pre-* in these examples receive a schematic presentation as in Figure 1. This is the central image schema of *pre-*, which I will call schema 1, the *across* schema.

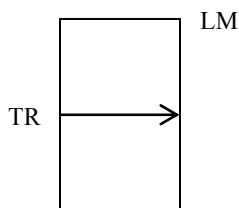


Figure 1 **prekosjavam** ‘go across/to the other side of, cross’ (bird’s eye view)  
Central image schema of **PRE**  
schema 1, the *across* schema

As Figure 1 shows, a TR (located at the beginning of the arrow) starts its movement at one end of the LM (represented by the rectangle) and goes along a path (presented by the arrow) all the way to the other side of the LM (the end of the arrow). In other words, the TR crosses the LM from one side to another, prototypically at a right angle, because often this is the shortest path (and hence the fastest way to get) to the other side of the LM.

## 2.2. The *across+* schema

A common variety of the central schema<sup>6</sup> is illustrated by example (3).

- (3) *Reka Dunav preminava i prez Bălgaria...*  
 river Danube goes-through and through Bulgaria  
 ‘The river Danube also goes **through** Bulgaria...’ (CSB 2001:183)

In (3), the TR is the river Danube, perceived here as a one-dimensional entity. It starts somewhere before the boundaries of Bulgaria and continues after these boundaries. The verb *preminavam* ‘go/run through’ depicts the TR as going from one place to another including across country boundaries. In other words, people conceptualize an entity as moving though in reality it does not necessarily have to change its location, because they are able to mentally trace the path of continuously moving entities, such as ships sailing along the river<sup>7</sup> (the dimensions of a ship being irrelevant, therefore it is zero-dimensional) via the so-called 1DMN trajector ↔ 0DMN trajector transformation<sup>8</sup> (Lakoff 1987:442-443).

The exchange in (4) also involves movement of the TR (the speaker and his boat) which originates before the LM (the rapids) and continues after the LM. Here, two synonymous verbs, *prekarvam* and *prenasjam* (one used by the story-teller, and the other by his interlocutor), indicate that the speaker and his companions referred to in (4) had to carry their boats (in their hands while walking) across the rapids.

- (4) A: *Ošte pod Dolna Studena ima edin*  
 as early as under Dolna Studena there-is-3SG one  
*prag, kojto tam štem-ne-štem zadălzitelno*  
 rapids which there want-NEG-want-1PL obligatorily  
*trjabvaše da sprem na desetina metra*  
 had to-3SG to stop-1PL at about-10 meters

- predi praga da vzemem lodkata*  
before rapids-the to take-1PL boat-the
- na rāka da ja prekaram.*  
on hand to it-F move-across-1PL
- B: *Da ja prenesete.*  
to it-F carry-across-2PL
- A: *Tāj kato v drugija slučaj se*  
since in other-the case REF
- polučavaše edin skok i počti vinagi ili*  
turned-out-3SG one jump and almost always either
- šte sčupiš lodkata ili šte*  
will-FUT break-2SG boat-the or will-FUT
- se obārneš.*  
REF turn-over-2SG
- A: ‘Before the area under Dolna Studena [name of town], there are rapids, where we absolutely had to stop, whether we liked it or not, about 10 meters before the rapids, (we had) to take the boat by hand, and **move** it **across** (the rapids).
- B: You had to **carry** it **across**.
- A: Because, otherwise, there was a jump and almost always you either break the boat or turn over.’ (CSB 2001:231)

In both examples, the TR’s path starts somewhere before the initial boundary of the LM and continues after the terminal boundary of the LM, but the verb with *pre-* still focuses on the section of the path which crosses the LM from side to side. This schema is called schema 1.2DMN (where 2DMN reflects the two-dimensional nature of the LM), or the *across+* schema (where the plus stands for the segments of the path beyond the LM boundaries), and is presented in Figure 2.

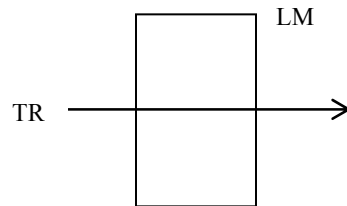


Figure 2 **preminavam prez** ‘go through/across’ (bird’s eye view)  
Schema 1.2DMN of **PRE**  
the *across+* schema

One may ask the question if the image schema in Figure 2 is distinct from the image schema in Figure 1. The difference between these schemas is that the *across+* schema implies a path which extends beyond the stretch of the path that crosses the LM, while the *across* schema is only concerned with the path that crosses the LM from end to end. Also, as example (3) shows, the *across+* schema applies both to the prefix *pre-* and the preposition *prez*; the *across* schema, on the other hand, typically applies only to the prefix. Moreover, the *across* schema gives rise to a number of schemas, e.g., the *from-to* and *transfer* schemas, which specifically focus on going from one end of an LM to another, from one point to another, or from one LM to another, while the *across+* (and the closely-related *through* schema, which differs only in that its LM is three-dimensional) and the *division* schema it gives rise to emphasize the idea of exit, therefore the *across* and *across+* are clearly two distinct schemas (see Figure 17).

### 2.3. Criteria for selection of primary sense

A very important question we need to address here concerns the criteria for the selection of the primary sense (and image schema) of the prefix *pre-*. Why is the *across* schema identified as the most prototypical one in my analysis, rather than any of the other schemas, e.g., the *across+* schema? Tyler and Evans (2003: 47-50) following Langacker (1987) suggest the following linguistic criteria which can be used for identifying the primary sense of a polysemous spatial term: 1) earliest attested meaning; 2) predominance in the semantic network; 3) use in composite forms; 4) relations to other spatial terms; 5) grammatical predictions. Determining the primary sense of *pre-*, however, turned out not to be a straightforward task. One of the reasons is that information about the earliest attested meaning of *pre-* is not (readily) available. Another reason is that *pre-* does not have a corresponding prefix with which to form a compositional set that divides up some spatial dimension (cf. the way the opposites *nad-* ‘above, over’ and *pod-* ‘under’ divide up the verticality axis). In addition, the third criterion, “use of composite forms”, cannot be applied to the prefix *pre-* in the same way as it applies to English *over* in *overcoat* and *look over*. We are left with just two of the above five criteria, “predominance in the semantic network”, referring to the involvement

of a unique spatial configuration in the majority of the distinct senses in the network (the way the configuration *higher than* is involved in the other two spatial meanings of *nad-*, *over* and *top*; see Tchizmarova 2005), and “grammatical predictions”, referring to the retrievability of a number of senses directly from the primary sense, and the traceability of the other senses to senses that were derived from the primary one.

Researchers have suggested other criteria for primacy of word meaning and a wide range of other scalar or multi-value linguistic phenomena. Ariel (1998:189-190, 214, 222), for example, argues that frequency of use should be a deciding factor (together with ease of accessibility) in assigning basicness to any of the three types of information Givenness: Knowledge Givenness, referring to encyclopedic knowledge, Physical Givenness (PG), referring to speech situation salient facts, and Linguistic Givenness, referring to previous discourse. She shows that demonstrative pronouns, demonstrative adjectives and other canonical markers of Physical Givenness, being widely accepted as basic elsewhere in the literature, are quite marginal (infrequent) in natural discourse; therefore, PG is not basic (except perhaps etymologically).

I argue that frequency is not a useful criterion in the analysis of polysemy. It may happen that the central meaning of a word is the most frequently used meaning in a given type of discourse or register, or even across different types of discourse and registers, but, nonetheless, frequency of use should not be equated with prototypicality in the cognitive sense. More important than how frequently a given meaning of a word or a lexeme is used, is the salience of a given meaning in the minds of native speakers and especially the ability of this meaning to generate other meanings in the semantic network. In terms of salience for native speakers, Biber et al. (1998:40) show that, although a word like *deal*, referring to the distribution of cards, has not been found in their 5.7-million-word sample from the Longman-Lancaster Corpus, it is, nonetheless, one of the very first meanings native speakers associate with the word *deal*, and should be included in a dictionary if its listing of the senses of *deal* is to be complete.

As far as meaning-generation is concerned, consider, for example, the *repetition* schema of *pre-* illustrated by *prepisvam* ‘copy’, *prepročitam* ‘read again’, and *prenareždam* ‘rearrange’ (discussed in section 3.7. below). This meaning is roughly equivalent to ‘again’ or ‘anew’. It is a highly productive meaning in the sense that *pre-* is

readily attached to new words in Bulgarian to give them the additional meaning of ‘again’ or ‘anew’ (Ivanova 1974, Academy Grammar, Vol.2:2, 1998). The *repetition* sense has one of the highest frequencies of occurrence in my corpus and has been claimed by Slabakova (2001:206-207) to be the default or dominant meaning of *pre-* based on the highest frequency with which this meaning was selected by native speakers to apply to non-existing verb stems in her study. However, as I point out later, the other choices given to the native speakers in Slabakova’s experiment do not constitute meanings of *pre-* at all,<sup>9</sup> and have to do with aspectual rather than lexical meanings. More importantly, even if the *repetition* sense turns out to have the highest frequency counts of all meanings of *pre-* in future studies based on large corpora and psycholinguistic experiments which will include the entire range of lexical meanings of *pre-*, I will still argue that it is not the most prototypical sense, because, as we shall see later (Figure 17), it does not serve as the basis of any other meaning and does not generate any other meaning in the semantic network of *pre-*.

In view of the above, the meaning whose spatial configuration underlies and motivates the largest number of meanings in the semantic network of *pre-* is *across* (see image schemas in Figure 17). Therefore, I have identified it as the most prototypical meaning of *pre-*. What is more, between the most closely related *across* and *across+* meaning of *pre-* (schematically presented in Figures 1 and 2), the *across* image schema takes precedence over the *across+* schema because the path in the spatial configuration of the former represents a portion of the path in the configuration of the latter, therefore, applying Occam’s razor, the *across* schema is conceptually simpler and presents a more elegant explanation from a learnability point of view. As stated above, however, the crucial factor influencing this decision is that the *across* schema gives rise to more schemas (a total of eleven) than the *across+* schema (which, jointly with the *through* schema, generates only two schemas: *division* and 2.2DMN) (see Figure 17).

#### 2.4. The *cross* schema

Having clarified the criteria for selection of the central schema, we return to the other spatial schemas of *pre-*. Another minimal variant of the central schema is illustrated by *presičam granicata* ‘cross the border’, *preminavam prez praga* ‘cross the

threshold’, etc. Here, the LM is or is perceived as one-dimensional and the TR’s path crosses it. This schema is called schema 1.1DMN (where 1DMN reflects the one-dimensional nature of the LM) or the *cross*<sup>10</sup> schema and is presented in Figure 3.

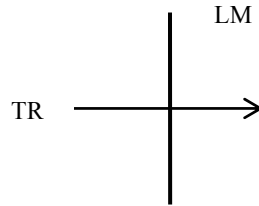


Figure 3 **presičam granicata** ‘cross the border’ (bird’s eye view)  
 Schema 1.1DMN of **PRE**  
 the *cross* schema

As the example *preminavam prez praga* ‘cross the threshold’ illustrates, this schema also applies both to the prefix *pre-* and the preposition *prez*.

## 2.5. The *through* schema

A number of verbs with *pre-* share the meaning of (passing) *through*. *Preminavam prez stajata/prez tunela* ‘go/pass through the room/tunnel’ (note again the co-occurrence of the prefix *pre-* and the preposition *prez*), for example, implies an LM which is either a three-dimensional (3DMN) container or one that is perceived as such (e.g., *gorata* ‘the woods’), and a TR’s path that is usually along one of the surfaces of the LM, e.g., the room floor, as illustrated in Figure 4. It is also possible for the path to cut through the inside of the LM without touching any of its surfaces, e.g., if the TR is a bird which flew into the room through an open door and exited through an open window. Let us call this schema of *pre-* schema 1.3DMN (where 3DMN reflects the three-dimensional nature of the LM) or the *through* schema. Like the *across+* schema (schema 1.2DMN) and the *cross* schema (schema 1.1DMN), this schema is also a minimal variant of the central schema. The difference between the *through* schema and the central schema is that the path of the former extends beyond the LM boundaries, and the LM must be a three-dimensional container. Schemas 1.1DMN, 1.2DMN and 1.3DMN are also linked to each other by similarity links; they only differ in the dimensionality of the LM.

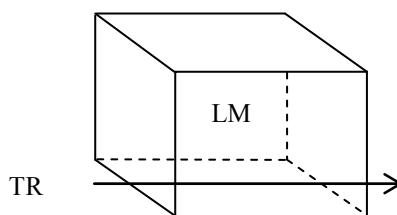


Figure 4 **PRE** with a three-dimensional LM (side view)  
**preminavam prez** stajata/tunela ‘go/pass through the room/tunnel’  
 Schema 1.3DMN of **PRE**  
 the *through* schema

Schema 1.3DMN, the *through* schema is at the core of a number of conventional metaphorical senses of *pre-* which will be addressed in the next section. Suffice it to say, that this sense of *pre-* can be paraphrased as ‘in one side and out the other’ (as stated by Lindstromberg 1998:126 for English *through*), and emphasizes the idea of exiting the LM, which plays a crucial role in a number of metaphorical meanings that have to do with spending time, enduring an ordeal, or doing something no more.

Other verbs that belong to the *through* schema in its spatial sense (though they may have other meanings as well) include: *prevozvam prez seloto/gorata/granicata* ‘drive through the village/woods/border, drive from one point to another’, *prekarvam prez seloto/gorata/granicata* ‘carry through the village/woods/border’, *preveždam prez seloto/gorata/granicata* ‘lead through the village/woods/border’, etc.

## 2.6. Some variants of the *through* schema

A variant of the *through* schema has to do with piercing or penetrating the LM. Consider example (5):

- (5) *Lajkata* *se* *svarjava,* *precežda* *i*  
 chamomile-the REF is boiled-3SG strained-3SG and  
*topiš* *čista* *nosna kārpa* *v neja i* *nalagaš* *na*  
 dip-2SG clean handkerchief in it-F and place-2SG on  
*okoto si.*  
 eye-the your

‘You boil the chamomile, **strain** it and dip a clean handkerchief in it and place it on your eye.’ (CEMB 2004:24)

The meaning of *prečeždam (prez)* ‘strain, sift (through)’ in (5) is ‘pass through a porous body’. Imagine someone pouring loose chamomile tea through a strainer into a cup – the solid chamomile particles get retained in the strainer, but the liquid and some tiny particles pass through, as sand particles do when sifted through a sift. As far as the particles that get through the strainer holes are concerned, we have a multiplex TR, i.e., one “consisting of a number of individuals” (Lakoff 1987:428), each with its own path (indicated by the arrows) headed in the same direction, downwards as in Figure 5 (schema 2.MX, where 2 refers to schemas derived from the *through* schema, representing the *through* rather than the *across* meaning, and MX stands for a multiplex entity, such as sand).

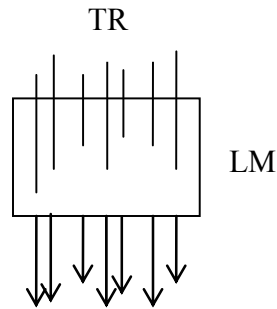


Figure 5 **prečeždam pjašak** ‘sift sand’: multiplex TR (angle view)  
Schema 2.MX of **PRE**

At the same time, the liquid (the tea) is a mass (MS) TR and its movement through the strainer is perceived as a single path as represented in Figure 6 (schema 2.MS).

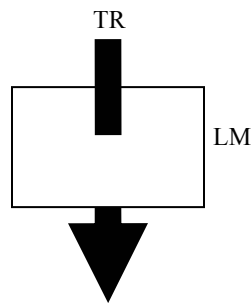


Figure 6 **prečeždam čaj** ‘strain tea’: mass TR (angle view)  
Schema 2.MS of **PRE**

Other verbs share image schema 2.MS and 2.MX on the understanding that the image, and, hence, the path, can be rotated in any direction, and the path does not necessarily have to be a straight line. Thus, an expression like *pticata preletja prez prozoreca* ‘the bird flew through the window’ (where again, the verbal prefix *pre-* and its corresponding preposition *prez* co-occur in the same clause in Bulgarian) presupposes a window (a vertical, two-dimensional LM indicated as 2.2DMN), which is open so that the bird (TR) flies through it, and a path in an unspecified direction – upward, downward, straight ahead, up and down, zigzagging, etc. Figure 7 illustrates some of the possibilities.

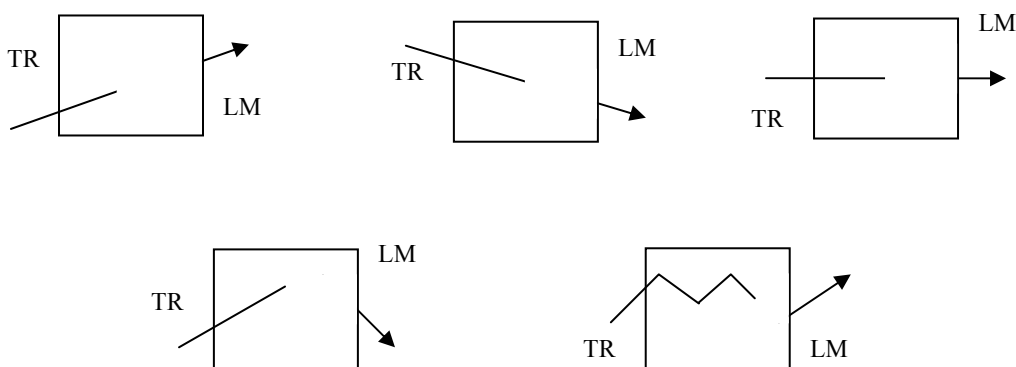


Figure 7 *pticata preletja prez prozoreca* ‘the bird flew through the window’  
(side views)

Schema 2.2DMN of **PRE**

## 2.7. The division schema

As standard Bulgarian reference books point out, *pre-* occurs with a number of verbs which mean *to divide into two*, e.g., *prekăršvam* ‘break in two’, *prerjazvam* ‘cut in two’ as in (6), etc.

- (6) *Dve sedmici sled razdjalata s ljubimija si*  
two weeks after separation-the with beloved-the REF

*Dončo, Keranka si prerjaza venite.*  
Doncho Keranka REF cut-3SG veins-the

‘Two weeks after she broke up with her boyfriend Doncho, Keranka cut her veins.’  
<http://starshel.bg/2003/3008/st3008.htm>

We are now in a position to see where this meaning comes from. The relevant image schema, schema 3, is presented in Figure 8; let us call it the *division* schema.

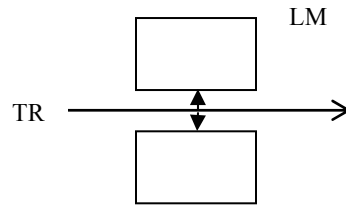


Figure 8 **prerjazvam** ‘cut in two’ (bird’s eye view)  
Schema 3 of **PRE**, the *division* schema

This image schema is linked to schemas 1.1DMN (*cross*), 1.2DMN (*across+*) and 1.3DMN (*through*) by virtue of the fact that when a TR crosses or goes through an LM, the TR’s path (indicated by the horizontal arrow) divides the LM into two conceptual halves situated on both sides of the path: e.g., one to the left and one to the right of the TR’s path. Crossing is dividing mentally or physically. When a TR has to make its way through an LM forcefully and/or when there is resistance from the substance of the LM to the TR’s passage, the LM may physically break in one or more places, e.g., the LM may split in two, with the two halves going in the opposite directions (represented by the vertical arrows), perpendicular to the direction of the TR’s path. This experience is the basis for the image schema in Figure 8, where the TR’s path stands for the direction of the force applied to the LM. It accounts for expressions like *prekāršvam klon* ‘snap a twig’, *vjatār prečupi brezata* ‘wind broke the willow tree in two’, *prerjazvam lenta* ‘cut ribbon in two’, *prepolovjavam kniga/večerja* ‘finish (reading) half of the book/(eating) half of the dinner’<sup>11</sup>, etc.

## 2.7. Interaction between the meaning of the prefix and the meaning of the verb

It should be noted that in these cases the interaction between the meaning of *pre-* and the meaning of the verbal root is rather transparent. The verbal roots and/or unprefixes verbs, e.g., *reža* ‘cut’, *čupja* ‘break’, etc., carry the meaning ‘separate, split, fracture’, etc., and the noun *polovina*, which makes up the verb *prepolovjavam*, means ‘half’. In these cases, the prefix *pre-* strengthens the meaning of the root and puts

emphasis on the result (or goal): if and when the event is completed, the LM will no longer be a single (or the same) entity; it will have changed its form, shape, appearance, etc., and will be divided into two (or more) separate entities, or, as is the case of *prepolovjavam* ‘finish half of’, only half of the entity or the action will remain. I say “if and when the event is completed”, because virtually every Bulgarian perfective verb with a prefix, which generally implies completeness and often completion of a bounded or telic event, has an imperfective counterpart with the same prefix (secondary imperfective), which implies, among other things, a bounded or telic event in progress, and hence incompleteness, e.g., the perfective:imperfective pair *prereža<sup>P</sup>* – *prerjazvam<sup>I</sup>* ‘cut in two’. Crucially, the boundedness (or telicity), i.e., the goal, is supplied by the prefix. In view of this prefix-root interface, it must be clarified that the image schema in Figure 8 represents the meaning of *pre-* as much as it represents the meaning of the verbal (or other) root, or rather the image captures the combined input of prefix, root and possibly other elements.

Indeed, many researchers have pointed out that the meaning of locative particles such as prepositions, exhibits strong contextual dependence. Drawing from a number of languages, Sinha and Kuteva (1995:167-169) make a strong case against the so-called **local semantics** and for the so-called **distributed spatial semantics**, where the former approach assumes that **spatial relational meaning**<sup>12</sup> is carried only by the local particle, while the latter approach argues that it is not mapped exclusively to the locative particle, but is distributed over other elements in the syntagm as well. Therefore, it is important to note that in this work, when I say that *pre-* expresses a given sense represented by a given image schema, I do not claim that only the prefix is responsible for the given reading and image schema. Rather, a prefix allows a finite number of interpretations, which this work aims to describe. My underlying assumption is that each prefix allows, selects, or fosters a given interpretation, and contributes to its construction along with other elements, both linguistic (such as the verb or the nouns denoting the TR and LM) and extralinguistic (such as information which is implied rather than stated, pragmatic knowledge, etc.).

## 2.9. The *over* schema

Keeping that in mind that a number of linguistic and extralinguistic factors jointly construct the spatial meaning of a prefix or any of its abstract extensions, we return to the spatial senses of *pre-*. A number of senses have to do with certain senses of *over*. We start with a meaning which corresponds to one of the variants of the central sense of *over* as discussed by Lakoff (1987:434) and to the central schema of *over* (with its arc-shaped path) as discussed by Dewell (1994:353). Expressions like *preskačam (prez) ogradata* ‘jump over the fence’, *preodoljavam*<sup>13</sup> *visočina/prepjadstvie* (as in *bjagane s prepjadstviija*) ‘pass/leap over a hurdle (as in a hurdle race or the track event hurdles)’, etc., get the image schema in Figure 9, which is based on a similar figure suggested by Lakoff for the sentence *The dog jumped over the fence* (1987:433-434). We will call this schema of *pre-* the *over* schema, or schema 4.

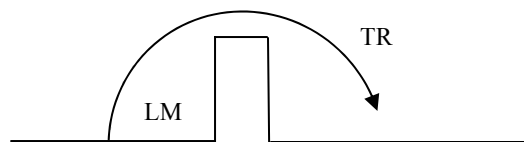


Figure 9 *preskačam* ‘jump over’ (side view)  
 Schema 4 of *PRE*, the *over* schema  
 Based on Lakoff (1987:434)

As discussed by Lakoff 1987 for *over*, this schema shows a vertical LM and a semicircular path of the TR over the LM which normally, but not necessarily, both begins and ends on the ground. That is why, Lakoff marks it as the V.NC.G (vertical, no contact, ground) variant of the central *above-and-across* schema he proposes for *over* (p. 434). It captures the prototypical reading of *preskačam* ‘jump over’, though the shape of the LM may vary, e.g., the LM does not necessarily have to be vertical (cf. *preskačam lokva* ‘jump over a puddle’).

This schema is linked to the central, *across*, schema of *pre-*, and via schema 1, to its minimal variant, schema 1.2DMN (the *across+* schema). In our experience, crossing an LM such as a field from end to end often involves overcoming some obstacles which require detours (e.g., going around an obstacle) or other modifications of the path (e.g., jumping/climbing over an obstacle). I assume that the image in Figure 9 represents such

a modified version of the prototypical straight, uninterrupted path represented by the central image schema, where the LM boundaries of the central schema correspond to the initial and terminal point of the path rather than to the boundaries of the obstacle in the *over* schema. When the LM represents the obstacle itself, as in *preskačam ograda* ‘jump over a fence’, the *over* schema bears a close resemblance to the *across+* schema (or to the *through* or the *cross* schema, depending on the dimensionality of the LM) in that the path extends beyond the LM (fence) boundaries. Looking at it from a different perspective, if the image schema in Figure 9 is represented from a bird’s eye view, i.e., if we “change the perceptual conditions” and present the scene as observed “by a direct downward gaze” (Deane’s terminology 1993:35-38), it will look very much like the *across+* image schema.

It must be noted, however, that *preskačam* is frequently used with the preposition *do* ‘to, at’, indicating the endpoint of a path (or goal of the TR’s movement), where *preskačam* basically means ‘go (from point A) to (point B)’<sup>14</sup> as in example (7).

- (7)
- |               |                |               |                  |                     |                  |
|---------------|----------------|---------------|------------------|---------------------|------------------|
| <i>Čakam</i>  | <i>vseki</i>   | <i>moment</i> | <i>Mixail da</i> | <i>se</i>           |                  |
| waiting-1SG   | any            | moment        | Mihail to        | REF                 |                  |
| <i>värne</i>  |                | <i>ot</i>     | <i>rabota i</i>  | <i>šte</i>          | <i>preskočim</i> |
| come-back-3SG |                | from          | work and         | will-FUT            | go-1PL           |
| <i>do</i>     | <i>“Metro”</i> | <i>da</i>     | <i>kupim</i>     | <i>njakoi nešta</i> | <i>za jadene</i> |
| to            | “Metro”        | to            | buy-1PL          | some things         | for eating       |
| <i>i</i>      | <i>piene.</i>  |               |                  |                     |                  |
| and           | drinking       |               |                  |                     |                  |
- ‘I’m waiting for Mihail to come back from work and we’ll go to “Metro” [department store] to buy some things to eat and drink.’  
 (CEMB 2004:220)

This reading of *preskačam* is also linked to the central *pre-* schema, the *across* schema, though in a different way. The path from one side of the LM to the other side of the LM in the central schema is reinterpreted here as a path from one place to another (from point A to point B, or from one LM to another LM) (see the *from-to* schema in section 2.14.). The starting point or source of motion can be implied or retrievable from preceding discourse (cf. example (8)) rather than explicitly stated, and it frequently coincides with the speaker or hearer’s location either at the time of the utterance (or some other

reference time). As Sinha and Kuteva (1995:188) point out for a similar example, the Bulgarian “preposition *do* ‘to’ profiles the goal of motion”.

## 2.10. The reflexive schema

Schema 4 of *pre-* shown in Figure 9 has a variant which parallels the *reflexive* schema of *over* discussed by Lakoff (1987:430-433). It is exemplified by *preobraštam se* ‘turn over’ in the following sentence:

- (8) *Njakoi ot nas – Daniel i Mitko se kačixa*  
some of us Daniel and Mitko REF got-on-3PL  
*na vlakčeto na užasite, deto se*  
on train-DIM-the on horrors which REF  
*izstrelva s reaktivna skorost i se*  
launch-3SG with supersonic speed and REF  
*preobrašta s glavata nadolu, no Anelija*  
turn-over-3SG with head-the downwards but Anelija  
*i az blagorazumno se vuzdāržaxme ot*  
and I prudently REF restrained-from-1PL from  
*tova preživjavane.*  
this experience

‘Some of us – Daniel and Mitko – got on the rollercoaster, which launches with supersonic speed and **turns over** with the head down, but Anelija and I were smart enough to restrain from this experience.’

(CEMB 2004:370).

The *reflexive* schema depicts either of two situations exemplified by *Roll the log over* and *The fence fell over*, respectively (Lakoff 1987:430-433). As Lakoff states, in the first case, the TR (the log) is not moving with respect to any other LM, but rather some parts of the TR (the log) are moving with respect to other parts of the TR, i.e., some parts of a single entity (called *reflexive TR*) act as a TR, while other parts of the same entity act as an LM, hence TR = LM. This is presented schematically in Figure 10, where the path traces a semicircle above and across other parts of the entity being moved; such a path is called a reflexive path. In the second case, the entity as a whole traces the reflexive path. In the example, the TR (the fence) is initially vertical and moves so as to follow the last half of the reflexive path as shown in Figure 11. The Bulgarian translation equivalent

*ogradata se prekaturi* or *preobărna* ‘the fence fell over’ will also get the representation in Figure 11.



Figure 10 Roll the log **over**.  
 Based on Lakoff (1987:433)  
 and  
*preobăřtam* (se) ‘turn over’ (side view)  
 Schema 4.RF of **PRE**, the *reflexive* schema

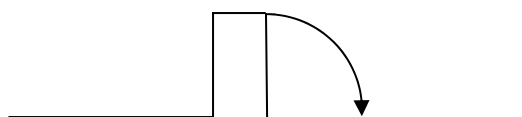


Figure 11 The fence fell **over**.  
 Based on Lakoff (1987:433)  
 and  
*prekaturvam* (se) ‘fall over’ (side view)  
 Schema 4.RF of **PRE**, the *reflexive* schema

In the first case (Figure 10), half of the TR follows the whole reflexive path, while in the second case (Figure 11), all of the TR follows the last half of the reflexive path (Lakoff 1987).

*Preobăřtam se* in (8) belongs to the first case, where parts of the TR (the rollercoaster) move with respect to other parts of the TR. The prefix **pre-** can occur with the preposition **prez** as in *preobăřtam se prez glava* ‘turn/fall head over heels’. Thus, Figure 10 also illustrates an image schema of **pre-**, which we can call the *reflexive* schema. It is linked to schema 4 of **pre-**, the *over* schema. The difference is that in the *reflexive* schema there is no second entity which acts as an LM, this role being performed by parts of the TR, therefore  $TR = LM$ , and that we are dealing with a reflexive entity. We, therefore, label it as schema 4.RF, and, after Lakoff, represent the transformational link

from schema 4 to schema 4.RF as  $NFR \leftrightarrow RF$ , where NRF means nonreflexive, and RF reflexive.

Again, as with *prereža* ‘cut in two’, we need to underscore the strong interaction between the semantics of the prefix and the verb and to clarify that image schemas reflect the situation as a whole rather than exclusively the meaning of the prefix. Thus, the roots *skačam* ‘jump’, illustrating schema 4, and *obráštam* ‘turn’, illustrating schema 4.RF, express the manner of motion, while the prefix *pre-*, which here means ‘over’ (in its *above-and-across* sense), completes the spatial description by expressing the path of motion, a fact about *pre-* noted also by Sinha and Kuteva (1995:188).

Both *preobráštam (se)* and *prekaturvam (se)* have non-reflexive and reflexive forms with *se* in Bulgarian, indicated by the addition of the reflexive particle (*se*) in parenthesis. In the case of non-reflexive usage, e.g., *kamionăt preobărna kolata* ‘the truck overturned the car’ and *toj prekaturi ogradata* ‘he turned the fence over’, the subject (*kamionăt/toj*) causes the object (*car/fence*) to turn over, while in the case of reflexive usage, e.g., *kolata se preobărna* ‘the car overturned’ and *ogradata se prekaturi* ‘the fence fell down’, it is the subject that does the turning over, and no external cause has been specified. The path of the TR of the reflexive expression is the same as the path of the TR of the non-reflexive expression, so they are treated the same in this work in terms of their image schema representation.

## 2.11. The covering schema

Two other senses of *pre-* seem analogous to senses of *over*. One refers to *covering* and I dub the other the *all over* sense. Consider example (9).

(9) [A father talking about his daughter]

<i>S</i>	<i>netărpenie</i>	<i>očakvam</i>	<i>utrešnia</i>	<i>den</i>	<i>da</i>
with	impatience	be waiting-1SG	tomorrow’s	day	to
<i>si</i>	<i>ja</i>	<i>pregărna.</i>			
REF	her-ACC	hug-1SG			

‘I can’t wait till tomorrow to **hug** her.’ (CEMB 2004:199)

*Pregrăștam* ‘hug’<sup>15</sup>, *premrežvam* ‘throw a net/veil over’ or ‘cover’ as in *sălzi premrežixa oči mu* ‘tears covered his eyes’, *premjatam (kărpa na răka/palto prez ramo)* ‘throw (a

towel over one's arm/coat over one's shoulder)', etc., all have to do with covering. Although there are different types of hugging (side to side, chest to chest, etc.), illustrated in Bulgarian by expressions like *pregrăștam prez ramo* 'hug someone by putting one of your arms around a person's shoulder', *pregrăștam prez krăstta* 'wrap arms around someone's waist', etc., hugging in Bulgarian culture is usually an energetic and emotional expression of closeness, that is best expressed in English by 'give someone a great big hug', or 'give someone a bear hug'. Unless stated otherwise, hugging in Bulgarian culture implies enveloping, surrounding, putting one's arms around another person's shoulders, or putting someone in each other's arms, i.e., covering. The other examples above represent more straightforward cases of covering.

For this meaning, I use the image schema proposed by Lakoff (1987) for the covering sense of *over* (see Figure 12) and call it the *covering* schema, or schema 5. Here, the arrow represents the TR's path, and the TR is at least two-dimensional and extends across the boundaries of the LM (just as with the covering sense of *over*, as discussed by Lakoff 1987:426).

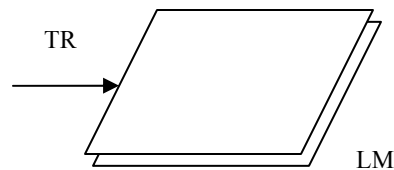


Figure 12 *premrežvam* 'throw a net/veil over; cover'  
(angle view)

Schema 5 of **PRE**, the *covering* schema  
Based on Lakoff (1987:427)

I claim that this schema is linked to the central, *across* schema (schema 1). The difference is that the TR in the *covering* schema is (or is perceived as) two- or three-dimensional, whereas the dimensionality of the TR in the central schema is irrelevant (0DMN). Both schemas represent a TR, which moves past the initial LM boundary, and follow a path above the LM or covering the LM surface, but the TR in the *covering* schema remains over the LM covering it. In other words, (as in the example by Lakoff *The city clouded over*) this schema has an end-point focus, which indicates that the final

state is the configuration in Figure 12. Therefore, the *covering* schema is a transform of the *across* schema where the TR stays in its path, or the TR becomes the path, which can be designated as TR = path.

### 2.12. The *all over* schema

The *all over* schema of *pre-* as in *prebrodja* ‘walk/go all over’, *pretärsja* ‘search all over’, etc., is a minimal variant of the *covering* schema, where the path of the TR consists of multiple points which coincide with different areas of the LM (Lakoff labels this variant of *over* as MX.P – points of a multiplex entity forming a path), and it is the path rather than the TR which covers the LM. The LM is gradually covered as the TR moves along its path. For this meaning, I offer the representation in Figure 13 (based on Lakoff 1987:429) and label the image schema, schema 5.MX.P.

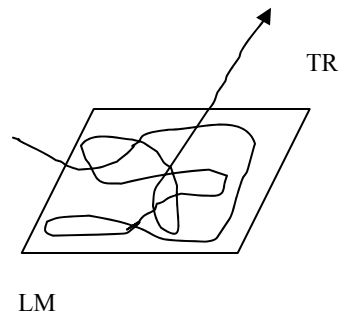


Figure 13 *prebrodja* ‘walk/go all over’ (bird’s eye view)  
Schema 5.MX.P of *pre-*, the *all over* schema  
Based on Lakoff (1987:429)

### 2.13. The *overflow* schema

The verb *prelivam* ‘overflow, flow over’ leads us to another parallel between *pre-* and *over*. According to Dewell (1994:364-365), cases where a fluid originates in a container and then flows *over* the top of its sides get the representation in Figure 14. The image in Figure 14 represents the central schema of *over* proposed by Dewell, which can be regarded as a three-dimensional mass transform of a multiplex TR, such as a herd of horses all jumping simultaneously outward *over* a circular enclosure.

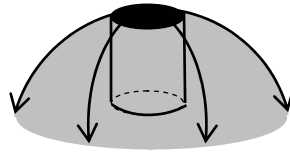


Figure 14 **Overflowing**  
Dewell (1994:364)

This schema captures well the meaning of *pre-* in *prelivam* ‘overflow’, and suggests both excess and overflow. In my opinion, this image schema of *pre-* is linked to two other schemas in a different way, the *through* schema and the *over* schema. If you start pouring liquid into a container (such as a cup), at some point the amount of liquid (TR) exceeds the capacity of the container and *prelivam* ‘overflow’ starts to occur. We can think of the TR’s path as a composite path consisting of three major segments: the downward movement of the liquid towards the bottom of the LM inside the container LM (similar to the MS variant of the *through* schema in Figure 6), its upward movement toward the top of the LM still inside the container LM, and its downward movement outside the container once the TR reaches the LM’s boundary and its capacity to hold liquid has been exhausted, i.e., when overflowing occurs (as in Dewell’s representation in Figure 14). This composite path is shown in Figure 15.

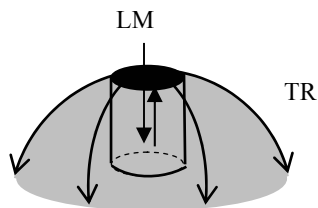


Figure 15 **prelivam<sub>1</sub>** ‘overflow’ (side view)  
Schema 2MS.MX/4.MS.RF of **pre-**, the *overflow* schema  
Based on Dewell (1994:364)

On the other hand, overflowing can be viewed as a variant of the *over* schema, schema 4, more specifically as a variant of the *reflexive* schema, schema 4.RF (exemplified by *preobráštam* (*se*) ‘turn over’). This will be more in line with Lakoff’s (1987) and Dewell’s (1994) analyses. Although we have two separate entities, the container (LM) and the liquid (TR), the TR’s path is reminiscent of the reflexive schema

in that when overflowing starts to occur, the mass TR starts moving out of the LM relative to the TR’s prior boundaries (as confined within the container sides) and starts acting as its own LM (TR = LM), i.e., in the third segment of the path, the TR becomes a reflexive TR, similar to the TR in *The syrup spread out* (as analyzed in Lakoff (1987:430-431)). Therefore, an appropriate label of the *overflow* schema of **pre-** may be either as schema 2.MS.MX, capturing the fact that the TR starts as a mass entity and turns into a multiplex one when overflowing starts to occur, or as schema 4.MS.RF, capturing the mass quality of the TR and its transformation into a reflexive TR when overflowing occurs.

As with the other senses, the *overflow* schema is at the basis of a number of metaphorical senses, e.g., *čašata na tărpenieto mi prelja* ‘(lit. the cup of my patience overflowed) I have had enough’, where the LM is understood as the cup’s upper edge, i.e., the metaphorical boundary of what is assumed to be the norm of one’s patience. These are discussed in more detail in section 3.

#### 2.14. The *from-to* schema

**Prelivam** has another sense ‘pour out of one container into another’. Let us distinguish between **prelivam**<sub>1</sub>, which will stand for the *overflow* sense, and **prelivam**<sub>2</sub>, which will stand for the *pour-from-one-container-into-another* sense. **Prelivam**<sub>2</sub> is linked directly to the central, *across*, schema. The *across* schema presupposes movement of a TR from one side of the LM to the other side of the LM. This general schema can be interpreted in several ways: from one point to another (i.e., from point A to point B as in expressions for distance), from one LM to another, etc. With **prelivam**<sub>2</sub>, the two sides of the LM in the central schema are represented by two different containers or LMs, and the movement is from one LM (LM1) to the other (LM2), e.g., **preljax mljakoto ot čašata v kupata** ‘I poured the milk from the cup into the bowl’ (Figure 16).

**Prelivam**<sub>2</sub> is also linked to the *reflexive* schema, schema 4.RF, as exemplified by **prekaturvam (se)** ‘fall over’. They share the same path of the TR, i.e., in both cases all of the TR follows the last half of the reflexive path. The difference between them is that in the *reflexive* schema the TR is the LM, while in the schema for **prelivam**<sub>2</sub> there are (at least) two LMs, different from the TR. I will call this schema the *from-to* schema, or

schema 1.2-LM/4.2-LM, where 1 and 4 reflect its links to the *across* and *over* schemas, while 2-LM reflects the fact that this configuration presupposes at least two LMs. Other examples of this schema include: **presipvam** ‘pour (a liquid or non-liquid entity)’, **prexvārljam** ‘transfer’, **premestvam** ‘move’, etc., all of which imply ‘from one place to another’. In these examples, the first LM, LM 1 from Figure 16 is taken to be the initial location point of the TR, the second LM, LM2, is the final location of the TR, and the arrow representing the TR in Figure 16 stands here for the path.

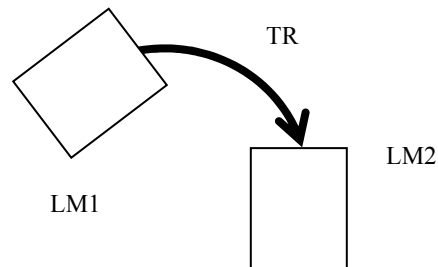


Figure 16 **prelivam<sub>2</sub>** ‘pour from (one container) into (another)’ (side view)  
 Schema 1.2-LM/4.2-LM  
 the *from-to* schema of **pre-**

Finally, **prelivam<sub>2</sub>** (the *from-to* schema) is linked to the schema **prelivam<sub>1</sub>** (the *overflow* schema, schema 2.MS.MX/4.MS.RF) by virtue of the fact that the former represents the first segment of the composite path of the latter. This sense also serves as the basis for metaphorical expressions such as **prelivam ot pusto v prazno** ‘(lit. pour from empty to empty) not do anything’, **prexvārljam topkata** ‘(lit. pass the ball) transfer responsibility’, etc. (see next section).

### 3. Metaphorical meanings of **PRE-**

#### 3.1. The *temporal* schema

This section deals with key non-spatial meanings of **pre-**. I begin with what I will call the *temporal* schema of **pre-**, schema 6. Verbs like **prebivavam** ‘be, spend (time)’, **prekarvam** ‘spend (time)’, **prespivam** ‘spend the night’, **prezimuvam** ‘spend the winter’, **prestojavam** ‘stay’, **preživjavjam** ‘(in its meaning) spend one’s life’, etc., exemplify a very common meaning of **pre-**, the result of its amalgam with the meanings of verbs like **stoja** ‘stay’, **živeja** ‘live’, **spja** ‘sleep’, **zimuvam** ‘spend the winter’, etc., i.e., spend time, or

“do something for a limited period of time” (Maslov 1982:119, 329). This meaning is linked to the central schema of *pre-*, the *across* schema, via one of the general metaphors identified by Lakoff and Johnson (1980:42-43) and Lakoff et al. (1989:76), TIME IS A MOVING OBJECT or TIME IS STATIONARY AND WE MOVE THROUGH IT. *Pre-* in example (10), for instance, is understood with the help of the latter metaphor, where the LM, time, (more specifically, the vacation the speaker is referring to) is seen as a stationary container or area which the TR (the speaker’s family) crosses from end (the beginning of the vacation period) to end.

- (10) *Te ni zavedoxa v edna tjaxna počivna zona...*  
they us took-3PL in one their recreational area  
*i tam po sáštiya način mnogo veselo*  
and there at same-the way very jolly  
*prekaraxme.*  
spent-time-1PL  
‘They took us to one of their recreational areas and we **had** a great **time** there too.’  
(CSB 2001:137)

In contrast, *pre-* in *preminavam* ‘pass, proceed’ in (11) is conceptualized with the help of the first metaphor, TIME IS A MOVING OBJECT, where the TR, the banquet, representing a small portion of time, is visualized as traveling from a starting point (its beginning of the banquet) to a destination point (its end). By virtue of this metaphor, time receives a front-back orientation facing in the direction of the motion just as any moving object would (Lakoff and Johnson 1980:42).

- (11) *Dori njakoj da organizira banquet, toj*  
even somebody to organizes-3SG banquet it  
*preminava v studena, tăržestvena i*  
passes-3SG in cold solemn and  
*delova obstanovka i na nikoj ne mu*  
business atmosphere and to no one NEG him-DAT  
*se xodi, no otiva po zadälženie.*  
REF go-3SG but goes-3SG at obligation  
‘Even if someone organizes a banquet, it **takes place** in a cold, solemn, and business-like atmosphere and no one feels like going but they go out of obligation.’  
(CEMB 2004:333)

In (11), the LM is implied; it is the duration of the banquet, seen as a distance between the two points.<sup>16</sup> As these examples suggest, when *pre-* is used in the *temporal* schema, the LM is often an event or occasion which represents a specific time interval.

### 3.2. Examples compatible with multiple schemas

Just as a moving TR may encounter and will have to overcome obstacles while traversing a physical path, so can it encounter events when passing through time. The relevant metaphors here are OBSTACLES TO ACTION ARE OBSTACLES TO MOTION, CONTINUING TO ACT DESPITE DIFFICULTIES IS MOVING DESPITE OBSTACLES, DIFFICULTIES ARE IMPEDIMENTS TO TRAVEL, which map the target domain of difficulties and obstacles to action to the source domain of motion (Lakoff et al. 1989:31-32, 37). Example (12) illustrates a very common meaning of *preminavam*, *preminavam prez trudnosti* ‘go through/overcome difficulties’ (which, incidentally, is very close to the meaning of *preživjavam* (e.g., bedstvie) ‘live/go through/survive (e.g., a disaster)’ in the same example, and to *pretārpjavam* ‘go through [an ordeal]’, etc.), where a (usually human) TR travels metaphorically through the LM – some difficulty, ordeal, a trying or important event in one’s life – and, at the end, comes out of it.

- (12)
- |                |                 |                  |                    |                  |                 |             |
|----------------|-----------------|------------------|--------------------|------------------|-----------------|-------------|
| <i>Kato</i>    | <i>ti</i>       | <i>kažat,</i>    | <i>če</i>          | <i>vsičko</i>    | <i>šte</i>      |             |
| when           | you             | tell-3PL         | that               | everything       | will-FUT        |             |
| <i>e</i>       |                 | <i>dobre, ti</i> | <i>izlizaš</i>     | <i>okrilen,</i>  | <i>pālen</i>    | <i>s</i>    |
| be-FUT         |                 | o.k. you         | go-out-2SG         | with-wings       | full            | of          |
| <i>vjara,</i>  | <i>če</i>       | <i>neštata</i>   | <i>šte</i>         | <i>se</i>        | <i>opravjat</i> | <i>i</i>    |
| faith          | that            | things           | will-FUT           | REF              | get-fixed-3PL   | and         |
| <i>taka</i>    | <i>uspjavaš</i> | <i>da</i>        | <i>preživeeš</i>   | <i>po-leko</i>   | <i>tova,</i>    |             |
| so             | manage-2SG      | to               | live-through-2SG   | more easy        | this            |             |
| <i>koeto</i>   | <i>te</i>       | <i>e</i>         | <i>spoletjalo.</i> | <i>A</i>         | <i>to</i>       | <i>kato</i> |
| which          | you             | be-3SG           | struck-3SG-Neu     | and              | it              | as          |
| <i>vsičko</i>  | <i>žitejsko</i> | <i>minava</i>    | <i>i</i>           | <i>zaminava.</i> |                 |             |
| everything     | from-life       | pass-by-3SG      | and                | go-away-3SG      |                 |             |
| <i>Važnoto</i> | <i>e</i>        | <i>da</i>        | <i>imaš</i>        | <i>сила</i>      | <i>da</i>       |             |
| important-the  | be-3SG          | to               | have-3SG           | strength         | to              |             |

<i>premineš</i>	<i>prez</i>	<i>težkia</i>	<i>period.</i>
go-through-2SG	through	difficult	period

‘When they say to you that everything is going to be o.k., you come out with wings, full of faith that things will be fine, and so you manage more easily to **live through** what has struck you. And that, as everything else from life, passes by and goes away. The important thing is for you to have strength to **go through** the difficult period.’ (CEMB 2004:386)

As with *through* (Lindstromberg 1998:131), *pre-* and *prez* in the *temporal* schema (as well as in most spatial and non-temporal, metaphorical, schemas) emphasize the idea of exit – accomplished with perfective verbs (e.g., *preminax* in *preminax prez težāk period* implies that the difficult period for me is over), and being the goal of the process indicated by imperfective verbs (e.g., *preminavax* in *preminavax prez težāk period* implies that I was going through a difficult period trying to get to its end).

Examples like *preminax prez mnogo trudnosti* and *preživjax mnogo trudnosti* ‘I went/lived through a lot of difficulties’ have been particularly hard to categorize as illustrating a given schema, because their interpretations in most contexts have been consistent with two or more schemas. They are not much different than *preživjavam truden period* ‘spend a difficult period of time’ (*temporal* schema), and often simultaneously suggests ‘the difficult situation has ended’ (*termination* schema; see section 3.3.), ‘I went through difficulties’, where difficulties are envisioned as three-dimensional containers such as tunnels (a metaphorical extension of the *through* schema), and ‘I went over obstacles’, where difficulties, i.e., impediments to action and progress, are perceived as impediments to movement (a metaphorical extension of the *over* schema). The conceptualization here is facilitated by metaphors like OBSTACLES TO ACTION ARE OBSTACLES TO MOTION, CONTINUING TO ACT DESPITE DIFFICULTIES IS MOVING DESPITE OBSTACLES, DIFFICULTIES ARE IMPEDIMENTS TO TRAVEL, which map the target domain of difficulties to action to the source domain of obstacles to motion (Lakoff et al. 1989:31-32, 37). Interpretations like this, consistent simultaneously with several schemas<sup>17</sup>, confirm Tyler and Evans’ observation (2003) that there are no sharp boundaries between the separate senses of a concept.

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reification (Lindstromberg 1998:32, 128). Thus, being at the other side, at the end, or out of mourning, for example, is being finished with mourning, feeling sorrow no more.

### 3.4. The completion schema

Closely related to the *termination* schema of *pre-* is its *completion* schema, schema 8, illustrated by *preglāštam* ‘swallow up’, *prežāltjavam* ‘turn yellow’, *preblednjavam* ‘turn white’, *pregrešavam* ‘commit a sin’, *pretārpjavam* *zaguba* ‘suffer a loss’, etc. Again, generally-speaking, events, actions, activities and states are conceptualized as metaphorical containers, which are entered and left, gone around, etc. When one reaches the end of such a container, one completes its metaphorical path through it. Let us look at a specific example.

- (14) *Pitaš li me i men kak*  
 asking-2SG QUE me-ACC too me-ACC how  
*izdāržam, kato otkak sām došla ..., sām*  
 stand-1SG as since be-1SG come-1SG-F be-1SG  
*počti edinstvenata v našta katedra deto uči*  
 almost only-the-F in our-the department who study-2SG  
*i raboti ednovremenno? Mnogo e trudno, i*  
 and work-3SG simultaneously very is hard and  
*ponjakoga ne se izdārža... Ostanalite imat*  
 sometimes NEG REF stand-3SG rest-the have-3PL  
*pari, plaštat. Ne e lesno da go*  
 money pay-3PL NEG be-3SG easy to it-ACC  
*preglātneš, ošte poveče, če mnogo ot tjax*  
 swallow-2SG what-is-more that many of them  
*izobšto njamat dadenost za akademična*  
 at-all don't-have-3PL vocation for academic  
*dejnost.*  
 activity

‘Are you asking me too how I am holding up given that ever since I came I am almost the only one in our department who studies and works at the same time? It is very difficult and sometimes hard to put up with. The others have money and pay. It is not easy to **swallow up**, what is more, many of them don’t have the skills to do academic work.’

(CEMB 2004:396)

In its literal meaning, this particular verb, *preglăștam* ‘swallow up’,<sup>18</sup> refers to food and drinks (the TR), whose path inside one’s mouth, through the esophagus, and then into the stomach is reminiscent of the arc-shaped path of schema 4, the *over* schema, or rather of the second half of this path in schema 4.RF, the *reflexive* schema. Once the TR reach the end of the path (the stomach), the event of swallowing up is completed.<sup>19</sup> In a similar way, we view hurt feelings, pride, offence, etc., as objects which can be swallowed. Two metaphors serve as the basis for this reading of *preglăștam* ‘swallow up’ in (14). One is a general metaphor, THE MIND IS A BODY (e.g., *His mind is decaying*), and its specific case relevant to example (14) is IDEAS (and hence THE EMOTIONS THEY GIVE RISE TO) ARE FOOD (e.g., *Let me chew on that for a while*) (Lakoff and Johnson 1980:46, Lakoff et al. 1989:80, 84). The thoughts of the person who has to swallow hurt feelings in (14) are seen as objects, more specifically, as food or drinks. The second relevant metaphor is EMOTIONS ARE ENTITIES WITHIN A PERSON, with the alternate name THE BODY IS CONTAINER FOR EMOTIONS (Lakoff et al. 1989:140), enabling speakers to “send” emotions on a path inside the body.

Completion seems to apply naturally to every instance of *pre-* with a clearly defined path, not only to *preglăștam* ‘swallow up’ in (14) and the other examples provided above for the *completion* schema. Completion is closely related to boundedness. I assume along with Maslov 1956 (in Ivanova 1966:12, 15) that boundedness most likely developed on the basis of the lexical meaning of prefixes, and perfectivity developed as a secondary byproduct on the basis of boundedness and resultativeness. Perhaps with the exception of the *all over* schema (schema 5.MX.P), where there are no preset paths (paths could be of indefinite length) and it is unclear how much of an action (e.g., walking, searching, etc.) should be performed in order to be compatible with the label *all over*, all other *pre-* schemas discussed so far may be said to imply completion because of their paths going literally or metaphorically across, through, or over bounded areas or containers. Once these paths reach or cross the terminal boundary, the event expressed by a verb with *pre-* is completed, though the event denoted by the verb stem may still be going on. Thus, once a TR jumps over an obstacle, the event denoted by *preskačam* ‘jump over’ (this particular obstacle) is completed, and the

fact that one may keep jumping after that is irrelevant. Similarly, as soon as just a few drops or even a single drop flows over the cup, overflowing has started to occur and, provided nothing intervenes, we can assume with some degree of certainty that it will be completed. Therefore, one can say *čašata prelja<sup>P</sup>* (past perfective verb) ‘the cup overflowed’, not only *čašata prelive<sup>I</sup>* (present imperfective verb for an ongoing process) ‘the cup is overflowing’, even if just a few drops have gone over the cup rim in an outward direction, and despite the fact that the liquid inside may still be overflowing at and for some time after the moment one says it<sup>20</sup>.

Note that completion/resultativeness, which has traditionally been linked with perfectivity, and the perfectivizing function of prefixes in Slavic in general and in Bulgarian in particular, which has been identified by numerous analyses as their main function (see the introductory chapter), are amenable to a different kind of analysis – a cognitive linguistic one. Within a cognitive semantic approach as the one presented here, a prefix like *pre-* is not seen a marker of perfectivity (i.e., it is not a grammatical prefix), nor is turning an imperfective verb into a perfective verb its main function (e.g., *greša<sup>I</sup>* – *pregreša<sup>P</sup>* - *pregrešavam<sup>I2</sup>* ‘make a mistake, commit a sin’). Instead, the completion sense of *pre-*<sup>21</sup> is analyzed in light of broad conceptual structures, and its *completion* schema is seen as a non-central, non-prototypical, or secondary image schema related to other *pre-* schemas via an intricate web of similarity and transformational links and metaphors. More specifically, it is seen as a by-product of the central, *across*, schema, with the completion of the path (from one side of the LM to the other) in the central schema standing for the completion of an event in the *completion* schema. This transformation is realized with the help of the metaphors AN ACTIVITY IS A JOURNEY and AN ACTIVITY (OR EVENT/STATE) IS A CONTAINER, through which we travel.

While the idea that Bulgarian (and Slavic) verbal prefixes are not first and foremost perfectivizers or markers of completion is not new (there is a body of literature opposing the view that verbal prefixes have a primary grammatical function, which argues that prefixes always carry or retain their lexical meaning and that perfectivization is a secondary phenomenon; see for example, Maslov 1982:117),<sup>22</sup> the way we arrived at this conclusion is radically different from existing analyses. To my knowledge, no one yet has tackled the issue from a cognitive linguistic perspective, taking as a starting point

the network of interlinked cognitive image schemas of a polysemous verbal prefix to show that completion is a non-prototypical sense. In the case of *pre-* in particular, completion is a secondary image schema linked to the central, spatial, schema by virtue of the focus on the end of the path and motivated by the conventional metaphors AN ACTIVITY IS A JOURNEY and AN ACTIVITY (OR EVENT/STATE) IS A CONTAINER.

### 3.5. The excess schema

We return to the other non-spatial meanings of *pre-*. One of the most productive *pre-* schemas is the so-called *excess* schema<sup>23</sup>, schema 9. The *excess* schema is linked to the *overflow* schema (overflowing occurs when there is excess), in both its spatial and metaphorical realizations. It is also linked to the *cross* schema, whose LM is conceptualized as a boundary, limit or norm, which is metaphorically crossed by the TR. This, the LM in the *excess* schema often serves as a scale, with a point on the scale that should not be crossed. Some examples of the *excess* schema with *pre-* include *prerabotvam se* ‘overwork, get overworked’, *prepivam* ‘drink too much’, *prejaždam* ‘eat too much’, *prestaravam se* ‘try too hard’, *prekaljavam* ‘go too far’, etc., all sharing the meaning ‘do more than necessary/expected/normal’. Consider also example (15):

- (15)
- |                 |                  |                 |                       |                     |  |
|-----------------|------------------|-----------------|-----------------------|---------------------|--|
| <i>Izobšto</i>  | <i>se</i>        | <i>očertava</i> | <i>mnogo bačkane</i>  | <i>i</i>            |  |
| anyway          | REF              | delineate-3SG   | much work             | and                 |  |
| <i>zaetost,</i> | <i>no</i>        | <i>mislja</i>   | <i>da ne se</i>       | <i>pretovarvam.</i> |  |
| busyness        | but              | think-2SG       | to NEG REF            | overload            |  |
| <i>Šte</i>      | <i>uča</i>       | <i>i</i>        | <i>rabotja</i>        | <i>obšto 8 časa</i> |  |
| will-FUT        | study-1SG        | and             | work-1SG              | totally 8 hours     |  |
| <i>na den,</i>  | <i>ili</i>       | <i>otkak se</i> | <i>sābudja do</i>     | <i>kām</i>          |  |
| per day         | or               | from REF        | wake-up-2SG to        | around              |  |
| <i>5-6 časa</i> | <i>sledobed,</i> | <i>i</i>        | <i>veče uikendite</i> | <i>mislja</i>       |  |
| 5-6 o'clock     | afternoon        | and             | already weekends-the  | think-1SG           |  |
| <i>da si</i>    | <i>počivam.</i>  |                 |                       |                     |  |
| to REF          | rest-1SG         |                 |                       |                     |  |

‘Anyway, I am in for a lot of work and busyness, but I don’t intend to **overwork** (myself). I will study and work (for) a total of 8 hours a day, or from the time I wake up to around 5-6 p.m., and from now on I plan to rest during the weekends.’  
 (CEMB 2004:126-127)

*Pretovarvam* (*se*) in (15) literally means ‘put too much load’. We know from experience that when we load a lot of stuff, say, at the back of a pickup truck, we end up with a pile, and if we keep loading, the pile keeps going up. There is a strong vertical image and upward movement associated with this situation which often gets mirrored in the non-literal uses of verbs with *pre-* in the *excess* schema, e.g., *pretovarvam* ‘overwork’ in (15). Lakoff (1987) and Dewell (1994) suggest analyses of the *excess* schema of *over* primarily along the lines of an overflowing container, but I believe that the metaphor MORE IS UP, LESS IS DOWN (Lakoff and Johnson 1980:15-16) also plays an important role in the *excess* image schema. In fact, the physical basis for the metaphor MORE IS UP used in relation to overflowing is that as the liquid accumulates, its level goes up. Therefore, VERTICALITY is an integral part of the *overflow* and *excess* schemas, regardless of whether it is applied literally or not.

### 3.6. The *achievement* schema

Bulgarian verbs such as *preborvam* ‘win a fight’, *prekarvam* ‘(when meaning) outwit, cheat’, *prevāzxoždam* ‘be superior than’, (*iz*)*prevarvam* ‘outstrip, surpass, excel, finish before/first’, illustrate the so-called *achievement* schema, schema 10, and reflect the same two relations, VERTICALITY and CONTAINMENT. The *achievement* schema and the *excess* schema are naturally linked to each other by the common meaning ‘more’ and a conceptualization that gets a representation similar to the *cross* image schema (on the assumption that the physical LM is understood as an abstract LM). However, the *achievement* and *excess* schemas differ in the way the LM is set: it is the assumed norm in the latter (and, also, in the *overflow* schema), while it is someone else’s results in the former. Some verbs like *prebivam* ‘beat too much, beat black and blue’ or ‘win a (decisive) victory over’ can belong to either schema depending on the context. As the English translations suggest, the *achievement* schema of *pre-* corresponds to a similar sense of English *out*. Lindstromberg (1998:36) points out that abilities are reified as bounded spaces; if two people’s abilities are being compared, one person’s ability can be visualized as enclosing the other person’s. If person A’s ability is greater than that of person B, then the bounds/limits of A’s ability are outside the limits of B’s ability.

### 3.7. The *repetition* schema

Like English *over*, *pre-* has a *repetition* sense. According to Slabakova (2001:206-209), the default meaning<sup>24</sup> of *pre-* is *repetition* of the event. I believe this claim is an effect of the design of Slabakova's study, where native speakers of Bulgarian were asked to choose which among four paraphrases best captures the meaning of a nonword composed of existing prefixes and stems (e.g., *pre-umrja* 'pre-die', *pre-otide* 'pre-go', *pre-liši* 'pre-deprive', etc.). The choices given, however, had to do only with the *completion*, *inception*, *repetition*, or *continuation* of the event, and no senses that have to do with the intensity of the event and/or the spatial coordination of the TR with respect to the LM or any other of their metaphorical extensions were included. The results are not surprising, given that, among the four choices provided in the study, the only one that applies uniquely to *pre-* is *repetition*. I argue that, although the *repetition* sense of the prefix *pre-* is highly productive in modern Bulgarian, i.e., the prefix *pre-* is readily added to new words to mean 'do again' or 'do in a slightly different way the second time around', *repetition* is not the most prototypical sense of *pre-*. The *repetition* schema, schema 11, is a secondary schema of *pre-* which bears connections with the central, *across* schema, and the *reflexive* schema, schema 4.RF. In fact, according to the criteria for prototypicality adopted here (primarily in terms of the ability of a schema to generate other schemas), the *repetition* schema is among the least productive schemas of *pre-* since it does not give rise to any other schemas.

Here are some examples: *prepisvam* 'copy' as in (16), *prekrojavam* 'cut again, retailor', *presnimam* 'xerox', *prepročitam* 'read again', *pregovarjam* 'go over, review, revise', *prenareždam* 'put in order again, rearrange', *presăzdam* 'recreate', *prezapisvam* 'sign up again, write down again', *prerazpredeljam* 'redistribute' as in (17), *prenasočvam* 'redirect', *prekrăstvam/prekrăštavam* 'change one's name', etc.

(16)	<i>Napuši</i> burst-1SG	<i>me</i> me-ACC	<i>smjax</i> laughter	<i>deto</i> when	<i>razkazvaš</i> tell-2SG	<i>kak</i> how
	<i>si</i> REF	<i>prepisvaš</i> copy-2SG	<i>nesvăršenite zadači v</i> unfinished-the tasks in	<i>teftera</i> notepad-the	<i>za</i> for	
	<i>sledvašti</i> next	<i>dni.</i> days	<i>Az</i> I	<i>săm</i> be-1SG	<i>absolutno</i> absolutely	<i>săštata</i> same-the

*kartinka.*  
picture-DIM

‘I burst with laughter when you tell me how you copy your unfinished tasks from your organizer pad for the next days. I am the same character.’  
(CEMB 2004:335)

- (17) *Nie tuk prerazpredelixme finansite i sega*  
we here redistributed-1PL finances-the and now  
*šte xarčim ot druga karta.*  
will-FUT spend-1PL from another card

‘We **redistributed** the finances here and now plan to spend money from another card.’  
(CEMB 2004:216)

The *repetition* sense of *pre-* in (16) is more closely linked to spatial descriptions than the one in (17), since *prepisvam* ‘copy’ is understood as going over the same path (which one’s hand follows as it writes). Sentence (17) illustrates *repetition* of an activity understood with the help of the metaphor AN ACTIVITY IS A CONTAINER, through which we travel, with the added stipulation, *again*. *Prerazpredeljam* ‘redistribute’ in (17) shows that *repetition* does not necessarily have to be performance of the same event in exactly the same way as the first time, and it often involves modifications of the path the second time around. Indeed, many events are repeated with the goal to change something and achieve better results. *Prerazpredeljam* also illustrates a typical stacking of prefixes before the verb stem in Bulgarian – the stem *delja* ‘divide’ has three prefixes added to it, word-initial *pre-* signaling *repetition*, *raz-* signaling “in many directions” in general, and “into pieces” in the verb *razpredeljam* in particular (Ivanova 1974:103-104), and another *pre-* which I believe is used in the *all over* sense.<sup>25</sup>

Lakoff (1987) on the one hand, and Lindstromberg (1998) and Tyler and Evans (2003) on the other, suggest two different explanations about the *repetition* sense of *over*, which are relevant to the *repetition* schema of *pre-*. According to Lakoff (1987:423, 435), the *over* of *repetition* (as in *do it over*) is an instance of his schema 1.X.C of *over* (where X refers to the extended LM, and C stands for TR-LM contact as in *Sam drove over the bridge*) plus two metaphors. The path is metaphorically understood as the course of the activity via the general metaphor ACTIVITY IS A JOURNEY, and the LM is understood metaphorically as an earlier completed performance of the activity. As

Lakoff points out, this is “a special-purpose constraint on the general metaphor, an idiosyncrasy not motivated by an occurrence elsewhere in the conceptual system”, and, for this reason, the *repetition* sense is less naturally tied than the other senses into the category of senses of *over*.

In contrast, Lindstromberg (1998:121), and independently Tyler and Evans (2003:105), suggest that the *repetition* sense of *over* probably derived from that exemplified by the rolling log (see Figure 10). If one rolls or turns an object *over*, one exposes a new surface of the same object, a fact which serves metaphorically to suggest a new start with the same activity (Lindstromberg). Tyler and Evans hypothesize that the *repetition* meaning of *over* may be the result of iterative application of the *reflexive* sense (i.e., the 90-degree-arc is repeated such that the TR passes through 360 degrees returning to its original starting point). This analysis concurs with native speaker intuitions, as reported by Tyler and Evans, that *repetition* prompts for a conceptualization of a wheel or cycle.

The two explanations, the iterative horizontal path and the iterative reflexive path, are not incompatible with each other. As a reflexive TR turns over, it acts as its own LM; if the TR keeps rolling, after one full turn it repeats the path that it has been following up to that moment, and the LM can now be reinterpreted as the path of the first/previous turn. Both explanations are compatible with the network of senses I propose for *pre-*, and we conclude that the *repetition* schema of *pre-*, schema 11, is linked both to the central, *across*, schema and to the *reflexive* schema of *pre-*.

### 3.8. The *transfer* schema

A final metaphorical schema that will be discussed here is the so-called *transfer* schema, schema 12, illustrated by *prepodavam* ‘teach’, *predavam* ‘teach’, *predavam* ‘broadcast’, *predavam* (*pozdravi*) ‘give (best wishes)’, *predavam* (*doklad*) ‘submit (a report)’, *preveždam* (*pari*) ‘transfer (money)’, *preveždam* (*tekst*) ‘translate (a text)’, *prevrăštam* (*se*) ‘turn into, become’, *prexvărlijam* (*sobstvenost*) ‘transfer (property)’, *prevključvam* ‘switch’, etc.

The *transfer* schema is linked to the central, *across* schema and to the *from-to* schema (exemplified by *prelivam*<sub>2</sub> ‘pour from one container into another’). As stated

earlier, the *across* schema follows a TR’s path from one side of the LM to the other side of the LM, which gets reinterpreted as movement in space from one LM to another in the *from-to* schema, or as movement along a metaphorical path from one LM to another in the *transfer* schema.

The *transfer* schema can refer to change of state (e.g., *prevrăštam* (se) ‘turn into, become’, where *vraštam* (se) means ‘return’) via the metaphor CHANGE OF STATE IS CHANGE OF DIRECTION (Lakoff et al. 1989:18), or it can refer to transfer of property, transmission of signal, words, ideas, etc. One of its most common instances has to do with communication. Consider (18):

- (18) *Kombinacijata božestvena priroda i vsičko*  
 combination-the divine nature and everything  
*naj-xubavo, koeto e napravil čoveka, ni*  
 most-beautiful which be-3SG made-M man-the our  
*vze akāla. Šte vidite snimki,*  
 took-3SG mind-the will-FUT see-2PL pictures  
*no nito dumi, nito kadri mogat da*  
 but neither words nor snapshots can-3PL to  
*predadat atmosferata na tova mestence.*  
 convey atmosphere-the of this place-DIM

‘The combination of divine nature and every most beautiful thing that man has made took our breath away (lit. took our minds). You will see pictures, but neither words, nor snapshots can **convey** the atmosphere of this place.’  
 (CEMB 2004:99)

As Lakoff and Johnson (1980:10-11, following Reddy 1979) observe, our language about language is structured by the complex CONDUIT metaphor, which is made up roughly of the following metaphors: IDEAS (OR MEANINGS) ARE OBJECTS; LINGUISTIC EXPRESSIONS ARE CONTAINERS; COMMUNICATION IS SENDING. The speaker puts ideas (objects) into words (containers) and sends them (along a conduit) to a hearer who takes the idea/object out of the word/container, e.g., *It is hard to **get** that idea **across** to him; I **gave** you that idea; It is hard to **put** my ideas **into** words* (Lakoff and Johnson 1980). Not surprisingly, *predavam* ‘convey, describe’ in (18) is made up of *pre-* and *davam* ‘give’. The relevant part of the metaphor is that ideas are objects which can be removed from one entity and received by another (in this case, they can be given by the speaker to the hearer). The

metaphor in (18) is applied both to visual images (pictures) and words (describing the speaker's impressions from the place in question), i.e., both are conceptualized as objects that can be given, shared, taken away, etc., from one person to another. The transition from the spatial *from-to* to the metaphorical *transfer* meaning is conventional, and particularly transparent in examples like *preveždam*, where spatial instances like *prelivam*<sub>2</sub> (e.g., *ot edna čaša v druga*) 'pour (e.g., from one cup into another)', i.e., move a physical entity from one place (LM1) to another (LM2), give rise to expressions like *preveždam ot anglijski na bālgarski* 'translate from English into Bulgarian', i.e., send the TR (words) on a metaphorical journey from one LM (language) to another.

### 3.9. Metaphorical schemas versus metaphorical extensions

So far, I have discussed seven major metaphorical schemas of *pre-*: the *temporal* schema, the *termination* schema, the *completion* schema, the *excess* schema, the *achievement* schema, the *repetition* schema, and the *transfer* schema. It needs to be underscored that apart from the seven metaphorical schemas, all spatial schemas of *pre-* have metaphorical uses, and I doubt there is any verb with *pre-* that only has spatial readings. These metaphorical instances, however, do not have a systematic character as the seven metaphorical schemas, where *pre-* occurs with wide range of verbs with various meanings and brings about the same meaning (e.g., *excess*, or *repetition*, etc.). In contrast, the metaphorical extensions may apply to a relatively large number of LMs, but they occur with a relatively limited number of verbs. For example, the spatial *through* and *over* schemas have metaphorical extensions that refer respectively to going through difficulties, and overcoming difficulties or negative emotions. These difficulties can be related to emotional problems, illnesses, natural disasters, problems inflicted by others, etc.; yet, they occur with a small number of verbs with *pre-* which express the idea of going through or overcoming hardship or trauma such as *preminavam prez* 'go through' and *preodoljavam* 'overcome'. Consequently, I have not assigned them schema status, and refer to them as metaphorical extensions.

#### 4. Overview of *PRE-*

Figure 17 represents the links among all the spatial *pre-* schemas and the seven major non-spatial schemas discussed in the previous two sections. The semantic network in Figure 17 represents a radial structure in which the central concept or prototype is a spatial image schema that has a privileged status in the generation of the other spatial and non-spatial (temporal and metaphorical) senses. It must also be kept in mind that the metaphorical schemas in Figure 17 categorize only a small part of the metaphorical extensions of *pre-*. Every spatial instance of *pre-* has one or more corresponding metaphorical readings, and it is impossible to discuss all of them and present them in the drawing.

The semantic network in Figure 17 also represents a typical family resemblance structure, where, as Cuyckens states, elements do not necessarily share the same feature(s), but they “share different sets of features; they are similar to each other in different respects (or along different dimensions) like the members of a family” (1993:29). One may wonder what verbs like *prelivam* ‘overflow’ and *prerjazvam* ‘cut in two’, for example, have in common, or whether they are related at all. *Prerjazvam* ‘cut in two’ in the proposed model illustrates the *division* schema, which is linked to the *through* schema, and to the *across+*, and *cross* schema when the LM is two- or one-dimensional, respectively, by virtue of the conceptual division of space in halves by a TR which crosses or goes through it. It is via these three schemas that the *division* schema illustrated by *prerjazvam* ‘cut in two’ is linked to the central schema.

*Prelivam* ‘overflow’, on the other hand, is linked to a variant of the *through* schema – schema 2.MS, and to a variant of the *over* schema – the *reflexive* schema (schema 4.RF) due to similarities in the TR’s path. The link of *prelivam* ‘overflow’ with the central schema is also an indirect one, via schema 2.MS (which in turn is linked to the central schema via the *through* schema) and via the *reflexive* schemas. Therefore, the verbs *prelivam* ‘overflow’ and *prerjazvam* ‘cut in two’ and the schemas they exemplify are related to each other like the members of a family, in the same way as someone’s cousins from the mother’s side would be related to this person’s cousins from the father’s side.

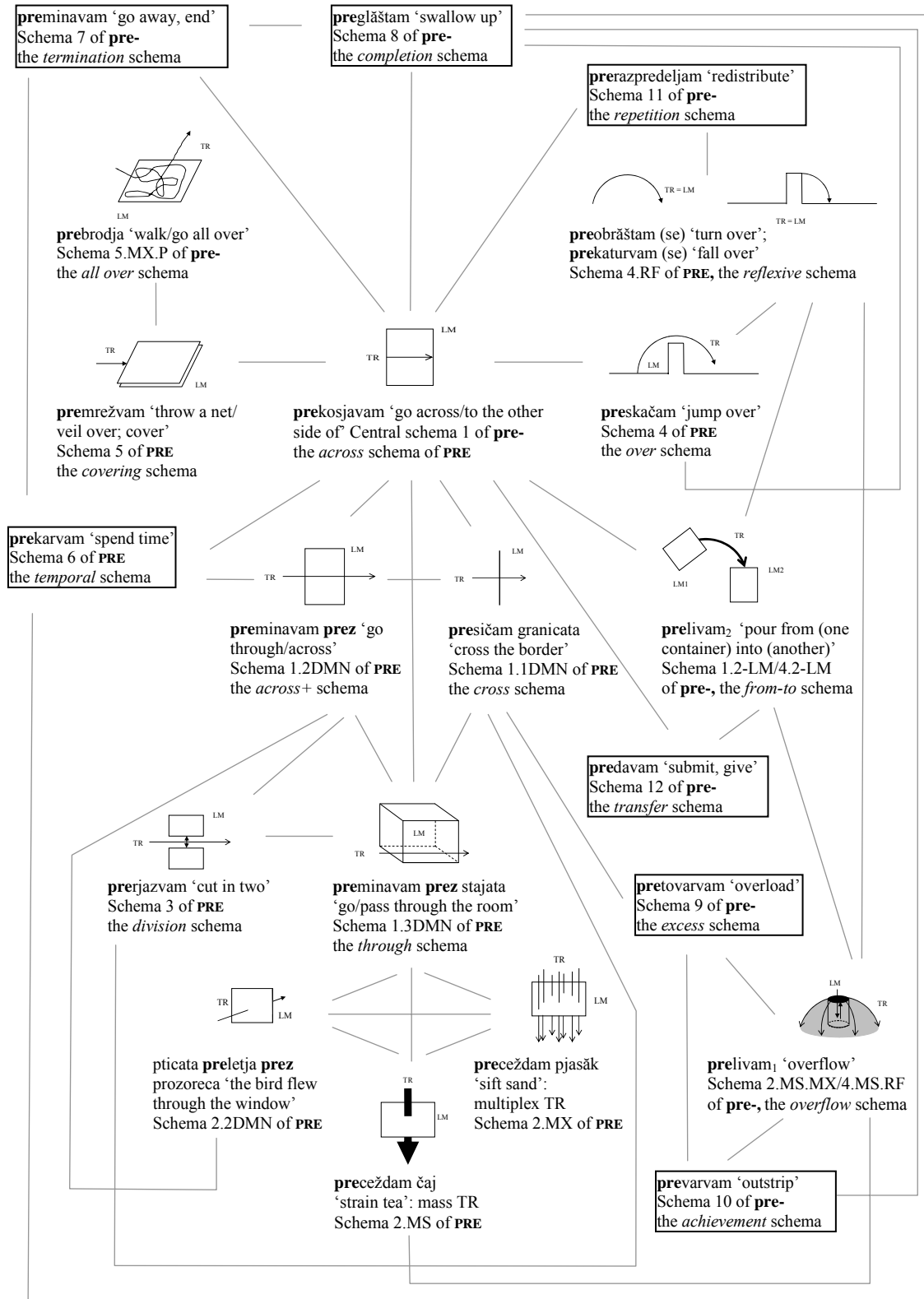


Figure 17 Links among the **PRE** schemas, including non-spatial ones

Although a number of meanings of *pre-* identified in existing sources correspond exactly to certain schemas of *pre-* in my analysis (e.g., the meaning ‘divide in two’ of *pre-* in traditional references corresponds to my *division* schema), the analysis proposed for *pre-* in this work differs from existing treatments in a number of important ways. As stated earlier, previous accounts present long lists of seemingly unrelated meanings of a polysemous prefix and/or try to find an invariant meaning present in all readings, leaving the impression that there is no system relating the different senses. In contrast, this study shows that the separate senses are related to each other in a well-structured, conceptually-sound, semantic network called a family resemblance structure, where members do not have to share the same feature or set of features.

This network is also a radial category in that one of the spatial senses of the prefix is given a privileged status as the central, or most prototypical, one, with the other senses having a subordinate or secondary role. Each of the less prototypical senses is shown to be motivated on the basis of some resemblance, association, or inference, and linked via instance, transformational, or metaphorical links, to the central or some other sense in the structure. Like other cognitive studies, the analysis presented here assumes existential bases for many of the meanings and relies on the assumption that “cognitive models structure thought and are used in forming categories and in reasoning” (Lakoff 1987:13). According to the view of polysemy advocated in this study, there is nothing random or arbitrary in any of the meanings of a prefix or a preposition. Although the different senses are highly dependent on context and speakers’ subjective point of view and interpretation, they are motivated by inferences, existential correlations, and existing cognitive models in the conceptual system, and that is precisely why they are explainable and learnable. In short, the cognitive analysis of *pre-* presented here is a substantial improvement over previous treatments in that it establishes the links among the various senses, the motivation behind them, and a well-structured system in which they exist, that allows for gradience (most and less central meanings), existentially-based inferences and inferences based on idealized cognitive models (in Lakoff’s sense, 1987) and metaphors in the conceptual system of the speakers of a given language.

## Notes:

<sup>1</sup> Most sources, with the notable exception of Sinha and Kuteva (1995:187), do not explicitly state that the prefix *pre-* originates from the preposition *prez*, but meaning and analogy give us good reasons to believe that is the case. Both share the meaning ‘*through, across, over*’ and are used simultaneously in a number of situations, e.g., *preminavam prez* ‘go through’, *prexvrăkvam prez* ‘fly over’, *preskačam prez* ‘jump over’, etc., a tendency characterizing a number of verbal prefixes and the prepositions they are derived from (Academy Grammar, Vol. 2:2, 1998:253).

<sup>2</sup> The order of these Aktionsarten (i.e., kinds of action) coincides with that in the Academy Grammar 1998, since Ivanova wrote the section on prefixation in the grammar.

<sup>3</sup> This example is from my Corpus of Spoken Bulgarian (CSB), a 55,000-word collection of 105 conversations and oral narratives, recorded in Bulgaria in 2001, mostly at informal dinner table gatherings. The CSB involved 78 participants (40 female and 38 male), from 21 to 81 years of age (age range of women 22-76; age range of men 21-81), 34 of whom have college/university degrees; 71 participants have lived for many years in Eastern Bulgaria, while 30 have lived for many years in Western Bulgaria (a number of them have lived extensively in both areas). Written agreement was obtained from all participants prior to the speech recording.

<sup>4</sup> This example is from my 150,000-word Corpus of E-mail Messages in Bulgarian (CEMB) 2004. The CEMB 2004 consists of 1593 e-mail messages, of which 1345 contain a single e-mail each, while the rest contain more than one e-mail (e.g., preceding correspondence and reply). The e-mail exchanges in the corpus are among family, friends and acquaintances and, except for a just few e-mails, represent a highly informal written register very close to informal spoken Bulgarian. The writers of the e-mails are 41 native speakers of Bulgarian (27 female and 14 male) from different parts of the country: 22 from Eastern Bulgaria (15 female and 7 male), and 19 from Western Bulgaria (12 female and 7 male). Of these speakers, 35 have a master’s degree or higher (23 female and 12 male), 3 have a bachelor’s degree (3 female), and 3 have a high school degree (1 female and 2 male).

<sup>5</sup> Contrast it with the word *nadlážno* ‘along (the length)’, which refers to an LM’s longer side.

<sup>6</sup> In Tchizmarova 2005 I claim that this is the most prototypical sense of the preposition *prez* but not the most prototypical sense of the prefix *pre-*.

<sup>7</sup> This is called *mental, subjective* or *fictive* motion. Matsumoto (1996:360) summarizes Langacker’s (1986, 1987, 1990, 1992) and Talmy’s (1983, 1989) claims about subjective (or fictive) motion as follows: sentences such as (i) and (ii) below do not express a real motion of the subject NP but involve some sort of implicit motion subjectively evoked in the mind of a conceptualizer who mentally traces the path described in these sentences, with an image of a moving entity often projected onto such tracing.

- (i) The highway goes from Los Angeles to New York.
- (ii) The bike is parked across the street. (Matsumoto 1996:359)

<sup>8</sup> This transformation can be illustrated by the following examples in English:

- (i) (a) Sam went **to** the top of the mountain. (0DMN TR)
  - (b) The road went **to** the top of the mountain. (1DMN TR)
  - (ii) (a) Sam ran **through** the forest. (0DMN TR)
  - (b) There is a road **through** the forest. (1DMN TR)
  - (iii) (a) Sam walked **across** the street. (0DMN TR)
  - (b) There was a rope stretched **across** the street. (1DMN TR)
- (Lakoff 1987:442)

Lakoff points out that this is a natural transformation that reflects our sensory and general spatial experience: when we perceive a continuously moving object, we can mentally trace the path it is following (pp. 442-443).

<sup>9</sup> The only other meaning in Slabakova’s study that applies to *pre-* is *completion*, but as I argue in Tchizmarova 2005, its status as a separate meaning of *pre-* is somewhat questionable.

<sup>10</sup> These terms are convenient labels for the different senses of *pre-* but they do not imply that only the examples that reflect a given schema can be translated in English using the term in the name of the schema (e.g., they do not imply that only the examples of the image schema in Figure 41 can be translated with *cross*), nor do they suggest that examples illustrating other schemas cannot be rendered in English using the same term (e.g., they do not imply that example of the central schema cannot be translated using the word ‘cross’).

<sup>11</sup> This verb is also compatible with the *termination* schema discussed in section 3.

<sup>12</sup> Sinha and Kuteva (1995:167-169) define **spatial relational meaning** as the characterization of a referential situation in terms of the static or dynamic spatial relationship obtaining between one object, the LM, whose location is usually assumed by the speaker to be known by the hearer, and another object, the TR, whose location or change of location is specified in relation to the location of the LM and its parts and regions.

<sup>13</sup> Here, the verbal root *delja*<sup>1</sup> - *deljam*<sup>12</sup> combines with two prefixes; *o-* and *pre-* (Pašov 1966:137), where *o-* ‘all over’ expresses either the Resultative-pancursive Aktionsart (the action affects the entire definitional area of the object) or the Resultative-circumcursive Aktionsart (the action affects the entire surface of the object) (Ivanova 1974:40-41).

<sup>14</sup> In this reading, *preskačam* usually means ‘go somewhere for a short period of time’, a connotation which I believe comes from the verb *skačam* ‘jump’ (jumping is usually fast).

<sup>15</sup> Although there is no unprefix verb *\*grāštam*, different prefixes attach to the stem to make different meanings, e.g., *razgrāštam* ‘open, turn (e.g., a page)’, *zagrāštam* ‘cover up’, *otgrāštam* ‘open, uncover’, *pregrāštam* ‘hug’, etc.

<sup>16</sup> Alternatively, the LM may be conceptualized as the person experiencing time.

<sup>17</sup> I agree with a reviewer’s observation that uses can be multiply motivated and there is no need to force a use into a single schema.

<sup>18</sup> Incidentally, here, though actual swallowing follows a downward path, in English the completion of the event is indicated by the particle *up* conveying an abstract perfective sense and meaning ‘completely, fully’ (Elizabeth Riddle, handout prepared for the TESOL Convention, New York, March 1999). The relevant metaphor here is

COMPLETION IS UP (from the superordinate metaphor GOOD IS UP), and the full verb-particle construction often has a default frame of having good results, or at least useful ones (Morgan 1997:332, Hampe 1997:233).

<sup>19</sup> And we know from experience that, after the TR is in one's mouth, unless something happens or intervenes (e.g., spitting out, choking or throwing up), we may state with a fair amount of certainty that the event will be completed even before the TR reaches the stomach.

<sup>20</sup> For a more detailed discussion of the status of the *completion* schema, see Tchizmarova 2005.

<sup>21</sup> I am not putting an equality sign between perfectivity and completion, nor am I saying that all perfective events – achievements and accomplishments – are completed (in view of the distinction between complete and completed event, see Chapter 1). However, I assume that all completed events are perfective, since with imperfective events – activities and states – we cannot speak of completion, only of termination.

<sup>22</sup> Maslov (1982:117) argues that it is only in rare cases that prefixes are added to make perfective verbs – there are many unprefixated verbs which are perfective but can, nonetheless, occur with a variety of prefixes, e.g., *izdam* 'publish, tell on', *otdam* 'give in', *predam* 'submit', *razdam* 'give out', *prodam* 'sell', *pridam* 'endow', etc., where the verb *dam* 'give' has a perfective meaning even before acquiring a prefix. Far more often than that, prefixes are added to verbs to introduce new lexical nuances, to change the lexical meaning of the verb, to make new verbs, with new meanings. The function of verbal prefixes in Bulgarian and all Slavic languages is word formative; perfectivization is only a satellite or secondary function.

<sup>23</sup> This schema is also prominent in Janda's analyses of the Russian verbal prefix *pere-* (e.g., *peresolit* 'oversalt') (1986, 1988). For a comparison of Bulgarian *pre-* with its cognates, Russian *pere-* and Polish *prze-*, see Tchizmarova 2005.

<sup>24</sup> I assume that by "default" she means central or prototypical.

<sup>25</sup> Note that, although there is *razpredelja* 'distribute', there is no verb *\*predelja*. The morphological makeup of *prerazpredelja* 'redistribute' is *pre-raz-pre-delja* (Pašov 1966:135).

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