Pre-locativity as the schematic meaning of the Croatian verbal prefix *pred-*

Criticising the traditional approach, according to which verbs formed with the same prefix form a cluster of homonymous relations, in this paper we introduce the concept *schematic meaning* which links together the quite distinct specific meanings of different verbs sharing a prefix. In the case of the Croatian verbal prefix *pred-* and its allomorph *pret-* this schematic meaning can best be characterised as the superschema of pre-locativity. This superschema characterises both the prototypical and the peripheral cases, whereby their (non)prototypicality derives from the conceptual status of and relations among the agentive trajector, trajector and landmark as the superschema’s conceptual substructures. A cognitive model based on conceptual networks allows us to characterise the category of verbs prefixed by *pred-* as a category exhibiting prototype effects; the schematic meaning establishes a motivated link between their diverse specific meanings and creates a semantic unity within the apparent semantic diversity.

**Key words**: verbal prefix *pred-*; schematic meaning; specific meaning; agentive trajectory; trajectory; landmark; superschema; pre-locativity; homonymy; polysemy.

1. Introduction

1.1. The two concepts *schematic* and *specific* are among the key concepts of cognitive grammar (Langacker 1987, 1988a, 1988b, 1988c, 1988d, 1991, 2000; Taylor 2002). They are central to our understanding of the nature of categories of all kinds, and especially to understanding the mutual relations among different category members. Cognitive grammar operates with three types of linguistic units, the *semantic* and the *phonological units* and the *symbolic units* pairing up the first two. All these units are organised into vertical schema-instance hier-
archies, i.e. into hierarchies linking the superordinate schematic units and the more specific subordinate units as their elaborations. The schematic and specific linguistic units might be said to correspond in principle to the traditional concepts hyperonym and hyponym, however, there are several reasons why the latter are incompatible with the cognitive grammar paradigm. First, the concepts schematic and specific derive from the conceptual approach to semantics in cognitive linguistics. One of the central tenets of cognitive grammar is that grammar is organised into a continuum between the lexicon and grammar. Grammar is thus not autonomous or independent of semantics, but its structures reflect semantic relationships and structure conceptual content. Grammar is construed as an inventory of symbolic units, i.e. of pairings of meaning and form, or in the words of Langacker (1987: 76) of the phonological and semantic poles of linguistic units. Every grammatical structure can thus be described as symbolic and the continuum of form and meaning as well as the dependence of the former on the latter allow us to extend the concepts schematic and specific to phonological and symbolic units as well. The terms hyperonym and hyponym, in turn, only apply to semantic relations. Similarly, the terms schematic and specific themselves are much more in line with the conceptual approach to meaning than the traditional terms hyperonym and hyponym. If we consider the extralinguistic contexts in which the word schema is typically used and what the word means, a schema will turn out to have the following attributes: it abstracts away details, it is general, it gives a murky or unclear picture of something that yet needs to be thought out in detail, etc. Since visualisation, i.e. picturing the situations expressed by concrete linguistic expressions is one of the central features of conceptualisation, the terms schematic and specific, which prompt for associative visualisation, are most compatible with the conceptual approach to semantics. In this article we will explore the role of these concepts in the semantic analysis of the Croatian verbs containing the prefix pred-.

1.2. Since the early 1980s the linguistic elements which designate or modify spatial relations have occupied centre stage in cognitive linguistics. This is not surprising given that space, as well as time, is a basic cognitive domain which is present, explicitly or implicitly, literally or metaphorically, in many linguistic utterances. Cognitive grammar has taken a particularly keen interest in spatial prepositions, particles and verbal prefixes (see e.g. Brugman 1981; Lindner 1981; Rudzka-Ostyn 1985; Janda 1985, 1986, 1988; Lakoff 1987; Taylor 1995; Šarić 2003, 2006a, 2006b), and this interest arose from a sharp disagreement with the traditional, prestructuralist and structuralist treatments of the matter. Namely, in the prestructuralist tradition a single prefix used to derive different verbs was seen as forming a cluster of purely homonymous relations (e.g. Bo-

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1 For more on basic and abstract domains see Langacker (1987: 147-150).
This resulted in an exclusive focus on the semantic differences and losing sight of any semantic commonalities among the verbs sharing a prefix. Structural semanticists were the first to point out this fundamental flaw of the traditional approach (Van Schooneveld 1958, 1978; Flier 1975, 1984; Gallant 1979). Nevertheless, given the methodological tools available at the time, viz. componential analysis and checking for the presence/absence of semantic features, structural semanticists went to the other extreme. Using binary features to characterise meanings, these scholars only focused on those semantic features which the different verbs with the same prefix had in common, losing sight of their semantic distinctions. Put simply, whereas prestructuralists turned a blind eye to the unity within the semantic diversity, structuralists did just the opposite.

In stark contrast to the traditional and structuralist approaches, the central strands of cognitive grammar (e.g. Janda 1985, 1986, 1988) treat the verbs formed with the same prefix as forming polysemous conceptual-semantic nets organised around prototypes. This means that there is always some semantic link between members of a category, and this link is most often established through meaning chains. In such cases there is not a single or perhaps a few prototypical features common to all category members (in the case of verbal prefixes, to all the verbs sharing a prefix), but the meaning of one member is construed as an extension of the meaning of another member. The result is a polysemous network of meanings linked indirectly into a chain.

Meaning A is related to meaning B in virtue of some shared attribute(s), or other kind of similarity. Meaning B in turn becomes the source for a further extension to meaning C, which is likewise chained to meanings D and E, and so on. The process may be illustrated as follows: A → B → C → D etc. (Taylor 1995: 108).

In her dissertation Susan J. Lindner (1981) proposed a somewhat different approach to analysing linguistic structures coding spatial relations. Her lexical semantic analysis of the English verb particles up and out became a milestone in cognitive linguistic research on the relationship between language and space. Analysing the constructions with the particle out, the author proposed a single superschema, or a single superschematic feature common to all the meanings of the particle out. At the same time, however, she considered the superschema too abstract to furnish verb constructions with any pertinent meaning. Therefore, she postulated three basic, more concrete subschemas, which she characterized as the highest relevant level of abstraction and used these subschemas to arrive at more specific meanings.

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2 Such an approach to the meaning of prefixed verbs is also found in Croatian grammars (e.g. Babić 1986; Barić et al. 1995).

3 On the other hand, no superschema is established for the constructions containing the particle up.
Compared to previous cognitive linguistic treatments of the determinants of spatial relations, this paper introduces an important methodological novelty; we will argue for the shifting of the highest relevant level of abstraction one step up the scale of schematicity. This level will come to coincide with the level of the common superschema, which, contrary to the mentioned claims, abstracts away features of the more specific semantic groups and furnishes them all with relevant, common meaning.\(^4\) In other words, semantic networks based on semantic chains need not be the only way to analyse the semantics of verbal prefixes; their only function is to establish tighter links among the individual elaborations of the superschema. Here we will use the Croatian verbal prefix \textit{pred} to argue for a much tighter, direct link between the meanings of different verbs sharing a prefix, one provided by a single superschematic feature. We will refer to this superschematic feature as the schematic feature of \textit{pre-locativity}\(^5\) and to the superschema shared by all its elaborations as the superschema of pre-locativity.

\section*{2. Discussion}

The prefix \textit{pred-} is among the less productive verbal prefixes in Croatian. It has two allomorphs \textit{pred-} and \textit{pret-} and produces eight polysemous groups of verbs elaborating the superschema of pre-locativity in different ways (Figure (i)). Given the marginal productivity of the prefix, some groups will only include single verbs. Before we turn to our analysis, a few introductory comments are in order.

1) The eight groups of verbs, representing distinct elaborations of the superschema, will be presented in the order of their decreasing prototypicality. We shall treat as more prototypical those verbs whose schematic meaning contains the following features to a substantial degree:

- Verbs whose trajectors and landmarks are ranked higher on the scale of concreteness (specificity) [\textit{ANIMATE people} > \textit{animals ANIMATE}] > [\textit{INANIMATE physical objects} > \textit{abstract entities INANIMATE}], (cf. Langacker (1991: 322)). Not only are concrete trajectors and landmarks automatically and perceptually accessible, but the degree of a trajector’s concreteness is also proportional to the awareness of its prototypical

\(^4\) Some early hints at such an approach to analysing prefixal verbs can be found in Belaj (2004, 2005), while a more comprehensive treatment of eight Croatian prefixes is presented in Belaj (2008).

\(^5\) Pre-locativity is also one of the meanings proposed for the preposition \textit{(is)pred} in I. Pranjković’s (1992, 1993) analysis of the basic meanings of spatial prepositions.
movement in space;

- Verbs which elaborate the schematic meaning without metaphorical support.

2) We will generally use three verbs to illustrate the groups although most groups actually contain more than three members. Other groups are either really limited to three, or include fewer than three verbs. In such cases we shall list however many, or rather, however few we managed to find in our corpus. Nevertheless, since the corpus we used, as any other corpus for that matter, cannot be complete, we shall treat all the lists, the rudimentary ones too, as potentially open to new members and shall symbolise this with three dots (this openness is plausible given the general productivity of verbal prefixes). Therefore, the verb lists presented below are not and cannot be complete, and should a verb emerge which would not fit into any of the eight groups proposed (and given the size of our database, they cannot be many), it would have to represent yet another distinct elaboration of the superschematic meaning.

3) All the verbs will be illustrated in the perfective aspect since aspect is not a relevant category for our purposes. An aspecral change almost never results in a change of the nature of schematic meaning.

4) We shall illustrate in bold lines those aspects of event structures which represent the schematic meaning shared by all the groups and captured by the superschema. Other notational conventions used in the Figures will be explained as they come to bear on the analysis at hand.

The superschema of pre-locativity is illustrated below, in Figure (i), while its eight more specific elaborations will be described and illustrated in the remainder of this paper.

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6 The source of data for this paper was the dictionary Veliki rječnik hrvatskoga jezika (Anić 2004).

7 It must be stressed that the elaborations of the superschema, though more specific than the latter, are nevertheless schematic with respect to the concrete meanings assigned to the verbs in dictionaries. These would occupy the very bottom of the schematicity scale.
2.1. *predsjedati, prednjačiti, predvoditi*... (*chair/preside over*; *be in the lead/outdo someone/be ahead of someone*, *lead*)

One reading of the schematic meaning of pre-locativity in the first group of verbs derives from the position of the agentive trajector/trajector relative to a collective human landmark. The agentive trajector/trajector is in front of the landmark, and is either stationary (e.g. *predsjedati nekim skupom*; ‘chair/preside over a convention’) or it exhibits a more or less robust physical activity, as is the case with the verbs like *prednjačiti* and *predvoditi* (e.g. *prednjačiti u utrci* (*be in the lead in a race*), *predvoditi utrku* (*lead in a race*). This group, however, also includes verbs requiring metaphorical readings of pre-locativity. Here we are primarily concerned with the basic spatial relation IN FRONT/BEHIND as the source for the orientational metaphors GOOD (BETTER) IS IN FRONT/BAD (WORSE) IS BEHIND. These metaphors allow us to construe ‘superior’ mental or psychological activity on the part of the agentive trajector/trajector as his spatial pre-locativity; the agentive trajector/trajector is placed in front of another human landmark. Thus, for example, the agentive trajector/trajector presiding over a

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8 The label *agentive trajector* corresponds to the well established term *agent*, or agent-like participants. However, since the former label is not unknown to the cognitive linguistic community (cf. Rudzka-Ostyn 1988), it will be used for its terminological affinity to the term *trajector*. 

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Figure (i)
Superschema of pre-locativity
meeting or a convention (Cro. *predsjedavati*) is the most prominent member of the microcommunity, a member with outstanding (or at least better) results in his profession; the agentive trajector/trajector may also be an excellent student, outdoing his peers (*prednjačiti u učenju*); and the agentive trajector/trajector heading a political party (*predvoditi političku stranku*) is ideally one with the best psychological and mental capacities and the most reliable member of the party etc. Figure 1a illustrates the concrete scenarios expressed by the concrete verbs in group 1. Figure 1b illustrates the conceptualization of the more abstract, metaphorical scenarios described above, where the concrete defocused spatial relations IN FRONT/BEHIND, marked in solid thin lines, are mapped onto the focused abstract relations of mental or psychological pre-locativity, illustrated in bold dashed lines.

**Figure 1**

2.2. *predočiti, predstaviti (se)...* (‘present/show something to someone’, ‘introduce oneself/someone to someone’)

Through the instigating activity of the agentive trajector, an animate trajector (e.g. *predstaviti nekoga nekomu* or *predstaviti se nekomu* ‘introduce someone/oneself to someone’), or an inanimate concrete trajector (e.g. *predočiti ne-
komu ugovor ‘present a contract to someone’) or an abstract trajector (e.g. predočiti nekomu nekakve činjenice ‘present facts to someone’) is pre-located with respect to the visual field of an individual or collective agentive trajector who is a landmark within the target spatial domain. The issue of the semantic role of the human landmark in the target spatial domain is an interesting one. Namely, because the participant who is presented with something or to whom someone introduces another person or oneself (predočiti, predstaviti, respectively) is located within the target domain of the action chain we should assign it one of the semantic roles belonging to the macrorole undergoer. In this particular case, it must be goal, since in this group of verbs the elaboration of the superschema of pre-locativity defines the landmark’s visual field as the goal of action. And yet, prelocating the trajector with respect to the visual field of the landmark implies the former’s ‘arrival’ to and into the landmark’s cognitive system. Of course, what ensues is a process of cognizing because, when we visually perceive something, we immediately gain some knowledge of the percept (cf. the famous conceptual metaphor KNOWING IS SEEING). The human landmark of the target spatial domain then automatically leaves the domain of undergoer to become an actor; in this causal chain it carries the roles of perceiver, recipient and ultimately cognizer.

These scenarios are illustrated in Figure 2 where the solid arrow represents the agentive trajector’s physical activity aimed at the trajector, and the dashed arrow represents his implicit impact on the landmark in the course of this activity; presenting something to a person (predočiti) involves directed activity which has an impact on the presentee (although the impact is not of physical nature). The dashed arrow pointing from the landmark to the trajector represents reaction of the human landmark to the action performed by the agentive trajector, i.e. the former’s transition from the target domain of undergoer into the source domain of actor via the mentioned semantic role hierarchy. Representing the trajector with dashed circles implies his relative conceptual inaccessibility given the speed of the action which takes him from the possession of the agentive trajector to the prelocative state. A reflexive verb predstaviti se (‘introduce oneself’) would imply the same relationship between the trajector and the landmark, but the trajector would correspond to the agentive trajector.

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9 Actor and undergoer are the key concepts of the semantic structure of sentence in Role and Reference Grammar (Foley and Van Valin (1984); Van Valin (1993, 2001); Van Valin and LaPolla (1997)). The terms refer to the two macroroles of which each takes several micro-roles, the latter ranging from agent as the prototypical actor to patient as the prototypical undergoer.
2.3. predbaciti, predložiti… (‘reproach’, ‘propose/suggest’)

The third group bears substantial resemblance to the second, except that the trajector is an articulated sound or verbal utterance pre-located with respect to the auditory field of the second agentive trajector as the landmark. The semantic roles are assigned exactly as in group two. Since sound is a highly abstract trajector, Figure 3 represents it in thin dashed lines, which are thinnest at the beginning of action when the trajector is still perceptually inaccessible within the domain of the agentive trajector.
2.4. *preduhitriti*…(*beat someone to the task*)

The agentive trajectors in the fourth group correspond to the trajectors. The schematic meaning of pre-locativity involves the agentive trajector performing an action prior to/faster than the second agentive trajector who is a landmark. In other words, the agentive trajector’s action temporally precedes another action (e.g. *preduhitriti nekoga u nečemu* ‘to beat someone to the task’). Figure 4 shows in dashed lines the action which the agentive trajector manages to perform before another agentive trajector that is also the landmark.
2.5. predbilježiti se, pretplatiti se, predugovoriti... (‘sign up for something’, ‘subscribe to something,’ ‘sign a preliminary contract’)

In group 5, the schematic meaning of pre-locativity also manifests itself in the temporal domain. An agentive trajector, corresponding to the trajector, performs an act, e.g. puts his signature on a document, and places himself temporally before some concrete or abstract landmark. This landmark will subsequently come into his possession (e.g. pretplatiti se na neki časopis ‘subscribe to a magazine’) or the agentive trajector will subsequently become part of an abstract event functioning as the landmark (e.g. predugovoriti kupnju nekretnine ‘sign a preliminary contract for the purchase of real estate’ or predbilježiti se za sudjelovanje na nekom putovanju ‘sign up for a trip’). The solid straight arrow in Figure 5 stands for the concrete physical activity performed by the agentive trajector, e.g. the action of subscribing to something (pretplaćivanje na nešto), which is implicitly directed (dashed arrow) at a concrete landmark (e.g. a magazine), which is to appear in the foreseeable future. The arched arrow symbolises the subsequent transition of the landmark into the possession of the agentive trajector.
2.6. predstojati… (‘to be ahead/forthcoming’)

The schematic meaning of this verb is characterised by the temporal prelocativity of trajectors of various kinds, most notably abstract trajectors like events, situations, business affairs etc. These trajectors are mostly situated in the immediate future with respect to some, usually human, landmark. By virtue of the mapping of the more basic and concrete spatial relations onto the more abstract, temporal relations, the trajectors come to “stand” ahead of, i.e. in front of the landmarks located in the present moment. In Figure 6, the relations within the more basic, but defocused spatial domain are shown in thin solid lines, while those in the focused, but more abstract temporal domain are shown in thicker dashed lines.
2.7. prethoditi… (‘precede’)

A verb like prethoditi (‘precede’) represents an opposite scenario to the one represented by the verb predstojati (‘to be ahead’) since the trajector is located in the immediate past with respect to the landmark. The interesting question, however, is how come the same prefix pred- can be used for the two diametrically opposed scenarios. We propose that with verbs like predstojati (‘to be ahead’) pre-locativity is motivated by the spatial relations\textsuperscript{10} mapped onto the temporal ones. The schema for a verb like prethoditi (‘to precede’) on the other hand, only involves temporal relations. Prefixation with pred- is thus possible in both cases because the relations of pre-locativity and post-locativity in time and space are not equivalent. In other words, what is ahead in space is behind in time, and the other way around. If we, for example, say that someone ended the race ahead of another person, it means that s/he completed it before the other person. Or, if

\textsuperscript{10} This is also supported by the existence of a derivative predstojnik ‘a chair/head’ (as in predstojnik katedre ‘head of the department’), where the basic spatial relations are clearly in evidence. A chair or head, Cro. predstojnik is one who stands \textit{ahead, in front of}, i.e. heads an institution. On the other hand, the derivative prethodnik ‘predecessor’ does not profile spatial relations, but merely temporal ones. A predecessor can only be a person who held an office or performed a function \textit{before} another person, not \textit{behind} that person.
we imagine separate temporal chunks within a span of several hours, e.g. 11.00h – 12.00h – 13.00h – 14.00h, as material entities in physical space, then, in the spatial domain 12.00h is ahead of 11.00h, 13.00h is ahead of 12.00h and 14.00h is ahead of 13.00h. But in the temporal domain the opposite holds: 11.00h precedes 12.00h, 12.00 precedes 13.00h etc. Therefore, since in this group the relations within the temporal domain do not result from any mappings of more basic spatial relations, there is no conceptual comparing of the two domains in terms of concreteness/abstraction. The temporal domain is the only domain in this scenario and is marked with a solid line. The trajector, as the focal element, is marked by a thicker but dashed circle, since contexts involving verbs like prethoditi ‘precede’ typically involve abstract events and situations.

Figure 7

8. predmnijevati, predosjetiti, predvidjeti… (‘presuppose/presume,’ ‘have a presentiment/hunch’, ‘foresee/anticipate’)

In the final, most peripheral group, the trajector role is played by the agentive trajector’s different senses, which get pre-located by virtue of the latter’s activity, with respect to some events or situations as potential landmarks. The metaphor KNOWING IS SEEING (in the case of the verb predvidjeti ‘foresee’), or the more general metaphor KNOWLEDGE OF AN ENTITY IS ANY PERCEPTUAL CONTACT
WITH THE ENTITY, allows us to place knowledge about an entity, gained through physical or cognitive perception, in front of a future event in the temporal succession. Figure 8 illustrates an abstract, nonphysical contact (dashed arrow) between the agentive trajector and another abstract landmark (a situation or event) via any of his senses (trajectors). This contact allows him to gain some knowledge (arched arrow) about the landmark before it becomes generally accessible, that is, before it happens.

![Diagram](image-url)

**Figure 8**

### 3. Conclusion

Our semantic analysis of the verbs formed with the prefix *pred*- and its allomorphs supports the idea that the meaning of any spatial verbal prefix can be described using a single schematic feature which is present in and central to the meanings of all the verbs formed with the same prefix. This kind of analysis has already proved applicable to other Croatian prefixes (see Belaj 2008) and to prefixes in other languages as well. The actual role of schematicity in the communication process, i.e. to what extent language users are indeed aware of the existence of one such common schematic feature in their daily exchanges is, how-
ever, a question that is beyond the scope of this paper and must be addressed, primarily by psycholinguistic research.

References


**PRELOKATIVNOST KAO SHEMATIČNO ZNAČENJE HRVATSKOGA GLAGOLSKOG PREFIKSA PRED-**

Kritizirajući tradicijski pristup prema kojemu glagoli tvoreni istim prefiksom tvore skup homonimnih odnosa, u ovom se radu uvodi pojam shematičnoga značenja koje ujedinjuje i povezuje različita specifična značenja glagola tvorenih istim prefiksom. U slučaju hrvatskoga glagolskog prefiksa *pred-* i njegova alomorfa *pret-* to se shematično značenje može definirati kao supershema prelokativnosti. Ta supershema obuhvaća kako prototipne tako i rubne slučajeve, pri čemu se (ne)prototipnost izvodi i iščitava iz konceptualnoga statusa i odnosa koji se uspostavljaju između agentivnoga trajektora, trajektora i orijentira kao konceptualnih podstrukturnih različitih scenarija kojima se elaborira supershema. Kognitivni model, utemeljen na konceptualnosemantičkim mrežama, omogućuje nam da kategoriju glagola prefigiranih prefiksom *pred-* definiramo kao kategoriju temeljenu na efektu prototipa, a shematičnim značenjem uspostavlja se motivacijska nit između različitih specifičnih značenja te se na taj način omogućuje semantičko jedinstvo kategorije unatoč specifičnim semantičkim razlikama.

**Ključne riječi:** glagolski prefiks *pred-*; shematično značenje; specifično značenje; agentivni trajektor; trajektor; orijentir; supershema; prelokativnost; homonimija; polisemija.