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# Prepositional categories and prototypes: contrasting some Russian, Slovenian, Croatian and Polish examples

### 1. Introduction

This analysis is a part of a planned cognitive linguistic study of the main spatial prepositions in Slavic languages inherited from the Old Church Slavic prepositional inventory. These prepositions show the compatibility of the main spatial senses in different Slavic languages. However, prepositional usage varies to a certain extent from language to language, even between historically closely related languages, in what seems to be an unpredictable manner at first glance. It is a challenge to contrast examples of prepositional usage that do not show compatibility and to attempt to explain the differences in terms of structuring the prepositional categories differently. For our analysis we examined one language from each branch of Slavic: Croatian (South), Polish (West) and Russian (East). Slovenian (South) was also chosen in order to provide a comparison within one branch.

A complete analysis of the spatial and related meanings of the preposition na in Croatian, Slovenian, Polish and Russian has already been worked out (Šarić & Brlobaš 2000). In this study the following problems will be discussed: 1) The interface between the prepositions na and u (Rus, Sln v, Pol w)<sup>1</sup> in some spatial uses, 2) the meaning of the preposition nad and the interface between the prepositions nad and na, i.e., the relation of the meaning of the prepositions nad and na in the three languages. This last topic raises our third point of interest: 3) The meaning of the prepositions na and na and their related prefixes.

<sup>1</sup> Rus = Russian, Sln = Slovenian, Pol = Polish, Cro = Croatian, OCS = Old Church Slavic.

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Spatial prepositions are radial categories and a major task in describing them is the definition of the central (prototypical) member of the category and a description of the ways in which the non-central members are related to the prototype. The term "prototypical meaning" refers to the best instance and function as a central model which shapes a category. In the case of prepositions, a very abstract geometrical relation shapes this category. The entire prepositional category is structured by resemblance to an idealized relation. The spatial relation expressed in any given use of the preposition is distinctly derived from that idealized relation. A simple relation must exist which is a "precondition" for an expression construed with a preposition to be acceptable. The prototypical meaning of a preposition reflects the intuition of a central idea connected with it. Deciding on a prototypical meaning is a matter of analysing the range of uses of the given preposition. A preposition may have several prototypical meanings. When we think of one of the central notions in cognitive linguistics—the term *prototype*—we do not automatically think of prepositions and their prototypical meanings because of the highly abstract functional meanings involved; prototypes are originally related to natural categories. Traditional grammars usually describe prepositions as synsemantic, or functional words that get some kind of meaning only in context. From this perspective, a complex expression would have a meaning that would not be implied in its parts at all. This contrasts with all theories of meaning - even with the praxis of lexicography, in which prepositions have better or worse meaning definitions.

Prepositions have often been discussed in a cognitive framework as polysemous items. The analysis of the prepositions in the cognitive frame has produced significant results (cf. for example Brugman 1981, Cyuckens 1988, Herskovits 1988, Vandeloise 1991, Deane 1993, Boers 1996). Prepositions do have a certain kind of meaning, their meaning is probably more complex than the meanings of other lexical categories, and the nature of this meaning has not been definitely determined. We use the term "prototypical meaning" even though the notion of prototype in this case is of a nature distinct from the prototypes for natural kinds: they correspond to the best instance and function as a central model to shape a category. In the case of prepositions, a very abstract geometrical relation shapes a category. The whole prepositional category is structured by resemblance



to an ideal relation. The spatial relation expressed in any given use of the preposition is distinctly derived from that ideal relation. The whole set of uses of the preposition can be subcategorised into types. These types undergo some semantic transformations and then manifest the prototypical meaning. A level of geometric conceptualisation mediates between our representation of the physical world and the application of prepositional expression. Choice and interpretation of a prepositional expression are influenced by contextual factors: relevance, salience, tolerance, and typicality. Pragmatic principles related to these explain many characteristics of the usage situation. There is a permissible tolerance for deviation from the simple relation. The shift from the simple relation can be conceived as gradual, measurable by some distance or angle. Transformations of the ideal meaning are of two kinds: a) transformation to another relation-a sense transformation, and b) gradual transformations connected with the tolerance principle. No general principle regulates the sense transformations. The transformed meaning can be related to the prototypical one by a process involving resemblance in appearance. Some transformations represent conventional extensions of the range of use of the prototypical meaning, others represent allowances for graded deviations from either the prototypical meaning, a kind of a geometric description, or the conventional extensions.

# 2. The interface between the prepositions na and u (Rus, Sln v, Pol w)

# a) the conceptualisation of locations and geographical areas

In the analysis of the spatial meanings of na (Šarić-Brlobaš 2000) three prototypical relations expressed by this preposition have been distinguished: it is applicable (a) for a TR and an LM if an LM supports a TR and the surface of a TR is contiguous with the surface of an LM; (b) for a TR and an LM if the boundary of a TR is contiguous with an LM, and (c) for a TR and an LM if they coincide. The preposition na as a preposition of contact/coincidence in its spatial uses overlaps in some contexts with the use of the preposition u (Rus, Sln v, Pol w), which in its static uses corresponds to the container schema and in its dynamic uses to a combination of the container and the path schemata. In OCS the phrases  $v_b$  + Loc./Acc. and Na + Loc./Acc. exist side by side in those cases in

which the characteristics of the LM are not definitely determined (i.e. there exists no notion of measure, proportion) and in those cases in which it is not determined whether we are talking about total or partial inclusion (the nouns *strana* 'side' and *město* 'place' occur with both prepositions). Hodova (1971) mentions the possibility of using both prepositions with the names of towns, lands, and settlements. This partial overlap of the use of *na* and *vъ*, which we already find in OCS, exists in all Slavic languages considered.

In the conceptualisation of small spatial areas or of larger geographical areas it is important whether an area is primarily understood as an area with closed and defined boundaries in which some other object can be seen as enclosed, or as an open area or a surface whose boundaries are defocused. This can explain the use of different prepositions in the Polish example *na okolice* and Croatian *u okolici* 'in the vicinity'. Astafeva (1974: 26-27) gives some Russian examples in which both prepositions can be used (v kuxne - na kuxne, 'in the kitchen', vo dvore - na dvore, 'in the yard', v sele - na sele 'in/at the village') and examples in which the choice of one preposition is not clearly motivated (na počte 'at the post office' - v vokzale, 'at the railway station', na ulice 'on/in the street' - v pereulke 'on/in the small street', na Kavkaze 'in the Caucasus' - v Krymu 'in Crimea'). When an area is conceptualised as a bounded space, the possibility of the use of v is expected whereas the use of the preposition na is connected with an open area without emphasizing its boundaries. Some parallel usage is explainable in terms of analogy. Therefore, the expression *v dvore* could be diachronically motivated because the backyards and front yards were surrounded by tall walls and were roofed over in some parts of Russia. The expression *na dvore* 'in the yard' has appeared by analogy with the expression na ulice 'on the street'. Here it is not the properties of the street and yard in the expressions *na ulice*, *na dvore* that are salient, but the situation of being somewhere outside and not in the house. One and the same constellation of objects or setting in the real word can evoke two different images in mental space, which results in the use of two different prepositions. Both are motivated: in one image some aspects of the objects are accented, in another one different, sometimes contradictory aspects. The basis for the English expression a bird in the tree is an image in which the interior of the crown of tree is prominent, its possibility to enclose, and to include the other objects (birds). In the



equivalent Croatian expression *ptica na stablu*, the prominent aspects of the image are the branches, i.e., the outside of the crown. The same setting can be conceptualized differently in one and the same language. The Croatian expression *na hodniku* 'in the corridor' is motivated through the image of a broad corridor as a surface. The walls are not prominent in this image. Otherwise, when the corridor is narrow, the walls that surround it become more prominent. The whole image evokes the impression of a bounded space and the container characteristics of the image are the basis for the expression *u hodniku*.

In Russian and Polish the preposition na is used in some geographical names (Pol na Ukrainie, Rus na Ukraine 'in Ukraine') whereas in Croatian and in Slovenian the preposition u/v is used instead. We consider such uses not as "idiomatic", but as diachronically motivated in a different way of conceptualising a concrete location. The use of the preposition u(v, w) and na varies with the names of mountains. The general principle determining the use seems to be: if one refers to the top of the mountain or an outer area of it, na is used, in other cases u(u planini 'in/on the mountain', na planini 'on the top of the mountain').

### b) na - u(v, w) with forms of transportation as a LM

In OCS *na* was used with open forms of transport as a LM (*na kolesnici* 'on a cart') and the preposition  $v_b$  with closed forms of transportation ( $v_b$  korabi 'in a ship') as a LM (Hodova 1971: 62). We can observe this situation in the Slavic languages considered here as well.

Vehicles in general can provide containers for passengers or a passenger can perceptually be located on the surface of the vehicle. For example, the salient shape of a bus can be a container. We can express the relation in which a TR is on a form of transportation as a LM 1) with na, 2) with u (Rus, Sln v, Pol w) or 3) with the instrumental without preposition. Russian exhibits all three of these possibilities with many forms of transportation (exat' poezdom/na poezde/v poezde 'to travel by train'). The

<sup>2</sup> Astaf'eva (1974: 29) claims that this use in Russian has been influenced by the Ukrainian language. This use emerged from the expression *na okraine* 'on the margin of an area'.

possibility of using na in Croatian and Polish is limited to forms of transportation that are open or to forms in which the upper/outer side is used (Pol jechać na koniu/na wielbłądzie; Cro jahati na konju/na devi 'to ride on a horse/on a camel'; Pol na sankach/na nartach/na łyżwach; Cro na sanjkama/na skijama/na klizaljkama 'on a sledge/on skis/on skates'). It seems that the instrumental case in all these languages is a neutral form in which it is not the characteristics of a form of transport (being on its inner or outer side) that are emphasised, but only the possibility of transportation/moving within the space. When we express that the passenger is inside a form of transportation, the preposition u(w, v) is used: u vlaku, w pociagu, v poezde 'in a train'). In Russian the expressions exat' na poezde/na avtobuse/na tramvae/na trollejbuse ('to travel by train/by bus/by tram/by trolley') are used when the position of the passenger is not emphasised, but the form of transportation as an instrument (usually expressed with the instrumental, Cro vlakom/autobusom, Pol pociagiem/autobusem 'by train/by bus'). These uses in Russian are said to have arisen by analogy with the expression exat' na izvozčike ('to travel in a half-opened coach', Astafeva 1974: 27). When the position of the passenger inside the vehicle is emphasised, the preposition v is used (sidet', spat' v poezde/v avtobuse/v tramvae/v trollejbuse/v lodke 'to sit, sleep in a train/in a bus/in a tram/in a ship'). In these expressions the equivalent preposition u is used in Croatian (but na with transportation forms that do not have an inside and with transportation forms on water: na biciklu, na motoru, na brodu, na jahti, na jedrenjaku 'on a bike, on a motorcycle, on a ship, on a yacht, on a sailboat'). The use of the preposition u(v, w) is excluded in those cases in which the form of transport has no inside (Rus naxodit'sja na parome/na drožkax 'to be on the ferry/in a half-open coach').

# c) na - u (v, w) with semiotic LMs

Our spatial experience influences how something is represented in the non-spatial domain. In the Slovenian example *prevesti v slovenščino* 'to translate into Slovenian' the preposition v with its landmark provides its concrete spatial meaning and thus transfers it

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<sup>&</sup>lt;sup>3</sup> There is an interesting exception in Croatian: the expressions *ići na vlak, ići na autobus* 'to go catch a train, a bus' are used in those contexts in which we express our intention to reach a form of transportation in general.

to the semiotic landmark. The language is conceptualised with its "enveloping" property—it envelops the ideas and representations. This is slightly different from Croatian and Russian, in which the preposition *na* is used (Cro *prevesti na slovenski*, Rus *perevesti na russkij*, Pol *przetłumaczyć na język polski*). This usage implies the understanding of the LM as a base on which the contents are "situated".

# 3. General remarks on the meaning of the preposition *nad* in Croatian, Slovenian, Polish, and Russian and the relation *nad-na*

In describing the particular prepositional senses of a preposition, the following parameters may be relevant:

- a) the nature of an LM its shape, size...
- b) the nature of a TR is it smaller, larger than the LM
- c) contact or distance between a TR and an LM
- d) the orientation of a TR with respect to an LM (the TR is in the horizontal dimension of the LM, total or partial enclosure etc.)
- e) static vs. dynamic relation. If the TR-LM relation is at some point in time a static one, the preposition designates the Place of the TR. A dynamic relation is realized over some stretch of time, i.e., the TR moves in regard to the LM. Three kinds of dynamic relations can be distinguished: Goal, Source, and Path. Goal focuses on a Place that is the end-point of the TR's movement, Source focuses on the initial point of its movement, and Path specifies a Place that defines the trace of the TR.
- f) the role of an observer. Some prepositions are strongly deictic, whereas others might refer to perceptually prominent aspects of an entity or require that both TR and LM are in the perceptual field of an imaginary observer. How the situation is construed is important. One and the same entity might be construed either as a surface or as an enclosure.

A particular use may profile some highly idiosyncratic aspects of a TR-LM relation.

The prototypical meaning of *nad*, common in all languages that we consider here, is the relation of a TR and an LM in which a TR is located higher than an LM (the preposition designates the Place of a TR) or moves on a higher level than the LM (the

preposition designates the Path of a TR) (in contexts with the instrumental, examples (1a-d). In other contexts, a TR moves towards the level higher than the level of the LM (examples (2a-c). In this use the dynamic relation designated is Goal. In Croatian, Slovenian, and Polish we find this preposition in static and dynamic contexts in which an LM is in the instrumental case, as well as in dynamic contexts in which an LM is in the accusative case, but in Russian only in static contexts with the instrumental case:

(1) a. Pticy kružilis' <i>nad</i> nami.	[Rus]	(2) a. Burza idzie <i>nad</i> miasto.	[Pol]
(1) a. I tiey kruzinis naa nann.	[Kus]	(2) a. Buiza idzie naa iiiasto.	լուսոյ
'The birds circled over us.'		'The storm wind is approaching the	town.'
b. Samolot leciał <i>nad</i> miastem.	[Pol]	b. Balon se je dvignil <i>nad</i> oblake.	[Sln]
'The plane flew over the town.'		'The balloon rose over the clouds.'	
c. Nad Slovenijo je visok zračni prit	isk.[Sln]	c. Oblaci se nadvijaju <i>nad</i> grad.	[Cro]
'High air pressure is over Slovenia.'		'Clouds appear over the town.'	
d. Magla se nadvila <i>nad</i> gradom.	[Cro]		
'The fog appeared over the town.'			

We can find the preposition nadb with this prototypical meaning in OCS as well. The preposition nadb is used in contexts in which a noun in the instrumental or accusative case serves as an LM. In the first case there exists a relation between a TR and an LM in which a TR is situated higher than an LM or an action takes place at a position that is higher than the position of an LM. If an LM is an object in the accusative case, the relation expressed with nadb implies that the end point of a motion of a TR is higher than an LM. Here are some examples from the OCS texts which Hodova (1971: 92; 57) cites: samarěninb... pride nadb nb, nadb nb even overline o



The examples (3) illustrate the variety of geometrical relations that a TR and a LM can realise if the utterance X *nad* Y is to be true (the distance between a TR and a LM, the dimensionality of the TR and LM, etc.). The *nad*-relation is applicable for various kinds of relations between a TR and an LM. Some of them concern the dimensionality and prominence of a TR and an LM:

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- a) a TR is a static object smaller than an LM, a LM is a more prominent object as in example (3a)
- b) a TR is a static object bigger than an LM, a TR is a more prominent object as in example (3f)
- c) a TR is a moving object smaller than an LM, an LM is a more prominent object as in example (3h)
- d) a TR is a moving object bigger than an LM, a TR is a more prominent object as in example (3e)
- e) a TR and an LM are parts of the same object; it may not be possible to determine which object is more prominent in the relation TR *nad* LM as in example (3i)

Some relations vary concerning the distance between a TR and a LM. The examples in (3) illustrate a variety of possibilities connected with the distance of a TR and a LM in the relation TR *nad* LM. It can vary from a very small distance of some millimetres or centimetre as in example (3i) to an immeasurable distance as in (3c) or (3f). One more factor in the *nad*-relation is the concreteness/abstractness of the TR and LM. Although we had more examples in which a TR and a LM are concrete objects, one or both of them can be an abstract object (cf. the example (3g)):

- (3a)Lampa wisi *nad* stołem.
- 'The lamp is hanging over the table.'
- (b) Usiedli *na* brzegu, w cieniu pochyłonej *nad* wodą rozłożystej wierzby.
- 'They sat on the bank in the shadow of the branching willow which was bent over the water.'
- (c) Jeżeli... zwrócisz ku wodom lice, gwiazdy *nad* tobą i gwiazdy pod tobą... [Pol]
- 'If you turn your face to the water, the stars over you and the stars beneath...'
- (d) Nad bolotami podnimalsja gustoj tuman. [Rus]

- 'A thick fog appeared over the swamp.'
- (e) Nad njegovom glavom letjeli su avioni.
- 'The planes flew over the town.'
- (f) Zvjezdano nebo *nad* nama...
- 'The starry sky above us...'
- (g) Sjena sumnje nadvila se je *nad* njegove misli.

[Cro]

- 'There is a shadow of doubt over his thoughts.'
- (h) Letalo kroži *nad* mestom.
- 'The plane is circling over the settlement.'
- (i) Obrvni lok *nad* očmi.
- 'The curve of the eyebrow above the eyes.'
- (i) Voda *nad* jezom.

[Sln]

'The water above the levee.'

The geometrical relation between a TR and an LM, which can be described as a nadrelation, also implies closeness, but not necessarily physical proximity. It is important that the TR and the LM are conceptualised as a part of the same mental image in which an imagined vertical line binds one object of the image with another one. The semantic component of closeness is a common element of the meaning of the prepositions na and nad, but the relation expressed by nad does not signal direct contact. The common element in the meaning structure can cause an overlap in the use of these two prepositions. The overlap is possible, and its occurrence and degree vary from one Slavic language to another. In the languages concerned, some historical changes have occurred in the conceptualisation of space. As a result of these changes, we can follow the slight differences in the meaning network of the prepositional category in each language. In Polish the preposition *nad* is used in contexts in which in Croatian and in Russian the preposition na is usually used. These are contexts with nouns such as river, sea, lake being LMs. In spatial expressions with these nouns the relation between the TR and LM determines that a TR is close to the LM, i.e., at the edge of a geographical area. This relation implies that a TR is contiguous with the edge of a concrete geographical area

serving as an LM: Rus *gorod na reke/na more/na ozere*; Cro *grad na rijeci/na moru/na jezeru* 'the town on the river/on the sea/on the lake'. This relation is conceptualized in Polish as a relation in which it is emphasized that a river, sea, or lake is physically at a lower level than the objects that are situated close to it:

- (4a) Mieszkać nad rzeką.
- 'To live on the river.'
- (b) Spacerovać *nad* brzegiem mora.
- 'To walk on the seashore.'
- (c) Osiedle *nad* jeziorem.
- 'The settlement on the lake.'
- (d) Miasto nad ujściem rzeki...
- 'The town at the mouth of the river...'

[Pol]

Thus, in Polish, the notion of the lower and higher level on which some objects are situated is more prominent in the understanding of the physical world. In Russian and Croatian the preposition *nad* is used in contexts in which the emphasis is on the elevation of physical objects in comparison to the level of the water. Consequently, the emphasis on the significantly higher position of the TR in comparison to the LM results in the utterances such as (5a, b):

- (5a) Moj dom stoit *nad* ozerom na vysokoj beregovoj gore. [Rus, Prišvin]
- 'My house is over the lake on the high mountain near the seashore.'
- (b) Nad dolinoj reki Kači stojala staraja i gustaja dubovaja roša.

[Rus,Sergeev-

Censkij].

'Above the valley of the Kača River there was an old and thick oak forest.'

The contexts in which *nad* appears in its prototypical meaning include not only the location on the higher level, but also a notion of closeness (contact or contiguity with a line). In Polish we can follow the meaning shift of the prototypical meaning of *nad* towards the meaning in which a TR and an LM are only close to each other. Some uses of this preposition in the temporal domain show this:

- (6a) Wracał nad ranem.
- 'He came around morning.'
- (b) Już *nad* świtaniem blask jutrzenki gasnał...
- 'Just around morning the glow of the Morning Star faded.'

[Pol]

In those contexts the secondary relation of closeness is a component that is retained from the relation "X is on a higher level than Y".

In Slovenian there is an instance of the overlap of *na* and *nad* that we do not observe in the other languages considered. So we have Slovenian examples (7a-c) in which the preposition *na* is used and examples (7d-e) in which the preposition *nad* is used. The relation expressed with *nad* and *na* is the same relation in which a TR makes concrete or abstract contact with an LM or is about to make contact with it. The LM can be a concrete entity, a geographical point, an abstract action/performance or a person occurring as a Goal of the action expressed by a verb. The relationship between a TR and a LM includes the notion of target.

- (7a) Streljati *na* sovražnika.
- 'To shoot at the enemy.'
- (b) Napoleonov pohod *na* Moskvo.
- 'Napoleon's march on Moscow.'
- (c) Iti z gorjačo *na* koga.
- 'To go at someone with a cane.'
- (d) Planiti nad sovražnika.
- 'To fall upon the enemy.'
- (e) Iti *nad* petelina.
- 'To go for (catch) a rooster.'

[Sln]

In the other languages considered we find the preposition *na* in similar contexts. The preposition *na* contributes to the idea that the LM is a target or reinforces it:

(8a) Puca *na* sve živo.

'He shoots at anything that moves.'

[Cro]



Other meanings of the spatial prepositions are derived from the central or prototypical spatial meaning as its metaphorical extensions. They are created, for example, by varying the referents of the landmark and the trajector. The notion of higher location in the prototypical meaning of *nad* extends to the notion of superiority and domination. The use of *nad* where the LM is an object or a group of objects with which a TR is compared as in the example (9a-c) above illustrate this, or the use of *nad* with the meaning "more than" as in (10a-b):

(9a) Pesnej *nad* pesnjami stala by eta pesnja.

[Rus, Nekrasov]

'This song would be the song of songs.'

(b) To był skandal *nad* skandale.

[Pol]

'It was the scandal of scandals.'

[Sln]

(c) Skopuh *nad* skopuhi.

'The miser of misers.'

(10a) Kochać, cenić kogoś, coś nad życie.

'To love, respect someone, something more than life.'

(b) Nic milszego nad muzykę.

[Pol]

'Nothing is so precious as music.'

As the basic preposition of a concrete or a metaphorical contact, the preposition *na* extends the contact meaning component to the meaning components "topic", "theme", "target", "object of interest/activity", and "focus of attention". The last one is related to the notions "topic" and "target". They all imply contact of the TR with the LM and their closeness. The TR and LM are conceptually very close. The notion of "topic" entails contact and closeness. The notion of closeness is also very important in some uses of *nad*, and this preposition also extends its meaning to the notion of topic and other related notions. We can follow this extended use of *nad* in all of the languages considered, but not to the same extent. So in Polish it is used in the examples as (11a) where the expressed relation includes a concrete physical activity (or a verbal activity as in (11b)).

In such utterance – for example in Croatian – na instead of nad is used. But we find nad in all languages in the examples in which the expressed activity is mental or emotional, and the LM is a theme, or an object of the activity, as in (11c-h):

(11a) Praca nad słownikiem.

'The work on the dictionary.'

(b) Dyskusja *nad* projektem.

'The discussion regarding the project.'

(c) Rozmyślać nad ludzkim losem.

[Pol]

'To think about human fate.'

(d) Ne sprašivaj, nad čem zadumyvajus' ja...

[Rus, Fet]

'Do not ask about what I am considering.'

(e) Ne rydaj tak bezumno *nad* nim...

[Rus, Nekrasov]

'Do not cry so madly over him.'

(f) Zamisliti se nad vsebino romana.

'To think about the content of the novel.'

(g) Jokati, vzdihovati nad kom.

'To cry, sigh over somebody.'

(h) Veselje nad dogodkom.

[Sln]

'The joy of the event.'

The set of verbs taking prepositional complements with *na* varies in the languages considered.<sup>4</sup> If we compare semantically equivalent constructions in two of the languages considered, we again observe an overlap of the semantic space of the prepositions *na* and *nad* (cf. Polish example (11a) and its Croatian equivalent *Rad na rječniku*). The spatial semantic component according to which a TR is on a higher level than an LM occurs in the examples in (11) as well. This position allows the TR a specific objective point of

<sup>&</sup>lt;sup>4</sup> Nad is a part of the verbal complements in some Pol archaic constructions: zabawiać się nad, przeglądać się nad.

view from which it is able to "see" all aspects of the LM and direct its attention, emotions or any kind of psychological activity towards the LM.

# 4. The meaning of the prepositions and their related prefixes

The example of the preposition *nad* is an illustrative example for the consideration of the relation between the main spatial prepositions and their related prefixes in Slavic. The spatial prepositions and prefixes, being etymologically connected with them, share the main meaning concepts, but the prefixes also undergo a semantic bleaching in the grammaticalization process. Janda (1986) shows on the basis of Russian examples that of all configurations associated with a given prefix, one is central or prototypical. All other configurations are connected or related to the central configuration by means of a series of links, which represent the transformations by which the configurations differ from each other. In the meanings of words with prefixes, we can follow the prototypical and peripheral meanings of the preposition, its metaphorical extensions and meaning shifts.

The prefix *nad*- serves to illustrate the predictable metaphorical extensions of the preposition in the non-spatial domain. As a nominal and adjectival prefix, it extends its prototypical meaning (a) "*nad*-X is spatially on a higher level than a referent of a base word X" to another meaning (b) "*nad*-X a is higher in the hierarchy, better than the referent of the base word or superior", "*nad*-X is higher, better than normally expected". This is closely connected with the notion of excess, i.e., meaning (c):"*nad*-X exceeds the expected measure, dimension or category":

- a) Rus *nadgortannik* 'uvula', *nadzemnyj* 'above-ground, raised above the earth', *nadsmotr* 'supervision', *nadpis* 'inscription, title', Pol *nadziemny* 'above-ground, raised above the earth' *nadwozie* 'superstructure', Sln *nadcesten* 'raised above the street', *nadpalubje* 'upper/top deck', Cro *nadgrobni* (*spomenik*) 'raised on the grave (tombstone)', *nadvožnjak* 'overpass, overhead bridge, overhead rail spain'
- b) Pol *nadburmistrz* 'head mayor', *nadradca* 'head counsel', Sln *nadlogar* 'head forester', *nadporočnik* '(first) lieutenant', Cro *nadbiskup* 'arch-bishop', *natkonobar* 'head waiter'; Pol *nadczłowiek* 'superman', *nadforteca* 'main fortress', Sln *nadljudje*

'supermen', *nadčloveški* 'superhuman', Cro *nadčovjek* 'superman', *nadljudski* 'superhuman'

c) Rus *nadklassovyj* 'out of the class', *nadzvezdnyj* 'out of the space of the stars, higher than the stars', Pol *nadciśnienie* 'high atmospheric pressure', *nadnaturalny* 'supernormal, supernatural', Sln *nadizkustven* 'out of the experience', *nadrealizam* 'surrealism', Cro *natprirodan* 'supernormal, supernatural', *nadstvarnost*, 'superreality'

The examples above show very similar concepts connected with the prefix *nad*- shared by Polish, Slovenian and Croatian:

X is higher than Y > X hierarchically superordinates Y > X is outside of the borders of Y > X exceeds the (value) category of Y

In Russian, the prefix *nad*- does not exist in the category "*nad*-X a is higher in the hierarchy, better than the referent of the base word or superior"—the role of the prefix *nad*- is taken by another prefix or adjectival element (Rus *sverxčelovečeskij*, *nečelovečeskij* 'superhuman' *staršij lejtenant* '(first) lieutenant', *verxnjaja paluba* 'upper deck'). However, it does exhibit the basic spatial meaning "X is situated higher than Y" and its extended version "X is outside of the borders of Y". The metaphorical uses of the prefix *nad*- are extended from its prototypical meaning. The objects that are on a higher level than the others are superior (e.g., Cro *nadčovjek*) in comparison to those on the lower level.

The prototypical meaning of the preposition *nad* is fully apparent in prefixed verbs such as Pol *nadlatywać*, Sln *nadletavati*, Cro. *nadlijetati* 'to fly over'. In Russian, the prefix *nad*- is not used in this semantic subcategory of verbs (*proletat' nad*). In Pol, Sln, and Cro, there is also the possibility of using *pre*- (Sln *preletavati*, Cro. *prelijetati*, Pol *przelatywać*). In its extended meaning, the verbal prefix *nad*- adds the component "more, better" to the meaning of the base verb: Cro *nadigrati* 'outplay, defeat' (Sln *nadigrati*), *nadmudriti* 'outwit' (Sln *nadmodriti*), *nadvikati* 'outdo in shouting'. In Russian we find the prefix *pere*- in those cases (*pereigryvat'* 'outplay'). In Polish we do not find the prefix *nad*- in such verbs either, but *prze*- or some other prefix (*przechytrzyć*, *podchodzejść* 'outwit'). Another submeaning of the verbal prefix *nad*- modifies the action of the base verb with the semantic component of "adding something onto the surface". The prototypical meaning of the preposition would imply that the result of adding is

equivalent for nadkleit'.

higher/bigger/longer than the surface or the initial object of the verbal action. It is so in many examples, as in Rus *nadstroit'* 'build onto the top of', *nadstavit'* 'lengthen', *nadvjazat'* 'lengthen, add by knitting', Pol *nadbudować*, *nadmurować* 'to build on top of', Sln *nadzidavati*, Cro *nadgraditi*, but in other cases the action of adding does not result in two levels, or in the augmentation of the initial object. The prefix *nad*- implies only some changes on the surface/initial object of the verbal action, as in Rus *nadkleit'* 'to paste on', *nadrisovat'* 'to write on'. We find here the possibility of overlap of the prefixes *na*- and *nad*-. Prefixed verbs such as those in Russian are not formed with *nad*- in Slovenian, Croatian and Polish. Examples such as *nadkleit'* show the meaning domain in which the prefixes *na*- and *nad*- overlap (or could overlap). So *nalijepiti* is the Croatian

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We have already mentioned the relation of the meanings of the prepositions na and *nad*. The existence of different prepositions in the same contexts in different Slavic languages indicates their closeness at some level. This situation also influences the meanings of the verbal prefixes. It is not predictable which possibility one language will take when two or more exist. In the Polish prefixed verbs nadbiec 'hurry, rush', nadchodzić, nadjechać 'come, arrive' only the relation of closeness in space or in time is expressed, the same relation that partly exists in the expression miasto nad rzeką 'the town on the river'. In Croatian, Slovenian, and Russian we do not find *nad*- as a prefix in the contexts in which only closeness in space or time is expressed. The prototypical meaning of the preposition nad- in those languages did not undergo the same semantic extensions as did the prototypical meaning of the preposition nad in Polish. In view of the examples given above, we may conclude that the prototypical meaning of the preposition nad is better preserved in the Croatian and Slovenian verbal prefixes, while it has a very broad extension in Russian and Polish that goes in the direction of the meaning network of the prefix na-. In a very large number of examples with this prefix in Russian and Polish we can follow the meaning shifts to the other category, to the meaning of the prefix na-. In numerous Polish examples as nadłamać 'broach, begin', nadkroić 'cut (a little bit)', nadmarznąć 'get frozen a little, get frozen on the surface' or in Rus nadlomit' 'break a little/on the surface', nadpilit' 'notch with a saw', nadkusit' 'bite (into)', the prefix indicates that the action does not take place to a full extent but only partially. This is also semantically connected with the beginning of an action. These examples are extended from the spatial meaning of the prefix: the prefix indicates that the action takes place only at the surface of the object. This can be illustrated with the Rus verbs nadlomit', nadkolot' 'cut a little/on the surface, chop (up) a little', nadrezat' 'notch' or Pol nadpalić 'fire on the surface', nadszarpywać 'broach'. This concrete spatial meaning gives rise to contexts in Polish in which the prefix indicates the beginning of an action or the bounded extent of the verbal action.

### 5. Conclusion

Lakoff (1982) has suggested that the extension of a category might be influenced by the existence of neighbouring or contrasting categories. As we have seen, the existence of one preposition does not prevent another from encroaching on its semantic space. We observed this phenomenon in the relation between the prepositions na and u and na and nad. They each share a part of a meaning chain that is historically motivated. The development of the meaning chain is certainly motivated, and in our case diachronically explainable as well (the roots of these languages in OCS), but not predictable. It is certainly not possible to find one prototypical meaning for all parts of the meaning chain that one preposition (or a prefix related to it) forms. But we can definitely state that a few prototypical concepts cover the entire meaning chain, and that many meanings do have a spatial base. The analysis has shown that the prototype meanings of prepositions that undergo this development are shared in the Slavic languages. It implies not only the interrelatedness of the spatial categorizations, but also the interrelatedness of cultural concepts. We can predict the directions in which the prototypical meaning of the preposition or of the prefix can extend, but not which part of the meaning chain will be broadly developed in one language or which part will not undergo a meaning extension at all. However, greater similarities in one and the same language branch are expected.



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