

*Applied Linguistics*  
*Приложна лингвистика*

## THE PREFIX NA- IN BULGARIAN VERBS: A COGNITIVE LINGUISTIC APPROACH

**Svetlana Nedelcheva**

*Konstantin Preslavsky University of Shumen*

**Abstract.** This study analyses the cognitive semantics of the Bulgarian verbal prefix *na-* ‘on, onto’ and aims to reveal its core meaning. Using a comprehensive inventory of corpora examples, the analysis distinguishes a few subgroups of *na-* verbs pointing out how apparently distinct meanings correspond to the central spatial meaning in the semantic network of the spatial particle *na(-)* and how the different meanings of the prefix *na-* relate to each other. The focus is particularly on the relation between spatial and non-spatial meanings, and on the application of conceptual metaphors that contribute to a consistent and motivated meaning network of *na-*.

*Keywords:* Cognitive Linguistics; semantic relations; Bulgarian verbal prefix *na-*

### Introduction

The preverb<sup>1)</sup> *na-* ‘on, onto’ is one of the most frequently used Bulgarian prefixes. It has not been studied in depth in Bulgarian linguistics apart from the short notes concerning its word-formative function. The brief remarks about *na-* compare it with other prefixes that have cognate prepositions. Homonymy between prefixes and prepositions seems apparent since 15 from all the 18 preverbs have an analogous preposition. The correspondence between prefixes and prepositions has been specified by many Bulgarian authors (Andrejchin et al., 1993; Georgiev, 1991). However, by the end of the 19<sup>th</sup> century prepositions and prefixes have not been differentiated in Bulgarian linguistic literature. Prefixed verbs are interpreted as consisting of a verbal root plus a preposition (Karagjulev, 1905; Kalkandjiev, 1936). In the middle of the 20<sup>th</sup> c. Bulgarian linguists (Andrejchin et al., 1957: 130) defined prefixes as written together with another word, while prepositions are differentiated by being written separately from the other words. They, however, ignore the fact that the prefix doesn’t exist on its own and when it is used in that way it is a preposition.

The present paper focuses on the semantic relations between the different meanings of the prefix *na-* in Bulgarian. However, the problem of the relation between verbal prefixes and prepositions from a syntactic and a semantic viewpoints is more

general. It does not only refer to Bulgarian and the Slavic languages but also to English and other Germanic languages. Firstly, I discuss the theoretical framework of Cognitive Linguistics (Talmy, 1988; Langacker, 1987; Langacker, 1991; Lakoff and Johnson, 1999). It gives the conceptual tools to describe the meanings of the preverb *na-*. The next section elaborates on the theoretical framework of the study. Section 3 presents a discussion of the semantic network of *na-*. This study is situated within the framework of Cognitive theory and the meanings of *na-* will be presented in the form of a motivated semantic network generated from cognitive schemas<sup>2)</sup>.

### 1. Theoretical framework

*Na-* prefixes base verbs of many different semantic groups and therefore expresses several distinct seemingly unrelated meanings. *Na-* performs perfectivizing function when it combines with some simplex verbs without changing their lexical meaning (compare the imperfective verb *товаря* ‘load’ and its perfective form *натоваря* ‘to load completely’<sup>3)</sup>), while with other simplex verbs, apart from serving as perfectivizer, it also modifies their lexical meaning (e.g., *гния* ‘rot’ and its perfective *нагния* ‘get a little rotten’). Grammar books differ in the number of separate meanings they provide for *na-*. Moreover, they arrange the meanings of *na-* differently and present no information on the semantic relations between the different meanings. These lists of meanings do not help foreign learners when they try to understand the meaning of prefixes. This study focuses particularly on how the apparently arbitrary meanings of *na-* are semantically motivated and relate to each other, and how they all relate to the central spatial meaning. The same approach is used by Saric (2013) in her analysis of the Croatian prefix *na-*. She pays particular attention to the relation of spatial meanings to those that seem less spatial or abstract, and to metaphorical transformations and abstractions that contribute to a coherent meaning network of *na-*. Foreign learners can definitely take advantage from such an approach to spatial particles (see Tyler, 2012; Janda et al., 2013).

Other Slavic linguists apply different approaches in their cognitive linguistic studies (e.g. Belaj, 2008; Dickey, 2013; Sokolova & Endresen, 2017). All of these distinct approaches, including the schematic meaning approach, the prototypical approach and the semantic network approach, are suitable for analyzing spatial particles and lead to compatible results. The network approach chosen in this analysis is applied to a corpus of real-language data, and aims to serve the purposes of teaching and learning spatial language. The spatial meaning of the prefix *na-* relates to the cognate preposition *na* ‘on, onto; at, to’, the meaning network of which is discussed in Nedelcheva (2010). The preposition *na* expresses relations of both horizontal and vertical support (e.g., *книгата на масата* ‘the book on the table’; *картината на стената* ‘the picture on the wall’), as well as cases of attachment

and adhesion (e.g., *етикетът на бутилката* 'the tag on the bottle')<sup>4)</sup>. In English *na* corresponds to *on* and *at* in its most common usages. It is interpreted as conveying a spatial relation between a trajector (a focal element) and a landmark (a reference object)<sup>5)</sup>. 'Contact with surface' is a core meaning for the semantics of the prefix *na-* equivalent to the preposition *na* realized in static and motion constructions (see (1a–b)), and its goal meaning, displayed by (1c), in which *na* introduces a goal to which the verbal action is directed. In its goal meaning *na* may combine with a verb denoting concrete or abstract movement.

- Ex. 1. (a) *Картината на екрана се смени.* 'The image on the screen changed.'<sup>6)</sup>  
(b) *Младият офицер се метна на гърба на пирата и го повали.* 'The young officer leapt on the pirate's back and knocked him down.'  
(c) *Спомнях си как за първи път бях отишла на море.* 'I remembered the first time I went to the sea.'

In static constructions such as (1a), the preposition *na* precedes a locative expression, thus showing the position of the trajector with respect to the landmark. In dynamic contexts such as (1b–c), *na* introduces the goal of the trajector's motion, namely the landmark. In all of the above cases, the landmark is a surface or is conceptualized as a surface. In spatial contruals (1a–b) the preposition *na* relates either to the shape of the landmark, or to the functional relation of a trajector and a landmark. In (1c), *na* encodes a concrete spatial goal of the motion verb. However, the goal preceded by *na* may also be abstract as in: *Успокоен откъм Маджарско, султанът се нахвърли на Херцеговина; година по-късно на Полша.* 'Undisturbed by Hungary, the sultan went down on Herzegovina; a year later – on Poland.' In this particular context the landmark, *Herzegovina*, is used in an abstract sense to stand metonymically both for the land associated with that country and for the people that inhabit it.

The analysis of this study is based on a corpus of 590 *na*-verbs. These verbs are mainly extracted from Pashov's (1966) exhaustive study on Bulgarian verbs. However, of all 894 *na*-verbs he has suggested a considerable part was abridged after a manual check in two dictionaries: Eurodict<sup>7)</sup> (an online multilingual dictionary containing 60,000 Bulgarian words) and Rečnik na bălgarskija ezik<sup>8)</sup> (Bulgarian Language Dictionary). Some were removed as obsolete or colloquial (e.g., *наратайствам се* 'be a farm-hand' and *напрекосам* 'cross')<sup>9)</sup>, and others were added after I consulted their frequencies with the Bulgarian National Corpus<sup>10)</sup> (BulNC). Verbs of multiple prefixation remain outside the scope of this study and are not included in the studied database.

The analysis in this paper is grounded in the postulates of cognitive linguistics (e.g., Tyler and Evans, 2003; Janda et al., 2013; Saric, 2013; Saric & Nedelcheva, 2015) and develops a semantic network of the verbal prefix *na-* in Bulgarian. A special focus is put on the relation between spatial and non-spatial meanings, and the metaphorical interpretations associated with the extended meanings of *na-*.

## 2. The spatial meaning of *na-*

I start the analysis with a group of *na*-verbs that denote a change of the landmark's surface as it is also the meaning that is closest to the central meaning of the preposition *na*: 'contact-with-a-surface'.

### 2.1. Change of surface

The change of the surface may be caused purposefully by an agent (e.g., *на-дунча* 'make holes') or in some rare cases involuntarily (e.g., *напраша* 'make dusty') (see 3a). But it may also be caused by a trajector which is a natural force: *нацепя* 'split, chop', *начуля* 'break into pieces, crush', *нашибам* 'lash, whip' (see 3b):

Ex. 2. (a) ...мантата се стовари с цялата си двутонна тежест отгоре ѝ, *начули* мачти и надстройки, *нагъна* перила и бордове, смаза компаса и руля 'the devil-fish dropped with its entire two-ton weight on top of it, broke masts and constructions, folded handrails and boards, crushed the compass and rudder.'

(b) Вятърът *начули* клоните на дървото. 'The wind broke the branches of the tree.'

The verbs in this group are primarily agentive directed to a surface which in effect changes its appearance, e.g. *бода-набода* 'prick all over'; *браздя-набраздя* 'harrow, line'; *рося-нарося* 'bedew', etc. It is logical that all the simplex verbs originate from a noun, a fact that is coherent with the purpose of the activity – changing an object's surface.

A special case of surface change is observed when the trajector and the landmark coincide. Then a person's facial movements change the appearance on their faces, as in *намръщи чело* 'wrinkle one's forehead'). All other verbs that refer to physiological processes and expressing emotions also belong to this group. They can be conceptualized as activities causing changes to the face of the agent perceiving it as a surface: *насълзя* 'bring tears to s.o. eyes', *насополивя* 'snivel', *наслюнча* 'wet with saliva', *набърча* 'frown', *нацуля*, *начумеря се* 'pout, frown'. The whole-part relationship of the trajector and landmark presuppose the reflexive nature of the verbs (3c):

Ex. 3. (c) Земята се *нагъна* и *разкриви*. 'The earth folded and curved.'

(d) Тя се *набърчка*, *нагъна* се и – хоп! – отлетя във въздуха като горяща, черна пеперуда. 'She wrinkled, folded and – up! – flew into the air like a burning, black butterfly.'

When solid surfaces are disturbed, it is either the upper part of the surface that undergoes the change, as in (3c), or the whole surface is affected because the object itself is conceptualized as flat (3d). In both cases the landmark is interpreted as two-dimensional, in the former the outer part of the object is the focus, in the latter the object is considered a surface.

## 2.2. Change of posture

Apart from change-of-surface verbs we can further recognize change-of-posture verbs. They are also considered by Saric (2013) in her analysis of Croatian *na*-verbs. Similarly to Croatian, Bulgarian has *na*-verbs encoding movement of a body, which leads to a different body position: *наклякам* 'squat, kneel down', *насядам* 'sit down' and *налягам* 'lie down':

Ех. 4. (a) Просяци преплуваха Дунава и наклякаха с протегната ръка по софийските улици. 'Beggars swam across the Danube and knelt down with an outstretched hand on the streets of Sofia.'

(b) Всички *насядаха* в кръг по средата на стаята. 'They all sat in a circle in the middle of the room.'

(c) Децата *налягаха* и се притиснаха до стената. 'The children lay down and pressed against the wall.'

Unlike in Croatian, in Bulgarian these verbs can only be used with multiple subjects to express not only a change in posture but also the trajectors partly covering the surface, which serves as a landmark in the spatial configuration.

Another difference between the verbs in Bulgarian (Bg) and Croatian (Cro.) belonging to the group 'change-of-posture' is "the desubstantival verb *nalaktiti se* 'lean one's elbows on a surface', encoding contact and support" (Saric, 2013: 55). The author interprets this verb as a "lexicalization of a prepositional phrase (*na lakat/laktove* 'onto the elbow(s)') (ibid.). In Bulgarian, however, the prepositional phrase is the only option:

Ех. 4. (d) *Подпря се на лакът* да се изправи, и завивката се заплете в краката ѝ. 'She leaned on her elbow to stand up and the blanket tangled at her feet.'

Contact and support as semantic features of the body-movement verbs correspond in Bulgarian and Croatian with some other verbs, for instance, *наклоня се* (Bg) – *nasloniti se* (Cro.) 'lean oneself on'. When used without the reflexive *se*, the verb encodes caused motion, e.g., *Наклоних* таблата с кореспонденцията си към нея 'I tilted the tray with the letters to her'.

Both in Bulgarian and Croatian some of the verbs in this group exhibit both concrete and metaphorical meanings. In some cases the metaphorical use has become more frequent and salient (see 5c-d):

Ех. 5. (a) Предприех големи работи: съградих си къщи, *насадих* си лозя. 'I have done great things: I built houses, planted vineyards.'

(b) Току-що *насадих* жълтата кокошка с десет яйца. 'I just set the yellow hen with ten eggs.'

(c) Станах, излязох и се *насадих* право на белята. 'I got up, went out and ran right into trouble.'

(d) *Насадох* се на пачи яйца! 'I cooked my own goose!'

In the first two of the above examples (5a-b) the verb *насадя* ‘plant, set’ is used in its concrete meaning, in which the trajector changes the posture ((5a) from horizontal into vertical for the vineyards) or the position of the landmark ((5b) from a free position to a set position for the eggs). In the other two examples the spatial meaning of *насадя* is extended into the metaphorical domain. The spatial core of the verb, ‘set’, is preserved but the reflexive use, ‘setting oneself’, combines with a negative connotation to give rise to the abstract sense ‘to get into trouble’. The last example (5d) is conceived as a set phrase with idiomatisized meaning. The examples in BulNC show that the extended meaning of this verb is more frequently used than the spatial one, since only 2% of the sentences refer to concrete landmarks.

### 3. Reaching a goal

The verbs in this group are the most numerous, about 200<sup>11)</sup>. Some of them I consider as border-line cases because they can be motivated both by the ‘change of surface’ and ‘reaching a goal’ semantic content, e.g., *надълбая* ‘dig out, scoop’, *надялам* ‘carve, cut’, *нажъна* ‘harvest, reap’, *назрея* ‘ripen, mature’. On the one hand, the choice of the prefix clearly relates to the SURFACE image schema, the one that is central to the preposition *na* and the prefix *na-* in spatial contexts. On the other hand, the surface-contact conceptual structure may not be in focus but may be related by analogy to an image-schematic structure that is metaphorically extended to reaching a goal, e.g., *наклоня* ‘bend, incline’, *накривя* ‘cock, tilt’, *наместя* ‘settle, put into place’, etc. The activities lead to apparent results whose semantic content conceals the spatial meaning of *na-* as the Overlap hypothesis claims<sup>12)</sup>. Or the ‘surface’ meaning of *na-* and the metaphorically extended ‘goal’ meaning of the verb can be seen as semantically redundant. In Hampe’s terminology (2002) applied to English spatial particles this is “conceptual overlap”.

The following examples seem to be motivated by more than one image-schema. In e.g., *строя* ‘build’ – *настроя* ‘build all over’ both the SURFACE image schema and ACCUMULATION image schema (Section 4) are operative. *Нагореция* ‘heat up’, *натежа* ‘grow heavier’, *надуя се* ‘swell up’ designate both ACQUIRING A PROPERTY (Section 4) and REACHING A GOAL in its very abstract sense. These blended image schemas prove the correlations between the different meanings of *na-* and justify building a semantic network (see Section 6). *Na-* gives the impression to be empty of semantic content and to function as a “pure perfectivizer” because the prefixed verbs denote the completion of processes expressed by the imperfective simplex verbs they originate from. Still, *na-* has its core spatial semantics, even though it becomes ‘invisible’ due to the overlap of the semantic content of the base verb and the prefix (e.g., *набележа* ‘map out, outline’ is a lexicalization of the trajector-landmark configuration *бележа на хартия* ‘put notes on paper’). The spatial meaning of *na-* is preserved when it combines with verbs denoting REACHING A GOAL then the Overlap Hypothesis has good grounds.

#### 4. Property verbs

This section shows various *na*-verbs in Bulgarian that represent different aspects of obtaining a quality, how the different types are interrelated, and how they relate to the spatial meaning of *na*-.

##### 4.1. Acquiring a property

This is a group that encompasses a numbers of subtypes. What motivates their grouping together is that the simplex verbs in most of the cases originate from an adjective or a noun, i.e. expresses a quality transformed into an activity. The fact that the base verbs derive from adjectives or nouns confirms their semantic correlation with the quality they express, e.g., *нажалея* ‘make sad’ ← *жалея* ‘be sad’ ← *жал* ‘grief’; *насиня* ‘turn blue’ ← *синя* ‘look blue’ ← *син* ‘blue’; *натопля* ‘warm up’ ← *топля* ‘warm up’ ← *топъл* ‘warm’. The group can be further subdivided into ‘verbs denoting change of emotions’ e.g., *наскърбя* ‘make sad’, *намръщя се* ‘frown’, ‘verbs denoting change of colour’, e.g., *начерня* ‘paint black’, *насиня* ‘paint blue, beat black and blue’, ‘verbs denoting change of shape and/or size’, e.g., *наедрея* ‘grow bigger’, *напълнея* ‘put on weight’, etc. Further subdivisions may be found within each of the smaller groups differentiating between literal and metaphorical meanings:

- начерня*    ↗ ‘paint black’ → to cover the surface of an object with black paint  
             ↘ ‘blacken’ → to defame, spoil s.o.’s reputation
- насиня*    ↗ ‘paint blue’ → to cover the surface of an object with blue paint  
             ↘ ‘beat black and blue’ → bruised, physically or emotionally

The semantic motivation of the metaphorical meanings is clearly related to the spatial meaning of the two verbs. Blackening a person’s reputation leads to other people experiencing negative feelings towards him/her, which makes that person seem bad, unfavourable and, therefore, black. Beating someone black and blue directly relates to the colours that appear on a person’s skin after a strong hit or a severe fight. However, the difference between the English and Bulgarian conceptualization is that the English idiom focuses on two colours, black and blue, whereas the Bulgarian verb refers only to blue.

##### 4.2. Accumulation of a property

*Na*- combines with a number of action verbs<sup>13)</sup> in order to express its accumulative meaning. In some cases it strengthens the intensity of the activity and in others it widens its scale. An example of the first group is *наблъскам* ‘crowd, jam, cram’. Things are not just pushed by the agent, as the base verb denotes, but the prefixed verb means that they are enclosed in a small container compared to their size, therefore, the intensity of the verb increases due to the prefix. Similar examples are *нагреба* ‘scoop up, ladle up’ and *накапя* ‘spot/stain with drops’. Both of them indicate dealing with liquids, whose quantity increases in the prefixed verb when contrasted with the base verb, *нагреба* suggests that a great amount of liquid

is scooped up, *накапя* indicates that a lot of drops have fallen and they are visible as spots on the surface. With *na*-verbs that belong to the second group the agent, who is also the trajector, performs the activity on a lot of landmarks, for instance (see 6a, b):

Ех. 6. (a) Алхузур чевръсто *набрули* много орехи, а Колка ги събираше в пазвата си. ‘Alhazur knocked down a lot of walnuts, and Kolka gathered them under his shirt.’

(b) Скоро дойде един слуга и *накърши* елата на парчета – от нея излезе цял сноп съчки. ‘Presently, a servant came and cut the fir-tree into pieces – it turned into a whole bunch of twigs.’

Similarly to other Slavic languages (see Filip, 2000; Filip, 2005 for Czech and Russian *na*-; Saric, 2013 for Croatian *na*-), the pattern ‘*na*-verb + reflexive *se*’ (when *na*- adds the meaning of ACCUMULATION) is widely used, e.g., *натряскам се* has acquired the metaphorical sense ‘get drunk’ only in this particular structure (compare *тряскам* ‘crash, bang’). In *намръзна се* ‘get chilled to the bone’ the combination of *na*- and reflexive *se* designate an escalation of the quality as opposed to the simplex verb *мръзна* ‘freeze, feel cold’.

### 5. Small quantity vs. complete saturation

In Bulgarian I have also found groups of verbs with not only different but sometimes even adverse meanings, analogous to those Saric has attested in Croatian (2013: 62-63): “some *na*-verbs relate to a small quantity (e.g., *nagristi*, ‘bite a little’), and some to a large quantity (e.g., *nagomilati*, ‘pile up’). There are also verbs that in some contexts seem to refer to a quantity that is a kind of norm, meaning ‘enough’ (*najesti se*, ‘eat enough’)”.

Bulgarian *na*-verbs indicating a small quantity express a characteristic that can be perceived by the senses, e.g., *нагорча* ‘have a slightly bitter taste’, *накиселея* ‘taste a bit sour’, *накуцам* ‘limp slightly’. To this group I also assign *na*-verbs defined as “Verbs denoting the beginning of the activity of the base verb or that the activity is performed on an object for the first time” (Tilkov et al., 1983: 219). I, however, do not consider them as ingressive verbs but as verbs denoting ‘small quantity’, e.g., *нагриза* ‘nibble, gnaw at’, *надъвча* ‘chew a bit’, or performing an activity for a short period of time, e.g., *навестя* ‘visit, call up on’, *намина* ‘drop in/by’, *наобиколя* ‘visit, call on’. Saric (2013: 63) cites in this group the following Croatian verbs that have their counterparts in the Bulgarian *na*- database:

Bg *надигам* – Cro *nadignuti* ‘raise a little’,

Bg *нагоря* – Cro *nagorjeti* ‘get a little burned’,

Bg *напукам* – Cro *napuknuti* ‘crack’.

With *нагоря* and *напукам* *na*- modifies the meanings of the base verbs so that they indicate changes taking place on the surface only, which can be viewed as an activity carried out to a small degree. *Надигам* alludes to the prepositional phrase

*дигам на* ‘raise on(to)’, which is lexicalized and is associated with the GOAL image schema.

‘Saturation’ verbs denote an activity in which the trajector has had as much as he/she needed, e.g., *набъбря се* ‘talk o.’s fill’, *наброя се* ‘roam till o.’s satisfied’, *надремя се* ‘have dozed enough’. The number of verbs in this group is considerable (147 attested in the database) and all of them follow the pattern ‘*na-verb se*’. As have been mentioned earlier the prefix and the reflexive particle work together to change the meaning of the base verb. In this verb group they contribute to expressing a ‘sufficient quantity’. Similarly to what has been pointed out for Croatian *na-*verbs (ibid.) we need context in order to distinguish between saturation and large quantity. For instance, in Bulgarian the two distinct meanings of *напия се* ‘drink enough’ (7a) and ‘get drunk’ (7b) can only be realized in a sentence:

Ех. 7. (a) Първо обаче спряха да отдъхнат, и *се напия* хубаво с вода. ‘First, they stopped to rest and drank a lot of water.’

(b) *Напия се* много бързо, тъй като бяха все още с празни стомаси. ‘They got drunk very quickly because their stomachs were still empty’.

The kind of drink is specified in 7(a), which excludes the possibility to apply the meaning ‘get drunk’. Although no alcoholic drink is mentioned in 7(b), the meaning ‘get drunk’ is understood due to reader’s background knowledge about the influence of alcohol on the human body especially without eating.

Contrary to the conceptualization in Croatian, in Bulgarian I do not differentiate between the meanings of a *na-*verb that denote ‘having enough’ of a particular activity and doing it ‘till o.’s satisfied’ because I regard them as synonymous, e.g. *живея* ‘live’ – *наживея се* ‘live long enough, live o.’s fill’. Examples such as *говоря* ‘speak’ – *наговоря (се)* ‘tell a lot of things, talk o.’s fill’; *играя* ‘play’ – *наиграя се* ‘play to o.’s heart content’; *гледам* ‘watch’ – *нагледам се* ‘see o.’s fill’ reveal that the construction ‘*na-verb se*’ adds the meaning of saturation to the base verb. This saturation corresponds exactly to what the trajector considers ‘enough’ to satisfy his/her needs. *Напълня (се)* ‘fill (oneself) up/out’ visualizes a somewhat different image schema from the other verbs as it is identified with a container as a landmark. The container has a particular volume that serves as a limit for the activity. No such physical limit is evident with the other verbs where the end of the saturation process for the trajector marks the abstract limit of the activity. With *напълня (се)* the “accumulative” meaning comes from the base verb, which implies vertical ascent. *Na-* contributes to the meaning ‘accumulating on a surface’ and, thus, its meaning coincides with the meaning of the base verb. The result is an overlap between the meanings of the prefix and the base form, as it is suggested by the Overlap hypothesis, hence it gives the false impression of a semantically empty *na-*.

As a subtype of the ‘saturation’ group I examine a group of verbal situations that are marked in the dictionary (see Eurodict) as requiring a continuous period of time, e.g., *нагладувам се* ‘go/be hungry for a long time’, *нагостувам се* ‘visit for a

long time', *надомакинствам се* 'do housework for a long time', *наклеча се* 'squat for a long time', *наумувам се* 'speculate for a long time'. Defining 'a long time' is a difficult task, the period will diverge from verb to verb. Upon closer examination the meaning of some base verbs already implies a considerable time period because they are state verbs<sup>14</sup>), e.g., *умувам* 'spaculate, theorize'. In the other cases it's the construction '*na-verb se*' that determines the emergence of the 'accumulative' meaning, which is in its turn contingent on time. However, the length of the time period cannot be predicted or measured if the verb is out of context.

The 'saturation' verbs may carry positive or negative connotations, e.g., doing something 'till one's satisfied' or 'fed up' with the activity, but these implications are already present in the semantic component of the simplex verb, *na-* and the reflexive *se* simply boost the 'accumulative' meaning that ultimately leads to 'complete saturation'. The focus is mostly on the agent and his/her condition as the verb provides information about what happens to the agent (see 8a). Due to the verb type, the focus may also be on an experiencer or patient that involuntarily takes part in the activity (see 8b, c):

- Ex. 8. (a) Слънцето ми *напече* главата и очите ми горят. 'The sun heated my head and I feel my eyes burning.'  
 (b) Още е пролет, а търновският камък *се напече* като през юли... 'It is still spring, and the stones in Turnovo are as hot as in July.'  
 (c) Гърбът ми *се напече* и ме заболя. 'My back got sunburnt and started hurting me.'

The first example (8a), where the *na-*verb is used without the reflexive *se*, presents the agent as performing the activity in its highest degree. The other two examples (8b-c) exhibit reflexive situations, in which the subject is a patient and an experiencer respectively. Hence, the verbal phrase with no reflexive particle determines the involvement of the subject as a doer of the activity, whereas the '*na-verb se*' construction brings to the forth those that are affected by the activity, the patients if the subject is inanimate and the experiencers if the subject is animate or relates metonymically to a living creature (e.g., the back of a person is related to the person through a PART-WHOLE metonymical relation, see 8c).

On the whole, the opposition between *na-*verbs denoting 'small quantity' and 'complete saturation' is motivated by different image schemas. The group of 'small quantity' verbs relates to the SURFACE image schema, while the 'complete saturation', which is a result of gradual accumulation of large quantity, is associated the VERTICAL image schema and Lakoff and Johnson's (1980) conceptual metaphor MORE IS UP.

## 6. The semantic network of *na-* and its interrelated meaning

I claim that the meanings of all the verb groups discussed above are correlated and each one is semantically linked to the central spatial meaning of *na-* 'contact-with-a-surface'; that is also the core sense of the cognate preposition *na*. Figure 1

illustrates the semantic network of *na*-verbs and shows how the various meanings of *na*-verbs relate to each other and to the prototype – the spatial meaning of this prefix. The prototype is marked with a bold line, the dark nodes connect the prototype to the distinct meanings and the light nodes link the subgroups to each other.

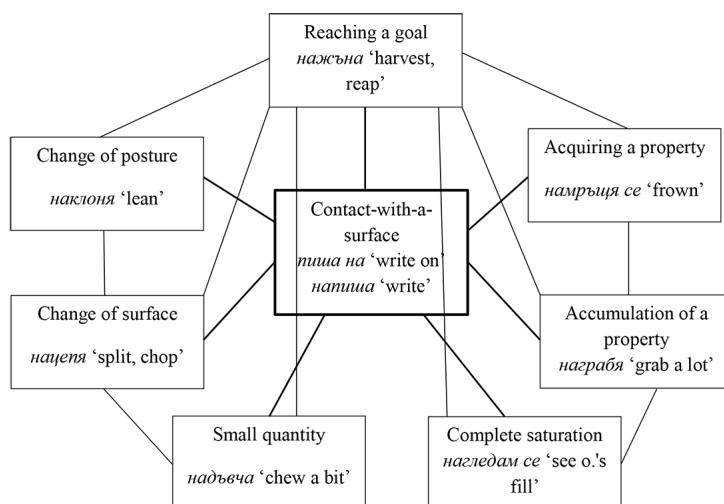


Figure 1. The semantic network of *na*-verbs

The analysis of the corpus reveals fuzzy boundaries between the different semantic subgroups. Many verbs seem to belong to more than one category as they are motivated by more than one image schema, for instance ‘reaching a goal’ can be interpreted as related to all the subgroups if the GOAL is conceptualized as a metaphorical target, which corresponds to an accomplished result, e.g., *нарежда* ‘cut up’ denotes both a visible change of the landmark’s surface and the landmark being cut as a result. ‘Change of posture’ and ‘change of surface’ are related by physical contiguity, e.g., *набръчкам* ‘wrinkle, crease’ may refer to ‘change of surface’ if we consider human skin, while with flat objects (e.g., tablecloths, clothes) we may regard them as changes in the position of the entire landmark.

‘Acquiring a property’ is directly related to the ‘surface’ meaning and can be construed as a ‘change of surface’ because when a human being feels an emotion that emotion is visible on the person’s face, e.g., *намръщя се* ‘frown’, *натъжа се* ‘sadden’. The ‘accumulative’ meaning presupposes the accumulation of a quality (e.g., *намръзна се* ‘get chilled to the bone’) or quantity (e.g., *налапам се* ‘gorge/stuff o.s.’) on a surface. Experiencing a large quantity of an activity leads to ‘complete saturation’, e.g., *наговоря* ‘tell a lot of things’ can be assigned to ‘accumulation’ and *наговоря (се)* ‘talk o.’s fill’ to ‘complete saturation’. One

verb with meanings belonging to different categories and the semantic overlap between the separate subgroups support the hypothesis that the network is the most suitable way to organize the senses of all *na*-verbs. The SURFACE image schema governs all the distinct meanings in the network and additionally their metaphorical extensions. For instance, I regard the subgroup ‘small quantity’ as a metaphorical extension of the SURFACE image schema. An activity that takes place on a surface is metaphorically extended to performing a particular stage of the activity, either its initial point, e.g., *напия* ‘have the first sip’ or a small part of it, e.g., *нахапая* ‘have a bite’. In these examples the activity affects the surface. The core spatial meaning is extended to doing a little of something. However, these verbs can also be found with ‘accumulative’ meanings, e.g., *напия се* ‘get drunk’, *нахапая* ‘bite all over’. Additionally, I commit *напия се* ‘drink o.’s fill’ to ‘complete saturation’.

The most problematic group is the one in which *na*- is traditionally defined as a ‘pure perfectivizer’. This analysis tries to disprove this definition. I agree that *na*- suggests the completion of the activity and that the activity is viewed in its entirety (exactly the function of the perfective aspect). The fact that *na*- turns imperfective verbs into perfective is indisputable as it follows the grammatical rules of Bulgarian and applies to all semantic subgroups. However, with some verbs it is difficult to detect an extra meaning apart from that of the base verb, e.g., *наготвя* ‘cook’, *нагъна* ‘fold up’, *накъдря* ‘curl, frizzle’, *напиша* ‘write down’. The SURFACE image schema is sufficiently noticeable with most of the base verbs in this group. It is also the image schema that is applicable to the prefix *na*-, hence the impression of its semantic emptiness. In fact, its meaning is blended with the meaning of the simplex verb, strengthening it.

Still, there are cases where the spatial profile is less apparent, e.g. *наброя* ‘count off, number’, *намисля* ‘think of’, *науча* ‘learn, find out’. Here the prefix adds the implication that the goal of the activity has been reached. In terms of Lakoff’s conceptual metaphor theory (1980) goal-attainment can be understood as motivated in the spatial domain by movement to a particular target, which further on may be metaphorically linked to an activity accomplishing a result in its final state. Even then *na*- preserves its initial correlation with the SURFACE image schema, which confirms the interrelatedness of all the meanings in the semantic network of *na*-verbs. *Na*- has a meaning of its own, despite of the spatial meaning of the simplex verb. Both the prefix and the verb having the same meaning determine their semantic blending, which upholds the Conceptual Overlap Hypothesis.

## NOTES

1. The notion ‘preverb’ “refers to morphemes that appear in front of a verb, and which form a close semantic unit with that verb. In many cases, the morpheme that functions as a preverb can also function without a preverbal context, often as an adverb or an adposition. Most linguists use the notion ‘preverb’ as a cover

- term for preverbal words and preverbal prefixes” (Booij and Van Marle 2003: 1). In this article the term ‘preverb’ is used interchangeably with ‘prefix’ as we study particularly verbs prefixed with na-.
2. Schemas can be divided into two types: static and evolving schemas. Static schemas represent a static situation. Evolving schemas constitute the conceptual category of modifications. The kinematic relaters link two situations. The primitives move and change are kinematic relaters. The primitive move indicates the passage of the entity from a place to another and change a change of property of an entity, a motion or a complete situation.
  3. The meaning of the prefixed verb is translated without taking into consideration its morphological structure.
  4. Bulgarian grammars and dictionaries (Konstantinova 1982) give generally two or three meanings of the preposition na: directed movement towards a horizontal or vertical surface or a position on such a surface.
  5. We follow Langacker (2008) and use his terms “trajector” and “landmark” or correspondingly “figure” and “ground”. The position or movement of the trajector is defined in terms of its relation to the landmark.
  6. The examples in this article are excerpted from the Bulgarian National Corpus or are obtained through Google searches.
  7. Available at: <http://www.eurodict.com/>.
  8. Available at: <http://ibl.bas.bg/rbe/>. Rečnik na bălgarskija ezik is a multivolume dictionary of Bulgarian. It has been chosen for reference as it is the largest and most representative thesaurus of Blg. It contains a total of 112,686 lemmas in the fourteen volumes that have been published so far.
  9. Bound bases are included in the corpus. When combined with na-, they are counted as prefixed verbs; for example, \*сила → насила ‘force, compel’ and \*качуля → накачуля ‘pile together’.
  10. Available at: <http://search.dcl.bas.bg/>.
  11. When discussing the group of goal-attainment verbs in Croatian, Saric (2013: 60-61) distinguishes two subtypes of verb groups. Subtype (A) relates to processes that yield results visible on surfaces, while in subtype (B) there are actions that affect surfaces. In our analysis these two subtypes belong to the change-of-surface verb group.
  12. The Overlap Hypothesis argues that there are no prefixes empty of semantic content. The illusion of emptiness is due to the semantic overlap of a verb’s meaning and the meaning of its prefix (cf. Janda et al. 2013).
  13. We use ‘action verbs’ or ‘actions’ here from the perspective of H. Jackson’s terminology (1990: 11-12): “Actions do not just happen. Actions are usually performed by human, or at least animate, agents or instigators. They are normally the result of the exercise of a will or intention on the part of the agent. Actions are done by somebody”.

14. See H. Jackson's (1990) and his use of the term.

## REFERENCES

- Andreychin et al. (Andreychin, L., Ivanov, M. & Popov, K.) (1957). *Savremen Balgarski ezik, part II*. Sofia: Narodna prosveta. [in Bulgarian].
- Andreychin et al. (1993). *Gramatika na suvremennia Balgarski ezik, Morfologia, vol. 2*. Sofia: BAN. [in Bulgarian].
- Belaj, B0 (2008). *Jezik, prostor i konceptualizacija: Shematična značenja hrvatskih glagolskih prefiksa*. Osijek: Sveučilište Josipa Jurja Strossmayera.
- Booij, G., Van Marle, J. (Eds.) (2003). *Yearbook of Morphology*. Kluwer, 1 – 11.
- Dickey, S. M. (2013). Orphan Prefixes and the Grammaticalization of Aspect in South Slavic. *Jezikoslovlje*, No 13(1), p. 71 – 105.
- Georgiev, S. (1991). *Balgarska morfologia*. Veliko tarnovo, Abagar. [in Bulgarian].
- Hampe, B. (2002). *Superlative verbs: A corpus-based study of semantic redundancy in English verb-particle constructions*. Tübingen: Gunter Narr Verlag.
- Jackson, H. (1990). *Grammar and Meaning: A semantic approach to English grammar*. London: Longman.
- Janda, L. A., et al. (2013). *Why Russian Aspectual Prefixes Aren't Empty. Prefixes as Verb Classifiers*. Bloomington, IN: Slavica Publishers.
- Janda, L. A., Nessel, T. (2010). Taking apart Russian raz-. *Slavic and East European Journal*, No 54.3, p. 476 – 501.
- Kalkandzhiev, P. (1936). *Kratka Balgarska gramatika*. Plovdiv. [in Bulgarian].
- Karagyulev, K. (1905). *Rakovodstvo po Balgarski pravopis. Part I*. Plovdiv. [in Bulgarian].
- Konstantinova, V. (1982). *Predlozite v Balgarskata gramatichna literatura*. Sofia: BAN. [in Bulgarian].
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Lakoff, G. & Johnson, M. (1999). *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*. New York: Basic Books.
- Langacker, R. W. (2008). *Cognitive grammar: A basic introduction*. New York: Oxford University Press.
- Nedelcheva, S. (2010). Cognitive Semantic Relations of the Prepositions V/NA and the Prefixes V-/Na- in Bulgarian. *Language, Cognition, Communication*. Shumen: Konstantin Preslavsky University Press. p. 99 – 110.
- Pashov, P. (1966). *Balgarskiat glagol*. Sofia: Nauka i izkustvo. [in Bulgarian].

- Saric, L. & Nedelcheva, S. (2015). The verbal prefix o(b)- in Croatian and Bulgarian: The semantic network and challenges of a corpus-based study. *Suvremena lingvistika*, 149–179.
- Sokolova, S. & Endresen, A. (2017). The Return of the Prefix ZA- or What Determines the Prototype. *Slavica Publishers*, p. 239 – 256. DOI: 978-0-89357-478-9.
- Talmy, L. (1988). The relation to Grammar in Cognition. In: Rudzka-Ostyn, Brygida (ed.). *Topics in Cognitive Linguistics*. Amsterdam: John Benjamins. p. 165 – 205.
- Tilkov, D., Stoyanov, S. & Popov, K. (1983). *Gramatika na savremennia balgarski knijoven ezik* Vol. 2. Sofia: BAN. [in Bulgarian].
- Tyler, A., Evans, V. (2003). *The Semantics of English Prepositions Spatial Scenes, Embodied Meaning and Cognition*. Cambridge: CUP.
- Zaliznjak, A. A. & Shmelev A. D. (2000). *Vvedenije v russkuju aspektologiju*. Moscow: Jazyki russkoj kultury. [in Russian].

## **БЪЛГАРСКИТЕ ГЛАГОЛИ С ПРЕФИКС НА-: КОГНИТИВЕН ПОДХОД**

**Резюме.** Това изследване анализира семантиката на българския глаголен префикс *на-* от когнитивна гледна точка и има за цел да разкрие основното му значение. С помощта на изчерпателен корпус от примери в анализа се разграничават няколко подгрупи от *на-*глаголи, които показват как очевидно различни значения се свързват с основното пространствено значение в семантична мрежа. Обръща се особено внимание на връзката между пространствени и непространствени значения и на влиянието на концептуалните метафори за изграждането на системна, мотивирана мрежа от значения на *на-*. Корпусът от *на-*глаголи се използва в анализа, за да се изследват две хипотези, популярни в лингвистиката на славянските езици: хипотезата за празен префикс и хипотезата за концептуално припокриване.

**Ключови думи:** когнитивна лингвистика; семантични отношения; български глаголен префикс *на-*

✉ **Dr. Svetlana Nedelcheva, Assoc. Prof.**

ORCID iD: 0000-0003-1614-8758

English Studies, Faculty of Humanities

Konstantin Preslavsky University of Shumen

9700 Shumen, Bulgaria

E-mail: s.nedelcheva@shu.bg