THE SEMANTIC MAP OF INTRANSITIVE PROPERTY PREDICATION IN BULGARIAN AND RUSSIAN

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This paper explores the place of some deadjectival verbs on the semantic map of property predication in Slavic languages following Prototype Theory, which is widely used in Cognitive Linguistics, and more specifically Croft's Radical Construction Grammar. I propose that intransitive property predicates belong to the category of unmarked verbs but as peripheral members of the category.

Key words: deadjectival verbs, intransitive property predicates, Prototype Theory, Radical Construction Grammar

In Russian, Bulgarian and other Slavic languages intransitive property predication is represented by the following constructions:

a) the copula *be* + adjective: Russian: *byt'* + adjective; Bulgarian *sam/bada* + adjective

b) the pseudo-copula 'become, turn or grow' + adjective: Russian *stanovit'sja / stat'*

'become', Bulgarian *stavam, stana.*

c) deadjectival verbs derived primarily with the *-e*-suffix with the meaning of 'appear, stand out as, act in a particular way associated with the adjective', or 'acquire the property', for example, Russian and Bulgarian colour verbs *belet'(sja), beleja (se)* 'be seen as white, become white' s*inet', sineja* 'be seen as blue, become blue'; *pustet', pusteja* 'become/be seen as empty, uninhabited'. There are a large number of verbs especially in Russian which convert adjectival roots to verbs using the *-i*-suffix, e.g. *glupit', hitrit',* etc. with the meaning of 'act in a particular way associated with the adjective'.

This paper explores the place of the deadjectival verbs on the semantic map of property predication in two specific languages, following Prototype Theory widely used in Cognitive Linguistics and more specifically Croft's Radical Construction Grammar (2001). I propose that

intransitive property predicates[1] of the type mentioned above in c) belong to the category of unmarked verbs but as peripheral members of the category, closer to the neighbouring category of the predicate adjective constructions in a) and b). In other words, this article focuses only on a very small conceptual area in the semantic map of intransitive property predication. Also, it should be pointed out that markedness here means typological markedness and differs from the Prague School theory. Typological markedness is a universal property of a conceptual category, not a language-particular grammatical category. When it is claimed that action predication is typologically unmarked, the reference is towards the conceptual category of action predication (or verb) as it is encoded in the world's languages, not the grammatical category labelled verb in English, Bulgarian or any other particular language. However, when data from particular languages are analysed and the analysis fits the universal typological map, this provides evidence for the validity of the theory of typological universals. A final preliminary remark should refer to the understanding of the term *category* in Cognitive Linguistics as a concept or conceptualisation.

Croft's Radical Construction Theory

Croft (1991, 2001) argues for the essentially semantic basis of syntactic categories such as parts of speech in terms of the correlation between semantic classes and propositional act functions instantiated in various constructions. Parts of speech are language universals found in conceptual space, i.e. they are semantic by nature and by mapping them onto grammatical form, we can account for language-particular distributional patterns.

In contrast to formal theories of syntax Construction Grammar treats language as a repertoire of more or less complex patterns – CONSTRUCTIONS – that integrate form and meaning in conventionalised and often non-compositional ways. Form in constructions may refer to any combination of syntactic, morphological, or prosodic patterns and meaning is understood in a broad sense that includes lexical semantics, pragmatics,

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[1] By *predicate* here readers should understand any kind of intransitive property predication constructions including the deadjectival verbs mentioned in c) above. Also, there is transitive property predication of the type 'make something acquire the property specified in the adjective or adjectival root'. Such transitive constructions are central in the category of the UNMARKED VERBS and they can be analysed in terms of force dynamics and energetic interactions, cf. the billiard-ball model and the stage model (Langacker 1991).

and discourse structure. A grammar in this view consists of intricate networks of overlapping and complementary patterns that serve as 'blueprints' for encoding and decoding linguistic expressions of all types.

A common-sense ontology of the types of phenomena found in the world such as things, properties, actions, etc. is the basis for the traditional notional definition of parts of speech as nouns, adjectives and verbs. Thus nouns denote persons and things, adjectives denote properties and qualities and verbs denote actions. However, it has often been pointed out that a purely semantic approach to the definition of parts of speech is inadequate; *destruction* denotes an action as much as does the verb *destroy*; the verb *belej*a in Bulgarian denotes a property i.e. the colour 'white' as much as does the adjective *bja*l 'white' and the noun *whitenes*s denotes a property or a quality as much as does the adjective *white*. Denotation in this case is intended to signify a relation between a lexical root and the piece of the world, partial situation, etc. that it is naively considered to "mean" i.e. to name it (Croft 1991: 38). It is a semantic function and should not be confused with discourse functions such as reference, modification and predication and in this sense it is what Langacker's (1987) calls symbolization.

However, when *whiteness* is used the speaker wants to refer to the property itself, i.e. to perform the propositional act of *reference* rather than to *predicate* the property or to *modify* an object with it. In the same way, *beleja* is used in Bulgarian to *predicate* the colour *property* in a particular way which involves the speaker/conceptualizer who sees or feels the encoded property (Tsoneva-Mathewson 2006). On the other hand, *whiteness* is not the same kind of noun as a "real" noun like *dog*; semantically it is more abstract than *dog* and morphologically more complex (has an additional morpheme) compared to both *dog* and the source adjective *white*. Similarly, the verb *beleja* is morphologically more complex than the adjective *bjal* from which it has been derived. In other words, even intuitively there seems to be an interaction between *semantic class*, *discourse function* and the relevant *constructions*[2].

The lexical items that fill the relevant roles in the propositional act constructions can be divided into semantic classes. OBJECTS, PROPERTIES, and ACTIONS are only a small subset of the semantic classes of words/lexical roots found in human languages. They can be defined in terms of the following four semantic properties: *relationality*, *stativity*, *transitoriness,* and *gradability*. These are well accepted in cognitive

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[2] The words in italics provide evidence that the discussion unavoidably points to the interaction of semantic class, discourse functions and constructions.

linguistics. For the purpose of this study it is necessary to point out that ACTIONS are relational, processual, and transitory while PROPERTIES are relational, stative and permanent (Croft 2001: 87; Table 2.2.).

Croft (2001: 88, Table 2.3.) proposes that there is a correlation between the three propositional acts and the three semantic classes defined above, which results in two types of structural coding *constructions*, based on the number of morphemes that are used to encode the propositional act function: zero structural coding and overtly marked structural coding *constructions*.

Referring, *predicating* and *modifying* constructions encode the propositional acts. Predication as well as reference and modification are pragmatic (communicative) functions, or as Searle (1969: 23 – 24) and Croft (Croft 1990, Croft 1991: 109 – 111) described them – propositional acts. The act of reference identifies a referent; the act of predication ascribes something to the referent, it prototypically reports relatively transitory states of affairs, and the act of modification functions to enrich the referent's identity by an additional feature of the referent, denoted by the modifier.

Croft's table is reproduced below (Fig. 1). It should be taken as a representation of conceptual space or semantic map of English parts of speech.[3]

	Reference	Modification	Predication
OBJECTS	UNMARKED NOUNS	genitive, adjectivalization PPs on nouns	predicate nominals, copulas
PROPERTIES	deadjectival nouns	UNMARKED ADJECTIVES	predicate adjectives, copulas
ACTIONS	action nominals compliments infinitives, gerunds	participles, relative clauses	UNMARKED VERBS

Fig. 1. The semantic map of English parts of speech amongst other possible constructions [4]

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[3] In Croft 2001 the semantic map of English parts of speech is slightly modified but the table from Croft 1991 serves the purpose of the discussion here better.

Croft's hypothesis is that the semantic classes of OBJECTS, PROPERTIES, and ACTIONS are the typological prototypes of referring, attributive, and predicating *constructions*, respectively. A typological prototype category is a functionally defined category that is typologically unmarked with respect to the relevant constructions. As such they receive zero structural coding, i.e. do not employ any (additional) morpheme whose function is to express the propositional act function. Examples of zero structural coding constructions in English include reference to an object, modification by a property, and predication of an action as in Croft's examples (80), (81) and (82) (Croft 2001: 89) cited below:

(1) I found the **ring**.
(2) The **big** cookie is hers.
(3) I **ate** it.

If one or more morphemes are employed for expressing the propositional act function, there is overt structural coding in the language. Such constructions have been listed in Fig. 1(Croft 2001: Table 2.3.): e.g. nominalisation of property or action words as in *good**ness**, happi**ness*** or *destruc**tion**, produc**tion*** (Croft 2001: 88, e.g. 74 a. and b.). The copula *be* for property words as predicates has been cited in Fig. 1 (Croft 1991, 2001) as an example of the combination of the semantic class of PROPERTIES and the propositional act function of predication in English. The three pairings of semantic class and propositional act are the TYPOLOGICALLY UNMARKED combinations, that is, they form typological prototypes. Any other combination of propositional act and semantic class is typologically marked, as is the case of PROPERTY PREDICATION, ACTION MODIFICATION, etc. These unmarked and marked combinations are conceptual categories which may be linguistically encoded in a variety of patterns across languages. Croft proposes the following implicational universals (2001: 90):

"Structural coding: If a language codes a typologically unmarked member of a grammatical category by n morphemes (n > or = 0), then it codes a typologically marked member of that category by at least n morphemes."

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[4] The parts of speech are represented in CAPS. They are also considered constructions in Croft's theory. The above table shows the place of the traditional parts of speech among all the other constructions which represent the match between discourse functions and semantic classes. In fact, traditional parts of speech should be referred to as parts of speech constructions.

The present paper addresses the question the place of the Slavic intransitive verbs derived from adjectives + e-suffix mentioned in c) above. In one way, they are UNMARKED VERBS, which can be inflected with the tense/agreement/modality inflections (although some of these verbs in Russian and Bulgarian are quite "defective"). In another sense, they are "marked" as they are morphologically more complex than some other basic verbs and they predicate properties rather than modify a referent. In other words, they represent a marked combination of semantic class and propositional act function i.e. PROPERTY PREDICATION. This problem disappears if derivational morphology is analysed as symbolising alternative conventionalized construals of the semantics of any of the lexico-semantic classes listed below, which will result in various realignments of the four semantic properties mentioned above.

Semantic classes of property concept words

The classes of property concept words that I have identified for the purpose of my research are listed below. The list does not suggest any hierarchical organization nor is it comprehensive. In fact, the data show that in almost all the classes listed below there are property concepts which can be verbally encoded in Russian and Bulgarian.

Colour: *белея, синея*
Dimension; Measure; Body size: *едрея, умалея, слабея*
Time-related properties: *младея, старея*

Physical properties – shape, structure, taste, texture (feel): *круглеть, мокрея, густеть, (о)мекна, леденея, киселея*
Human propensities – physical states, emotional states, physical inability, socially

defined states: *болея, боля, (о)свирепея, (о)злобея, оглупея, (о)беднея*
Full/empty states: *пустея*

Verbal property predicates as unmarked but peripheral class of verbs.

Although deadjectival verbs are morphologically more complex than their respective adjectival stems since they represent a marked combination between a semantic class and a propositional act function, they occupy an unmarked point in conceptual space, that of unmarked verbs. They are derived words and they fit the expected pattern for the semantic class of

the derived form, i.e. 'action' for verbs. A more precise way to describe this phenomenon would be to say that the semantic shift from a permanent, inherent property of a referent to a transitory property perceived by the speaker, has brought the semantics of properties closer to the semantics of action, especially in the case of what I have called *perceptual deadjectival verbs* (Tsoneva-Mathewson 2006). Such a construal is achieved by introducing the Perceiver (most often the Observer) onstage or profiling the perceptual experience he or she is undergoing (Langacker 1987) in relation to the property symbolised by the stem.

Another possible construal of the semantics of properties as transitory predicates is viewing the property as a process of acquiring it. Such a construal is also overtly marked in Slavic languages by the derivational suffix *-e-*, which derives a class of ingressive (inchoative or what I call processual) deadjectival verbs. Unlike the deadjectival verbs of the perceptual type the ingressive verbs participate in a large number of potential behaviour constructions typical of verbs, i.e. tense and mood inflections as well as an array of perfectivizing prefixes which provide the process thus construed with specific aspectual contours. In this respect they appear to be closer to a prototypical verb. There is yet a third possibility, which I have termed 'a type of behaviour associated with a particular property' and which is overtly marked in Slavic by a variety of suffixes. *Russkaja grammatika* (1980) provides numerous examples in Russian: *glupit'* 'act the way a stupid person acts', *xitrit'* 'act the way a cunning person acts', *grubit'* 'speak roughly', *ljutovat'*(coll) 'act ferociously', *vrednichat'* (coll) 'do harm', *famil'arnichat'*, *korotat'* 'spend time, easy life', *zlobstvovat'* 'be spiteful and show it, act in a spiteful way', *vazhnichat'* (coll), *mudrstvovat'* 'deliberate'. The following examples are from Bulgarian, some of the verbs have been directly borrowed from Russian: *golemeja* (se) 'act importantly', *izdrebneja, izdrebnjavam* 'act in a petty way', *krotuvam* 'keep quiet, keep a low profile', *familiarnicha* 'behave in an intimate way' (negative connotations). They participate in behavioural potential constructions typical of verbs such as tense, aspect, and mood. But how close to the verbal prototype do they get? I suggest that the three categories of intransitive deadjectival verbs can be viewed as part of the general verbal category which is radially structured and the three subclasses occupy places away from the prototype for action but at different distances.

In the Bulgarian linguistic literature the question about the 'defectiveness' of the type of verbs we are discussing here has been raised before. Stankov (1968, 1976, 1977) claims that there are more than 200

secondary imperfective verbs which do not have forms for the Aorist in Bulgarian. To this group he adds imperfective *e*-suffixed verbs such as *studeneja* 'become cold', *edreja* 'become big', *xitreja* 'become cunning or act in a cunning way', etc. Ivanchev (1988: 133 – 135), however, presents the results of interviews with native Bulgarian university students, which show that *e*-suffixed verbs can normally be used in the Aorist. I shall mention only a couple of sentences, which illustrate this point.

(4) Тиквата едря, едря и когато се пръсна, от нея се посипаха жълти семена
     Tikvata **edrja**, **edrja** i kogato se prasna, ot neja se posipaxa zhalti semena.
     Pumpkin.ART bigV.AOR, bigV.AOR and when REFL burstAOR, from her REF spillAOR yellow seeds
     'The pumpkin grew and grew bigger and when it burst yellow seeds spilled out.

(5) Трупът дълго студеня на бесилката.
     Trupat dalgo studenja na besilkata.
     Corpse ART long cold.V AOR on gallows.ART
     'The corpse was getting colder and colder on the gallows.'
or   'The corpse was getting colder and colder (and you could feel it).'

The acceptability of such sentences in Bulgarian has been contested by Chakarova (2006). For all property predicates of this kind, except for colour verbs the perceptual interpretation needs special contexts and a special type of mental gymnastics. These verbs are usually accompanied by temporal adverbials such as *dalgo vreme* 'for a long time', *cjala godina* 'for a whole year', *za izvestno vreme* 'for a while', which determine the temporal boundaries of the event. On the other hand, the reduplication of the verb as in (4) above supports the sense of continuity of the event, which at the same time is bounded by the Aorist form. In any case, the Aorist form although possible needs to be supported by other lexical means so that the sentences are interpretable. This fact, to my mind, provides further evidence for the non-prototypical status of deadjectival verbs of this type.

Ivanchev (1988) points out that these verbs are inchoative and stative at the same time, for example *sineja* means 'become bluer' as well as 'appear blue' and they cannot be precisely distinguished. I suggest that they are polysemous with the inchoative meaning in the centre and the perceptual meaning being an extension of the central one. The fact that the processual verbs can acquire aspectual meanings through prefixation is evidence that they are at least a step closer to the prototype compared to the perceptual verbs which cannot be used with prefixes. The perceptual construal of property predicates is even more limited in terms of behaviour potential constructions. Deadjectival verbs structure the propositional act

function of predication in a less prototypical way. For example, colour verbs are used only in the Present and Imperfect in Bulgaria$_n$. There is not a single use of perceptual colour verbs with Aorist in the literary texts comprising the corpus in Tsoneva-Mathewson (2006). The perceptual construal of property predicates is also limited to primarily visually salient properties although taste and touch are also involved. In other words, verbal property predicates are unmarked verbs but they are also non-prototypical verbs and as such should be represented away from the centre of the area mapping the natural correlation of actions and verbs and closer to the periphery near the area mapping the non-prototypical combination of properties and predication. The figure below is an attempt to represent the semantic map of property predication in Bulgarian and other Slavic languages.

	Reference	Modification	Predication

OBJECTS

PROPERTIES

ACTIONS

be + adj.
become + adj.

Adj + e + infl

Unmarked Verbs

tense, agr, modal

☐ overt structural coding of function in construction

┊┄┄┄┊ zero structural coding of function in construction

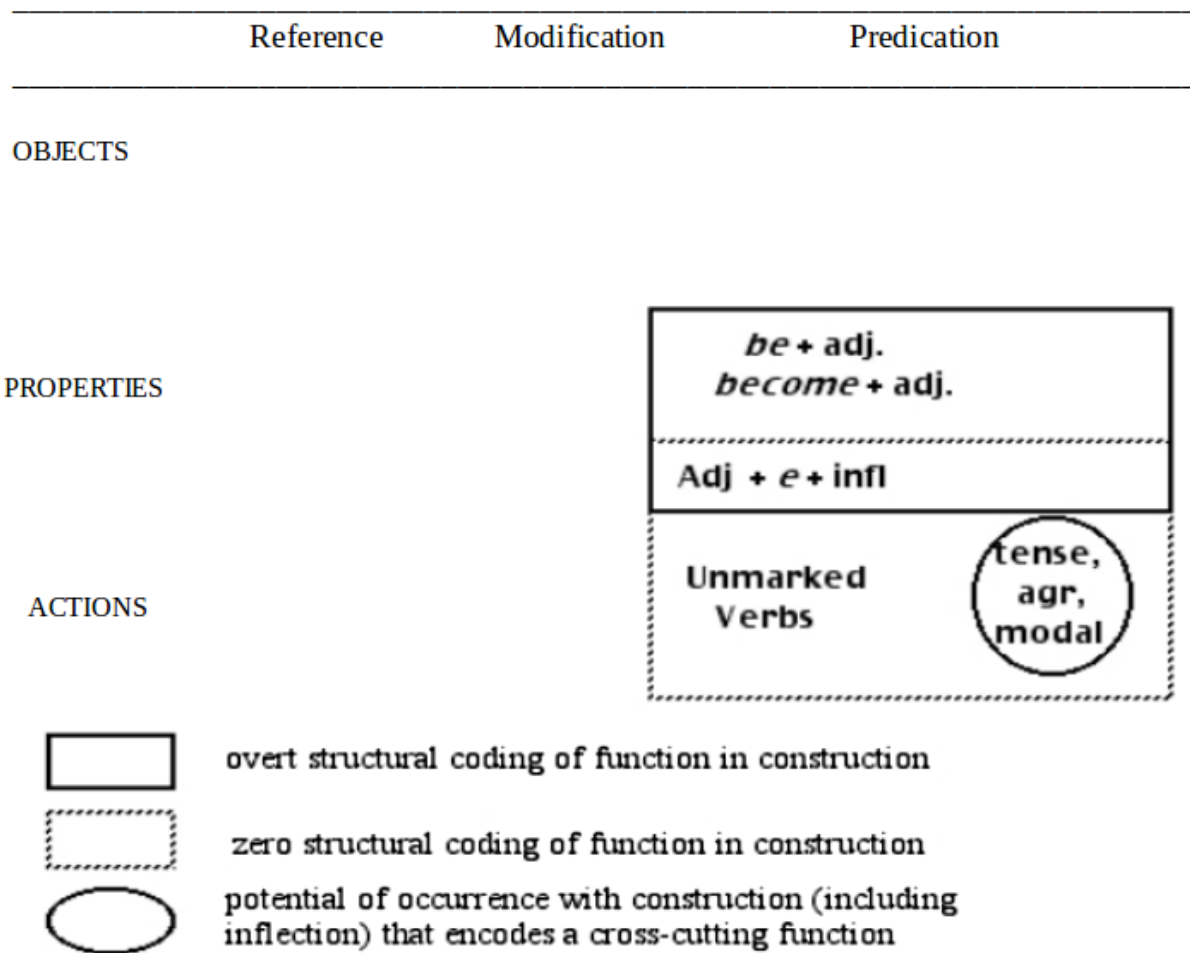⬭ potential of occurrence with construction (including inflection) that encodes a cross-cutting function

Fig. 2. The semantic map for Bulgarian property-predication constructions

To sum up the discussion above, patterns of word formation (derivational morphology) can be accounted for by the conceptual, i.e. semantic, process of conversion. When properties prototypically encoded as adjectives are conceived of as transitory and not inherent, i.e. as a process which involves these properties in one way or another, they are symbolized by the respective deadjectival verbs. They can be symbolized by other structural means such as the predicate adjective constructions, but then the transitoriness also decreases. Ultimately, these constructions shape the semantic map of property predication constructions which was outlined above. They form a connected region in conceptual space.

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