VERBAL PROPERTY PREDICATION IN RUSSIAN AND BULGARIAN

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Abbreviations

Agr	Agreement
arc	archaic
ART	article
B	Bulgarian
coll	colloquial
COP	copula
COMP	complementizer
FEM	feminine
IMP	imperfect
INST	instrumental
LCS	Late Common Slavic
MASC	masculine
Morph	morpheme
NR	nominalizer
OCS	Old Common Slavic
Periph	Periphrastic expression
PRES	preent tense
R	Russian
RCG	Radical Construction Grammar
Suppl	suppletion
TNS	tense
WH-Rel	relative clause

Verbal Property Predication in Russian and Bulgarian
(Abstract)

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This project explores the semantics of Slavic verbs derived mainly from adjectives and referred to as verbal property predicates. It has been claimed (Stassen 1997) that verbal property predication in Russian exists only in the semantic subclass of human propensitities (states), e.g. *bojat'sja* 'be afraid', *grustit'* 'be sad', *radovat'sja* 'be happy', etc. The present study shows that properties from other semantic subclasses of properties can be verbalized, e.g. colour: R. *belet'(sja)* 'become white, be seen white'; dimension: B. *o/kăseja* 'be seen as short, become short': temperature B. *ledeneja* 'become icy cold, feel icy cold, be perceived as icy cold', etc.

In the present study I adopt a cognitive linguistic approach in which meaning is encyclopaedic and is rooted in human experience and general knowledge of the world (Langacker, 1987). Following Wierzbicka (1988) and Croft (1991; 2001), I argue that verbal property predicates can be analyzed as conventionalized construals of the semantics of property, which bring it *closer* to the semantic prototype for the discourse function of predication, i.e. an action. There are several possible construals, which have been termed **perceptual**, **processual**, **force-dynamic**, **inchoative**, and **behavioural**. The perceptual, processual and behavioural are the construals which are discussed in more detail as they are the ones that remain closely linked to the adjective predicate constructions. The common links tie them to the same elemental conceptualization, namely the **scene.** The differences come from the cognitive process of figure/ground selection: various aspects of the same scene are profiled (foregrounded) in the various construals and given various linguistic expressions.

In Slavic the dramatic semantic shift in the root from inherent property to transitory state is accompanied by overt derivational morphology. The derived verbs are complex, bound, and partially schematic constructions, while adjective predicates are complex, free, and fully schematic constructions.

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Chapter 1

Background and purpose

The aim of this research is to study the region of the conceptual space mapped by verbal property predicates in Bulgarian and Russian. The theoretical background of the study (see Chapter 2) is cognitive linguistics in general and Radical Construction Grammar (Croft 2001) in particular. The research pursues two major goals: (i) to test certain hypotheses put forward by previous typological research (Stassen 1997) and (ii) to provide a better understanding of the semantics of verbal property predicates in intransitive constructions.

The initial idea for this work came from Stassen's typological research on how intransitive predication[1] in the world's languages is encoded linguistically (Stassen 1997). In a sample of 410 languages he uncovered the encoding patterns or strategies for the predication of various semantic classes, i.e. actions, properties, objects, and locations. The present study will focus only on the strategies for the predication of properties, Therefore, I shall introduce only this part of Stassen's comprehensive study. In Chapter 5 he discusses the phenomenon of pattern-switching, i.e. a predicate category can be encoded by more than one pattern. In the case of adjective predicates, which have no prototypical encoding strategy of their own anyway (see Chapter 4 for a discussion of the intermediate position of properties between objects and actions), they take over the strategies typical of nouns or verbs and this is called Adjective-Switching. Some languages use predominantly the nominal strategy for predicatively encoding property concepts; others use the verbal encoding strategy. However, there

[1] This work will keep in line with Stassen's research and study primarily intransitive property predication, which is a marked clause structure compared to a finite transitive clause describing an action, which is unmarked with reference to the canonical event model (see Chapter 2).

are languages which employ both strategies and Russian is mentioned as one of them. Trying to identify the conditions for using one or the other strategy, Stassen suggests that in certain cases the choice between verbal and nominal encoding appears to be dependent on semantic distinctions such as 'permanent' vs. 'non-permanent'. If the property assignment is viewed as being 'permanent', 'inherent', or 'characteristic', the nominal strategy is used; if the property assignment is viewed as 'non-permanent', 'contingent', the verbal strategy is used.

According to Stassen, it follows from the nature of the PERMANENCY parameter that not all property-concept words in a language will be equally susceptible to an encoding switch which is monitored by this parameter. For example, a property concept word, which denotes a permanent quality such as 'wooden' or 'silver', is unlikely to be verbally encoded, while items which indicate mental or physical states such as 'angry' or 'glad', or 'thirsty' would lend themselves to verbal encoding. As a result, Stassen predicts that only a small subset of the property-concept words in a language will be able to be affected by this type of switch encoding, i.e. the ones which can be given both a permanent and non-permanent interpretation (e.g. good, strong, wet).

A second subtype of adjectival verbal-nominal switching is derived from the so-called INGRESSIVE PARAMETER, which is basically aspectual in nature:

> 'For at least some property-concepts, a distinction can be made between a DYNAMIC phase of 'becoming', in which the entity is viewed as gradually 'acquiring' the property, and a STATIC phase, in which the entity is seen as 'having' the property, and which may or may not be perfective or resultative in meaning" (Stassen 1997: 163).'

It is always the verbal encoding of the predicative adjective which carries the dynamic reading of the predicate, while the nominal encoding implies static meaning. The process of coming to possess a property, i.e. the ingressive/inchoative interpretation is cross-linguistically very common. The Slavic languages provide plenty of evidence. Here are some examples from Russian and Bulgarian:

1. R. (a) *Ona* *tolstaja.*
3SG.FEM. fat.SG.FEM.NOM
She is fat.

(a') *V molodosti* *ona byla* *tolstaja/tolstoj.*
In youth-LOC she be-PAST fat-NOM/INSTR
In her youth she was fat.

(b) *Ona* *tolsteet.*
3SG.FEM. become fat.3SG.PRES.
'She is becoming fat.'

(c) *Ona* *stanovitsja* *tolstoj.*
3SG.FEM become3SG.PRES. fat.SG.FEM.INSTR
'She is becoming fat.'

2. B. (a) *Tja* *e* *krasiva.*
3SG.FEM COP.3SG.PRES. beautiful. SG.FEM
'She is beautiful.'

(b) *Tja* *krasivee*
3SG.FEM become beautiful. 3SG.PRES.
'She is becoming beautiful.'

(c) *Tja* *stava* *krasiva.*
3SG.FEM become. 3SG.PRES. beautiful. SG.FEM
'She is becoming beautiful.'

In the above examples the Ingressive Parameter manifests itself in 2 ways: in examples (a) and (c) it operates through the choice of a zero copula for the present

tense in Russian which is overt for the past tense as in 1.(a') and *be*-copula in Bulgarian for the static interpretation and the copula-like verbs *stanovitsja* and *stava* for the dynamic interpretation respectively. In the (b) examples the dynamic interpretation is encoded verbally by *tolsteet* and *krasivee.*

Finally, Stassen claims that among the languages which allow a switch between nominal and verbal encoding of property predicates there are some languages in which there seems to be a CATEGORY SPLIT among the lexical items which denote properties. The semantic subdomain of property predicates is divided in such a way that certain property predicates will always receive a verbal encoding, while other property predicates will always be encoded by a nominal encoding. Such languages called SPLIT-ADJECTIVE LANGUAGES, contrast with RADICAL LANGUAGES, in which the whole semantic subdomain of property predicates is encoded in a uniform way, either verbally (single-option A-languages) or nonverbally (single-option B-languages).

Surveying the data, however, Stassen comes to the conclusion that it is impossible to formulate a principled explanation for all cases of adjective split in all relevant languages.

> 'Thus, for example, it is hard to think of a reason why, in Maasi and Moore, there is a split between 'young' (verbal) versus 'old' (nominal), or a split between 'thin' (verbal) and 'fat' (nominal), or, in Supyire, a split between 'black' (verbal) and 'white' (nominal).' (Stassen 1997: 168)

In spite of the apparent idiosyncratic character of the phenomenon, he tries to identify some regularities in property-word encoding across languages. In order to demonstrate these regularities, Stassen suggests that the property predicates can be

classified into semantic subclasses and these subclasses hierarchically structure the semantic domain of property-concept words.

THE ADJECTIVE HIERARCHY:

Hum Propensities >	Physical properties >	Dimension >	Value >	Material
		Colour	Age	Gender
			Form	

The aim of the hierarchy is to make predictions about the formal encoding of property-concept words. One such prediction is that the further to the right of this scale a category is, the less likely it is to be encoded verbally, as the PERMANENCY parameter operates more and more strongly. A second claim is in terms of an implicational universal quoted in detail below:

> '(17) The Human-Propensity Universal
> In a split-adjective language, human-propensity predicates will be encoded by the verbal strategy. The large majority of split-adjective languages provides corroboration of the Human-Propensity Universal. If the adjectival split has been recorded by means of some listing of verbally and nonverbally encoded property-concept words, items meaning 'sad', 'hungry', or 'afraid' appear to be grouped at the verbal side of the split. In a number of cases, the prediction made by the Human–Propensity Universal is actually stronger than its original formulation entailed, in that the class of human-propensity items is the ONLY class of property-concept words which can be encoded verbally. For such languages, the first oblique in the Adjective Hierarchy marks the split-point between verbal and nominal encoding. Quite a few, genetically unrelated, languages in the sample appear to have a distinct class of intransitive verbs (sometimes called 'state verbs', 'quality verbs', or 'experience verbs') which designate emotional or physical states of animate entities. Examples of such verbal subclasses are illustrated in the sentences (18 - 20):

.....

(20) Russian (Indo-European, East Slavonic)

(a) *On* *saditsja* *na stul*
3SG.MASC sit down.3SG.PRES. on chair
'He is sitting on the chair' (Fennell 1961: 77)

(b) On boitsja
3SG.MASC be afraid.3SG.PRES.
'He is afraid' (Fennell 1961: 333)

(c) Ona krasiva
3SG.FEM beautiful.SG.FEM
'She is beautiful' (Mazon 1949: 297)'
(Stassen 1997: 169-170)

The fact that human-propensity items lend themselves so easily to verbal encoding Stassen interprets through the semantic concept of Time Stability, which is a complex notion consisting at least of the two previously mentioned parameters: the PERMANENCY PARAMETER and the INGRESSIVE PARAMETER. On both of these parameters, human-propensity concepts align with the non-stable value.

Indeed, a great number of physical and emotional states in Russian and the other Slavic languages are verbally encoded (cf. Wierzbicka 1988) and they will be analysed in Chapter 6 alongside with Stassen's argumentation (1997: 171) but they certainly are not the only class of property concepts which can be verbally encoded in Russian as well as in other Slavic languages. Property concepts from every semantic subset can be encoded verbally, even the ones denoting permanent qualities such as 'wooden' and 'icy', e.g. R. *derevenet'* 'become, look or feel wooden' from the adjective *derevjannyj* 'wooden'; B. *ledeneja* ' become, look or feel like ice' from the adjective *leden* 'icy', even from the subset of gender nouns, e.g. Polish *niewieścieć* 'act like a woman' from the noun *niewiasta* 'woman, wife' used to refer to qualities perceived as specifically female or B. *văzmăžeja* 'become strong as a male adult' from

the noun *măž* 'man'. As to the middle section in the hierarchy, there are numerous examples of verbs derived from adjectival roots or stems encoding property concepts such as colour, e.g. R. *belet'(sja)*, B. *beleja (se)* from the adjectival root *bel-* 'white' with the ingressive meaning 'become white' and the static meaning 'be white, appear white'; dimension, e.g. R. *dlinnet'* from the adjectival root *dlin-* 'long' with the meaning 'become longer', B. *otesneja* from the adjectival stem *-tesn-* 'narrow' meaning 'become narrow' ; physical properties, e.g. B. *kiseleja*, R. *kislet'* from the adjectival stem *kisl-* 'sour', meaning either 'become sour' or 'taste sour' etc.[2]

First, the fact that the above verbs have remained unnoticed does not refute Stassen's Human–Propensity Universal about split-adjective languages; it only points out that Russian allows adjective-switching on a larger scale than the one documented in Stassen's research and perhaps it is not a split-adjective language at all[3]. Second, the verbs cited above as well as many others are derived from nominal or adjectival roots through suffixation. When analyzing property predication, Stassen focuses exclusively on morphological inflections as he defines predication in terms of inflectional constructions (subject and/or object agreement, tense-aspect-mood inflection, etc.). As we shall in Chapter 2 and Chapter 4, for Radical Construction Grammar predication as well as reference and modification are pragmatic (communicative) functions, or, as Searle (1969) describes them, propositional acts which cognitively organize information. Inflections only partially define a propositional act function; they are what Croft (2001) calls 'behavioural potential of a

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[2] Stassen admits that between the two opposite ends of the hierarchy the picture looks quite messy as the behaviour of the relevant items is idiosyncratic, and often, chaotic. He also mentions that the manner of encoding may be based on metaphor or the possible effects of diachronic developments.

[3] Stassen points out that, as the parameters which underlie the encoding switch are of a fairly semantic nature, it is possible that these parameters may have escaped the attention of traditional grammarians of particular languages and in turn have not been mentioned in reference grammars used by typologists (1997: 157).

stem in a particular syntactic role'. There are also additional morphemes which place a lexical root in a particular function. For example, overt nominalizing suffixes for property words and action words in English as in *whiteness* or *destruction* used as referring expressions, or the copula *be,* which is obligatory when property words or objects are used as predicates and so on. Thus verbalizing suffixes which derive verbs from adjectives and nouns in Slavic languages (in English as well, e.g. *whiten, lengthen* (intr), etc.) will be analyzed in the present study as part of the family of constructions encoding property predication sharing the same cognitive base with the predicate adjective constructions but differing in degree of transitoriness and specificity (see Chapters 5 and 6).

Third, verbs derived from adjectives most often do have the ingressive meaning of gradually acquiring the property denoted by the root and thus conform to Stassen's Ingressive parameter, e.g. B. *debeleja* 'become fat'; R. *staret'* 'become old'; R. *gustet'* 'become thick', R. *xitret'* 'become clever', B. *zeleneja* 'become green' and many others. Extensive previous research has studied their semantics and offered various descriptions and classifications - inchoative verbs (Sigalov 1963, Uluxanov 1977), process verbs (Musin'ska-Vol'ny 1996), gradual-dynamic verbs (Hiro-Weber 1990), verbs denoting gradual states (Sil'nitskij 1986), etc. Again, it becomes clear that the operation of the Ingressive Parameter is not over a limited area in the semantic subdomain of properties; it covers the whole hierarchy. Furthermore, the above cited verbs have a second meaning, which I shall refer to as 'perceptual', which seems to be related not only to the general cognitive concept of Time Stability and which must also be accounted for. It can be quite different from the meanings of 'experience verbs', which designate emotional or physical states of animate entities, and to which Stassen refers when discussing the human-propensity subclass of

property-concept words. From the point of view of cognitive linguistics all properties are permanent or inherent when they are used in their prototypical function, i.e. modification. If so, can we really distinguish between property concepts that are permanent such as 'wooden' or 'silver', transitory such as 'angry' or 'glad', and yet others that can be given both permanent and non-permanent interpretation as Stassen does? On the other hand, there seems to be typological evidence that in conceptual space (see Chapter 2) properties are intermediate between the semantic classes of objects and actions, reflected in the hierarchy *object* > *property* > *action* (Croft 1991: 130, Stassen 1997: 127) and properties are spread between objects and actions in the deatiled hierarchy proposed by Stassen, i.e. *object* > *material, gender* > *value, age, form* > *dimension, colour* > *physical properties* > *human propensity* > *action* (Stassen 1997: 168-9). This contradiction disappears when it is clearly stated that by a prototype we understand the core of a category; it does not say anything about its boundary (Cruse 1992, Croft and Cruse 2004). In fact, as we shall see in Chapter 2, universal typological theory, which is an integral part of Radical Construction Grammar, does not describe boundaries; boundaries are features of language-particular categories. That is why Stassen found it virtually impossible to come up with a principled explanation for all cases of adjective-split in all relevant languages. Any property can be construed as more or less transitory, more or less specific in terms of the details of the real life situation that are being designated, and such a construal can be conventionalized in the language. For example, when colour is conceptualized as 'a transitory feature of the scenery' (Wierzbicka 1988), such a construal is marked by the *e*-suffix in Slavic languages. However, dictionaries list only some of the 'possible' deadjectival colour verbs and tests among native speakers show uncertainty in judging the acceptability and use of others (see Chapter 6). Thus,

only some colour verbs are fully conventionalized in the speech community although there is a general pattern; these construals are not only language-specific, they are property-specific. In any case, at least in Russian and Bulgarian, it is not the Permanency parameter that is most influential in the 'decision' which property to get verbally encoded for the purpose of predication. It is a parameter which draws on the visual salience of the property and the position of the speaker/observer in the speech situation (see Chapter 6).

The aim of the present research is not to confirm or refute Stassen's hypothesis; the data from Slavic, which seem to contradict Stassen's typological hypothesis, has encouraged me to study the phenomenon of property predication as a language-specific phenomenon. As has already been pointed out above, property words follow a cross-linguistically common pattern of shifting meaning to the inchoative process 'become [property]' (Croft 2001: 74) or ingressive 'acquire [property] (Stassen 1997). Russian and Bulgarian, as well as the other Slavic languages, possess this pattern. In addition, they also possess another pattern of shifting the meaning of colour, size, etc. concepts to the stative 'perceive [colour, size, etc.]'. Thus the semantic shifts involved are language specific and idiosyncratic conventions which in Slavic languages are accompanied by overt derivation at the level of word formation. As such they must be part of the grammatical representation of the word. i.e. they are derived words (verbs from adjectives or nouns via adjectives) and they fit the expected pattern for the semantic class of the derived form (verbs). In other words, the meanings of verbal property predicates should be analyzed in terms of different conventionalized construals of the semantics of properties which bring it closer to the semantic prototype for predication, i.e. a verb.

The aim of the present study is to document in a detailed way the specific semantics of property predicates in two closely related Slavic languages, Russian and Bulgarian. To be able to account for the meanings of the deadjectival verbs in Russian and Bulgarian and the general semantic shift from property (e.g. 'white') to process or experiential state ('become white' or 'appear, be seen white') in a principled way, I shall adopt a construal analysis of verbal semantics (Langacker 1987, 1991; Croft and Cruse 2004). I shall attempt to identify the various construals underlying the alternative expressions of property predication. My hypothesis is that the construals marked by the intransitive deadjectival verbs are all grounded in the same image schema or Idealized Cognitive Model (see Chapter 2) which has been referred to as the **scene**. The different construals select different elements that the scene is composed of as focal points or profile. In other words, the different constructions, e.g. adjective predicate constructions and their parallel deadjectival verbs, profile different aspects of the same objective reality which is the object of conceptualization and linguistic expression.

I shall also adopt a Radical Construction Grammar approach to parts of speech (Croft 1991, 2001) in which Nouns, Verbs and Adjectives are considered typological prototypes resulting from a correlation between a semantic class and a propositional act function. Such an approach will support a subsequent analysis in which adjective predicates with R. *byt'*, B. *săm* 'be' or R. *stanovit'sja*, B. *stavam* 'become' and the respective deadjectival verbs are complex constructions occupying contiguous spaces on the semantic map of property predication in Russian and Bulgarian (see Chapter 4). The two types of constructions, syntactic and morphological, differ in their degree of schematicity or generality. While syntactic predicate adjective constructions are fully schematic, morphologically derived deadjectival verbs are partially schematic

and more substantive, i.e. involve more detail in the conceptualization of the **scene** mentioned above.

Finally, adjectives as modifiers, predicate adjectives and deadjectival verbs differ in their degree of transitoriness. Properties as modifiers refer to features which are either inherent, 'timeless' or which are viewed without any reference to time as in (1):

(1) *Posmotrite! Na gorizonte* ***belyj parus***.
'Look! There is a **white sail** on the horizon.

Properties in predication are 'separated' from the referent and display a degree of transitoriness as in (2) where the adjective predicate construction introduces 'new information' and can be interpreted as referring to a transient state:

(2) *Voobšče-to* ***voda*** *v ètoj reke* ***teplaja,*** *no segodnja* ***ona xolodnaja***.
'As a rule/in general the water in this river is warm, but today it is cold.'

Modifiers describe features inherent to the referent, adjectival predicates (syntactic or morphological) ascribe features to the referent at a particular moment in time and place them in a time frame, which necessarily introduces a degree of transitoriness. Among the two property predication constructions, deadjectival verbs exhibit a higher degree of transitoriness as they are directly related to the speech event (see Chapter 6). This is demonstrated in (3):

(3) *Parus* ***beleet*** *na gorizonte*.
'The sail **is white (and one can see it)** on the horizon.'

It seems that the various intransitive property predicates in Russian and Bulgarian can be characterized relative to each other in terms of the degree of

transitoriness of the situation, in which the property is assigned to the referent. This is a second reason why they should be represented as occupying contiguous regions on the semantic map of property predication.

There are three strands in this study which feed into each other. Croft's approach is typological; typology is interested in finding regularities across languages and it is only natural that for such a task typologists study a huge number of languages (cf. Stassen's work discussed above) which are areally and genetically as diverse as possible. As was pointed out at the beginning, the idea for the present study originates from Stassen's typological research, yet it focuses on the meanings of etymologically related verbs (cognates) in genetically closely related languages. Although these verbs have common roots the same in Russian and Bulgarian, they have diverged semantically to various degrees and the differences are of importance. Recent research in lexical typology of genetically related languages (Kibrik 1998, Raxilina and Prokofieva 2004) has shown that the semantic diversity of cognates in genetically related languages can be as insightful and psychologically and typologically as relevant as similarities across genetically unrelated languages. Finally, the results of the present study may suggest that the conceptual space for parts of speech should be kept as general as possible. Properties may be conceptually intermediate between objects and actions, but within their category it seems difficult (Stassen 1997) if at all possible to build a detailed hierarchy of properties spread between objects and actions. The possibilities of conceptualization/ construal of various properties as inherent or more or less transitory are numerous and difficult to predict from general principles. As to the conceptual map of property predication in Russian and Bulgarian it has to reflect, on the one hand, the closeness of the reconceptualized properties to the semantic (typological) prototype for predication, i.e. unmarked verbs, and, on the

other hand, its distance from the prototypical action transitive verbs. In other words, as we shall see in Chapter 4, intransitive imperfective deadjectival verbs are away from the centre of the verbal category and much closer to the adjective predicate construction. Both deadjectival verbs and adjective predicates represent a marked combination of propositional act function and semantic class but through different means: the former are morphological and the latter are syntactic. These facts provide support for the cognitive linguistic idea that morphology, syntax and the lexicon represent a continuum rather than separate modules in the representation of all grammatical knowledge in the speaker's mind in the form of generalized constructions (see Chapters 2, 5 and 6).

Chapter 2

Theoretical Assumptions

2.1. Introduction

2.1.1. Setting up the scene: the Cognitive Revolution and "Counter-revolution"

Cognitive linguistics encompasses a number of broadly compatible theoretical approaches to linguistic meaning and structure that share a common basis: the idea that language is an integral part of cognition which reflects the interaction of cultural, psychological, communicative, and functional factors and which can only be understood in the context of a realistic view of conceptualization and mental processing.

Such a view runs contrary to the well-established American and West-European linguistic tradition, which has been devoted to establishing a body of logical rules for generating only the grammatically well-formed and semantically acceptable sentences of a language from a set of universal, possibly innate, structures. In short, it runs contrary to the numerous successive versions of generative grammar and questions the very foundations of mainstream formal linguistics, which back in the late 1950's and 1960's was labelled as 'cognitive revolution'. Paradoxically, it runs parallel to certain East European and Russian linguistic traditions. During the Cold-War isolation Russian and other East European linguists remained cut off from mainstream formal linguistic theories and developed home-grown semantic theories which share a great number of cognitive linguistic ideas (Raxilina 1998).

The use of the term 'cognitive' for these two opposing theoretical frameworks demands some explanation. The 'cognitive' revolution performed by Chomsky and his followers was a reaction against positivism and behaviourism in human sciences

in general and Bloomfieldian linguistics in particular. Behaviourism in America in the period between 1930's and the end of the 1950's studied human behaviour including language in terms of habits, stimuli and responses. During this time the study of meaning in language was largely neglected. This is because Bloomfield and his followers, among whom was Chomsky's mentor Zellig Harris, felt that meaning was inherently subjective, directly unobservable, and thus beyond the scope of scientific investigation at least for the foreseeable future. In this context Chomsky's professed mentalist approach to linguistic analysis was thought to be the revolution intending to bring 'mind' back into the human sciences after a long cold winter of objectivism. For Jerome Bruner, who was among the first lecturers on cognitive processes at Harvard University and a co-founder of the first Center for Cognitive Research there, as well as for other participants in the cognitive revolution of the 1950s and 1960s, Chomsky's mentalistic approach to language brought hope that meaning would become the central concept of psychology, not stimuli and responses, not overtly observable behaviour, not biological drives and their transformation, but meaning. Did this really happen?

What really happened was that behaviourism was indeed dealt a mortal blow by Chomsky's emerging transformational grammar, which claimed that behind the observable surface-linguistic structures there are unobservable deep structures which are essentially innate, universal, and it is only natural to claim that they have a mental character. During the next twenty years both psychologists and linguists would be testing the hypothesis about the existence of such structures as well as the rules for the generation and interpretation of the surface structures, i.e. syntax. Thus, one of the most pervasive and influential approaches to the critical question of how language and the mind are connected was really pioneered by Noam Chomsky. It brought linguistic

research to the centre of the emerging cognitive science in the 1950s and 1960s. Nowadays, however, it also raises the question whether the direction in which the entire discipline has been steered since then was the right one.

Although linguistic data were in the centre of research in the cognitive sciences (e.g. parsing, memorizing words in utterances, etc.) the whole paradigm of linguistic research has shifted. The research focus shifted from meaning to information and from the construction of meaning to the processing of information. 'Mind as a computer' became the dominant metaphor, and computability became the necessary feature of a good theoretical model. Chomsky's professed mentalistic approach, which was expected to involve meaning, i.e. semantics, turned out to be a formal systems approach, in which the principal assumption is that the rules of syntax are independent of semantics. Language, in this view, is independent of the rest of cognition. The set of rules formulated under the idea that a grammar is a formal system is essentially algorithmic, i.e. mathematical. In such a system, no use is made of meaning. Chomsky's generative grammar assumes that the language faculty is independent of external cognitive capabilities. This definition of grammar blocks any attempt to disconfirm it by referring to facts about cognition in general. A language defined as a set of strings of uninterrupted symbols generated by production rules is like a computer language.

2.1.2. Objectivist Semantics

It should be briefly mentioned that formal syntactic theories developed in the twentieth century were complemented by formal semantic theories (model-theoretical or truth-conditional semantics); the logical rules, which generate the grammatically

well-formed sentences of a language, need the correct lexical items to be inserted appropriately in the grammatical structures. The individual words are thus analyzed as sets of 'objective' semantic features which correspond to the properties of entities and categories in either the existing world or in possible worlds. For example, the meaning of *car* will contain the following semantic features: [+inanimate, +movable, +concrete, etc.].

Thus, all linguistic expressions and the concepts they express are symbols, meaningless in themselves, which get their meaning via direct unmediated correspondence with things and categories in the real world (or possible worlds). Such an analysis is grounded in the classical theory of categorization which goes back to Aristotle and defines a category on the basis of necessary and sufficient properties. Such an account, however, does not consider the nature of human thinking and communicating or the nature of human experience.

Chomsky's revolution was cognitive in the sense that it brought mind into the human sciences, but not as the seat of meaning which underlies human cognition, communication, and culture, rather as the seat of information processing and computation.

The cognitive linguistic approach is a natural reaction to Chomsky's formalist approach as outlined above. For the cognitive linguist the human language is not like a computer language and linguistic meaning and information are not one and the same thing. Although cognitive linguistics is a reaction against formal syntactic theories and formal semantics, it is far from being 'revolutionary'. As it has been pointed out above, East European home-grown semantic theories are remarkably close to cognitive linguistics. In addition, cognitive linguistics gives us the chance to reconnect the threads of various linguistic areas of inquiry and build on previous

research in semantics, pragmatics, and grammar. As a theory it has no single source or central authority, but a set of core concepts and goals, which are shared by cognitive linguists, psychologists, philosophers, literary critics, etc. These concepts have emerged from empirical observations rather than as the product of a superimposed theory. They are anchored in the experiential aspects and such cognitive principles underlying language as figure and ground, i.e. prominence, gestalt perception, mental imagery, motor movements, attention allocation, etc.

2.2. Cognitive Linguistics and Linguistic Cognition

The main assumption of cognitive linguistics is that linguistic cognition is an inextricable phenomenon of overall human cognition and as such we expect patterns and structures of cognition observed by psychologists, neurobiologists and the like to be reflected in language. Conversely, linguistic structures, by virtue of their relative concreteness, provide generalizations that may reflect basic human cognitive abilities and processes which still remain unobservable directly. Linguistic structures are not only relatively concrete and directly observable; what is even more important is that they are also examples of categorization that is abstract, automatic and entirely unconscious. Linguistic categories are among the kinds of abstract categories that are, perhaps, the most important ones for the study of the mind, as their conceptual structure cannot be viewed as merely a mirror of nature. As Lakoff (1987), one of the major influences in cognitive linguistics, points out, human language is an important source of evidence for the nature of cognitive categories. Conversely, the views on cognitive categorization such as Rosch's prototype theory (see section 3.2. below) should affect the theories of categorization used in linguistics. If languages use the

kind of categories used by the mind in general, then linguistic theory should be bound up with cognitive issues in general. This assumption is also outlined by one other founder of the cognitive linguistics school of thought, Ronald Langacker (1987:12-13), against the background of the generative grammarian's approach to the issue:

> 'Language is an integral part of human cognition. An account of linguistic structure should, therefore, articulate with what is known about cognitive processing in general, regardless of whether one posits a special language "module" (Fodor 1983), or an innate *faculté de langage*. If such a faculty exists, it is nevertheless embedded in the general psychological matrix, for it represents the evolution and fixation of structures having a less specialized origin. Even if the blueprints of language are wired genetically into the human organism, their elaboration into a fully specialized linguistic system during language acquisition, and their implementation in everyday language use, are clearly dependent on experiential factors and inextricably bound up with psychological phenomena that are not specifically linguistic in character. Thus we have no valid reason to anticipate a sharp dichotomy between linguistic ability and other aspects of cognitive processing. Instead of grasping at any apparent rationale for asserting the uniqueness and insularity of language, we should try more seriously to integrate the findings of linguistics and cognitive psychology.'

For cognitive linguistics meaning is the central issue, the meaning of words as well as the meaning of sentences; in other words, the meaning of any linguistic expression no matter how small or big it is. The centrality of meaning comes from the assumption that all linguistic phenomena are interwoven with each other as well as with other cognitive phenomena to allow us to make sense of the world, to understand our experience, and to be able to communicate this understanding. Unlike objectivist semantics, cognitive semantics adopts an experientialist account in which meaningful thought and reason make use of symbolic structures which are meaningful

in themselves as they reflect not only the external objective reality but also the way this reality is perceived and conceived by human beings. Experiments and personal interviews, which are preferred to theoretical frameworks and introspection as forms of investigation, have shown that in the definition of common words such as *car* already discussed above in objectivist semantic terms, people will include such attributes as 'fast', 'comfortable', 'luxury', etc. These, in fact, are associations and impressions which are part of the common experience of people in a particular culture. Such an experiential view of words seems to be superior to the objective account of meaning because it provides a much richer and more natural description of their meaning (Ungerer and Schmid 1996). Linguistic expressions are also meaningful in themselves because they store our shared experience of the world in yet another way. Take figurative language, especially metaphor. Lakoff and Johnson (1980) have convincingly argued that we live by certain metaphors such as ARGUMENT IS WAR, TIME IS MONEY, COMMUNICATION IS SENDING, etc., which are conceptual phenomena structuring our way of thinking to which we have access through the language we use (see section 2.6.).

The assumption of cognitive linguistics that language is symbolic in nature goes beyond the conception of only the lexicon as being symbolic (Langacker 1987). It argues that morphological and syntactic structures themselves are inherently symbolic, above and beyond the symbolic relations embodied in the lexical items they employ. One of the most significant hypotheses of cognitive linguistics is that most if not all grammatical categories have meaning and the meaning contributed by these categories is conceptual. Such an approach presupposes that the semantic structure of language is seen as a subset of overall conceptual structure. As Langacker (1987: 98) points out, there should not be any difference in kind between conceptual

structure and semantic structure; there is only a terminological distinction, the former being general, the latter specifically linguistic. Cognitive Grammar, the theoretical framework developed by Langacker and closely paralleling Lakoff's version of cognitive semantics, considers all linguistic structures to be concepts, from phonemes to the meanings of words and larger expressions. Concepts are also referred to as units by Langacker, a unit being 'a structure that a speaker has mastered quite thoroughly, to the point where he can employ it in largely automatic fashion, without having to focus his attention specifically on its internal parts or arrangement. Despite its internal complexity, a unit constitutes for the speaker a "prepackaged" assembly; precisely because he has no need to reflect on how to put it together, he can manipulate it with ease as a unitary entity. It is effectively simple, since it does not demand the constructive effort required for the creation of novel structures' (1987: 57; emphasis in the original).

Cognitive Grammar, like cognitive linguistics in general, is an integrative theory; it rejects the concept of 'modules' in language and accommodates language within cognition: 'Grammatical structures do not constitute an autonomous formal system or level of representation: they are claimed instead to be inherently symbolic, providing for the structuring and conventional symbolization of conceptual content. Lexicon, morphology, and syntax form a continuum of symbolic units, divided only arbitrarily into separate components; it is ultimately as pointless to analyze grammatical units without reference to their semantic value as to write a dictionary which omits the meanings of its lexical items.' (Langacker 1990b: 1)

A semantic analysis within Cognitive Grammar is equated with conceptual analysis plus an analysis of how conceptual content is shaped and construed. There are many different ways to construe a given body of content, and each construal

represents a distinct meaning, that is, an expression imposes a particular image on the content it evokes. Thus, for Cognitive Grammar meaning is conceptualization and, since human beings conceptualize relative to various cognitive domains, Cognitive Grammar claims that meaning is encyclopaedic, a full account of the meaning of linguistic expressions would mean a full account of cognition (Langacker 1987): 'The only viable conception of linguistic semantics is one that avoids false dichotomies and is consequently encyclopedic in nature' (Langacker 1987: 154).

From the symbolic nature of language it follows that meaning is central in cognitive linguistics. It underwrites the existence of all linguistic units and phenomena, none of which is semantically empty. All the various phenomena of language from supra-segmental phonology through morphology and syntax to discourse pragmatics work together to express meaning. The web metaphor of language structure stands out in the following quote from Janda (2000): 'Cognitive linguistics is an exploration of the fabric of meaning, woven thread by thread from bodily experience and embroidered by metaphor.'

2.3. Frames, Domains and Idealized Cognitive Models (ICM)

2.3.1. Profiles and frames/domains

It has already been pointed out several times that the most basic theoretical construct for cognitive semantics is the **concept**, which is a basic unit of mental representation. However, concepts do not simply float randomly in our minds; they are organized in a certain fashion. As Croft and Cruse (2004: 7) point out, certain concepts 'belong together' because they are associated through experience. They use

the now classic example of RESTAURANT[1], which is not merely a service institution; a number of concepts are asociated with it: WAITER, BILL, ORDERING, EATING, and these concepts are related to RESTAURANT by ordinary human experience. These intuitions have been developed into a central principle in cognitive semantics: concepts are not isolated, atomic units in the mind; they can only be comprehended relative to some presupposed, background knowledge called **frame**. In the 1970s and 1980s Fillmore developed the theory of frame semantics which was later extended by other linguistics. A frame is a coherent region of conceptual space (Croft and Cruse 2004). Langacker (1987:147) calls it **domain** and provides the following example: the concept KNUCKLE in order to be understood, learned, explained, etc. presupposes the conception of FINGER, so the concept FINGER provides the immediately necessary context or domain of the concept KNUCKLE. To put it simply, one would not know what a knuckle is unless he/she knows what a finger is. How do we know what a finger is? One of its defining feature is its position in the hand. The chain can be extended further on: HAND is relative to ARM, and ARM is relative to BODY. Finally, the body is positioned in three-dimensional space and the notion BODY has to be considered as a configuration in SPACE[2]. In other words, in order to describe in full the meaning of *finger* we have to describe the full array of conceptual content that is evoked by the above linguistic expression, i.e. the expression's **maximal scope.** So if the body as a whole (through a chain of intermediaries) can serve as the maximal scope for the concept of KNUCKLE, then FINGER provides the **immediate scope** for the characterization of KNUCKLE. The immediate scope comprises those facets of the maximal scope that figure most

[1] The capital letters are used to refer to the notion or the concept, while small italicized letters are used to refer to the linguistic expression, e.g. a word, a morpheme, or a clause.
[2] Originally Cognitive Grammar was labelled Space Grammar.

directly in the characterization of the profiled entity. The expression's profile (the entitity it designates) serves as a kind of focal point within its immediate scope.

Now, the meaning of linguistic expressions can be described in terms of a **profile** against a **base**. The profile refers to the concept symbolized by the word whose meaning is being discussed, i.e. *knuckle*. The base is the presupposed background knowledge in which the concept profile is anchored. The profile 'stands out in bas-relief' (Susan Lindner quoted from Langacker 1987: 183). Neither profile nor base is sufficient to define a word concept on its own. The profile concept presupposes other knowledge in its definition, its base. But the base in most cases is a complex conceptual structure which includes more than one concept profile; for example, FINGER supports the concept FINGER NAIL. Thus the base alone cannot define a linguistic concept. The meaning of a linguistic unit must specify both the profile and its base.

What makes the base a domain is the fact that it supports multiple concept profiles. Croft and Cruse (2004: 15) define a domain as a semantic structure that functions as the base for at least one concept profile (typically, many profiles). The canonical example of a profile-base relation is the part-whole relation which is illustrated by Langacker's example as well. FINGER, which is the base for the profile of KNUCKLE, is also far from being a primitive notion; it can be characterized relative to the concept HAND. Here it is itself a profile for the HAND frame, which in turn is understood in the context of ARM. Finally, the notion BODY is the domain in which ARM can be comprehended. Thus it becomes obvious that whether a conceptual structure is a profile or a domain (base) is a matter of construal.

The notion of BODY is a configuration in three-dimentional space. It seems that the chain of profile-base/frame relations stops where a directly embodied human

experience begins. SPACE is regarded by Langacker as a basic field of representation grounded in our body experiences. Such a basic field is called a **basic domain** (Langacker 1987: 148). Other basic domains are MATERIAL, FORCE, TIME, various sensations, emotions and perceptions, e.g. vision, temperature, taste, pressure, pain, and color, as well as certain social interpersonal phenomena. Langacker also postulates that any nonbasic domain, i.e. any concept or conceptual complex that functions as a domain for the characterization of a higher-order concept are **abstract domains.** An abstract domain is essentially equivalent to what Lakoff (1987) terms an **ICM** or idealized cognitive model (see below).

The relationships between domains are just as essential in semantic analysis as the profile-base relations. The relation between an abstract domain and a basic domain is not taxonomic (or **schematic**). It is the relationship of a concept to background assumptions and presuppositions. Some domains have more than one **dimension** (Langacker 1987: 150-151). For example, space has three dimensions; temperature, length or pitch are unidimensional, they are scalar domains in which physical properties perceived by our senses are grounded; colour has the dimensions of hue, brightness, and saturation. A concept may be profiled in several different domains, e.g. the concept of SNOW can be profiled in several different domains: space, colour, temperature, etc. or the specification of BODY is achieved not only in relation to the SPACE domain but in relation to other basic domains such as temperature, color, etc. Thus the full specification of concepts is relative to several domains, i.e. a **domain matrix**.

What are the basic conceptual entities that reside in various domains? Langacker suggests three types of basic conceptual entities: 1) a minimal concept in a particular domain; for space it is a line; 2) experientially grounded conceptual

archetypes such as a physical object, spatial motion of an object, a physical container and its contents, a whole and its parts, seeing something, holding something, and face-to-face social encounter and 3) concepts which are not tied to any domain such as point vs. extension, change vs. continuity, contact, inclusion, group (Langacker 2000:9, 24, 171–172).

To sum up, Langacker's view of linguistic knowledge is encyclopaedic, organized into conceptual domains which are grounded in our experience in the world.

For semantic analysis it is essential to determine the profile-base relation, and the relationships between different bases and domains. Fillmore (1982) provides examples which reveal that some distinctions in word meaning refer not to the profiled concept, which usually is thought of as 'the definition' of the word, but to its frame/domain. For example, LAND and GROUND denote what seems to be 'the same thing' and in some languages like Bulgarian or Russian there is only one word for this thing: *zemja, zemlja,* respectively. However, in English this 'thing' is profiled against a different frame for the two different words: LAND describes the dry surface of the earth in contrast to SEA; GROUND describes the dry surface of the earth in contrast to AIR (Fillmore 1982: 121). In Russian and Bulgarian ZEMLJA or ZEMJA is profiled against a frame which contains the contrast with both SEA and AIR. In other words, how an experience is framed is a matter of **construal**: it depends on how the speaker conceptualizes the experience to be communicated and understood by the hearer. Construals are pervasive in conceptualization and in linguistic meaning (see 2.4.)

Judging from the example above, the profile-frame/domain distinction may be one reason for the presence or absence of translation equivalents in different languages and for difficulties in translation (see Chapter 6).

2.3.2. Idealized Cognitive Models (ICM)

Fillmore and Lakoff's insightful contribution to the theory of frames is that the knowledge represented in the frame is itself a conceptualization of experience that often does not match reality; in fact, it often provides an idealized model of reality. The idealization involves oversimplification and often metaphorical understandings and theories of reality. The example most cited in the cognitive literature is the concept of BACHELOR. A dictionary definition of the word *bachelor* is 'an adult unmarried male'. This definition may suit most normal cases but there are cases in which speakers react with uncertainty: the Pope, Tarzan, a male homosexual living with his boyfriend, etc. It seems that the idealization, i.e. the ICM for BACHELOR does not include all possible real-world situations and that is why it is an idealization. It has been said above that an ICM involves oversimplification but this is not exactly so. Even the 'simplified' frame ADULT UNMARRIED MALE has to include much more information than is usually associated with these two labels (for more details see Croft and Cruse 2004). Human categorization is essentially a matter of both human experience and imagination, of perception, motor activity and culture, as well as of metaphor, metonymy and mental imagery. The symbolic units or ICMs posited above are organized into prototype categories which are also radial categories (Lakoff 1990).

2.4. Construal operations

2.4.1. Introduction

This section is of particular importance for the present research. It has been pointed out in Chapter 1 that property predicates in Russian and Bulgarian will be analyzed as conventionalized construals of the semantics of properties and these construals should be spelt out in detail. It has also been pointed out in the present chapter that semantics is conceptualization. So far I have primarily discussed framing and profiling as a pervasive type of conceptualization in linguistic expressions. But the range of conceptualization processes (construal operations) employed in all aspects of the grammatical expressions of a situation (inflectional and derivational morphology, parts of speech, clause structure) and identified by cognitive linguists so far is considerable. The most comprehensive classifications proposed so far are those of Langacker (1987: Chapter 3 Focal adjustments) and Talmy (2000) under the name of schematic systems. The present research has used primarily Langacker's focal adjustments and they will be discussed in more detail below. There are also some other widespread types of linguistic conceptualizations such as image schema or metaphor which have not been explicitly incorporated in the above mentioned classifications and which I shall briefly discuss in 2.4.2.

2.4.2. The Body in the Mind: the Embodiment of Meaning

As has been pointed out above, the experiential account of meaning proposes that meaning is embodied, i.e. it is grounded in our physical and social experiences. The shape and construction of our bodies and the way we interact with the environment form the experiential basis for understanding the structure of our concepts. Lakoff (1987:265) claims that 'conceptual structure is meaningful because

it is *embodied*, that is, it arises from, and is tied to, our preconceptual bodily experience. In short, conceptual structure exists and is understood because preconceptual structures exist and are understood. Conceptual structure takes its form in part from the nature of preconceptual structures.'

According to Johnson (1987) and Lakoff (1987) there are at least two kinds of structures in our preconceptual bodily experiences:

(a) basic level structure: basic-level categories result from our gestalt perception, capacity for bodily movement, and ability to form rich mental images (see below.)

(b) image schemas, which are simple and basic structures recurring in our everyday bodily experiences in the process of interacting with the world. In other words, image schemas are schematic versions of images, which are representations of specific embodied experiences.

Examples of such schemas are: CONTAINERS, SOURCE-PATH-GOAL, FORCES, BALANCE, NEAR-FAR, COUNT-MASS, etc., and various locational and orientational relations such as UP-DOWN, FRONT-BACK, IN-OUT, PART-WHOLE, CENTER-PERIPHERY, etc.

Most of the above-mentioned image schemas (containers, surface, count-mass, etc.) are in fact conceptualizations of the very structure of entities in a scene and are tied to a **gestalt** perception described by psychologists (see Koffka 1935 quoted in Croft and Cruse 2004). Some of the principles of gestalt psychology such as proximity, bounding, and good continuation represent how the mind conceptualizes a single complex object from fragmented perceptual sensations. As will be shown in 2.4.3., the Gestalt principle underlies a number of other conceptualizations. In fact, it becomes obvious that a rigid classification of the various construal operations is almost impossible since they interact with each other in subtle but complex ways.

2.4.3. Selection and figure/ground alignment

The phenomenon of profiling a concept in a semantic frame discussed in 2.3.1. is closely tied to the human cognitive ability to focus on what is relevant in our experience for the purposes of communication. In cognitive linguistics such a phenomenon is referred to as **selection**. The focal adjustment of selection is influenced by the natural properties of the perceived phenomena: some properties are more **salient** than others and can be easily selected.

The most obvious example of **selection** is the variety of words that symbolize different elements in a domain; they focus our attention on these elements, for example *radius, arc, circumference*, etc. in the CIRCLE domain. In other cases, derivational morphology shifts the profile, i.e. shifts the attention and selection from one entity to another or from one aspect of a scene to another; for example, in English the agent nominalizing suffix *-er* shifts the profile from process 'speak' to agent 'speaker', or instrument as in 'stapler'. In Bulgarian and Russian verbalizing suffixes such as the *e*-suffix do exactly the opposite i.e. they turn 'a thing' (noun) or 'property' (adjective) into 'process'. Profile shift (semantic shift) is a function of salience.

Another cognitive process that appears to be strongly influenced by the objective properties of a scene is **figure/ground** alignment. This distinction has been suggested by gestalt psychology for the organization of our visual and auditory perception. It was introduced into cognitive linguistics by Talmy to account for the linguistic expression of spatial relations (Talmy 1983, 2000). Although we do not see spatial relations the way we see physical objects, there is the intuition that locational relations like up-down, in-out, back-front reflect basic experiences similar to the ones we have with basic properties. Indeed, similar perceptual principles may be

responsible for structuring our spatial-relations concepts, e.g. gestalt perception and especially its sub-principle of the prominence of the parts of the perceived object. The application of this principle is extended beyond a single object and its parts. Most visual scenes are organized by our mind in such a way that an entity is chosen to stand out and be perceptually prominent/salient, i.e. be the figure in the perceived situation while another or others will be perceived as formless, unstructured, in other words, they will be given a ground status. For example, if there is a bicycle parked in front of a building, it is unlikely to hear somebody saying *The house is behind/in front of the bicycle* but it is natural to say *The bicycle is behind/in front of the house*. Having in mind the principles of gestalt perception and figure/ground segregation, it is more likely to select the bicycle as a figure rather than the house, especially in view of our interaction with the latter; it is possible to move the bicycle but not the house. Linguistically the relationship is expressed in the prepositions *in front of* and *behind.*

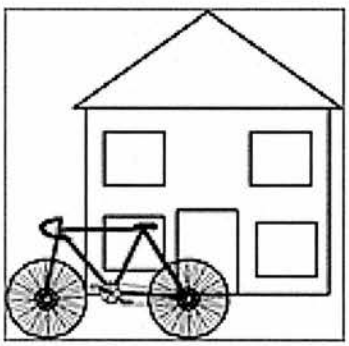

Figure 2.1 Representation of figure/ground alignment

Instead of figure and ground in cognitive linguistics the terms **trajector** and **landmark** have been adopted (Langacker 1987). A trajector is defined as the figure in a relational profile (see 2.4.6.), while landmark is the ground to the trajector.

As has been pointed out in 2.2., grammatical structures i.e. morphological and syntactic structures, are also considered inherently symbolic above and beyond the

symbolic relations embodied in the lexical items they employ. One of the most significant hypotheses of cognitive linguistics is that most if not all grammatical categories have meaning and the meaning contributed by these categories is conceptual. Such an approach presupposes that cognitive models fundamental to our experience and conceptualization of the world underlie prototypical syntactic relations such as subject and object, transitivity, voice, case, etc. Langacker (1991: Chapters 7, 8) suggests that the subject-verb-complement pattern can be given a principled explanation if it is viewed as a reflection of the principle of figure/ground segregation. In other words, in a simple transitive sentence the subject corresponds to the syntactic figure, the object to the syntactic ground (also called clausal **trajector** and clausal **landmark**) and the verb stands for the relationship between figure and ground. These descriptive tools will be made use of in Chapter 6 for the analyses of certain deadjectival verbs.

The figure/ground organization is almost totally subjective; it is not inherent in the situation but a matter of construal. This becomes especially obvious in the symmetrical relationship between the subject and the object as in the sentences below (from Langacker 1991: 311)

(1) Line A intersects line B.

(2) The railway tracks parallel the highway.

(3) Joshua resembles Jonathan.

In the sentences above, the choice of what goes in the subject position is up to to the speaker and can be easily accounted for by figure/ground organization. But such symmetrical clause structures are exceptional. Can the principle of prominence accommodate all transitive and intransitive subjects? According to Langacker what all subjects have in common is their status of figure within the clause and the

phenomenon is not tied specifically to transitivity; it is applicable to intransitive subjects, too. However, the choice of syntactic figure is guided and constrained by additional cognitive principles which interact with the figure/ground organization.

2.4.4. Scanning

Scanning is a cognitive ability based on our fundamental ability to compare things and events and to identify similarities and discrepancies (Langacker 1987:101). In the act of comparison there is a standard (S), which serves as a point of reference relative to which the target (T) is evaluated. The term **scanning** reflects the directionality of the operation from S to T and the implication of change i.e. the value of T depends on the degree of departure from S. A simple illustration of the process in real life is the way we follow the flight of a bird or the way we distinguish one musical tone from another. Langacker distinguishes two modes of cognitive processing which take part in the conceptualization of a complex scene: summary scanning and sequential scanning.

Summary scanning is additive, and the processing of various cognitive units proceeds simultaneously. When it is completed, all the relevant facets of the complex scene are put together as a whole, a single gestalt. This mode of scanning is depicted in Figure 2 (from Langacker 1987:). This is the mode of processing characteristic of things, i.e. nominal profiles. It is also characteristic of relational profiles such as adjectives and prepositions.

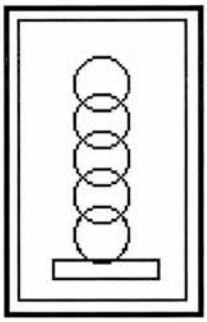

Figure 2.2 Representation of summary scanning

In sequential scanning the relevant cognitive units are processed successively but the data is added up only for a certain stage of the event resulting in a particular configuration. Then the process is repeated for the next stage and the next stage. Each stage serves as standard for the next one in the act of comparison, and the recognition of disparity amounts to the recognition of change, which is implicit in an event. Sequential scanning, therefore, is suitable for temporal relations and is expressed mainly by verbs. Figure 3 below, based on Langacker (1987:144, Figure 3.11.a), represents the process of sequential scanning involved in the conceptualization of *fall*. Langacker (1987:145) compares the difference between summary and sequential scanning to the one between examining a photograph and watching a film.

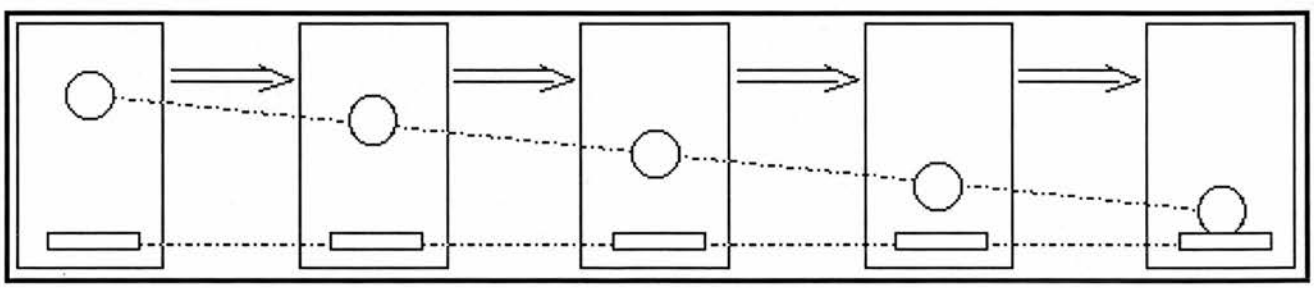

Figure 2.3. Representation of sequential scanning

2.4.5. Viewing arrangement

The stage metaphor is again a useful instrument in defining viewing arrangement as a cognitive principle (Langacker 1987: 122-132). The elements of the stage metaphor introduced so far are participants and setting, and what happens "onstage" must be distinguished from the setting. There is yet another element in the metaphor: the audience. The viewing arrangement captures the relationship between the offstage observer and onstage events. The stage model pertains to perceptual experience. The canonical arrangement, or, as Langacker calls it, the **optimal viewing arrangement**, is such that the relationship between the viewer (speaker/hearer) and the onstage event is not expressed; the 3rd person perspective is the norm and this is captured in Figure 4(a) (Langacker 1987: 129, Figure 3.5. (a)).

An alternative relationship is the egocentric viewing arrangement, in which the relationship between the speaker/hearer and the onstage event is profiled and expressed linguistically by deictic expressions such as 1st and 2nd person pronouns, *here* and *there*, *now* and *then*, *this* and *that*, etc. which express reference to the viewing position or vantage point of the speaker. This type of arrangement is depicted in Figure 4(b) (Langacker 1987: 129, 3.5(b).

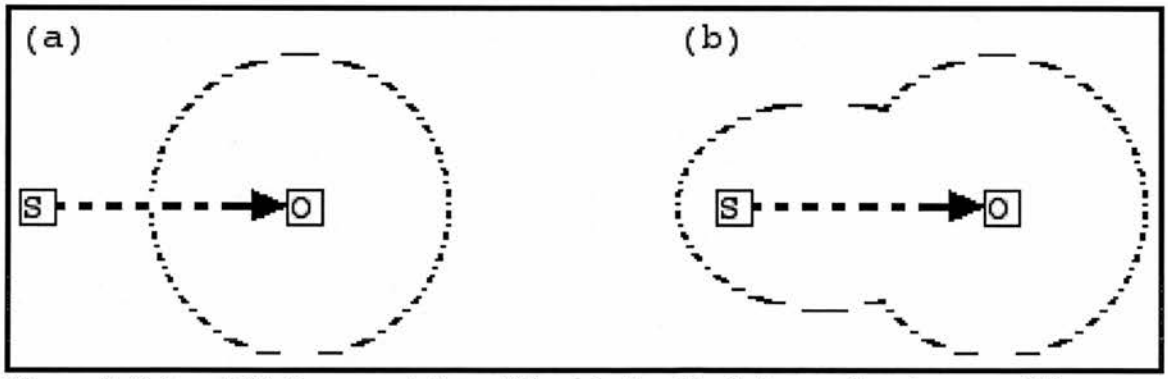

Figure 2.4(a) and (b) Representation of the relationship between the viewer and the onstage event

The notion of viewing arrangement provides the opportunity to include pragmatic considerations in the cognitive grammar framework. It is the foundation for Langacker's elaboration of the conception of 'grounding', i.e. how the relationship between onstage event and the vantage point from which the speaker and hearer conceptualize the content of a clause is expressed by tense, mood, nominal determiners, and indefinite pronouns. It figures prominently in the analyses of the semantic structure of verbal predicates derived from adjectives for visually salient properies, especially colour verbs in Slavic languages (see Chapter 6).

2.5. Categorization

2.5.1. Categorization as a construal operation

The act of categorization is a fundamental mental activity which involves the psychological process of comparison (Langacker 1987). Croft and Cruse (2004: 54) describe the phenomenon in the following way:

> 'The act of categorization - applying a word, morpheme or construction to a particular experience to be communicated-involves comparison of the experience in question to prior experiences and judging it to belong to the class of prior experiences to which the linguistic expression has been applied.'

This class of prior experiences is an abstract mental construct called **conceptual category**. In semantics, categorization plays a crucial role because it is reflected in the use of words and language in general. A lexical item is comprehended as corresponding to a conceptual category. Defining the lexical item therefore means defining the category.

2.5.2. The Classical Model of Categorization

The classical model, also called the Aristotelian model, is based on Aristotle's distinction between essential and accidental features or attributes of objects and natural phenomena. Things are in the same category only if they share a set of necessary and sufficient conditions. These conditions can be represented as a list of distinctive, discrete features which are either present (+) or absent (-). For example, the necessary and sufficient conditions for a creature to belong to the BIRD category are 'two wings', 'two legs', 'a beak', 'feathers' and 'lay eggs'. As there is a one-to-one correspondence between categories and the concepts for these categories, the structure of the concepts mirror the structure of the real world. Categories of the mind, i.e. concepts, fit the categories of the world, i.e. natural kinds. The linguistic version is the doctrine of natural-kind terms: the world consists of natural kinds of things and natural languages contain names called 'natural kind terms that fit those natural kinds. But a large number of the categories we deal with during our lives are not categories of things objectively existing in the world. They are abstract entities among which there are categories of actions, emotions, spatial relationships, social relationships, etc. A theory of categorization must account for all kinds of categories, both concrete and abstract. The classical theory has been taken for granted in the Western scholarly tradition for over 2000 years. It is not based on empirical study; it is a philosophical position based on *a priori* speculations.

2.5.3. Prototype Effects and the Internal Structure of Categories

An alternative to this model based on empirical research in cognitive psychology has been adopted by cognitive semantics, and is known as the **prototype model.**

The starting point for this kind of research in psychology was the classification of physical properties such as temperature, height, length, width, and especially colours. Classification or categorization as it is commonly called is a mental/cognitive process which produces cognitive categories also called concepts. For example, RED, BLUE, YELLOW are colour concepts (or categories), COLD,WARM, HOT are temperature concepts, LONG, SHORT, etc. are length concepts, and so on. But how do we categorize these when they have no clear cut boundaries and form a continuum without natural divisions? In addition, colour terms differ tremendously between languages, which makes colour classification look totally arbitrary.

The anthropologists Berlin and Kay (1969) provided strong evidence that colour categorization is grounded in focal colours. These are areas or points in the colour spectrum which were consistently judged by various speakers of the same language and speakers of various languages to be the best example of RED, YELLOW, GREEN, etc. While the boundaries of colour categories vary (for example, the judgements of speakers of the same language as well as of different languages varied as to whether the border-line area between red and yellow is red or yellow or something else), focal colours are shared by everyone.

In the early 1970s Rosch explored the psychological reality of focal colours, i.e. whether focal colours were rooted in pre-linguistic cognition or they were simply a side effect of linguistic expression. She aimed to prove that focal colours were prominent participants in the cognitive processes of categorization. And, indeed, she

did. Her experimental results showed that focal colours were perceptually more salient than non-focal colours, more memorable, and their names were more rapidly produced and earlier acquired by children. When it turned out that focal colours were used as 'anchors' for their colour categories irrespective of whether they took up a central or marginal position in a set, the term focal was replaced with 'natural prototype' and research was extended to shapes, organisms, and objects. It turned out that, just as the focal red is always the 'anchor' for all types of redness, i.e. the best example of redness, there are best and not so good examples of squares, birds, vehicles, etc. Subjects in tests judged certain members of the categories as being more representative than other members, i.e. exhibited prototype effects. For example, robins are judged to be better examples of the category BIRD than chickens, penguins, and ostriches. Figure 5 presents a section of examples from Rosch's goodness-of-example rating tests (Rosch 1975) :

	category				
rank	BIRD	FRUIT	VEHICLE	FURNITURE	WEAPON
top eight					
1	robin	orange	automobile	chair	gun
2	sparrow	apple	station wagon	sofa	pistol
3	bluejay	banana	truck	couch	revolver
4	bluebird	peach	car	table	machine gun
5	canary	pear	bus	easy chair	rifle
6	blackbird	apricot	taxi	dresser	switchblade
7	dove	tangerine	jeep	rocking chair	knife
8	lark	plum	ambulance	coffee table	dagger
.....	.....	.....	.....	.....	.....
middle ranks					
26*	hawk	tangelo	subway	lamp	whip
27	raven	papaya	trailer	stool	ice pick
28	goldfinch	honeydew	cart	hassock	slingshot
29	parrot	fig	wheelchair	drawers	fists
30	sandpiper	mango	yacht	piano	axe
.....	.....	.....	.....	.....	.....
last five					
51*	ostrich	nut	ski	picture	foot
52	titmouse	gourd	skateboard	closet	car
53	emu	olive	wheelbarrow	vase	glass
54	penguin	pickle	surfboard	fan	screwdriver
55	bat	squash	elevator	telephone	shoes

* Since the total number of listed items varied between 50 and 60, the numbers of middle and bottom ranks are not identical with the original ranks for all categories

Figure 2.5 A section of examples from Rosch's goodness-of-example rating tests

The results of the experiments with objects and organisms were of major significance. Being less obviously perceptual and yet yielding similar results, now it could not be argued that the asymmetries or prototype effects come from the perceptual nature of a limited number of categories such as colour and shape. All kinds of concrete entities and natural phenomena are conceptually organized around prototypes, which function as cognitive reference points used in making inferences. Therefore, it is more likely that prototype effects come from the perceptual and cognitive capabilities of the human mind rather than from the 'objective' nature of the categories themselves. Furthermore, if there are good examples of a category, for example *car* for the category of VEHICLE, and a bad example of the same category such as *elevator*, at which point does a VEHICLE become a NONVEHICLE? This is the same question that has already been asked in connection with graded categories such as height. When does a man stop being short and begin to be tall? In other words, there is not a clear-cut boundary not only for graded categories such as colours. Summing it up, all kinds of concrete entities and natural phenomena may be conceptually organized in terms of prototype categories, whose boundaries are fuzzy, not clear-cut. Thus categories emerge as having a complex internal structure less rigid than the one implied by the classical categorization view.

Before Rosch the philosopher Ludwig Wittgenstein studied the category GAME and found that the rigid classical model did not give a satisfying account for its structure.

> 'Consider for example the proceedings that we call 'games'. I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all? –Don't say: 'There must be something common, or they would not be called "games" ' – but look and see whether there is

anything common to all. – For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don't think, but look! – For example at board games, with their multifarious relationships. Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost. - Are they all 'amusing'? Compare chess with nought and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball-games there is again, this feature has disappeared. Look at the parts played by skill and luck; and at the difference between skill in chess and skill in tennis. Think now of games like ring-a-ring-a-roses; here is the element of amusement, but how many other characteristic features have disappeared! And we can go through the many, many other groups of games in the same way; we see how similarities crop up and disappear.'

There are no common properties shared by all games. He suggested that games are connected to each other in a network of overlapping similarities, resembling the way members of a family share traits. In such an *a priori* speculative manner he came to the conclusion that categories were structured by what he called **family resemblances**.

Based on their empirical research Rosch and Mervis (1975:575) suggest that the categories of the human mind are structured on the basis of family resemblances, i.e. each member of a category has at least one, and probably several, attributes in common with one or more other members, but no, or few, attributes are common to all items. This definition is especially suitable for superordinate categories like FURNITURE, VEHICLES, ANIMALS, etc. (cf. 3.3.). More concrete categories like BIRD, CAR, CHAIR, etc. behave in a different way. Figure 6 exemplifies the importance of both attributes and family resemblances for this type of categories.

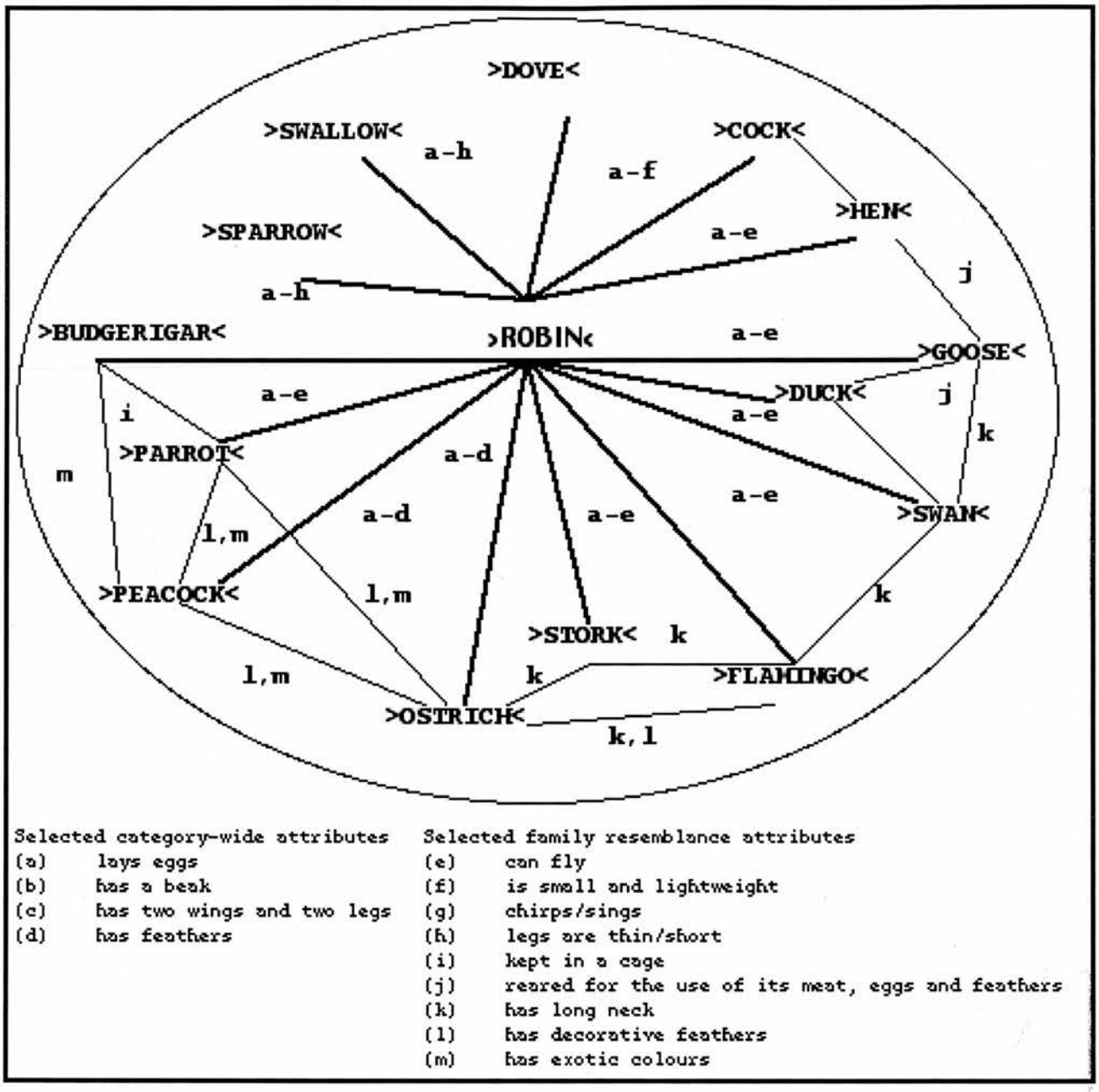

Figure 2.6 Selected common attributes and family resemblances of the category BIRD (from Ungerer and Schmid 27: Figure 1.8)

In these cases even the bad examples of the category like 'ostrich'and 'penguin' share some important attributes with all the other category members, while the best examples like *robin* and *sparrow* share many attributes with other members of the category. However, the significance of family resemblances may vary for different categories. What is important is that some examples of the category rely to a

certain extent on the family-resemblances principle in addition to the category-wide attributes. An ostrich is a bird not only because it shares the attributes from (a)-(e) like a robin in Figure 2 but also because it is similar to a flamingo ('a long neck') and to a peacock ('decorative feathers'), which are further away from the prototype. They also exhibit characteristics which are unexpected for the category 'tall' and 'run fast' rather than 'fly'. Such category structure is also referred to as radial (Lakoff 1987).

Finally, Rosch's attribute-listing experiments showed that the overlapping attributes are least between the good examples of different categories and many more between bad examples, which points out to the fuzziness of category boundaries. Summing it up, Rosch and her associates in cognitive psychology and Wittgenstein in philosophy challenged the major implications of the classical theory:

(1) categories are uniform in the sense that no members are better examples than any others

(2) categories are independent of the human beings doing the categorization since their properties are inherent in them.

Cognitive categories have prototypical members which take central position in the category. Other members of the category may be closer to or further away from the prototype(s). All members need not share certain significant qualities. Category membership can be a matter of degree, and the boundaries of the categories may be fuzzy. The category is formed around the typical instances, the prototypes. The perceived resemblance of other members to the prototype constitutes the basis for their membership of the category. The prototypical member may be understood as the "best" member, the most typical one, the clearest case of category membership.

2.5.4. Levels of categorization: basic-level categories

Categories form taxonomic hierarchies on the basis of different levels of generality. For example:

SUPERORDINATE	ANIMAL	VEHICLE
BASIC LEVEL	DOG	CAR
SUBORDINATE	TERRIER	SALOON

Scientific classifications, of course, are much more complex, consist of many levels, and aim at scientific rigidity based on philosophy and logic. They do not consider either the fact that human beings are constantly in contact with the objects and organisms in the surrounding world or the capabilities of the human mind which does the categorization.

However, Rosch and her associates found that the middle of the taxonomic hierarchies is psychologically the most basic level of classification. This understanding was not new in psychology. Evidence for the primacy and centrality of basic-level categories has also come from earlier studies by Brown (1958,1965), who found that names for basic-level categories like *dog, car, cat*, etc. are the ones that are acquired first and most easily by children, tend to be short and are used most frequently. This 'first' or 'superior' level of categorization is the only level on which organisms and objects can be associated with characteristic actions or motor movements such as sniffing flowers, rolling and kicking balls, stroking a cat, etc.

Further support for the prominence of the basic-level categories of mind came from anthropology. In the 1970s the anthropologist Brent Berlin and the botanists Dennis Breedlove and Peter Raven tested empirically the validity of scientific classification of plants for folk taxonomies. Their research was done in southern Mexico, among the Mayan-speaking Tzeltal people, and it showed the following

results. At the 'folk-generic level', as they called it, which coincides with the level of the genus, the categories are most numerous, their names are simpler and commonly used, and categories at this level have greater cultural significance. Examples of such categories are BEAN and CORN. They are considered so basic that they are not even related to any superordinate class in the mind of the Tzeltal people. This is due to their 'economic importance' and 'cultural significance'. At this level things are perceived holistically, as a single gestalt; at the lower levels specific details are picked out to differentiate different kinds of beans, for example.

Finally, the psychological experiments carried out by Rosch and her associates (1976) confirmed what used to be only assumptions and provided a general perspective on all of them, something which has since been called the theory of **prototypes and basic-level categories**. Without going into the details of the experiments, it should be pointed out that the tests used in the investigation of the basic-level categorization were very similar to the tests used in the research of prototypes. Let us repeat the results (Rosch 1976) and how they correlate with prototypes:

-the basic level is the level where we perceive the most obvious similarities between members of one and the same category and differences between the members of one category and the members of another category. To put it in more technical language, the basic level is the level at which the greatest number attributes naturally correlates into clusters available for categorization. These clusters of attributes are at their fullest in the prototype ('robin' in the case of BIRD) and expressed by the category name BIRD:

-the basic level is the level at which categorization is determined by overall gestalt perception. Gestalt perception is characterized by the perceived part-whole

relationship in which the parts of an object contribute to the overall shape of an object, are also related to its function (especially valid for artefacts) but are perceived as an integral whole, a single mental image. Such a holistic perception is particularly easy for the prototype.

-the highest level at which people use similar motor movements for interacting with the category members.

-the highest level at which most of our knowledge is organized. For example, we know a few things about plants in general but a lot of things about flowers, or trees and less so about the different kinds of trees like oak, poplar, etc.; we can say a few things about vehicles, many things about cars and much less about lower-level categories such as different makes unless you are an expert.

The basic level organizes not only our knowledge about objects and organisms but also categories relevant to all areas of human experience. It should be reminded that basicness was first mentioned in connection with basic colour terms, which are regarded as adjectives. Although there is the traditional understanding that properties are not categorized in isolation, but are experienced as attributes of categories denoting objects and organisms (e.g. hues and shades of colors are identified as properties of various objects: cherry, olive, amber, etc.), what matters in cognitive linguistics is that these properties must represent cognitive phenomena one way or another, based on sensory experience in our most immediate interaction with objects, people and our own bodies. There are basic-level actions for which we have conventional mental images and motor programs, like walking, running, swimming, pulling, grasping, etc. The are also basic-level social concepts, like families, restaurants, clubs, etc., as well as social actions, like arguing. There are also basic-level emotions, like anger, happiness, etc.

Thus the idea that meaning is embodied, i.e. it is grounded, in our physical and social experiences, is not an idle assumption. It has been shown above that at least some categories are embodied. Colour categories, for example, are jointly determined by the external physical world, the human body (the eyes), the human mind and the cultural context. Basic-level structures depend on human perception, imaging capacity, motor abilities, etc., which are all preconceptual bodily experiences.

2.6. Metaphor as a construal operation

Metaphor, like categorization and other construal operations, involves judgement and comparison (Croft and Cruse 2004). On the basis of rich linguistic data Lakoff and Johnson (1980) have shown that metaphors are powerful cognitive tools which we use in the process of conceptualization of abstract categories. The access to the metaphors that structure our way of thinking is through the way we use language. For example, the way we talk about time in English, as shown in the sentences below, indicates that we conceive of it as of some kind of valuable commodity and limited resource.

(4) You're *wasting* my time.
(5) Time is *money.*
(6) Can you *give* me a few minutes.
(7) I have no time to *spend.*
(8) We're *running out of* time.

In other words, a concept that has been formed in one domain is implemented in another, i.e. a metaphor has occurred. In cognitive linguistics a metaphor is not simply a figure of speech; it is a mapping from a source domain to a target domain. Research has shown that the source domain is always the human body and its

interaction with other objects in the physical space. Common targets are time, emotions, and states of being.

Lakoff and Johnson (1980) identify three basic types of metaphors:
(a) orientational metaphors which represent the extension of spatial relations such as IN/OUT, UP/DOWN, FRONT/BACK to non-spatial domains such as emotions, e.g. HAPPY IS UP/SAD IS DOWN as in *feel low* or *feel high*; the visual field is understood as a CONTAINER with the orientation IN/OUT as in things *come into* and *go out of* sight; personal relationships are also understood in terms of containers: one can be *trapped in* a marriage and *get out of* it; MORE IS UP; LESS IS DOWN as in Lakoff's examples below (1987: 272):

(9) The crime rate keeps *rising*.
(10) The number of books published is *going up*.
(11) The prices are *falling*.

(b) ontological metaphor is the conceptualization of non-things (abstract categories, emotions, etc.) as if they were things, e.g. *Their relationship is* **rotten.** (where a relationship is conceived as a thing subject to rotting)
(c) structural metaphors take an item with rich structure in bodily experience as the source domain for understanding something else, e.g. PEOPLE ARE PLANTS metaphor underlies many expressions such as *sprouting up* for children's growth, *blossom* for youth, old age as the time of *withering* and *fading*, and the slaughter of solders as being *mowed down*.

The three types of metaphors are very often fused together as in *falling in love* in which there is an interplay of the orientational metaphor extending the use of *in*, the ontological metaphor which identifies the concept of LOVE AS A PLACE and the structural metaphor LOVE IS FALLING DOWN that maps out our understanding of

physical falling with the initial encounter with love. It should be borne in mind that although metaphor is a powerful cognitive phenomenon and underlies all languages, the occurrence of specific metaphors and their extensions is a highly language-specific phenomenon. It is based not only on cognitive models but also on cultural models.

Finally, there is no fundamental difference between metaphors used in figurative language and those that structure linguistic categories: the latter have become conventionalized in a given language and culture.

Metonymy is another basic cognitive process. As with metaphors it has been usually described as a literary device to create imagery based on a part-whole relationship. Lakoff and Johnson (1980) have shown that, in fact, it is a powerful cognitive process. There is a general principle underlying metonymy in cognition; given a cognitive model with some background condition (e.g. institutions are located in places), there is a 'stand for' relationship that may hold between two elements A and B of the same model, such that one element B may stand for another element, A. In this case B=the place and A=the institution as in the following example: *The White House isn't saying anything.* Which part is being picked out determines which aspect of the whole we are focusing on and which cognitive and/or cultural model is highlighted (Lakoff and Johnson 1980: 36). Croft (1993:350) provides the following examples which demonstrate the above point:

(12) We need a couple of strong *bodies* for our team.
(13) There are a lot of good *heads* in the university.
(14) We need some new *faces* around here.

In the context of sports the PHYSICAL STRENGTH model instantiated in the BODY category is involved while in the university context the model

INTELLIGENCE related to HEAD is used. The category FACE standing for the whole category of PEOPLE is particularly suitable in the context of new faces as it is the face that is perceived first when meeting new people.

2.7. Clause structure

2.7.1. Models and role archetypes

In section 2.2. it has been pointed out that conceptualization is characterized relative to cognitive domains or idealized cognitive model. Such an ICM is the billiard-ball model, which captures one of the most elementary types of interaction between organisms and things, i.e. physical contact (Langacker 1987). The elements of such a model are space, time, material substance, and energy. These elements are conceived as constituting a world in which discrete objects move around in space; some of them are charged with energy and, when they make contact with other entities, they participate in energetic interactions similar to the ones that the balls in a billiard game are involved in. This model is a generalization of the notion of causation in which the energetic interactions or processes are conceptualized as different forces acting upon the participants in the events. The first one to notice the force-dynamic notions and their critical relevance to many aspects of linguistic structure was Talmy (1988, 2000).

Physical objects and energetic interactions provide the respective prototypes for the noun and verb categories. A very simple type of interaction is illustrated in Figure 7 and instantiated in the sentence:

(12) Susan peels a banana.

(a)

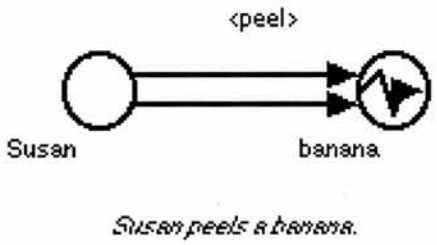

Figure 2.7 Representation of a simple type of interaction

Similarly, Langacker claims that the billiard-ball model figures in the characterization of a prototypical finite clause, which inherits its profile from a content verb designating an energetic interaction. He introduces the notion of action chain to account for longer interactions. An action chain arises when an object ("the head") makes forceful contact with another, resulting in a transfer of energy; the second object is thereby driven into contact with a third, again resulting in the transmission of energy; and so on indefinitely, until the energy is exhausted or no further contact is made. The last object in this chain is called "the tail". The energy transmission underlying the sentence structure in (13) is diagrammed below (from Ungerer and Schmid 1996: 175 Figure 4.12b).

(13) Floyd broke the glass with a hammer

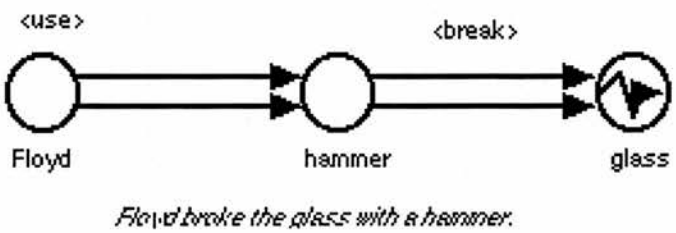

Figure 2.8 Representation of an action chain

The simplest action chain is the one in which the head and the tail interact without intermediaries, i.e. there are only two participating objects, as in Figure 7 above.

Another cognitive model resides in our conception of semantic roles such as agent, patient, instrument, experiencer, etc., which are well-established linguistic concepts commonly referred to as "thematic relations" or "theta roles" and first demonstrated by Fillmore (1968). For Langacker, however, these are not only linguistic constructs but rather pre-linguistic conceptions grounded in everyday experience. He calls them role archetypes and they reflect our experience of interacting with the world. We know that a person is capable of initiating motion or physical activity with another person or object, which results in a transfer of energy to the other person or object; this is a definition of the archetypical agent. Conversely, the archetypical patient is defined as an inanimate object that absorbs the energy transmitted via externally initiated physical contact and undergoes a change of state or is moved to another location. The archetypal role of instrument is defined as the intermediary in the transmission of energy between the agent and the patient. The experiencer role is used for a person engaged in a mental activity, including emotions.

Another basic model, which pertains to perceptual experience, is the stage model (Langacker 1991: 284). It involves the concepts of a viewer, a setting, and participants and idealizes a fundamental aspect of our moment-to-moment interaction with the world: the observation of external events, each comprising the interactions of participants within a setting. Transferred to linguistic expressions, the above distinction is reflected in clause structure. Participants provide subjects and objects, while the setting is expressed by adverbials of various kinds.

2.7.2. Unmarked Clause Structure

By combining the models described above Langacker proposes the complex conceptualization sketched in Figure 9a). He calls it a canonical event model.

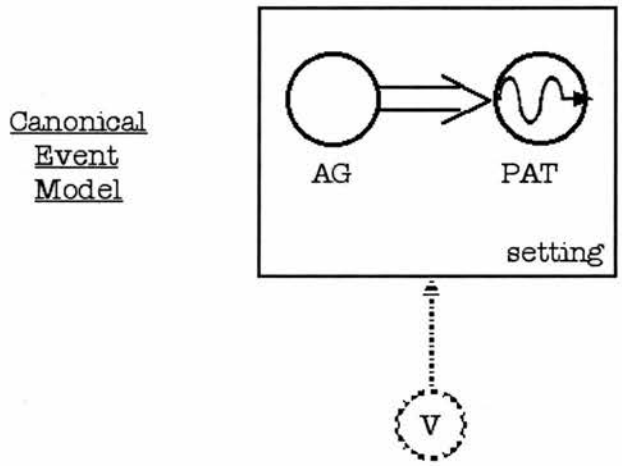

Figure 2.9(a) The canonical event model

From the stage model it has adopted the notion of an event occurring within a setting and a viewer (V) observing it from an external vantage point. From the billiard-ball model it has adopted the minimal conception of an action chain, in which one discrete object transmits energy to another through physical contact and the action chain head is characterized as an agent, and its tail as a patient that undergoes a change of state (shown by the squiggly arrow.) The canonical event model represents the normal observation of a prototypical action and its relevance to clause structure is particularly obvious in a finite transitive clause describing an action. The relationship between the conceptualization above and the linguistic structures expressing it is termed unmarked coding. All of the sentences above are instances of unmarked coding.

However, languages have the lexico-grammatical means to code non-canonical situations or allow a given situation to be portrayed in alternate ways. The

examples below will illustrate just a couple of such marked clause patterns. Many other examples of marked clause structure can be found in Langacker 1991: Chapter 8.

2.7.3. Marked Clause Structure: Examples

It has been shown above that the sentence in (13) above can be analyzed as a linguistic instantiation of the action-chain model in which the agent is selected as syntactic figure, followed by the patient as syntactic ground or object, and the instrument. The entire action chain is profiled as in Figure 8 above. However, in English, this is not the only possible linguistic instantiation of the glass-breaking action chain or many other canonical situations. A speaker may choose to describe the glass-breaking situation above as in

(14) The hammer broke the glass

or

(15) The glass (easily) broke

These constructions are represented in Figure 9b) and 9c).

Figure 2.9(b) A representation of the action-chain model for example (14)

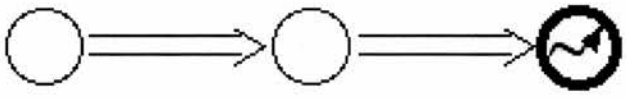

Figure 2.9(c) A representation of the action-chain model for example (15)

In contrast to 2.9(a), in 2.9(b) the head of the action chain is not expressed linguistically; the profile is limited to the instrument-patient interaction, and in 8(c) it

is the last element of the action chain, the patient and the processes it is undergoing that are profiled. In each case the subject is the head with respect to the profiled portion of the action chain. Similarly, the object is the action-chain tail, provided that the head and tail are distinct. In 2.9(c) the head and tail coincide and since every object presupposes a subject the single profiled participant functions as a subject and the sentence is thus intransitive. Thus 2.9(b) and 2.9(c) show the effect of profiling in marked clause structures. In Chapter 6 I am going to use similar representations for the analyses of intransitive deadjectival verbs as unmarked but nonprototypical verbs in Russian and Bulgarian.

Another example of a marked clause structure is the setting-subject construction for expressions such as

(16) The garden is swarming with bees

in which the locative setting is taking the role of a syntactic figure or subject while the syntactic ground is taken by bees as in Figure 10 (Figure 4.18 Ungerer and Schmid). As the figure shows there is a container-contained relationship between figure and ground and the container i.e. the setting has become prominent.

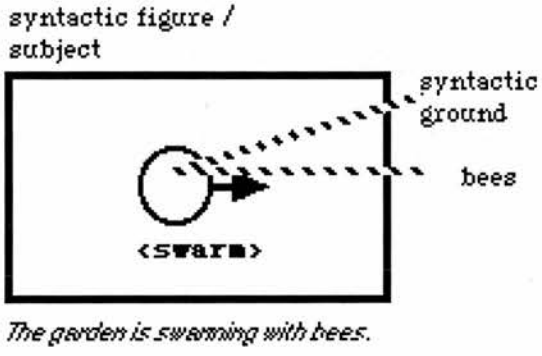

Figure 2.10 Setting as a figure (subject).

2.8. Universal theory of parts of speech and Radical Construction Grammar

Sections 2.4 and 2.7 above introduced Langacker's Cognitive Grammar model of syntactic representation. As it has been shown, fundamental syntactic categories such as Noun and Verb (cf. 2.4.4) and Subject and Object (cf. 2.4.3) can be adequately described in terms of construal of experience. Croft (1991, 2001) also argues for the essentially semantic basis of syntactic categories such as parts of speech but in terms of the correlation between semantic classes and propositional act functions instantiated in various constructions. Both models are ultimately Construction Grammar models of syntactic representation. As both approaches will be used in subsequent analyses in this work and the basic tenets of Cognitive Grammar have already been extensively presented in previous sections, the following section will discuss Croft's universal theory of parts of speech within Radical Construction Grammar (2001).

Construction Grammar is a response to this model of grammatical knowledge proposed by the various versions of generative grammar between the 1960's and the 1980's. In all these versions a speaker's grammatical knowledge is organized into separate components - phonological, syntactic and semantic and each component governs linguistic properties of a single type: sounds, word structure, syntax, meaning, use. In addition to these components, there is the lexicon. It is considered to be different from the other components as it combines information from all the other components. A lexical item stored in the lexicon has a sound structure, it belongs to a syntactic category which determines how it behaves with respect to the syntactic rules and has a meaning. Thus the lexicon crosscuts the other components which is represented in Figure 11 below (from Croft and Cruse 2004: 227).

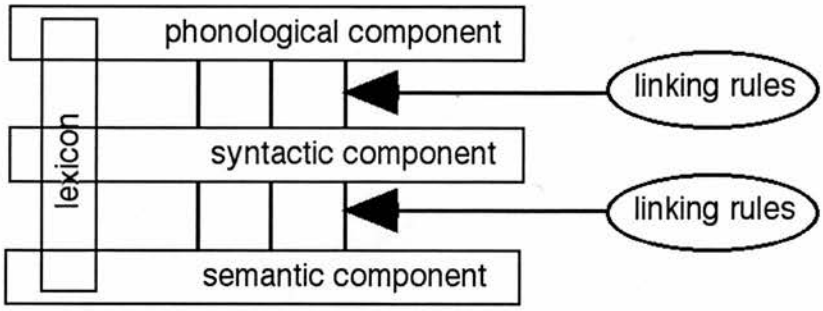

Fig. 2. 11 The organization of syntactic knowledge in formal theories

As it is shown in the figure there are also linking rules which map information from one component to another, for instance, rules that map the syntactic structure of a sentence onto the semantic structure of the meaning conveyed by the sentence. To sum up, the generative model suggests that all grammatical structures larger than a single word can be explained by highly general rules. All arbitrary and idiosyncratic aspects of grammar should be restricted to the lexicon, for example idiomatic expressions.

In contrast to formal theories of syntax, Construction Grammars (Fillmore, Kay and O'Connor 1988) consist in the insight that language is a repertoire of more or less complex patterns, i.e. constructionts that integrate form and meaning in conventionalized and sometimes non-compositional ways (e.g. substantive idioms such as *kick the bucket, saw logs*, etc.). Form in constructions may refer to any combination of syntactic, morphological, or prosodic patterns while meaning is understood in a broad sense that includes lexical semantics, pragmatics, and discourse structure (see 2.2.). 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.

The above insight is a consequence of substantial research which has revealed

a large number of families of related constructions with specific syntactic, semantic and pragmatic properties. Just a few examples will suffice: coordinate constructions, paired focus construction, single focus constructions (Fillmore et al. 1988) such as *let alone*-constructions, there-constructions (Lakoff 1987), exclamative constructions (Michaelis and Lambrecht 1996), equational tautological constructions (Wierzbicka 1987) such as 'boys will be boys'. Such studies demonstrate that speakers possess an extraordinary range of specialized syntactic knowledge that goes beyond general rules of syntax and semantic interpretation on the one hand, and a list of substantive idioms fixed in the lexicon on the other. Therefore, there exists the need to posit constructions as a unit of syntactic representation. What is more, it is possible to generalize the concept of construction to account for all of a speaker's grammatical knowledge.

What we have to do is to reanalyze general syntactic rules as the broadest, most schematic constructions of a language (Croft and Cruse 2004: 247-256).

What is radical about Radical Construction Grammar developed by Croft (2001) is that it argues against the existence of syntactic relations; syntax is, in fact, a side effect of the semantic structure of grammatical constructions. The only syntactic structure is found in the relations between the syntactic elements to the construction as a whole. Syntactic relations are replaced by syntactic roles and symbolic relations linking form and meaning. Croft uses the semantic map model of typological theory to map category distributions onto a largely universal conceptual space. His radical idea of constructions being the primitive units of syntactic representation finds support in the psychological research by Tomasello (1992 quoted in Croft and Cruse 2004) who finds that children do not acquire syntactic structures which they then implement with sets of verbs but they acquire individual verbs, each of which is

associated with a construction, and information about the construction of a known verb is not transferred to new verbs.

The universal-typological theory is part of Radical Construction Grammar. It was first formulated in Croft's earlier work (1984, 1986, 1991). It is conceived as broad enough to be thought of as a theory of parts of speech as language universals. And at the same time, by adopting the semantic map model, i.e. the universals of language are found in conceptual structure, i.e. they are semantic by natiure, and by mapping them onto grammatical form, we can account for language-particular distributional patterns. It is the latter aspect of the theory, which will be exploited in subsequent analyses in the present study. First, I shall discuss the foundations of the theory in the interaction of semantic class and discourse function.

A commonsense 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 *beleja* in Bulgarian denotes a property i.e. the colour 'white' as much as does the adjective *bjal* 'white', and the noun *whiteness* 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. Denotation here should be equivalent to Langacker's (1987) 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 (cf. Chapter 4). In addition, *destruction* and *whiteness* are not nouns on par with a 'real' noun like *dog*; semantically they are more abstract than *dog* and morphologically more complex (an additional morpheme) compared to both *dog* and their respective sources the verb *destroy* and the adjective *white*. Similarly the verb *beleja* is morphologically more complex than the adjective *bjal* which derives it. In other words, even intuitively there seems to be an interaction between *semantic class*, *discourse function* and the relevant *constructions*.

Referring, *predicating* and *modifying* constructions encode the propositional acts. Predication as well as reference and modification are pragmatic (communicative) functions or, as Searle (1969:23-4, Croft 1990, Croft 1991: 109-11) 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.

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 linguistics. A concept is inherently RELATIONAL if its existence or presence requires the existence or presence of another entity.

The second semantic property is STATIVITY. This property represents the presence or absence of change over time in the state of affairs described by the concept. In other words, it represents whether a concept is a state or a process. Properties are stative. TRANSITORINESS is the third semantic property which serves for the distinction of the semantic classes. It determines whether a concept represents a transitory state or process or an inherent or permanent state of the entity in question. States (human propensities) appear to be semantically intermediate between properties and actions as they are more often transitory rather than permanent. In Chapter 6 I am going to show that properties can also be conceived as transitory in particular situations. GRADABILITY is a concept which represent whether an entity is gradable along a scale.

Table 2.1 (Croft 2001:87; Table 2.2)

	Relationality Gradability	Stativity	Transitoriness
Objects	nonrelational nongradable	state	permanent
Properties	relational gradable	state	permanent
Actions	relational nongradable	process	transitory

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. Croft's table representing the semantic map of English parts of speech is reproduced below:

Table 2.2 (Croft 2001: 88, Table 2.3)

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

Following the TYPOLOGICAL MARKEDNESS theory (Greenberg 1966, Croft 1990, 1996) 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:

(17) I found the **ring**.

(18) The **big** cookie is hers.

(19) 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 Table 2.1 (Croft 2001, Table 2.3.), e.g. nominalization of property and action words as in *good**ness***, *happi**ness*** or *destruc**tion**, produc**tion*** (Croft 2001:88, e.g.74a. and b.). 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.'

It is quite straightforward to show that this principle holds for Russian and Bulgarian (see Chapter 4).

2.9. Conceptual Space and Semantic Maps

In section 2.8. I introduced Croft's universal-typological theory of parts of speech which proposes a set of universals that define and constrain a range of variation in the structure of constructions encoding the propositional acts of reference, modification and predication. In this section I shall present the structure of the

conceptual space for parts of speech as presented by Croft in his Radical Construction Grammar. I shall also outline the language specific region of property predication in the semantic map of parts of speech constructions in Bulgarian, Russian and other Slavic languages in Chapter 5.

The conceptual space approach is central to typological research. It is believed that language universals, if any at all, are represented in the structure of conceptual space. Therefore, the universals of parts of speech constructions are laid out as regions in conceptual space as in Figure (Croft 2001:92, Figure 2.3.). The conceptual space for parts of speech repeats the structure of Table 2.2 above plus two additional functions.

	REFERENCE	MODIFICATION	PREDICATION	
	object	object	object	identity
OBJECTS	reference	modifier	predication	predication
PROPERTIES	property	property	property	location
	reference	modifier	predication	predication
ACTIONS	action	action	action	
	reference	modifier	predication	

Figure 2.12 The conceptual space for parts of speech

Conceptual space is a structured representation of functional structures and their relationships to each other. Croft has chosen to distinguish between conceptual space for language universal conceptual structures and semantic map for language specific semantic structures. This gives us the means to represent the speakers' knowledge of their language.

Moreover, for a specific domain of language we need to refer to the relevant dimensions of conceptual space. The relevant dimensions are the functions or

conventional meanings of the constructions whose analysis we are aiming at and the meanings of the elements that fill the relevant roles in these constructions (Croft 2001: 93). Thus, we have a general model to analyze in a principle way both the form and the meaning of language or any portion of it. In this particular study it gives us the means to analyze property predication in Slavic languages encoded in several ostensibly disconnected constructions as connected points in the semantic map. Such an approach is based on the hypothesis which Croft summarizes in the following way (Croft 2001: 96):

Semantic Map Connectivity Hypothesis: any relevant language-specific and construction-specific category should map onto a connected region in conceptual space.

The typological-universal theory of parts of speech also makes predictions about the grammatical encoding of functions in conceptual space formulated by Croft (2001: 98) :

Structural Coding Map Hypothesis: Constructions encoding a function should code that function in at least as many morphemes in typologically marked points in conceptual space as in typologically unmarked points in conceptual space.

Behavioural Potential Map Hypothesis: Constructions expressing the behavioural potential of a category should be found in at least the typological unmarked points in conceptual space.

Croft has tested these hypotheses on the primary parts of speech in English (Croft 2001: 99, Figure 2.3). In Chapter 4 I shall test his hypotheses on a smaller region – the morphosyntactic constructions encoding modification and predication in Bulgarian and Russian. Since they are highly synthetic languages, derivational morphological constructions play a major role in the encoding of function in Slavic

languages. I shall lay out the semantic map of the respective constructions which will be an attempt to answer the question that has concerned me while studying Croft's semantic map of English parts of speech : where is the place of verbalizing suffixes such as the English *-en* which derives transitive and intransitive verbs from adjectives such as *whiten, blacken, weaken, lengthen, widen,* or the Slavic *e*-suffix and *i*-suffix deriving intransitive and transitive verbs respectively from various adjectives? In one way, deadjectival verbs are UNMARKED VERBS. As unmarked verbs deadjectival verbs can be inflected with the tense/agreement/modality inflections (although some of these verbs in Russian and Bulgarian are quite 'defective', see Chapter 4 and Chapter 6). In another sense, they are 'marked' as they are derived and morphologically more complex than some other basic verbs and they predicate properties rather than actions. For example, in Russian and Bulgarian the so called colour verbs and the predicate adjective construction *be* + property appear to be truth-functionally equivalent: *Parus belyj* 'The sail is white' and *Beleet parus* 'A sail is white (and I can see it)'. After all, even the copula in property predication constructions is inflected for tense, agreement and modality in Slavic as well as in English. Does this make it an unmarked verb and where should it be placed on the semantic map? In fact, Croft does not seem to treat it as a verb - for him it is a copula (see footnotes in Chapter 1, 5 and 6).

Where is the place of relational adjectives in Slavic languages which are derived through suffixation from nouns? Relational adjectives are immediately structurally recognizable as adjectives and are used for the function of modification. As such they qualify for the region of UNMARKED ADJECTIVES on the semantic map of Russian and Bulgarian. However, they lack the prototypical adjectival category of degree. In addition, these derivational constructions structurally mirror the

overt nominalization constructions found with property word and action words in reference. In Table 2.2 (Croft 2001: 88, Table 2.3.) nominalization constructions are referred to as deadjectival nouns (e.g. 'good**ness**', 'happi**ness**') and action nominals (e.g. 'destruc**tion**', 'produc**tion**') and in Fugure 2.12 (Croft 2001: 99, Figure 2.3.) they take marked points in the semantic map of English parts of speech. They lack the behavioural potential constructions prototypical of UNMARKED NOUNS such as number but share others such as definiteness (the-article). Also under certain conditions action nominals can be used in the plural, e. g. *I have seen several productions of this film*, thus sharing the behavioural potential constructions of unmarked nouns. In other words, although they are not prototypical nouns, they are nevertheless nouns. Yet, they occupy marked points in the semantic map of English parts of speech. Similar examples of property and action reference can be cited from Russian and Bulgarian.

These inadequacies are solved by the prototype theory which Radical Construction Grammar adopts. The terms Noun, Verb and Adjective describe functional prototypes which are language universal. Prototypes do not define boundaries. Boundaries are language specific categories. Being derived deadjectival verbs and relational adjectives in Slavic do not belong exactly to the core of unmarked verbs and unmarked adjectives. To put it a different way, they can be analyzed as peripheral members of the RADIAL category of unmarked verbs and unmarked adjectives respectively (Lakoff 1987 and section above). My contention is that they occupy points in the semantic map which are within the categories of unmarked verbs and unmarked adjectives respectively but towards the periphery with links to nearby regions within the same functions i.e. predication and modification respectively. In Chapter 4 I shall offer a finer-grained semantic map of the region of property

predication in Russian and Bulgarian as well as of the smaller region occupied by relational adjectives.

The inadequacies referred to in the previous paragraph also seem to disappear if we apply construal analysis to derivational morphology as an overt expression of semantic shifts in the semantics of properties and objects. For example, properties are inherent, permanent and stative. When they are used in predication, they will be semantically shifted closer to the prototype for predication i.e. the verb. When a colour property, which is inherent, is construed as transitory it surfaces as either appearance or the process of coming to possess that property. Alternatively, they can be analysed as construals of experience rather than semantic classes, in which case a detailed analysis of the conceptualization processes involved will be in order. Such an approach is more in line with Langacker's Cognitive Grammar (1987), but it does not contradict the universal typological theory of parts of speech.

Chapter 3
Data and methodology

3.1 Introduction

There have been previous discussions of properties in predication constructions, but only within the bigger task of providing a classification of the semantic types of predicates in Russian (Alisova 1971, Stepanov 1980, Bulygina 1982, Seliverstova 1982). I believe that a fine-grained description of the semantics of property predication constructions which delineate a small region on the semantic map of Slavic languages will be equally illustrative of the possibilities of cognitive linguistics and construction grammars to provide insightful and principled accounts of linguistic facts. The fact that in Bulgarian and Russian as well as in other Slavic languages we can assign certain properties to an object in a couple of ways which truth-functionally are almost identical does not mean that these languages are grammatically profligate for its own sake and the difference in these structures is only a matter of form. The aim of the present research is to provide morpho-syntactic and semantic analyses of property predicates which, hopefully, will show the linguistic phenomenon in its unity.

To begin with, in Russian, Bulgarian and other Slavic languages properties are assigned through the following constructions:

a) the copula 'be' + adjective: R: byt' + adjective ; B. săm/băda + adjective

b) 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', e.g. R. and B. colour verbs *belet'(sja), beleja; sinet', sineja*; *pustet', pusteja* 'be seen as empty, uninhabited; R. *veličat'sja*, B. *golemeja (se)* 'act importantly'.

c) the pseudo-copula 'become, turn or grow' + adjective: R. *stanovit'sja / stat'* 'become', B. *stavam, stana.* There are several other pseudo-copula verbs in Russian and Bulgarian which mark change of property or conservation of property, e.g. R. *sdelat'sja* 'become', *ostavat'sja / ostat'sja* 'remain', *polučat'sja / polučit'sja* 'turnout', *vyxodit' / vyjti* 'come out', *delat'sja / sdelat'sja* 'become', *obratit'sja* 'turn into'. However, *stanovit'sja / stat'* is the only pseudo-copula which behave syntactically like *byt'* (see Pereltsvayg 2001) and semantically it parallels deadjectival verbs.

d) intransitive deadjectival verbs with the meaning of 'acquire or intensify the property' denoted by the source adjective.

The constructions in a) and c) have traditionally been analyzed as the predicative constructions in Slavic languages. They have been compared to the respective verbs only in passing (Bulygina 1982, Seliverstova 1990) or as part of the discussions in the linguistic literature about the nature of the copula (see Chapter 5). Formal approaches argue that the copula has purely grammatical functions marking only tense, mood, etc. (Jespersen 1958, Lyons 1978). In the Russian linguistic literature there exists the opinion (Jarceva 1947, Smirnickij 1957) that the copula *be* preserves its meaning although bleached. Evidence for such an analysis is the opposition between *be* and *become*, R. *byt'* and *stanovit'sja / stat'*. I shall argue along the lines of cognitive linguistics that indeed the auxiliary *be* is a schematic representation of the meaning of existence. Similarly, the verbs participating in predicate adjective constructions in English as well as in Russian and Bulgarian, *become, stanovit'sja, stavam* originated from verbs of directed movement, *come* in English, *stavam / stana me* 'stand up' in Bulgarian and the same in Russian. This is not surprising as the metaphor CHANGE IS MOVEMENT is a common linguistic conceptualization. In our specific case the

change is from not having the property to coming to possess the property and / or perceiving its intensity.

Chapter 6 will provide a comprehensive list of deadjectival verbs derived from core adjectives in Russian and Bulgarian. The way they have been selected and classified is explained below.

3.2 Semantic classes of property concept words

On of the aims of in this project is to present evidence that in Russian, Bulgarian and other Slavic languages Human Propensities are not the only class of property concepts which can be verbally encoded; property concepts from other semantic subsets listed by Stassen (1997) can be encoded verbally for the purpose of predication. In fact, Stassen's claim can be reversed – property concepts can often be verbally encoded in Russian and other Slavic languages. The encoding constructions either involve copulas such as the equivalents of *be* and *become* or verbs derived mainly from adjectival as well as from some nominal stems or directly from roots[1]. These have been categorized closely following Stassen's adjectival hierarchy[2] as well as Croft's semantic classification of Russian lexical roots especially the classes of properties and states (1984, 1986, 1991). Croft's semantic classification of Russian lexical roots is arranged in such a way that properties and states are in between objects and actions. Their intermediate status is clearly spelt out in his later research

[1] On several occasions in the course of the analysis I shall remind the readers that adjective predicates with copula verbs are often referred to as nonverbal predication (see Croft and Cruse 2004). I follow Langacker's (1987) treatment of the copula be as a verb.

[2] Stassen's adjective hierarchy (Stassen 1997) which lists 9 categories of property-concept words is a synthesis of the category systems proposed in Dixon (1977), Pustet (1989), and Wetzer (1996).

(2001:96-97) where he utilizes the notion of conceptual space as a structured representation of functional structures and their relationships to each other:

> 'The conceptual space for parts of speech also make conceptual sense. For example, the conceptual space for parts of speech also implies that properties are intermediate between objects and actions. There is some typological evidence supporting both of those hypotheses. It appears that overt expression of predication–copulas or an auxiliary (as it is called when it accompanies action word predications)-conforms to the hierarchy object < property < action. (Croft 1991: 130, Stassen 1997: 127). Stassen also proposes a more detailed hierarchy of properties spread between objects and actions: *object < material, gender < value, age, form < dimension, colour < physical properties < human propensity < action.* Stassen's research demonstrates that detailed cross-linguistic research-his sample consists of 410 languages-reveals further fine-grained detail of the topography of conceptual space that could not be discovered otherwise'.

As has been pointed out in Chapter 1, the present study focuses on this intermediate area between *object* and *action.*

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. 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
Dimension: Measure; Body size
Time-related properties
Physical properties: shape, structure, taste, texture (feel)
Human propensities: physical states, emotional states, physical inability, socially defined states
Full/empty states

3.3 Adjectives and deadjectival verbs

In order to collect the data, four major kinds of sources were considered. The first source included Bulgarian and Russian dictionaries. Native speakers of Bulgarian, participating in an elicitation test, an interpretation test and a translation test designed for the study, formed the second source. The third source was an electronic corpus, from which examples have been systematically collected. The fourth source are examples of the usage of deadjectival verbs primarily extracted by other researchers from literary texts (Bulygina 1985, Israeli 1997).

The first stage in the data collection was to compile a list of property concept words i.e. adjectives and sort them out in their relevant categories. For the selection of colour and dimension adjectives in Bulgarian I used Todorova's monograph (1987) on the semantic and functional characteristics of colour and dimension adjectives in Bulgarian. It gives a comprehensive list of these classes of adjectives. For the purposes of the present research I compiled a list of the colour adjectives that were statistically above zero in Todorova's tables. I added five other colour adjectives which I know derive intransitive verbs. In fact, three of them are not strictly speaking colours but refer to brightness - *tămen* 'dark', *svetăl* 'light' and *jasen* 'clear, bright'. The list of dimension adjectives was confined to the first group of 14 dimension adjectives compiled by Todorova (1987: 43) which are very old, basic and nonderived.

The other classes of property concept words (adjectives) in Bulgarian were filled in with adjectives relying on my native speaker's knowledge. All the adjectives in their respective semantic classes are listed in the tables in Chapter 6. The Bulgarian adjectives were the starting point for the selection of the respective adjectives in

Russian. Gribble's Russian root list (1973) was also consulted. The results were checked in dictionaries and discussed with native Russian speakers.

Having first established the semantic classes of property concepts and their adjectival members in Bulgarian, next I used my knowledge of Bulgarian as a native language to derive intransitive verbs from the adjectives in the different semantic subclasses. Transitive counterparts were also listed as well as the inchoative *-sja / se* derivatives from them. The results were verified by consulting Bulgarian dictionaries and are also listed in the tables in Chapter 6. Finally, I looked for their Russian equivalents.

The picture that emerges was the following: property predication in Russian and Bulgarian 'captures' five major types of construals of the objective reality pertaining to objects and properties - perceptual, processual, force-dynamic, inchoative and behavioural. In other words, I identified five ways in which inherent states, i.e. properties, are construed as transitory and they are all related in a semantic network. I do not consider the labels the most felicitous. As is often the case in linguistic analyses, these labels have been used to refer to possibly similar notions but in a variety of frameworks, perspectives, or approaches. That is why I shall briefly specify how they are used in the present study.

In cognitive linguistics transitive verbs or, more precisely, a finite transitive clause describing an action, is the unmarked coding for the prototypical conception of physical objects and their energetic interactions (see Chapter 2). I have termed **force-dynamic** the construal in which an object gets in contact with another object and as a result of a certain force applied by the first object to the second object, the second object undergoes a change of property, be it colour, dimension, or any other physical or emotional (for animate things) state. The first object is prototypically in the role of

an agent, while the second object is in the role of a patient. This situation is directly related to the canonical event model described in Chapter 2. The transitive verbs that capture the above mentioned construal derive from the respective adjective for the property which undergoes the change and most often classified as *i*-stemmed verbs. In fact, it is not clear to what extent *-i-* is a classifying affix or a derivational morpheme.

Inchoative is a construal closely related to the force-dynamic construal, as it conceives the same event but this time without the agent. In Slavic languages it gets naturally marked by the reflexive *-sja / se,* which generally marks the neutralization of the agent vs. patient opposition (cf. Schenker 1988) and leads to an intransitive verb.

Intransitive verbs derived from adjectival stems by the *e*-suffix have often been described as inchoative too (Sigalov 1963, Uluxanov 1977) since they seem also to express non-energetic and non-agentive acquision of a certain property. Yet, as will become clear in Chapter 6 they are distinct in their meanings as much as they are distinct in their form (*i*-affix vs. *e*-affix). These verbs capture the **processual** construal of properties as transitory predicates in term of acquision or intensification of the predicated property. Stassen (1997) shows that this is cross-linguistically a very common construal which is also cross-linguistically expressed though primarily verbally.

The **perceptual** construal is the specifically Slavic one. In addition to predicating a property to an object (usually a visually observable property) it invokes the speaker/observer in the scope of the predication, thus relating it directly to the speech event, the ground (Langacker 1987), which includes the moment of the speech as well as the position of the speaker relative to the scene in which the object is located. Other equally (or even more) appropriate labels to be considered are 'visually

perceptual construal' or 'deictic construal'. For the present study I have kept the most unspecified term, i.e. 'perceptual construal'.

A verb is conceptually dependent; it profiles a set of interconnections involving one or more participants. That is why its semantic structure is best described at the level of the clause. I have collected a body of sentences to demonstrate the usage/meaning of the deadjectival verbs which are the focus of the present work. The sources used are described below.

3.4 Previous works and dictionaries

Two previous works on the semantics of colour verbs were invaluable in the data collection: Hill (1972) for many of the sentences with *beleja* and *černeja* and Israeli (1998) for a list of all colour verbs in Russian and sentences illustrating the 'appear' meaning of these verbs. Sentence examples of the meanings of verbs derived from the rest of the adjectival semantic classes have been extracted from the electronic sources described below.

3.5 Electronic sources

A fundamental characteristic of cognitive linguistic approaches is the use of real data. The sentences that have been used to illustrate the meanings of various constructions are real sentences extracted from real texts, oral or written. Three main electronic sources of present-day Bulgarian have been searched. The first one is Nikolova's corpus amounting approximately to 50, 000 word tokens. The second one was the BulTreebank data base which provides a high quality set of syntactic structures of Bulgarian sentences within the framework of Head Driven Phrase

Structure Grammar. Lastly, many sentences have been extracted from the works of contemporary Bulgarian writers downloadable from **www.slovo.bg**.

3.6 The elicitation test and the interpretation test

Another important feature of cognitive linguistic approaches is the use of experiments which aim to reveal the psychological reality of linguistic meaning. The present study has also tried that on a localized phenomenon: the derivational pattern constructing colour verbs in Bulgarian with the meaning of 'appear, be seen [colour], stand out with [colour]. An elicitation test and interpretation test were performed at Plovdiv University on two different days in April 2005. A total of 18 students, all native speakers of Bulgarian, participated in the tests. On the first day they were provided with a list of 33 common colour adjectives in Bulgarian and were asked to form verbs with the meaning of 'appear, be seen + colour'. The students were 3rd year English language and literature graduates. A week later the same students were given the interpretation test. It consisted of a list of sentences with deadjectival verbs in their perceptual meaning . The informants were asked to judge the sentences as acceptable or unacceptable and provide an interpretation of the acceptable ones, i.e. use the expression which best represents the meaning of the verbs in the sentences. The tests can be found in the Appendix 1.

Finally, a second type of interpretation test was performed. Three professional translators were asked to provide interpretation into English of Bulgarian sentences containing colour verbs. The results are provided in Appendix 2. The reason I have focused on colour verbs more than other verbal property predicates is that colours, being visually salient properties, provide the most numerous group of verbal property

predicates and the most obvious interconnections between the different elements of the scene they profile (see Chapter 6).

Chapter 4
The Semantic Map of Property Predication in Slavic

4.1. Properties in modification and predication

For quite some time adjectives have been in the focus of linguistic research as a class with a peculiar syntactic behaviour i.e. distribution in different languages. Many linguists claim that there are languages that lack Adjectives: words denoting qualities are described as (Stative) Verbs (Acehnese, northern Sumatra, Mandarin Chinese) or as Nouns (Quechua, Finnish), depending on their morphosyntactic properties. In his famous paper Dixon (1977:9) poses the question 'how does it [i.e. a language with either no Adjective class at all or only a small non-productive minor class of Adjective] express concepts that are expressed through adjectives in languages, like English, which do have this major class?' His findings, based on a sample of seventeen languages are summarized below:

1. Languages may have a category of Adjectives which can be identified on language-internal morphosyntactic grounds. No matter how small or restricted this category is, it is likely to include at least these four types of Property concepts: DIMENSION, COLOUR, AGE and VALUE.

2. Whether or not there is a category of Adjectives, the words expressing Property Concepts tend to fall into categories which either share many properties with the class of Nouns, or many properties with the class of Verbs.

Based on Dixon's findings Hopper and Thompson (1993:366) explore the next logical question: 'Why should a given set of concepts, namely Property Concepts, be distributed across these two quite distinct lexical categories, namely Noun and Verb, in the world's languages (as opposed, say, to being exclusively treated by grammars

of languages as a subclass of either Noun or Verb, or as a separate class of Adjectives?)' They give a number of examples from languages in which adjectives behave like verbs (Acehnese) or from languages in which adjectives closely resemble the structural/distributional behaviour of nouns (Finnish).

There have been suggestions that a semantic factor underlies the categorization of cognitive 'percepts' namely *time stability* (Givón 1979, 1984, Stassen 1997). The quote below is from Thompson (1988):

> 'Experiences ... which stay relatively stable over time ... tend to be lexicalized in human languages as nouns .... At the other extreme of the lexical-phenomenological scale, one finds experiential clusters denoting rapid changes in the state of the universe ... languages tend to lexicalize them as verbs" (1984: 51-2). According to Givón Adjectives occupy "the middle of the time-stability scale" (1984: 52). Yet, this statement seems to contradict the statement on the following page (1984: 53) that "prototypical adjectival qualities" are "those of stable physical qualities such as size, shape, texture, colour, taste, or smell'.

To overcome the above contradiction Thompson (1988) suggest a pragmatic approach. The discourse study of adjectives suggests that attributively used adjectives as modifiers of given arguments (*the red house, that brave soldier*) are rare in actual conversational transcripts. Instead adjectives are used almost exclusively for two purposes:

A) if a reference is given, to predicate a property of it ('we were real good'); in this case Property Concept words share a predicating function with verbs

and

B) if the referent is new, to define it while introducing it ('you've got a funny baggie'); in this case Property Concept words share a referent-introducing function with nouns.

Thompson suggests that this sharing of both verbal and nominal functions in discourse provides an explanation for the fact that Property Concepts will sometimes be categorized with morphosyntactic properties similar to those of Verbs, sometimes with morphosyntactic properties similar to those of Nouns and sometimes, as they are neither prototypical Nouns, nor prototypical Verbs, they will be categorized as a separate lexicogrammatical category of Adjectives. Thus a strictly semantic account misses the point that property concepts have discourse characteristics in common with both nouns and verbs. The results also neatly fit the Hopper and Thompson (1984) definitions of a prototypical noun as a new referent and a prototypical verb as an assertion about an established referent.

However, the fact that attributive adjectives as modifiers of given arguments are rare in ordinary talk does not mean that they are non-existent or also rare in other types of talks, for example oral narratives. Croft (1991), as well as Chafe (1982:41-42), come up with different results. In their surveys the proportion of attributive to predicate adjectives is around two to one. Of course, the corpus of Bulgarian literary texts which I have used for the present study shows an overwhelming majority of attributive use of adjectives. This is not surprising at all, as the descriptive function of adjectives is of primary importance in written communication, especially the type which creates rich images. After all, the main function of attribution (modification) is to enrich the image evoked by the noun (Wierzbicka 1986: 374). Indeed, property concept lexical items can perform and do perform the functions of predication and reference in various morphosyntactic constructions. But many linguists (Bolinger

(1967), Croft (1991)) consider their attributive function as prototypical and unmarked. For example, Wierzbicka's (1988) answer to the question: 'What are adjectives for?' is straightforward - for the execution of the pragmatic function of modification or attribution. She believes that an adequate semantic analysis can convincingly show that attribution is a discourse function distinct from predication, contrary to the transformational grammar approach, which has insisted on treating attribution as derived from predication.

As a distinct discourse function modification has its own prototypical part of speech category – the adjective. Its function to add a feature to a referent is also reflected in the traditional label given to this part of speech in Slavic, *prilagatel'noe im'a* in Russian, *prilagatelno ime* in Bulgarian, and similar ones in the other Slavic languagaes as well the Latin 'adjectivum' of which the Slavic labels are calques. As a modifier an adjective may provide a descriptive feature, a single property of an entity or add a feature to the (normally) multidimensional image evoked by the noun (Wierzbicka 1988:486), which tends to be either 'timeless' or which is viewed without any reference to time. Wierzbicka's example is the one below in (1):

(1) *Her red cheeks emanated youth and good health.*

The attributive use of the adjective *red* suggests a permanent feature of the cheeks and probably old information. Adjectives can be used predicatively (prototypically verbal use) to refer to a transient state and suggest new information as in:

(2) *Her cheeks were red.* [1]

However, in English this use is marked by an additional structural element, the copula *be*, and so it is in Russian and Bulgarian. In Russian, adjectives even have optional special forms for predication, the so-called short forms, e.g. *bel* instead of the long one *belyj*, which is preferred in modification constructions (see below).

(3) R. *Sneg byl* ***bel.***
(4) B. *Snegăt beše* ***bjal.***
'The snow was white'.

The same lexical item (root) i.e. the colour white appears in yet another construction which encodes the propositional act function of predication - the derived verb *belet'* in Russian and *beleja* in Bulgarian with two distinct meanings.

a) acquire a certain property as in

(5) *Dyxanie Rjabina stalo neravnomernym i korotkim, lico načalo zametno* ***belet'.*** (Berezko G.S. Noč polkovodca)
'Rjabin's breathing became irregular and short, his face visibly started to get white.'

b) appear, be seen or be felt +a property as in the Russian sentence

(6) *Parus* ***beleet***
sail white (is-visible-as-white, v)

---

[1]The past tense seems to coerce the transitory construal. In a sentence such as *Her cheeks are red* the interpretation of *red* as a permanent feature is just as possible as in its attributive use. However, the difference here can be seen in new vs. old information. As we can see the different interpretations/construals are provided by the tense construction, which is associated with the function of predication. It is quite possible to construe the property as transient even in the present tense in a sentence such as *Her cheeks are red from the cold*, where the causative construction *from the cold* provides the meaning of transitoriness.

and the Bulgarian sentence

(7) *Pipni mu nosleto! Prosto* ***ledenee.***
Touch his little nose! Simply **icyV** (is-felt- as-cold-as-ice,v)
(said by a mother referring to the coldness of her baby's nose)

The above facts bring us back to Croft's universal-typological theory of parts of speech, which stipulates that UNMARKED ADJECTIVES are a result of a correlation between the semantic class of properties and the propositional act function of modification (see Table 2 in Chapter 2). In the same spirit an adjectival or property concept can correlate with a nonprototypical, 'unnatural' function such as predication with certain adjustments, the auxiliary *be*, the short forms of adjectives and even the derivational *e*-suffix, which turns adjectives into verbs, the prototypes for predication. As Croft has argued (2001:73-74) it is common cross-linguistically for a lexical item to appear in more than one propositional act functions with or without overt morphological derivation but with a considerable and often systematic semantic shift, which is demonstrated by the examples in (5), (6) and (7) above. His hypothesis that the semantic shift is always towards the semantic protoype for the particular propositional act function has been confirmed by Russian and Bulgarian data. The rather common semantic shift towards the process of acquiring a property or the rather peculiar, yet typically Slavic semantic shift towards the transitoriness of the sensation (visual, tactile) associated with the property at a particular moment of time are both verbally encoded. Properties such as colour join the prototypical semantic class for the propositional act function of predication, i.e. actions (or 'inactive actions' as Croft 1991 calls them) and surface as UNMARKED VERBS such as *belet'* in Russian and *beleja* in Bulgarian. The same is true of the Latin pair of sentences (cf. Bally 1920):

(8) Rosa rubra est.

'(The) rose is red (adj).'

(9) Rosa rubet.

'(The) rose is-red(v).'

Even in a predicative function the adjective *rubra* suggests a permanent property of the rose, whereas the verb *rubet* suggests a momentary feature of the scenery (Wierzbicka 1988: 487; for further discussion see 4.4).

From the discussion above it becomes obvious that neither a purely semantic (Givón 1979, 1984; Stassen 1997), nor a purely functionalist approach (Hopper and Thompson 1984) can account adequately for the intermediate status of adjectives in the world's languages. Croft's universal-typological theory of parts of speech, which combines both semantic and discourse factors seems to provide an answer to the question that was asked at the beginning of this section: 'Why should a given set of concepts, namely Property Concepts, be distributed across these two quite distinct lexical categories, namely Noun and Verb, in the world's languages (as opposed, say, to being exclusively treated by grammars of languages as a subclass of either Noun or Verb, or as a separate class of Adjectives?)' Lexical items designating property concepts appear either as Nouns, Verbs or Adjectives depending on which propositional act function they align with and the semantic shift (construal or conceptualization) they undergo. Ultimately, these alignments and adjustments are symbolized or encoded by the morphosyntactic (and phonological where relevant) constructions in which the lexical items appear.

In 4.7, I shall take up the above discussion again in order to show that deadjectival verbs like *rubere, belet', beleja*, etc. in their 'be seen or felt+PROP' sense occupy an unmarked point in the semantic map of Slavic parts of speech but are

nonprototypical verbs as a result of a highly specific and complex construal of the semantics of properties as transitory predicates rather than permanent. Such a construal is achieved by introducing the Perceiver (most often the Observer) onstage or profiling the perceptual experience he is undergoing (Langacker 1987 and the discussion in Chapter 6). 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 type above, which I call perceptual, 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 shall term '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', *vredničat'* (coll) 'do harm', *familiarničat'* 'behave in an intimate way', *korotat'* 'spend time, easy life', *zlobstvovat'* 'be spiteful and show it, act in a spiteful way', *važničat* (coll) 'act importantly', *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', *familiarniča* 'behave in an intimate way'(negative connotations). A comprehensive list and a discussion are provided in Chapter 6.

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. This possible cognitive model will be outlined in 4.6. A finer-grained semantic analyses of the three conceptualizations above will be postponed for Chapter 6. To prepare the ground for the discussion in 4.6, in the next section I shall provide one more example of 'unnatural' correlation of semantic class and propositional-act function, i.e. objects used for modification which surface as a constructional pattern for the so called **relational adjectives** in Slavic languages. The result is that relational adjectives occupy an unmarked point on the semantic map of Slavic parts of speech, but nevertheless they remain nonprototypical members of the adjectival category.

4.2. Nouns and Adjectives as Modifiers

Unmarked nouns result from the correlation of the semantic class of object with the propositional act function of reference. However, an object can correlate with a nonprototypical function such as modification. In English, there are a number of constructions which overtly structure the function of modification of lexical roots denoting objects – denominal adjectives derived from nominal roots by suffixation, e.g. *theatrical, industrial,* etc., the genitive constructions *'s* and the *of*-phrase, a large number of other prepositional phrases with *for, in, with, by*, etc. as in *a cake for Mary.* There is also the zero coding of the function of modification of lexical items denoting objects, the so called complex nominal constructions, e.g. *water gun, theatre performance*, etc. In any of these cases there is a semantic shift no matter how subtle or dramatic, which is a result of the construal of nonrelational object words as relational. Such semantic shifts are encoded in various morphosyntactic constructions as the ones mentioned above and the more modifier-like these constructions are the

less object-like the concepts are. The situation holds for both English and Slavic languages but is much more obvious in Slavic since denominal adjectives are much more numerous in Slavic languages than in English where the complex nominal constructions prevail. Denominal adjectives in Slavic languages join the semantic class of properties, which is the prototype for the propositional act function of modification, and as such they are UNMARKED ADJECTIVES. Relational adjectives such as *derevjannyj* 'wooden' in Russian or *ženski* 'female' in Bulgarian are examples of the above correlation. Even their traditional label 'relational' shows the correlation. As unmarked adjectives they exhibit much of the **behavioural potential** of the adjectival category, i.e. gender, case, number agreement with the head noun (see 4.3).

The point I wanted to make with the examples in the previous two paragraphs is that morphosyntactic constructions are meaningful, i.e. they are semantic phenomena. In other words, when properties are predicated as verbs there is a semantic shift which is a result of shift in profile i.e. it is a semantic phenomenon. Derivational morphology converting adjectives into verbs overtly or nouns into adjectives marks construal plus truth-functional semantic shift in meaning. Such a linguistic phenomenon is termed **conversion** in cognitive linguistics (see below, p.91). The derived words fit the expected pattern for the semantic class of the derived form in the language i.e. action for *belet'* and property for *derevjannyj*.

These examples also comply with Croft's typological theory of parts of speech which combines both semantic class and discourse function (see Chapter 2, section 2.8). According to this theory Nouns, Verbs and Adjectives should be described as functional prototypes which combine the semantic class of objects, actions and properties with the propositional act function of reference, predication, and

modification respectively. In other words, the traditional notional definitions of parts of speech are not entirely incorrect; they are simply limited to the prototypical members of the parts of speech category, although, as it has been noted above, nonprototypical semantic classes may also belong to the part of speech category (see the semantic map below).

Before I proceed further to analyze adjectives as modifiers in Slavic languages, I should mention Langacker's (1987:189) conceptual analysis of adjectives. Adjectives are semantically, i.e. conceptually, definable just as are the other two basic grammatical categories, Nouns and Verbs. The entities referred to as adjectives are symbolic units, each with a semantic and a phonological pole, but it is the former which determines their categorization. As members of a given class they share fundamental semantic properties, and their semantic poles thus instantiate a single abstract schema. Adjectives designate different kinds of atemporal relations and unlike verbs and like nouns are summarily scanned (see Chapter 2). Like verbs they are relational. Such an analysis is broadly compatible with Croft's universal-typological theory of parts of speech.

In the section below I shall describe Bulgarian and Russian adjectives in their prototypical, unmarked propositional act function of attribution (modification). What I would like to show is that the region labelled UNMARKED ADJECTIVES is far from homogeneous. Unmarked Adjectives are not a structurally or semantically uniform class, yet they all structure the unmarked point of properties and modification. I shall also argue that the different types of adjectives within the class of unmarked adjectives structure a radial category with a central group of prototypical, core adjectives which are very old, basic and from a synchronic point of view non-derived, and less prototypical adjectives derived from objects (or verbs). The overt

derivational morphology signals a language specific conventionalized construal, i.e. **conversion** of the semantics of objects which brings them closer to the prototype for modification, i.e. adjectives.

The semantic class of properties can be subdivided into several subclasses. Stassen (1997) proposes the following hierarchy, which is supposed to structure the whole region in conceptual space between OBJECTS and ACTIONS:

MATERIAL, GENDER < VALUE, AGE, FORM < DIMENSION, COLOUR < PHYSICAL PROPERTIES < HUMAN PROPENSITIES

COLOUR together with AGE, DIMENSION and VALUE occupies a prominent place among properties which are deemed worthy of being designated by adjectives in languages with small, closed class of adjectives (Dixon 1977), which means that they are perceived as prototypical. In modern Slavic languages basic adjectives, which occupy the central part of the conceptual space (see the map in Figure 4.2), are considered very old and nonderived from a synchronic point of view although they have distinct adjectival markers and diachronically are most probably derived from nouns (see section 4.5).

Core properties have four semantic characteristics (see Chapter 2); they are permanent (they must last as long as the nominal image/referent), relational (they add a feature to an existing nominal image/referent), stative (there is no change over time in the state of affairs described by the concept, prototypical adjectives are states, but they can denote inherent states as well as temporary, transient states) and gradable (the quality can be quantitatively evaluated since most properties are measured on a scale between two extremes).

Unlike languages in which adjectives are not distinct from N and V as discussed above, adjectives in Russian, Bulgarian and other modern Slavic languages constitute a large lexico-grammatical class morphologically distinct from the more

fundamental classes of nouns and verbs. According to Croft's theory about parts of speech, adjectives are the typologically unmarked and prototypical structures for the expression of the propositional act function of 'modification'. The semantic map of English parts of speech will be the starting point and a point of comparison with the parts of speech that the present study is interested in: adjectives (basic and derived) and verbs derived from adjectives.

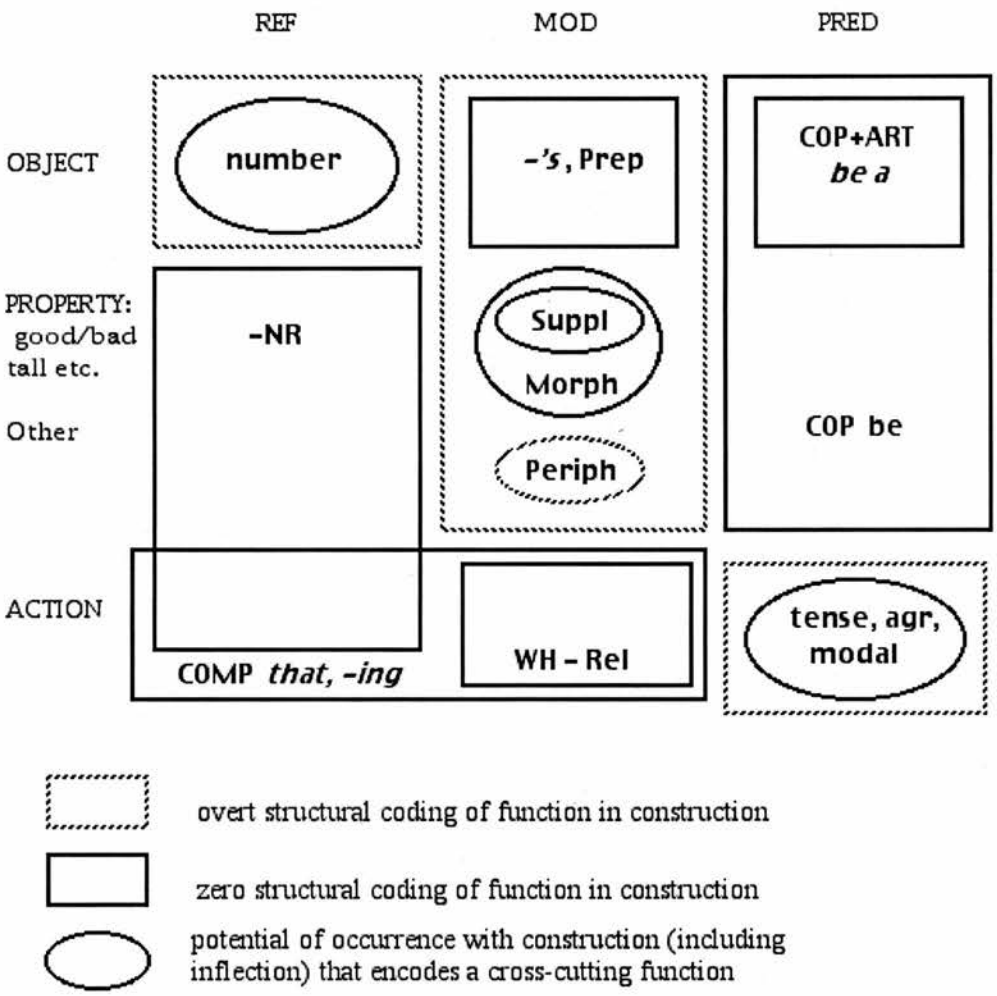

Figure 4.1. The semantic map of English parts of speech

In English the marked combination of a noun functioning as a modifier is structurally coded in constructions such as denominal adjectives, the Genitive enclitic *-'s*, Preposition phrases, or is zero structurally coded by the complex nominal

construction (Croft 1991, 2001). Croft (1991: 71) argues that nouns as modifiers (complex nominals, including those that are denominal adjectives such as *theatrical*) can have virtually any semantic relation since there is no inherent semantic relation in the object the way core properties have inherent and relational characteristics (see above). Any contextually appropriate semantic relation can be induced in the modifier-head construction. The test he uses for complex nominal constructions such as

(10) *record jacket*
(11) *record industry*

yields different results compared to inherently relational modifiers like *brown*, or *torn*,

(12) *brown jacket*
(13) *torn jacket*

in periphrases such as 'a jacket that is brown', 'a jacket that is/was torn' but '*a jacket that is a record' and '*an industry that is a record'.

However, my observations show that complex nominal constructions should not be treated on a par with denominal adjectives. Denominal adjectives can easily be paraphrased in relative clauses, for example *promotional campaign* can be paraphrased as a *campaign that is promotional.* The adjectival suffix *-al* signals the conversion of a nominal concept into a relational atemporal concept. In other words, it signals a construal (a semantic shift) which is conventionalized in English (purpose, ownership, part-whole, etc.) and is part of the semantics of the denominal adjectives. A further study is needed to specify the existing meanings of denominal adjectives in English, but even at this point we can say that they are more predictable and less

context-dependent for their specific meanings than complex nominal constructions. In the next paragraph, though, I shall offer a more detailed analysis of the so-called relational adjectives in Russian and Bulgarian which, in fact, inhabit the semantic space occupied by both denominal adjectives and complex nominal constructions in English. This situation must create difficulties for Slavic learners of English who "search for" morphologically or syntactically explicit ways to mark the construal of an object as a relation and avoid the zero marked complex nominal constructions. At this point such a statement is purely impressionistic, but I believe the problem deserves further study.

4.3. Relational adjectives as unmarked but peripheral members of their category

Adjectives are the major group of modifiers in Slavic languages. Similarly to English, there are other modifying constructions in Slavic languages such as the Genitive case in those Slavic languages that have it (Russian, Polish, Serbian, etc.), participles, relative clauses, prepositional phrases, etc. However, they are structurally non-zero marked compared to prototypical adjectives; they are nonprototypical structures for the propositional act function of modification. This is in compliance with the structural coding map hypothesis (Croft 2001: 98), which stipulates that 'constructions encoding a function should code that function in at least as many morphemes in typologically marked points in conceptual space as in typologically unmarked points in conceptual space.' Although UNMARKED ADJECTIVES are the prototypical structure for the propositional act function of modification and as such they are zero structurally marked, in Russian and Bulgarian they are characterized by distinct derivational and inflectional morphology. As has been pointed out above, derivational morphology structures or marks semantic shifts in meaning (see below). In the case of adjectives derived from nouns as in Slavic it marks a conventionalized construal of objects

from unitary or nonrelational to relational (hence the label **relational adjectives** in the traditional grammar of Slavic languages). Inflectional morphology is also in compliance with Croft's theory of parts of speech and especially with the Behaviour Potential Map Hypothesis, which stipulates that 'constructions expressing the **behavioural potential** of a category should be found in at least the typologically unmarked points in conceptual space'. Adjectives as modifiers are encoded in language-specific inflectional constructions such as gender/case/number agreement with the head noun and degree morphology. The question of the role of derivational morphology especially in highly synthetic languages like the Slavic languages is a very complex one.[2] It certainly cannot be discussed on the same level with inflectional morphology which encodes additional conceptual dimensions of the categories defined on the conceptual space. However, it cannot be equated with the structural coding constructions either, as it does not structure propositional-act functions but words.

Adjectives in Russian and Bulgarian constitute an extremely varied class in terms of the semantics of their roots or stems. Based on their semantics, adjectives in Slavic are divided into three major classes: **qualitative**, **relational** and **possessive**. From a synchronic point of view, qualitative adjectives are those which fit the traditional notional definition - adjectives denote properties such as colour (R. *belyj*, B. *bjal* 'white), dimension (R. *vysokij*, B. *visok*, 'high'), age (B. *star* , R. *staryj*), value (R *dobryj*, B *dobăr* 'good'), etc. Following Croft's theory of parts of speech qualitative adjectives are prototypical modifiers. They combine the semantic class of properties with the propositional act function of modification and as such they are

[2] In cognitive grammar as a kind of construction grammar, any construction, be it a derivational construction on the level of word formation or an inflexional construction or any longer construction such as a prepositional phrase, is part of the morphology-syntax continuum, in which all the forms function in one direction to express the target meaning/function.

least structurally marked. Most of them are unanalyzable synchronically, which makes them basic and nonderived[3].

Qualitative adjectives are most marked in terms of behavioural potential, which is expressed by the category of degree (R. *bolee vysokij* 'higher', B. *po-visok* 'higher'; R. *samyj vysokij*, B. *naj-visok* 'highest') just as is predicted by the Behavioural Potential Map Hypothesis (see Chapter 2, section 2.9). Behavioural markedness of qualitative adjectives is also expressed by the opposition long vs. short forms in Russian, e.g. *vysokij – vysok* 'tall', 'high'; *tixij – tix* 'quiet'. This opposition has been lost in Bulgarian. Such a distinction is closely connected with the propositional act function of predication which will be discussed in detail in section 4.3. There is yet another characteristic feature which marks qualitative adjectives as prototypical-the ability to form antonyms. Physical properties (temperature, hardness/softness, bitterness/sweetness, etc.) as well as dimension properties (length, width, height), age, are all uninterrupted scales extending between two extremes. These continua do not provide natural divisions. Their classification can be conceived as a mental process, closely related to human perception (see Chapter 2 about Berlin and Kay's research on colour terms).

However, the mechanics of perception is probably not directly responsible for the conceptualization of properties. Wierzbicka points out that a definition of 'colour' has to be based on the concept of SEEing (1996: 299), but it should not be directly

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[3] According to some Russian grammar books there are cases of qualitative adjectives being derived from nouns, e.g. R *sil'nyj* 'strong', *vkusnyj* 'tasty', *poleznyj* 'useful'. The direction of derivation has always been a difficult question in Slavic languages. *Sil-, v/kus, po/l'z-* are lexical roots profiling properties perceptually salient from a strictly modern point of view but they are stems from a historical point of view (I am grateful to Ian Press for this observation). They fit the expected morphological pattern for the semantic class they belong to, i.e. the characteristic adjectival affixes -n suffix, or -yj inflection while the respective nouns are a result of a semantic shift in zero coding, the *-a* inflection marking only gender.

related to the mechanics of colour perception. What the linguistic meaning of 'colour' is related to is colour conceptualization and this seems to be different in different cultures despite some striking similarities (1996: 203). She suggests that colour terms are oriented towards visually salient environmental prototypes. To be able to communicate about our visual sensations, we project them on to something in our shared environment (1996: 331). This is also mentioned by Ungerer and Schmid (1996), who point out that the variety of colour terms in various languages and particularly words like *cherry* or *brick-red* or *nebesnyj, niebieski* for 'sky blue' in Russian and Polish, the numerous colour terms derived from precious stones in English as well as in Slavic languages, suggest that colours are not categorized in isolation, but are experienced as attributes of categories denoting objects and organisms. The etymology (see below) of basic colour terms also provides evidence in this direction.

Langacker (1987) and Croft (1991), however, assume that the perception of colour IS responsible for the linguistic behaviour of colour words. Although colours belong to the very core of the adjectival category, they differ semantically from other properties in that they do not form antonym pairs on a single dimension. Instead, colour terms generally denote regions in the colour spectrum with fuzzy boundaries. In this respect, colour properties are more like substances and can be used as mass nouns. In fact, it is quite rare for a property root to appear in a nominal construction and to denote the quality itself rather than the object having the quality and such instances are always with colours (Croft 1991). For example, in the sentence below the adjectives used in locative constructions refer to the deep/shallow area rather than to the property itself:

Pluvam na dălboko/plitko.

Swim1sgPRS in deepNEUT/shallowNEUT.
I am swimming in the deep/shallow end (of the pool)

However, in the sentences

Xaresvam *červeno*
Like1sgPRS redNEUT
'I like red.'

or

Červeno(to) e ljubimijat mi cvjat.
RedNEUT(ART) is favouriteART my colour
'Red is my favoutite colour'.
červeno refers to the property itself.

It is not unreasonable to see a symbolic link between the choice of the neuter adjectival o-suffix in nominal constructions like the ones above and the *o*-suffix, which is very common with mass nouns such as *seno, zărno, brašno*, etc.

Langacker's account (1987: 190) of colour terms in their nominal uses (e.g. *Red is a warm colour*) is similar. Colours designate particular regions in the domain of colour space; most are defined relative to the hue dimension primarily (*red, yellow, blue,* etc.), but a few are confined largely or solely to the brightness dimension (*black, white, grey*). In short, colours can be reduced to summarily scanned entities in the domain of space and as such they are like substances (see Figure 4(a) in section 4.4). Whatever the mechanics of conceptualization of colour, their interconnectedness with things is obvious. They are inherently tied to objects and as such their primary function is a modifiers. In Chapter 6 I will show that the inherent link between colours and objects can be pushed to the background in the process of conceptualization as the act of perception is being brought to the fore. Although unusual in the world's languages, such a construal is very common in Slavic languages.

Contrary to qualitative adjectives, relational adjectives do not distinguish either the

category of degree or the short adjectival form; they have only long forms. Relational adjectives denote properties indirectly, relative to another object (or action) e.g. *včerašnjaja gazeta* 'yesterday's newspaper'.

I have already pointed out that there are languages, including English, in which nouns can be easily used attributively (denominal adjectives such as *theatrical, industrial*, etc. or "complex nominal" constructions (Croft 1991: 71), e.g. *cherry tree, university housing, state budget*, etc. I have also mentioned that, contrary to Croft's analysis, denominal adjectives in English, compared to complex nominal constructions, are construed as less object-like which brings them closer to the semantic prototype for modification, that is, the adjective. Such a subtle distinction is missing in Slavic languages, in which the use of nouns for the purpose of modification is automatically signalled by the huge number of relational adjectives in Slavic languages derived from nouns, e.g. B. *višnevo dărvo* 'cherry tree', R. *gosudarstvennyj bjudžet* 'state budget', *vodnyj sport* ' water sport', etc. Such derivations are parallel to both English complex nominal constructions and denominal adjectives. Therefore, I suggest that this particular area of the semantic map of parts of speech in Slavic should look slightly different (see below on p. 102).

In languages with an open class of adjectives like Russian and Bulgarian, any object concept can surface as an 'adjective' in one way or another as long as there is a construal which brings it (the concept) closer to the semantic prototype (relational, stative, permanent, gradable) for modification, i.e. adjectives. Such a construal is signalled by language particular derivational affixes[4]. The construal is also accompanied by a semantic shift from object, e.g. B. *dărvo* 'tree', to some kind of relationship between the head noun and the modifying noun, eg. *dărvena masa* 'a

[4] In Russian as well as in Bulgarian there are many more derivational morphemes (at least nineteen in Russian according to Tixonov and Džambazov 2001:146)

table made of wood'. Relational adjectives can develop qualitative meanings as well, e.g. *dărven* may also refer to qualities associated with the object 'tree' such as stiffness, hardness, inflexibility, e.g. *dărvena glava.* In these cases relational adjectives come so close to the semantic prototype that they even take degree morphology, e.g. *Tvojata glava e po-dărvena ot Ivanovata (*You are more fixed/inflexible than Ivan). My point here is that these various meanings are largely predictable. As Kubrjakova (1999) points out, it is not surprising that the relational adjective from *kartofel'* in Russian reflects prototypical situations such as 'prepare something from potatoes' e.g. *kartofel'noe pjure*, in which the association is 'made of' or the 'potatoes grow in fields', e.g. *kartofel'noe pole*, where the association is 'the place where'. Another prototypical situation encoded by relational adjectives in Russian and Bulgarian is 'belonging to somebody'. Such a construal is encoded by the suffixes *-ov, -in*, etc. as in R. *ded-ov, otc-ov, mater-in, babušk-in;*B. *djadov*, *babin*, etc. Such derivations are parallel to the English genitive construction (grandfather's, father's, grandmother's), which occupies the marked point between objects and modification in the semantic map of English parts of speech. Russian grammar books (*Sovremennyj russkij jazyk* 2002) usually analyze them as a separate class of possessive adjectives. Such a relationship can be encoded by the Genitive case in Russian and a prepositional phrase in Bulgarian, e.g. *paltoto na djado* 'grandfather's coat'. This 'profligacy' was noted in Russian linguistics back in the 19th c. and the 20th century, e.g. Pavskij (1850), Potebnja (1899) and Meščaninov (1945) noted that notions of possession, origin and other relations between things could be expressed by cases, prepositions and combinations of nouns. Thus, Russian could well do without possessive adjectives. Instead of *derevjannyj stol* 'wooden table' we can easily say *stol iz dereva* 'a table (made) of wood'. Indeed, they noted, there are languages that

have no adjectives or have very few adjectives, a point which takes us back to the beginning of the present chapter (see 4.1). Before I continue the present analysis of how and why one and the same content is being structured in different ways, I shall summarize the discussion so far.

First, adjectives in Russian and Bulgarian are a lexicogrammatical category which exhibit prototype effects and is most adequately described as a radial category in which some members are central and others peripheral. Qualitative adjectives, which denote properties such as colour, dimension, physical properties, age, value, and human states are central members. They denote permanent and inherent properties of entities and do not depend on relations with other entities. They are basic in the sense of nonderived and often unanalyzable, and encode properties directly in the lexical stem. They exhibit the adjectival behavioural potential in full encoded in gender, number, case and degree morphology. The vast number of relational adjectives including possessive adjectives are peripheral members of the adjectival category. They do not do not exhibit the behavioural potential of adjectives in full; they lack the category of degree. They are derived primarily from nouns (some are derived from verbs) and stand for various kinds of relations between two entities, which are largely predictable, e.g. 'possession', 'part-whole', 'made of', etc. The object, which is the modifier in these relations undergoes a semantic change (construal) from a nonrelational, unitary object to a property albeit a relational property. Properties correlate with the propositional act function of modification and surface as unmarked adjectives. Thus, relational adjectives can be analyzed as unmarked but nonprototypical adjectives in Slavic languages and I suggest the following layout of the semantic map of properties, objects and modifiers in Slavic languages:

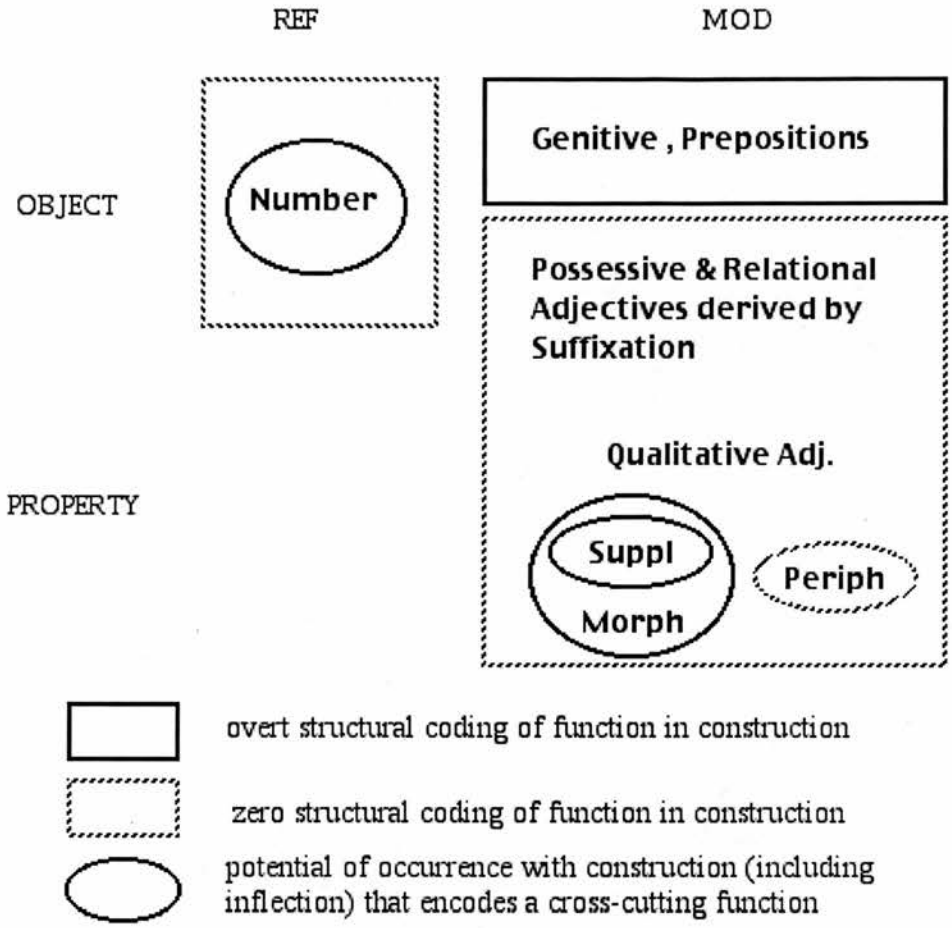


Figure 4.2. The Semantic map for the Russian Adjectives

As a peripheral member of the class of adjectives, relational adjectives are closer to the area of the marked correlation between objects and modification, i.e. the Genitive case and prepositional phrases. (see 4.1.).

As I have shown above, such construals are language specific and are conventionalized in languages in different ways (compare the large number of relational adjectives in Russian and Bulgarian and the large number of complex nominal constructions in English).

Second, what this analysis confirms is the understanding that these phenomena are semantic, i.e. they have resulted from a process of reconceptualization of the lexical item and the 'new' construal is symbolized by a morphosyntactic derivation

i.e. a construction. Morphology, just like syntax, describes complex constructions, but constructions of bound morphemes. This is opposite to most current formal theories, which separate grammar from meaning and analyze derivational phenomena as modular, either in the lexicon or in the grammar. As I have pointed out above, Construction Grammars advocate that grammatical knowledge can be represented as a continuum, the lexicon-morphology-syntax continuum, and constructions of various types, from schematic syntactic constructions (see Chapter 5 for the analysis of adjective predicates as schematic constructions) through morphological to substantive lexical items structure this continuum.

4.4. Alternative construals of relational properties

It was pointed out in 4.3 that the relationship of possession in Bulgarian and in Russian can be expressed at least in two ways. In Bulgarian there are two types of constructions, one is the relational adjectival construction - *djadovoto palto* 'grandfather's coat' and the other is the prepositional phrase – *paltoto na djado* 'the coat of grandfather'. In Russian there are the Genitive case and the relational (possessive) adjectives. But it does not follow that these two constructions are semantically equivalent. The role of conceptualization is clearest in such cases when a single language provides alternative expressions for what appear to be truth-functionally equivalent situations. The two types of constructions above represent two different conventionalized construals of the semantics of possession. As I have previously mentioned, Slavic languages are not unnecessarily profligate. The two different constructions offer a different conceptualization of the experience in every case. To achieve the construal of possession expressed through an adjective, the conceptualizer/the speaker must be able to conceive of a thing which is nonrelational as relational, i.e. 'being the possessor of'. Relationality (entity/interconnection) is a

basic construal i.e. conceptual operation which according to Langacker (1987) underlies adjectives and other modifiers.

A concept is inherently RELATIONAL if its existence or presence requires the existence or presence of another entity. Properties and actions are relational. For example, *hit* is inherently relational as its existence requires the existence of at least two entities, the hitter and the thing that is hit; *red* is also relational because its existence requires the existence of an entity that possesses the property. Objects are nonrelational. Schematically nonrelational i.e. nominal, and relational predications (see Chapter 2) are represented by Langacker in the following way (1987: 220); (tr) stands for trajector and (lm) stands for landmark:

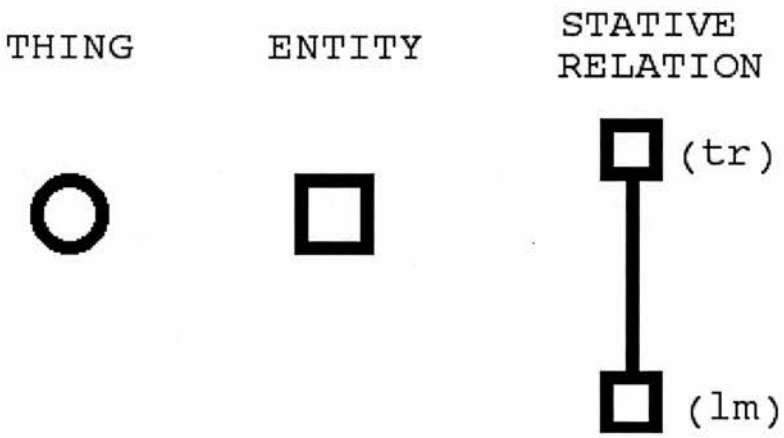


Figure 4.3. A thing, an entity, and a relation

'an optimal nominal predication profiles a unitary entity that is so construed because the cognitive operations providing interconnections among its constituents are minimal both in magnitude (i.e. their distance approximate zero) and in prominence (the interconnections are not themselves in profile). By contrast, a relational predication focuses on interconnections and profiles the cognitive events in which the conceptualization of these interconnections resides.'(Langacker 1987:216, underlining mine).

The circle indicates a thing, a nominal predication without any detail about its internal structure since, as was pointed out above, the cognitive operations performed do not focus on its constituents and interconnections between them. The squares and connecting lines indicate a relational predication with the cognitive operations performed focusing on the constituent entities and the interconnections between them. A specific example is shown in the figure below (Langacker 1987: 216, Fig. 6.2. a) and b):

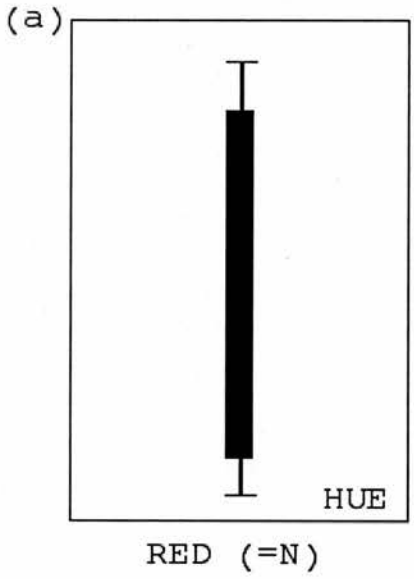


Figure 4.4.(a) A representation of the semantic value of 'red' in its nominal use

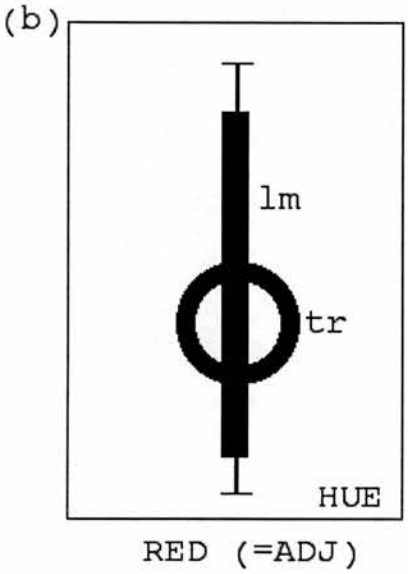
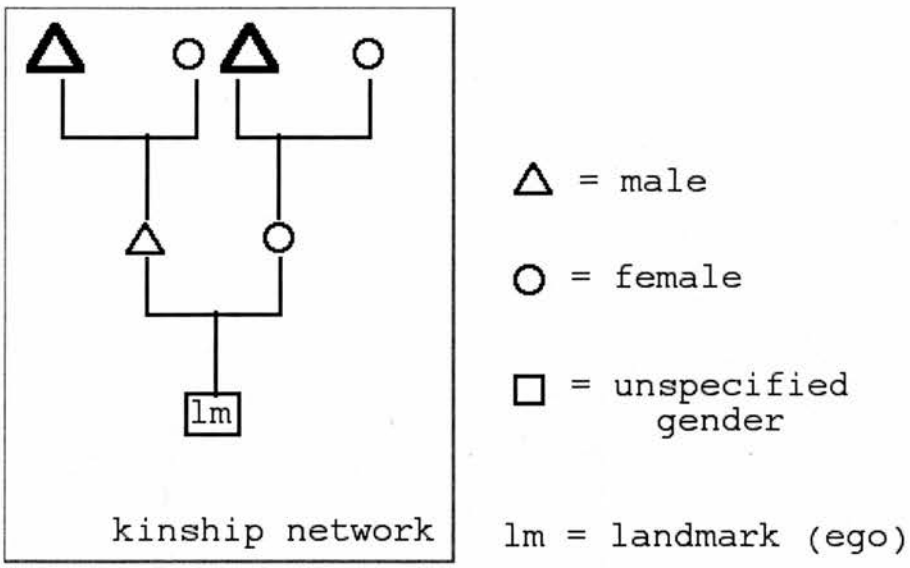


Figure 4.4.(b) A representation of the semantic value of 'red' as a relational predication in its adjectival use

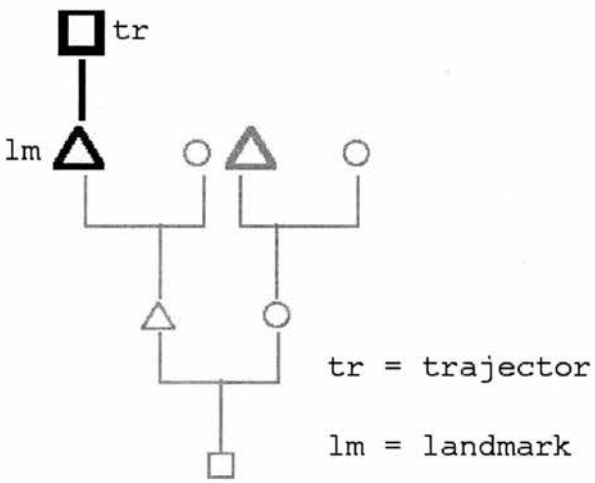
Figure 4.4(a) shows the semantic value of [RED] in its nominal use (e.g. *Red is a warm colour*) where it designates a region in colour space, i.e. construed as a unitary entity, and Figure (b) shows the relational property of [RED] in its adjectival use. The region profiled in (a) is also profiled in b) but this time there is another entity located within this region and represented by a circle. Being a relational predicate, [RED] displays an asymmetry between the profiled participants. One is the trajector and the other is the landmark (see Chapter 2). The above analysis captures in a straightforward way the similarities and differences between variants of a morpheme that appear in different parts of speech constructions without overt derivation.

In synthetic languages like Slavic the different semantic values are signalled by derivational morphemes. Thus, the adjectival markers signal a semantic shift from the class of objects (including persons) which are nonrelational to a relation between a person and an object, i.e. possession as a relational property. Thus the analysis provided by Langacker can apply to derivational morphology typical of Slavic languages. Suffixes such as *-ov*, *-in*, etc. symbolize or profile exactly the interconnections between the constituent entities *'djado* 'grandfather' and *palto* 'coat'. The difference in conceptualization between '*djado*' and '*djadov*' can be presented in the following diagrams:



Djado (grandfather)

Fig.4.5.(a) A representation of the semantic value of the noun B. *djado* 'grandfather'



Djadovo palto (grandfather's coat)

Fig.4.5 (b) A representation of the semantic value of the relational adjective B. djadov 'belonging to grandfather'

'*Djado*' designating a person (thing) is construed as a unitary entity within the domain of kinship shown in Fig. 4.5.a. The triangle in dark lines represents the above construal and the lines connecting it with the other entities in the domain as well as

the entities themselves are just a frame, they are not profiled but are at the background, therefore, they are all represented by light lines. In Fig. 4.5.b. the same entity is profiled but this time it is represented as a square (e_1) with a connecting line towards another entity represented by a square (e_2) , i.e. the nominal predication [PALTO] 'coat', which is a nonrelational, unitary predication. The squares and connecting lines together indicate a relational predication with the cognitive operations performed focusing on the constituent entities and the interconnection between them. There is also an asymmetry between the profiled participants. One is the trajector ('coat') and the other is the landmark ('grandfather'). The conceived relational property 'being the possessor of' is based on our experience and common sense, which allows the conceptualization of the relation between a piece of clothing and a human being[5].

The above described construal processes are performed to ensure the communicative act function of modification. They are conventionalized and non-effortful, automatic.

In Bulgarian there is also a prepositional phrase expressing possession, *paltoto na djado*, which is attributed to the influence of the other Balkan languages and is usually listed among the features of the so called Balkan Sprachbund. That is why such a construction is missing in Russian. The prepositional phrase in Bulgarian is a consequence of the historical development of the dative and genitive case. The dative

[5] Extensions of this conceptualization are also possible. A predication designated by *babina roklja* 'grandmother's dress' profiles the same type of possession relationship as *djadovo palto.* However, when the conceptualization shifts from 'being in a specific kinship relation with the conceptualizer and being the possessor of something' to the metaphorical extension 'old fashioned' the suffix also changes. The metaphorically extended meaning is expressed by the suffix *-ešk-* as in *babeška roklja* 'old-fashioned dress'. The semantic link (inference) is obvious - 'being two generations removed from the conceptualizer and being the possessor of something makes this something old-fashioned'.

took over the genitive and later on both were replaced by the same prepositional construction N_1 na N_2. This construction involves a different image, a different construal relationship. A plausible relationship is the one that involves the image of a receiver and as a consequence a possessor of a thing. A further study is needed to provide evidence for such an interpretation.

The two analyses in 4.3. and 4.4. are fully compatible. Croft's is typologically oriented, thus we had to compare data across languages (English and Slavic languages), while Langacker's analysis applies to different constructions within the same language or language family.

The discussion so far has revolved around adjectives as a typological prototype correlating the semantic class of properties with the propositional act function of modification. I have also analyzed the nonprototypical correlation of the semantic class of objects and modification, which results in the so called relational adjectives in Slavic languages . I have shown that such a correlation is grounded in specific semantic shifts (construals). The reason I dedicated a considerable space to relational adjectives was to test the approach which I shall use for the analysis of intransitive property predicates which also focus in their meaning and use a nonprototypical correlation between semantic class and propositional act function. To round up the discussion I shall briefly outline the development of the adjectival category in Slavic languages which shows that prototypical adjectives in the modern languages started as a nonprototypical combination between objects and the discourse function of modification.

4.5 The History of Adjectives in Slavic languages

Diachronically adjectives originated from nouns in the older Slavic languages (Townsend and Janda 1996: 178-9). Adjectives were nominals that abstracted from

the nouns with which they were associated and then assumed syntactic gender adapting themselves to the new gender-based two fold nominal declension (hard and soft i.e. both LCS *novъ* and LCS *ništjь*) which was becoming the dominant declension pattern. In Late Church Slavonic (LCS) there were only a few vestiges of association with the simple nominal declension, e.g. Old Church Slavonic *isplьnь* 'full' and *svobodь* 'free'. These 'nominal' adjectives modified nouns and performed both attributive and predicative functions, but they were not yet formally distinguishable from nouns. The short nominal forms of the adjectives differed in LCS from nouns only syntactically, for example *zъlo*. Many of today's simple, underived adjectives were probably derived from nouns: R. *krutoj* < **krantos* 'steep bank' (Ivanov 1964 :54); *bel'* < *bal* 'fire' Old Icelandic (Townsend and Janda 1996: 135), P. *zielony* 'green' is etymologically derived from *zioło* 'herb or grass'; *czerw-* 'red' is believed to have come from the name of a red worm (Wierzbicka 1996). As it has been pointed out above this is not cross-linguistically unusual. In Modern English this is a dominant syntactic construction referred to as the Complex Nominal Construction.

However, there is an understanding that IE verbs such as **bhā* 'shine', etc. gave rise to adjectives such as 'white' and in fact modern colour verbs in Slavic are not innovations at all but a continuation of an old linguistic phenomenon. I am grateful to Stefan Pugh who pointed out this to me. In any case the history of adjectives in Slavic provides further support for the idea that adjectives are less prominent as a typological prototype than nouns and verbs (Croft 1991: 130-3; section 4.1) and as our discussion in previous sections has shown, their *raison d'être* has often been questioned.

The emergence of adjectives as a discrete category parallelled the development of **compound** or **long** forms, which were made up of the short, nominal

(noun-like) or indefinite (because it tended to have a sense like the one in *an interesting one*) adjective, to which the third person demonstrative pronoun *jь* was added as a way of defining or restricting it, e.g. '*the* interesting one' (Press 2000:64).

Janda and Townsend (1996: 179) demonstrate the combination of nominal adjectives plus forms of LCS *jь* with the following example:

$N_{sg.masc}$ *novъ* + *jь* domъ > *novъjь domъ* R. *novyj dom*

and how it developed in the various Slavic languages:

Compound adjectives in Slavic languages LSC novъ+jь 'new'

	LSC	R	P	Cz	SC
$N_{sg.masc}$	*novъjь*	*novyj*	*nowy*	*novy*	*novi*

The difference in meaning of the short and the new long form is examplified below:

Indefinite	Definite
novъ sosědъ '(a) new neighbour'	*novъjь sosědъ* 'that/the new neighbour'

The subsequent development of adjectives in Slavic was influence by two factors: preservation or loss of the distinction between indefinite vs. definite meaning and the restriction of the short forms to predicative use and the long form to attributive use. Bulgarian generalizes the short form without respect to indefinite/definite or predicate/attributive oppositions and suppresses the long forms. This might be related to the rise of the definite article in Bulgarian, e.g. *belijat*. All other Slavic languages have preserved the above oppositions in various configurations as a result of subsequent changes. Cz, P and R evolved a long attributive vs short predicate distinction, but Cz and P have now eliminated most of the short predicate forms. In R nowadays there is no strict, purely formal rule as one can use the long form both attributively and predicatively (Pugh, p.c.), eg. *ona krasivaja* instead of *ona*

krasiva but there are still mandatory short forms for a number of adjectives in certain sentences; e.g. *gotov* 'ready', *bolen* 'sick', *sposoben* 'able', etc.

Thus, the two different propositional-act functions 'modification' (attribution) and predication being distinct functions, 'deserved' to be expressed not only by the *be*-auxiliary but also by different forms of the adjectives in the older Slavic languages. Besides, there were intransitive deadjectival (denominal) verbs of 'becoming (or being)'. In fact, it is part of the general OCS pattern deriving 3rd conjugation type of verbs with the suffix *-e-* from adjectives and nouns (Old Bulgarian Grammar 1993). Townsend and Janda (1996: 244-5) point out that the original verbs in what they classify as ĚJ-type have not survived very well, and there is a good deal of cross-over between this type and the 2nd E-stem conjugation in their classification [6].

> 'The type is basically intransitive and markedly so when combined with nominal (both noun and adjective) roots in the meaning of 'become', where it is somewhat productive. This intransitive ĚJ was opposed to transitive verbs in **I** which had "factitive" (causative) meaning: 'make (or cause to) be' what the noun or adjective was; the corresponding **ĚJ**-verb then had the intransitive sense of 'be (or become)' what the noun or adjective was. For example- LCS *zelen-i-ti* 'make green' vs. LCS *zelen-ěj-øtъ* 'be or become green.'

Although there have been various crossovers into other types the **ĚJ**-type has more or less remained an identifier of intransitives in Russian and Bulgarian and the

[6] Townsend and Janda's (1996) classification differs from the one presented in *Starobălgarska gramatika* (1993).

present study provides evidence towards this position[7]. The **ĚJ**-suffix shares the intransitive meaning 'become' with the NU-suffix as in R. *slabejut* 'they become weak' or *slabnut'* 'become weak'. While the I-type is a Slavic innovation, the **ĚJ**-type had an older history. In spite of the uneven development of the intransitive **ĚJ**-verbs (and the transitive **I**-verbs) through time and across languages the present study will show that in Russian and Bulgarian the modern descendents of the **ĚJ**-type deadjectival (denominal) verbs are constructs which symbolize a particular construal of the semantic class of properties for the propositional act function of predication.

4.6. Property predication constructions in Slavic languages - preliminary remarks

In performing a speech act, a speaker must perform a series of propositional acts. As has already been pointed out (see Chapter 2), the major propositional acts are **reference** and **predication**. The act of reference identifies the entity that the speaker intends to talk about (Searle 1969) or, to put it in conceptual terms, it is involved in the opening of a 'cognitive file' (Croft 1991). The semantic class of objects, which are nonrelational i.e. conceptualized as autonomous units and permanent are 'ideal' for referring. The act of predication is the act of ascribing a property (in the philosophical sense) to a referred-to entity, which does not involve creating a file for that entity but inherently involves the referred-to entity. For this reason, verb roots, which are the prototype for predication, are relational. It is not surprising that adjectives, which are also relational, function commonly as predicates (Thompson 1988) and in some languages are indistinguishable from verbs. Thus in some

[7] Townsend and Janda 1996 provide evidence for the breakdown of the formal transitive-intransitive opposition in the modern Slavic languages and for the more consistent continuation of the transitive (factitive) **I**-type.

languages property predication is encoded verbally. The example quoted by Croft (2001: 74, borrowed from Stassen 1997: 158 from Lambdin 1971: 193, 14) is from Biblical Hebrew. The Verbal inflection in (15) (by internal vowel change) yields an inchoative interpretation, in contrast with the stative Non-verbal predication in (14).

(14) tob -im ha- anasim
good -M.PL ART- man.PL
'The men are good'.

(15) zagen
old.3sg.M.prf
'He became old.'

Thus, a property word used in predication constructions undergoes a semantic shift to the inchoative process 'become [property]'.

In many languages, in order to function in predication, the semantics of adjectives requires them to combine with the copula 'be' (or 'become') which symbolizes a process. This is the case in Slavic languages. The examples from Russian and Bulgarian illustrate the same semantic shift as in the example from Biblical Hebrew. However, they also illustrate the possibility of an additional semantic shift when a property word is used in Slavic in predication constructions, which is discussed in the paragraph below.

(16) belyj parus
white sail
'white sail'

(17) Parus bel.
sail white
'The sail is white.'

(18) Parus stanovitsja belym.
Sail become3sgPRS whiteINSTR
'The sail becomes white.'

(19) Parus beleet.
sail white3sg.PRS
'The sail becomes white.'
or 'The sail appears/is seen white'

The construction in (16) is an attributive or modification construction which involves the long form of the adjective *bel* 'white'. The long forms are the prototypical forms of adjectives in Modern Russian as they are the ones which are used in modification constructions, i.e. the function which is prototypical for unmarked adjectives.[8] As a semantic class properties are permanent, inherent, and stative. Langacker's schematic representation of colour, which was discussed above, indicates that all the specification of a colour property can be satisfied simultaneously in a single consistent conceptualization that is not construed as unfolding through conceived time, i.e. summarily scanned. Properties share the above conceptualization with objects. As a modifier the adjective enriches the description of the referent and there is no degree of separation between the property and the object it characterizes. Iconically this is represented by the immediate proximity between the object and its modifier.

The construction in (17) is a predicative construction with a zero auxiliary to mark present-time reference and the short form of the adjective *bel* specializing typically in predicate constructions. *Parus bel* construes the property as relational, and thus introduces a degree of separation between the colour trait and the object. An auxiliary profiles 'a process' as very generally grounded in a mental space/possible

[8] There is a tendency in modern Russian to use both short (when available) and long forms for predication.

world or discourse space (such as present vs. past time reference). The past tense form of the copula, *byl,* appears in past time reference to mark the separation between the property and the object even more clearly and the sense of transitoriness becomes more obvious. Iconically the degree of separation is marked by the phonologically expressed copula separating the property from the object possessing it.

A sentence such as

(20) *V prošlom godu ja* ***byla tolstoj****, no potom poxudela.*
'Last year I **was fat** but then I became thin.'

clearly examplifies the transitoriness encoded by the past tense predicative adjectival construction.

In (19) the verb *belet'* profiles a process, the process of acquiring or intensifying the property 'white'. Processes are transitory. In Langacker's conceptual scheme verbs ('processes') are construed as relational and sequentially scanned i.e. as unfolding through time. Such a construal of the semantics of properties, which are permanent, inherent, is achieved by treating it as a process of acquiring the property. In Slavic, derivational morphology marks construal plus truth-functional semantic shift in meaning. In the case of intransitive deadjectival verbs, this is the e-suffix (and the n-suffix in Modern Russian) plus inflectional morphology such as tense, aspect, mood encoding the potential behaviour of unmarked verbs. In the acquisition meaning the verb is parallel to the 'become+adjective' predicative construction but not semantically identical.

The inchoative interpretation of intransitive colour verbs in Russian, Bulgarian and other Slavic languages is one language-specific although cross-linguistically common construal or reconceptualization of the colour property from

permanent to transitory which, of course, brings it closer to the prototype for predication i.e. verbs. There is a second conventionalized construal of the semantics of colour property (and other properties as will be shown below) which is quite specific for Slavic languages and as such it causes substantial difficulties in translation - the interpretation of 'appear + colour', 'be seen by an observer + colour' or as Wierzbicka calls it 'a transitory feature of scenery' and which I label the 'experiential' or 'perceptual' meaning of deadjectival verbs. These verbs are traditionally referred to as stative. They correspond to the 'be+adjective' predicative construction but again are not semantically identical.

The above phenomenon has been also discussed with examples from English. The more predicate-like the syntax of property words in predication, the more transitory and less inherent is the property asserted (Wierzicka 1986, Bolinger 1967, 1980, Croft 1990: 105-6). Bolinger's example is illustrative of the scalar increase in inherentness from Verb to Adjective to Noun in English (Bolinger 1980:79).

(21) Jill fusses.
(22) Jill is fussy.
(23) Jill is a fussbudget.

Langacker argues that even action nominalizations represent an alternative construal of the action as a static whole or summarily scanned. If his analysis is correct then we should be able to account for property verbalization, the derivational construction which turns adjectives into verbs as an alternative conceptualization or construal of the property as sequentially scanned. Bolinger's and Wierzbicka's analysis of the verb-nonverb distinction supports the prototypicality of transitory predicates as verbs since they can be easily conceptualized as transitory. Langacker's analysis supports the prototypicality of processes since they are the most easily

scanned sequentially (Croft 1991: 107). However, there is no fundamental difference between the semantic class analyses and construal analysis.

Dictionary definitions of verbal property predicates in Slavic languages usually begin with synonymous predicative constructions 'become + adjective' and 'be+adjective', but continue to add further specifications to their definitions. Seliverstova (1990: 37) points out that constructions like *stanovit'sja blednym* 'get/become pale', which are often considered as absolute synonyms of the respective process verbs like *blednet'* , in fact, do not denote the process of acquiring the respective property. What these constructions signal is that the object denoted by the subject in the sentence is characterized by the property from a certain moment onwards. Even a sentence like *On stanovitsja umnym (krasivym)* 'He is becoming clever (handsome)' signals not the increase of the property clever or handsome but that Y (the subject) does not possess the property but there are symptoms that Y will possess the property. In other words, the link between Y and the property will be established. Therefore, *stanovit'sja* is also a kind of link verb similar to *be* (for a more detailed discussion see Chapter 5). Seliverstova provides the following tests to support her analysis. Sentences with *stanovit'sja* + adjective do not allow adverbs modifying the flow of the process. Compare the sentences

(24) *Ona medlenno/bystro stanovitsja umnym
She slowly/quickly become cleverINST
'?She is slowly/quickly becoming clever'

(25) On medlenno no nesomnenno umneet
He slowly but undoubtedly cleverV3sg.pres
'He is slowly but undoubtedly becoming cleverer (and cleverer).'

(26)* Ona medlenno stanovitsja blednym
She slowly become paleINST

(27) Ona medlenno bledneet
She slowly paleV3sg.pres
She is slowly becoming paler (and paler).

In other words, the verbal property predicates and their corresponding predicative constructions are not complete synonyms. When properties are predicated as verbs there is a semantic shift which is a result of shift in profile i.e. it is a semantic phenomenon. Derivational morphology converting adjectives into verbs overtly marks construal plus truth-functional semantic shift in meaning. Thus property verbalization is another illustration of the semantic process of conversion. These semantic shifts may be cross-linguistically very common as the property-acquisition semantic shift but they are language specific conventions. For example, in Russian, Bulgarian and other Slavic languages the semantic shift from colour to colour acquision or intensification is parallel to the one in the English intransitive verbs (*whiten, yellow, redden*), but they also have another language specific conventional meaning i.e. 'appearance/perception of colour', which is not available in English. As Croft (2004: 43) points out: 'the truth-conditional semantic shift that accompanies the construal is conventionalized in the language, and cannot be assumed to carry over to other languages or even other words in the same language.'

Such examples are not usually analyzed as examples of construals since the profile is central to a word's meaning and a change in profile means a change in truth conditions (Croft 2004: 47). However, in cognitive linguistics conceptualization is the fundamental semantic phenomenon. Whether alternative construals give rise to

differences in truth conditions or not is a derivative semantic fact. Therefore, a semantic analysis involves a conceptual analysis.

4.7. Verbal property prerdicates as unmarked but peripheral class of verbs.

Although deadjectival verbs are morphologically more complex than the 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 the above phenomenon will be to say that the semantic shift from a permanent, inherent property of a referent to a transitory property perceived by the speaker, or to an inchoative process of intensifying the degree of the property, has brought the semantics of properties closer to the semantics of action, especially in the case of what I have already called processual deadjectival verbs. They participate in behavioural potential constructions typical of verbs. i.e. tense, aspect, mood. But how close to the verbal prototype do they get?

In the Bulgarian linguistic literature the question about the 'defectiveness' of the type of verbs we are discussing here has been raised before[9]. 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. Ivančev (1988:133-135), however, presents the results of interviews with native Bulgarian university students, which show that *e*-suffixed

[9] I am grateful to Ian Press for drawing my attention to the status of the Aorist forms of these verbs.

verbs can normally be used in the Aorist. I shall mention only a couple of sentences, which illustrate the point.

(27) Tikvata **edrja, edrja**
Pumpkin.ART **bigV.AOR bigV.AOR**
i kogato se prăsna ot neja se posipaxa žălti semena.
and when REFL burstAOR from her REF spillAOR yellow seeds
'The pumpkin grew and grew bigger and when it burst yellow seeds spilled out.

(28) Trupăt dălgo **studenja** na besilkata.
Corpse ART long cold.V **AOR** on gallows.ART
'The corpse was getting colder and colder at the gallows.'
or
'The corpse was getting colder and colder (and you could feel it).'

The acceptability of these sentences in Bulgarian has been contested by Čakărova (2006). The latter interpretation is not only too macabre to be entertained but obviously rather difficult; a special context is needed for it. In Chapter 6 it will become obvious that 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 *dălgo 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 (27) 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 nonprototypical status of deadjectival verbs of this type.

Ivančev (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. Similarly to the relational adjectives discussed above, 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 Bulgarian. There is not a single use of perceptual colour verbs with Aorist in the literary texts comprising the corpus for this study. As we will see in the next chapter, 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 nonprototypical 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 nonprototypical combination of properties and predication. The figure below is an attempt to represent the semantic map of property predication in Bulgarian.

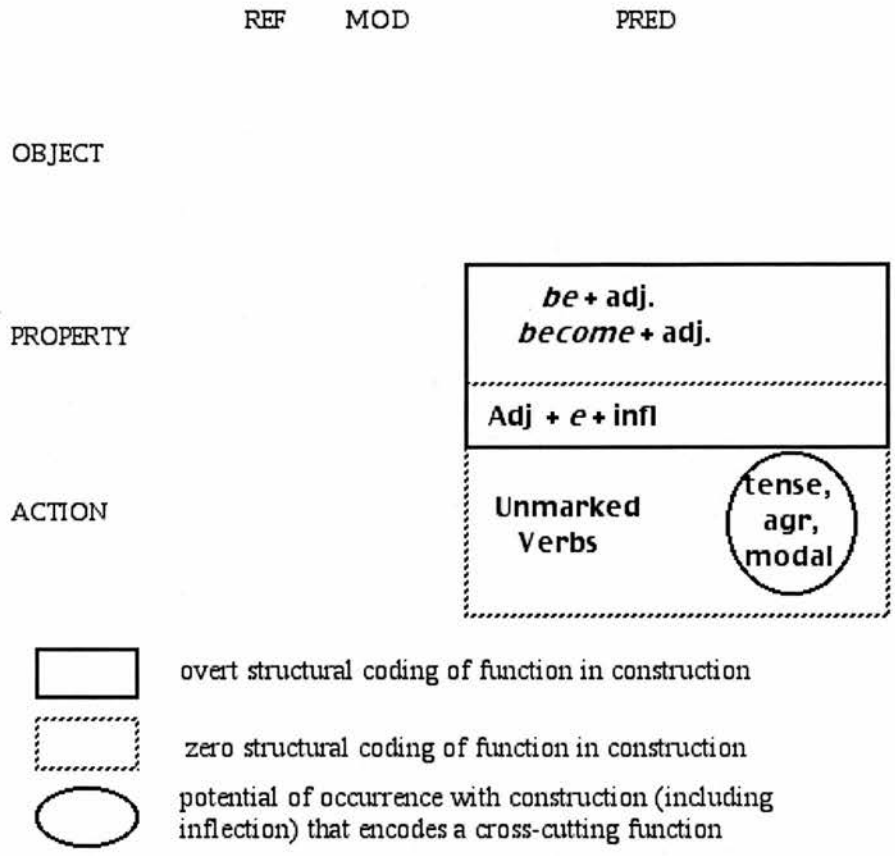


Figure 4. 6. The semantic map for Bulgarian property-predication constructions

As we shall see in subsequent sections, verbal property predicates have very complex semantics, which correlates not only with the major function of predication. They may also correlate with one of the crosscutting propositional acts identified by Croft (1991), namely SITUATING the entity in some background dimension, which combine both space and time (see Chapter 6).

To sum up the above discussion, 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.

4.8 Summary

There is good reason to study derivations of this kind. They provide the researcher with explicit material to study the changes in the conceptualizations which are structurally marked by the various derivational morphemes as well as the conceptualizations which are preserved in the stem. Besides, one of the basic tenets of construction grammar and the cognitive linguistic approach to syntax and grammar in general is that grammatical knowledge represents a continuum, which is generally referred to as the syntax-lexicon continuum.

Everything from words to the most general syntactic and semantic rules can be represented as constructions. Morphology including derivational morphology represents complex grammatical units, made up of morphemes. From a structural point of view, the only difference between morphology and syntax is that morphemes are bound within words, while words are morphologically free within a phrase or a sentence. Morphologically simple words are atomic, that is, they cannot be further divided into meaningful parts. Morphologically complex words such as deadjectival verbs in Slavic languages are constructions whose parts are morphologically bound. Therefore, morphology describes complex constructions, but constructions of bound morphemes. Morphological expressions can be placed on a continuum of schematicity. A maximally substantive morphological expression is fully specified, as in *book-s*. Partially schematic morphological expression include [book-NUMBER] and [NOUNS-s]. Fully schematic morphological expressions include [NOUN-

NUMBER]. Whether atomic or complex, free or bound, schematic or substantive, all constructions in construction grammar are pairings of syntactic and morphological (and phonological where relevant) forms with a meaning, including pragmatic meaning (Croft and Cruse 2005).

Similarly, we can analyze the intransitive verbs derived from adjectives (or nouns) as constructions such as [ADJ – *e* – TNS], which is partially schematic, while an individual word form like the Bulgarian *bel-e-še* is a wholly substantive morphological construction. Of course, it is part of a more schematic morphological pattern in Slavic which combines a schematic nominal or adjectival stem with a schematic suffix to yield a complex substantive verb. Such a structural pattern is a grammatical construction in itself which is not essentially different from the predicative syntactic constructions [*be* ADJ] which parallel deadjectival verbs. A more detailed analysis will be provided in the discussion of the different semantic subclasses of Adjectives allowing a transitory construal of properties and representing it in a verbal construction in Chapter 6. What has to be mentioned at this point, however, is that the semantic class of human propensities or states is not the only class that can be verbally encoded for the purpose of predication in Russian as suggested by Stassen (1997), but there are more general patterns which allow almost any semantic class of property concepts encoded in the adjectival root or stem, i.e. colour, dimension, age, even gender to achieve the construal of unfolding in time and hence transitoriness. At the same time as the data presented in Chapter 6 show, which adjectival root/stem will lend itself to transitory construals is difficult to predict although I have tried to outline some probabilities.

A comprehensive semantic analysis of verbal property predicates is impossible on the level of the word only. Being relational and temporal predications

(Langacker 1987; Croft 1991, 2001), their full semantic characterization can be achieved on a sentential level. The actual instances of verbal property predicates in the Bulgarian corpus of literary texts are substantial enough in number to allow valid generalizations. For example, all instances of colour verbs in the sentences of the Bulgarian corpus as well as the examples from Israeli's study (1998) of Russian colour verbs include locational phrases. This fact throws light onto the specific semantics of deadjectival verbs formed from colour adjectives. The types of subjects that property predicates go with are also illustrative of their semantics. In other words, verbal property predicates have to be studied not only as a derivational construction but also as an instance of the intransitive construction in Russian and Bulgarian. To my knowledge these types of predicates have not been the focus of extensive research so far and this is a major contribution of the present study.

Chapter 5
Property Predication Constructions in Bulgarian and Russian

5.1.The Bulgarian and Russian predicate adjective constructions

In Chapter 4 I already discussed the correlation between the semantic class of properties and propositional act functions as well as the syntactic constructions and derivational patterns accompanying the semantic shift, which brings the property concepts closer to the prototype for predication i.e. verbs. In Chapter 2 I also introduced the basic concepts of Cognitive Grammar such as **profile** and **base**, **trajector** and **landmark, things** and **relations** and especially **atemporal relations** and **processes**. Adjectives or adjectival expressions are atemporal relations, which have a thing for their trajector (Langacker 1987). Such a definition is compatible with the position adopted so far, i.e. that adjectives serve prototypically for modifying nouns and as modifiers they are relational, permanent, stative and gradable (see Croft 1991, 2001).

The description of adjectives as stative, atemporal relations needs clarification. To begin with, properties are relational concepts and adjectives are relational predications (in Langacker's sense of the term 'predication') in two ways. First, a property cannot be conceived without a thing that possesses the property. For example, we cannot conceive of height without something that is tall. Second, all basic properties except colours (see Chapter 6) are conceived of as scales with end points; so adjectives come in pairs of antonyms such as *long* vs *short*, *cold* vs *hot*, and so on. In other words, relations are **conceptually dependent**.

As a modifier the adjective enriches the description of the referent and there is no degree of separation between the property and the object it characterizes. Iconically this is

represented by the immediate proximity between the object and its modifier as in Figure 4.4(b), which is repeated below for convenience as 5.2.

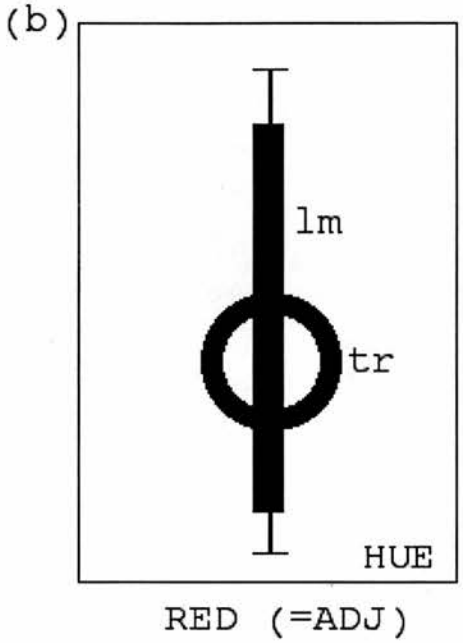


Fig.5.2 A representation of the semantic value of core adjectives as modifiers

Langacker's pictorial representation shows the semantic value of RED in its adjectival use but I believe it reflects the conceptualization of most core adjectives, which are defined in terms of scales as was pointed out above.

In all relational predications there is an asymmetry between the profiled participants mentioned above. One of them is the profile or trajector (tr), which stands out against a base or a landmark (lm) .

The above description referred to stative, atemporal relations. However, it is part of our experience and knowledge that properties can undergo changes: they can be lost or acquired, sometimes as a result of a forceful, dynamic contact between two entities as in

(1) *The cold made her cheeks red/reddened her cheeks*

or they can be seen as naturally, spontaneously occurring as in

(2) *He became ill.*

In both cases such processual notions can be put in profile by integrating the property RED or ILL with other expressions to become processual.

Many properties are directly observable by the speaker and thus they can be tied to what Langacker (1987: 126) calls the **ground**, i.e. the speech event, its participants, and its setting. In Slavic languages this is possible through the process of derivation, in which the property root combines with a suffix to make a processual predicate and to relate it to the **ground** with reference to the time of speaking, e.g. B.*beleja.*, R. *belet'* 'be seen white', B. *umneja*, R. *umnet'* 'become clever'. The structural schema is exemplified in the diagram below:

DERIVED STEM
[BASIC STEM $_{\text{property}}$]←[DERIVATIONAL MORPHEME $_{\text{e-suffix}}$]

In other words, there is again an integration of the stative, atemporal property with another expression, a derivational morpheme on the level of morphology. In essence, both morphological and syntactic expressions are constructions (see Chapter 2 and Chapter 6). The point I would like to make clear is that, as long as there are semantic/conceptual reasons to turn an inherently stative atemporal concept such as PROPERTY into a PROCESS, there are various compositional linguistic means to express the processual conceptualization.

Let us look at a specific example. In *Parus byl bel* the colour property 'white' is being ascribed to the subject 'sail'. It also relates the property 'white' to the speech event placing it temporally before the speech event. This fact introduces a degree of separation between the colour trait and the object, e.g. perhaps now the sail is not white any more, it was white only then. The relationship between the object and the property is

not inherent as it is when the adjective is used as a modifier. There is a sense of transitoriness. Iconically the degree of separation is marked by the phonologically expressed copula separating the property from the object possessing it.

Once the semantic leap from 'inherent' or 'pemanent' to 'transitory' is made, the Slavic languages have several alternative ways to express that thought or concept. It has already been pointed out that there are two sets of intransitive constructions in Slavic languages which predicate properties to objects in subject position with two distinct meanings. One of the meanings is 'inchoative', i.e. the acquisition of properties encoded by the Russian [NP *stat', stanovit'sja* Adj] predicate adjective construction and the Bulgarian [NP *stana, stavam* Adj] as well as by verbs derived from adjectival roots by the *e*-suffix in their ingressive sense. The second meaning is 'stative', i.e. ascribing a property, encoded by the Russian [NP *byt'* Adj], the Bulgarian [NP *săm Adj]* predicate adjective constructions and by the same deadjectival verbs, this time in their 'appear, stand out with a property' sense.

In the present section I shall discuss the predicate adjective constructions in Russian and Bulgarian as they are understood in cognitive linguistics. The ultimate goal will be to show that they are complex and general (schematic) syntactic constructions in close proximity in the semantic space to the complex but substantive[1] intransitive deadjectival verbs in the syntax-lexicon continuum. The derived verbs can be analyzed as partially schematic morphological expressions of the type ADJECTIVE – SUFFIX, where the suffix is a complex marker of the predication of transitoriness or a process. This process (in the general sense) is rendered specific by the choice of the adjectival root and additional syntactic elements such as locative phrases. In other words, a unified

[1] 'Substantive' as a term in cognitive linguistics is used in opposition to 'schematic'. The latter also translates familiar notions such as 'general', 'rule-oriented' while the former translates notions such as 'specific', 'detailed'.

analysis of both predicate adjective constructions and deadjectival verbal predicates is possible in terms of the degree of generality of the semantic rules associated with general (schematic) syntactic structures and more specific morphological expressions. The end point of the argument will be to show that morphology is very much like syntax, i.e. it describes complex constructions, but constructions of bound morphemes. Therefore, a uniform representation of all grammatical knowledge in the speaker's mind, in the form of more or less generalized constructions, is tenable.

Proximity in semantic space, however, does not mean identity; I will argue that the predicate adjective constructions and the respective deadjectival verbs are not synonymous and the interference of the semantics of these predicates cannot be excluded as some previous formal analyses of these two types of property predication constructions have claimed (Pereltsvayg 2001). Pereltsvayg believes that the differences in behavior of Russian predicate adjective (and nominative) constructions, on the one hand, and intransitive stative verbs (primarily derived from adjectives), on the other, with respect to unaccusativity diagnostics cannot be reduced to the differences in the thematic properties of the arguments compared and presents an extensive argumentation in favour of deeper unobservable syntactic differences to account for the different results in the diagnostic tests. The types of verbs she analyses are the types which are also in the centre of the present research. The examples below are taken from Pereltsvayg (2001).

Stative predicates in Russian:

stative intransitive verb	**adjectival predicate**		**nominal predicate**
	short adj	**long adj**	
bolet' 'to be ill'	*bolen* 'ill'	*bol'noj*	*bol'noj* 'patient'
bedstvovat' 'to be poor'	*beden* 'poor'	*bednyj*	*bednjak* 'pauper'
pjanstvovat' 'be drunk'	*pjan* 'drunk'	*pjanyj*	*pjanica* 'drunkard'

belet' 'to be/appear white'	*bel* 'white'	*belyj*
krasnet' 'to be/appear red'	*krasen* 'red'	*krasnyj*
černet' 'be black'	*čëren* 'black'	*čërnyj*
želtet' 'be yellow'	*žël* 'yellow'	*žëltyj*
zelenet' 'be green'	*zelen* 'green'	*zelënyj*
sinet' 'be blue'	*sinij* 'blue'	
golodat' 'to be famished'	*goloden* 'hungry'	*golodnyj*

From the point of view cognitive linguistics there is nothing more in language than the symbolic relationship between form (phonological structures) and meaning (semantic structures). Both adjectival predicates and intransitive deadjectival verbs are composite constructions which derive their meanings from the elements that compose them. In the next section I will provide a short history of ideas related to adjectival predicates within the class of copular sentences.

5.2. Previous research in various theoretical frameworks

The predicate adjective constructions have long been caught in the debates of structural linguistics and various formal theories and their modifications. They have been most often analyzed under the class of copular sentences (for a more extensive discussion of pre-generative-grammar theories of the copula, see Moro 1997: 248-258; for generative grammar analyses see Pereltsvayg 2001), and the focus of analysis has primarily been the meaning or function of *be*. According to one tradition, *be* is a meaningless element inserted for purely grammatical purposes in specifiable environments (Bach 1967); its function is to provide the sentence with inflectional elements required by declarative sentences, in particular, tense and mood specifications. This function is described by Jespersen (1937:135, cited in Moro 1997:256) as follows:

... 'later these [nominal sentences] were brought to the usual type by the addition of the least substantial verb ..., in much the same way as other sentences were made to conform to the usual type by the addition of the colorless subject *it* (it rains, it pleases me to go, etc.).'

Similar understanding underlies the invention of the term 'copula' from Latin *copulare* 'to link' by Abelard and its later use by Port Royal grammarians Antoine Arnauld and Claude Lancelot (cited in Moro 1997:251-252 and Lepschy 1998:167). According to this conception, the copula can turn a term into a predicate and link it with the subject. This idea is reflected in the Port Royal *Grammaire* (p. 92):

'The only 'pure' verb is the verb *to be* in the third person of the present indicative, whose only function is linking subject and attribute, without adding any further meaning.' [cited in Lepschy 1998:167]

Other analyses maintain that the copula (*be*, *byt'*, *săm*, etc.) is a predicate itself and it is ambiguous between two or more readings. Examples from English are given (1) below.

(1)	a. I think consequently I am.	existential
	b. The football is under the table.	locative
	c. The fairies are small.	predicative
	d. Alice is a doctor.	equative/identity/class inclusion
	e. John is building a new house.	auxiliary

Quirk and Greenbaum (1973:353, cited in Moro 1997:298) make the following generalization about the uses of *be*:

...'*be* is commonly used to introduce a characterization or attribute of the subject... but with complement noun phrases it also commonly introduces an identification of the subject.'

Functional grammars (Goosens 1992 cited in Pereltsvayg 2001 : 23-24), Montague grammar (Montague 1973, Dowty et al. 1981:229, Partee 1976, 1999 cited in Pereltsvayg 2001: 24) also make a distinction between various types of *be*. For all these approaches the meaning of the copula (*be*, *byt'*, *être*, *essere*, etc.) is ambiguous between two or more readings, including predication, identity and expression of tense/mood. The ambiguity of the copula is related to the lexical item itself, i.e. it is encoded in the lexicon, not to the syntactic structure of the sentence in general.

Cross-linguistically, copular sentences are common although they vary in their interpretations (e.g. Hebrew and Bengali express a possessive relationship by a copula in addition to the ones already mentioned above with regard to English). Other languages, including Spanish, Basque, Irish and Scottish Gaelic, use two distinct copulas in predicative (and equative) constructions with two different interpretations (quoted from Pereltsvayg (2001)).

(3) SCOTTISH GAELIC (from Ramchand 1997:193)

a. Is faicilleach Calum.	b. Tha Calum faicilleach.
IS careful Calum	BE Calum careful
'Calum is a careful person (by nature).'	'Calum is (being) careful.'

Slavic languages typically use morphological case, nominative vs. instrumental to mark the contrast between the two types of copular sentences.

(4) RUSSIAN

a. Čexov byl pisatel'.	b. Čexov byl pisatelem.
Čexov was writer.NOM	Čexov was writer.INSTR
Čexov was a writer.'	Čexov was a writer.'

(He is dead now.)

(5) SLOVAK (from Rothstein 1986)

a. Kukuchin bol lekar.
Kukuchin was doctor.NOM
'Kukuchin was a doctor [his main characteristic].'

b. Kukuchin bol lekarom.
Kukuchin was doctor.INSTR
'Kukuchin was [happened to be] a doctor.'

(6) BELARUSIAN (from Grannes et al. 1995:338)

a. Budz' vjasëly.
be.IMPER cheerful.NOM
'Be cheerful!'

b. Budz' vjasëlym.
be.IMPER cheerful.INSTR
'Be cheerful!'

Polish is interesting in this respect because it makes use both of the case alternation and of different copulas (the verbal copula *jest* "is', as in (b), and the pronominal copula *to*, corresponding to a demonstrative 3rd person singular neuter pronoun, as in (a):

(7) POLISH

a. Ta pani to premier Anglii.
this woman DEM premier.NOM England.GEN
'This woman is the premier of England.' [Rothstein 1986]

b. Ta pani jest premierem Anglii.
this woman is premier.INSTR England.GEN
'This woman is a premier of England.' [ibid]

Bulgarian does not make such a distinction as it has no morphological cases.

It has been long noted in the literature on Russian that the two types of copular sentences with instrumental and nominative marked post-copular phrase, respectively,

do not mean exactly the same thing. However, there is an extensive debate in the literature as to the exact nature of these meaning differences. Traditional literature uses terms like "identity", "characteristic", "status", "function", "essential quality", "appearance", "concreteness", "temporal" to describe the meaning differences between sentences with nominative and instrumental post-copular phrases (for a good overview of traditional literature on the subject, see Nichols 1973:7-17). Generative literature, on the other hand, focuses on describing the differences in terms of stage-level vs. individual-level predicates. The most widely accepted generalization is that sentences with an instrumental post-copular phrase denote transient, temporary, or changeable properties, whereas sentences with a nominative post-copular phrase denote characteristic, permanent, or non-changeable properties (see Peškovskij 1914/56, Jakobson 1936, Rozental' 1976: 37, Wierzbicka 1980, Bailyn and Rubin 1991). For example, Wierzbicka (1980: 119) characterizes the meaning differences as follows:

> ...'the nominative case is used when the predicate nominal denotes a property seen as essential and inalienable; the instrumental case is used when the predicate nominal denotes a property which is seen as transient and inessential.'

Pereltsvayg (2001) challenges the accepted view and argues that the case alternation between nominative and instrumental in the examples above is an overt indication of deeper differences in syntactic structure of copular sentences. According to her analysis there is no need to distinguish a copula of identity and a copula of predication in addition to the tense (and mood) marking functions of the copula. Instead, she argues that the so-called copula of identity is only a marker of tense, whereas the copula of predication is a true argument-taking predicate; thus, the differences between the copula of identity and the copula of predication reduce to properties of functional vs. lexical heads. Following Baker (2000) both NPs and APs in post-copular positions, are

predicative in nature, and they cannot discharge their (Theme) θ-role directly, that is, by θ-marking their specifiers. Instead, they require "help" from a special head. However, this 'helping' head is a lexical rather than a functional category; it is a kind of verb according to Pereltsvayg (contra Baker 2000).

What is amazing in Pereltsvayg's structural syntactic analysis is the similarly to Langacker's (1991) semantic analysis. She proposes a unified analysis for the copula *be* in its predicate adjective construction and predicate nominative construction. What is even more intriguing is that she assigns a lexical (semantic) value to the copula which is also in line with cognitive linguistic description. Her apparatus of argumentation, of course, is completely different. From a cognitive linguistic point of view such an analysis is unnecessarily convoluted and unnatural. In a cognitive linguistic framework, the lexical (semantic) meaning of the copula can be accounted for naturally and in a straightforward manner (see below). In addition, such an analysis is closely connected to previous semantic classifications of *byt'* predicates especially in the Russian linguistic tradition (Seliverstova 1982, 1990). She also excludes an important fact from Russian predicate adjective constructions, i.e. the short adjectival forms as they do not change for case (Nominative or Instrumental).

In the Russian linguistic tradition property predicates stand out as a semantic class opposed to the classes of actions, states, processes, etc. Šterba (1974: 90) discusses three types of predicates: 1) actions (**dejstvija**), 2) states **(sostojanija**) and 3) properties (**kačestva**). Each of the above semantic groups has a formal expression: actions are expressed by verbs, properties in predication are expressed by a copula (**svjazka**) plus a long adjective and states are expressed by a copula (**svjazka**) plus a closed class of words, which belong to a particular morphological class (*pečalen, žal', v sostojanii, nado,* etc.) and participate in a particular syntactic construction, e.g. *xolodno, mne*

xolodno, mne žarko. He points out that a lexical root can appear in more than one class of predicates as in *morozno* (state, **sostojanie**), *morozit'* (**sostojanie v vide dejstvija**, state expressed as action), *ja bolen* (**sostojanie**); *boleju* (**sostojanie v vide dejstvija**); *ja vesel* (**sostojanie**); *ja veseljus'* (sostojanie v vide dejstvija); *ja veselyj* (kačestva, properties); *on šumen* (**sostojanie**); *on šumit* (**dejstvie**, action); *on šumnyj* (**kačestva**), etc.

Subsequent semantic classifications of Russian predicates (Demjankov 1980; Kibrik 1980, Stepanov 1979, 1980; Bulygina 1982; Seliverstova 1982) take into account semantic classifications proposed for English predicates (Chafe 1975; Vendler 1967) in their search of general (possibly universal) semantic distinctions. Such distinctions are ultimately conceptual distinctions (Wierzbicka 1980: 49-50). Bulygina (1982) suggests that predicates should be divided into two major groups: 'properties' (**kačestvo**) expressed primarily but not necessarily nonverbally (adjective predicates and nominal predicates) and 'events' (**javlenija**) expressed primarily but not necessarily verbally (see the diagram in Fig. 5.1). Such a division is based on the presence or absence of temporal localization (**vremennaja lokaliziranost'** vs. **vnevremennost'**). Fig. 5.1 represents Bulygina's classification of Russian predicates in a simplified form.

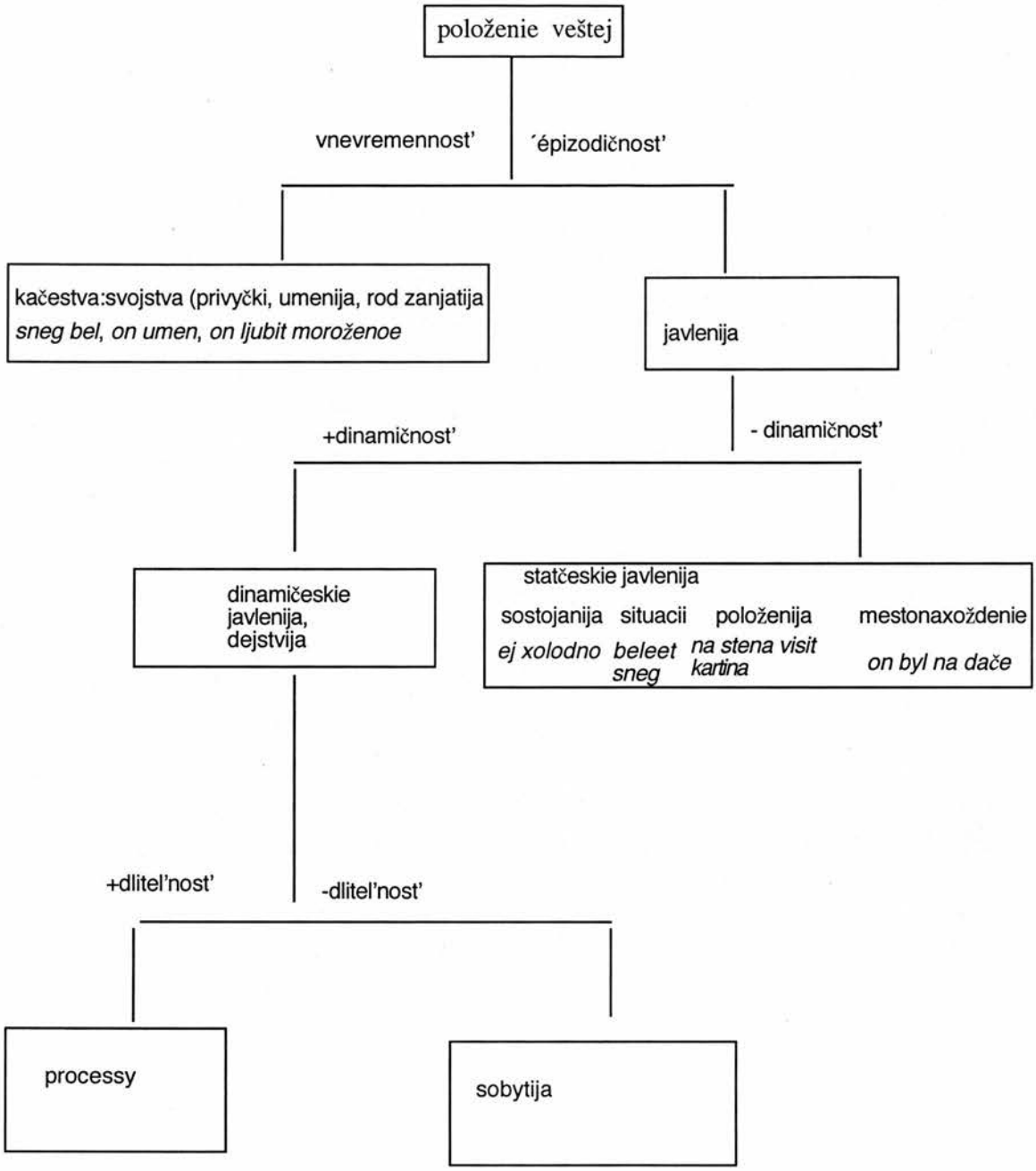


Fig. 5.1 Simplified classification of Russian predicates (Bulygina 1982)

She uses Cvetaeva's verses to demonstrate the intuition of the non-linguist as to the meaning of adjectival predicate *poloe* and the deadjectival verb *pustovat'*.

(8) *Dači* ***pustujuštie****. Kak mat'*
Staruju, tak že čtu ix.
*Èta ved' dejstvie "****pustovat****' '-*
Poloe ne ***pustuet****.*

and

(9) *Vsjak xram mne čužd, vsjak* ***dom mne pust****,*
I vse ravno, I vse edino...
(Toska po rodine)

In linguistic terms, the distinction is based on the differences in their relationship to time. According to Bulygina, property predicates (as well as nominal predicates) are somewhat independent of time, there is no clear-cut temporal boundary of the existence of the link between the subject and the assigned property, properties cannot be expressed as continuous (**aktualizacija priznaka**) (for counterexamples see below). They are potentially atemporal which is exhibited in their use in generic statements. Conversely, the majority of verbs including the existing parallel deadjectival verbs can be used in their continuous sense (**aktual'noe upotreblenie**), thus denoting a transitory state of affairs located in a specific moment or period of time. For example, the adjective *pustoj* ascribes the subject *dom* a permanent property, which does not undergo changes in time while the verb *pustovat'* (as well as in the form of *pustujuštie*) ascribes a transitory feature characterizing the subject *dači* at a particular moment (or period) of time. She provides further examples: predicates such as *belet'(sja), krasnet'(sja), zelenet'* refer to the specific situation (**aktual'naja situacija**), in which the speaker is located or locates himself (see Chapter 6). In the same way (10), which ascribes the permanent property 'high' to the object 'house', differs from (11), which denotes a specific situation (**aktual'naja situacija**) directly observable at a specific moment of time.

(10) *Dom, v kotorym my žili do vojny,* ***byl očen' vysokij...***

'The house in which we lived before the war **was very high.**

(11) Vokrug **vysilis'** gory.

around highV hills.

'There were hills all around (and I/we/the speaker could see them).

She also points out the difference in meaning between verbs such as *svirepstvovat'* 'act in a fierce way', *malodušničat'* 'be spiritually weak', etc. (see Chapter 6 for many more of this type) and the adjectives that they are derived from, i.e. *svirepyj* 'fierce', *malodušnyj* 'weak-spirited'. The latter denote permanent qualities while the former denote accidental, transitory characteristics at or during a particular time.

In Slavic linguistics the distinction static vs. dynamic has often been applied to different types of predicates. Does this distinction apply to the types discussed above? Bulygina goes a rather long way to justify it. Adjectival predicates by virtue of their separation from time imply stativity. On the other hand, she claims that the predicates which denote events (**javlenija**), i.e. the deadjectival verbs under discussion, can be considered dynamic to the extent that the situation they denote will be replaced by another in the course of time. Yet, deadjectival predicates are classified as 'situations and behaviour' (**situacii i povedenie**) under 'static events' (**statičeskie javlenija**). As static events, predicates of the *belet'(sja)* type differ not only from property predicates (*sneg bel* 'the snow is white') but from predicates such as *(po)belet'* 'become white or whiter', which denote a change at a specific moment or during a specific period of time. Comparing predications of the type *Sneg bel* 'The snow is white' (property) - *Eščë v poljax beleet sneg* ' In the fields snow was seen white' (static event "projavlenie") - *Smotri, pjatno na glazax beleet* 'Look, you can see how the stain is becoming paler/fading' (dynamic event, process) shows that the static vs. dynamic distinction is

independent from the more general distinction '**vnevremennost'** (lack of temporal localization) vs. **èpizodičnost'/vremennaja ograničennost'** (temporal localization).

The analysis proposed in Chapter 6 does not contradict Bulygina's insightful description. It heavily draws on her ideas but, unlike her analysis, it looks for a general model to anchor the different types of property predications as an embodiment of our conceptualization of a scene or a situation and to explain the differences in the degree of their transitoriness, specificity/schematicity and interconnections profiled (see Chapter 6)[2].

In Bulygina's classification the adjectives predicating properties (**kačestva**) and their respective deadjectival verbs, which also should predicate the same properties in one way or another, end up in two separate disconnected compartments. Such a classification is somehow counterintuitive. In Chapter 4 I have already argued that deadjectival verbs of the type *belet'(sja), pustet'*, etc. are noncentral members of the verbal category occupying space contiguous to the predicate adjective construction on the semantic map of property predicates in Slavic languages.

Yet another difference is that there is no mention of the copula *byt'* in Bulygina's analysis. The adjectival (and nominal) predicates in examples such as *sneg bel; on p'janica, etc.* are termed nonverbal predicates since there is no copula assigning the property to the Subjet. Therefore, one should assume that the copula *byt'* is not treated as a verb in her analysis. It is not clear if it performs grammatical functions such as being a marker of tense, aspect, etc. since such predicates are being distinguished by their '**vnevremennost'** according to Bulygina. Such a distinction does not explain the use of

[2] It is quite revealing that the example Bulygina offers for the distinction between *belet'* as a static manifestation of colour (**projavlenie**) and a dynamic process explicitly shows that the visual perception is involved in the conceptualization of the dynamic process, i.e. a verb of seeing *smotri* and the expression *na glazax* 'in front of my eyes'. She has previously mentioned the presence of the speaker in the conceptualization of the static meaning of the verb.

property predicates in sentences such as (from Seliverstova 1982)

(12) *Voobšte-to* ***voda*** *v ètoj reke* ***teplaja,*** *no segodnja* ***ona xolodnaja.***
'As a rule/in general the water in this river is warm, but today it is cold.'

In the first clause the adjectival predicate *teplaja* 'warm' can be interpreted in the way suggested by Bulygina i.e. as a permanent property ascribed to the object 'water', but in the second clause it is hardly possible; the adjective predicate *xolodnaja* clearly has a temporal reference, i.e. the present moment. A similar comment can be made in regards to the use of temporal adverbs such as the Russian *ran'še* 'earlier', e.g. *Ran'še ona byla očen' krasiva* 'In the past she was very beautiful'. In other words, as Seliverstova (1982) suggests, predicate adjectives have temporal reference, they refer to a stretch of time but they do not occupy any point on this stretch of time, i.e. they lack specific temporal localization. Seliverstova argues that the copula *byt'* in Russian is an existential verb with bleached semantics. Existence in language is represented in spacial terms which was noticed by ancient Greek philosphers: 'to exist means to be somewhere'. The concept of existence is represented in three main ways: Existence 1 - to be in the real world or in any other world; Existence 2 - to be in some place or within some location (the existence in this world or any other world is implied); Existence 3 means to be located at some moment or within some period. Predication instantiates the third type. According to Seliverstova all predicates express temporal localization but they differ in terms of phase structure (**fazovost'** vs. **nefazovost'**) (Seliverstova 1982). Seliverstova's analysis is presented in the next paragraph.

Byt' predicates in Russian as in many languages is used to predicate properties. They are non-phase predicates. Objects and properties are represented in language as existing at any moment as a complete whole not in phases one after the other. Phase

predicates, i.e. actions, processes and states (what is referred to as human propensities in this study) can be characterized in terms of phases; only a particular phase in the unfolding action or process exists at any particular point in time, not the action or the process itself as a whole (cf. Langacker's summarily scanning vs. sequential scanning of events). At any subsequent moment in time the action or the process seems to 'disappear' and at the same moment 'appear' again. In other words, one phase incessantly unfolds into another. Actions and processes occupy the full length of the stretch of time within which they last. *Byt'* property predicates cannot occupy the full length of a stretch of time within which they 'move' from one point to the next as whole entities. Seliverstova uses a spacial metaphor to demonstrate the point: an object which moves from one point to another along a path cannot occupy the whole path if its length is shorter that the path's length. Therefore, non-phase property predicates cannot combine with expressions such as *ves' den'* 'the whole day', *ves' god* 'the whole year', etc. as the examples below show:

(13) a. *V proslom godu ja byla tolstoj, a potom poxudela.*
Last year I was fat, then I became thin.
b. **Ves' god ja byla tolstoj, a potom poxudela.*
The whole year I was fat, then I became thin.

(14) a. *V molodosti ona byla krasivoj*
In her youth she was beautiful.
b. **Vsju molodost' ona byla krasivoj.*
All her youth she was beautiful.

As we see from the Englsih translation, however, there are languages which allow the use of expressions like *ves' god* with *byt'* property predicates, and English is one of them at least. Seliverstova points out that such a possibility occurs when somehow the copula gains greater independence in the predicate adjective construction, thus the predication

splits into two: 1) the property itself, 2) being (**prebyvanie**) in this property. Then, expressions like *ves' god* denote 'being' in that quality rather than the 'being' of the quality.

States (human propensities) pass the test for phase structure and are grouped with actions and processes, for example,

(15) *Ves' den' on byl goloden.*
The whole day he was hungry.

She also admits that there are cases in Russian where the rule about the combination with the *ves' god*-type of expressions does not apply, as in the examples below.

(16) *Vsju žizn' ja byla tolstoj.*
All my life I have been fat.
(17) *Vsju žizn' ona byla krasivoj.*
All her life she was beautiful.

Another example in which property predictate are used with expressions of the *ves' god* - type is (18) below:

(18) *Vse leto trava byla zelenoj.*
The whole summer grass was green.

She suggests that they have semantically shifted to mean 'states' thus allowing the combination. The objects to which the property is ascribed are usually living, growing things as in the case of grass and in such cases colour can naturally be conceived of as unfolding in time. Similarly, there are cases in which property predicates express the manifestation of the property (see Bylygina 1982) or an iterative appearance of the property, for example,

(19) *Vsju vojnu svet byl tusklivym.*
The whole war the lighting was weak (every time we turned on the light it was weak).

She points out that it is possible for the copula *byt'* to acquire some kind of independence which will allow the use of the *ves' god* - type of expressions with Russian quality adjectives as it can be done in English.

To sum up, Seliverstova (1982) analyzes adjectival property predicates with the copula *byt'* as non-phase structures; they are not distributed in time but simply 'move' in time as whole entities. Properties can change and objects change in that way. In Russian there are predicates which express such a change (cf. *On umnyj* (property) vs. *On vse umneet i umneet* (He is getting cleverer and cleverer)).

Bulygina's and Seliverstova's analyses of property predicates introduced above are parts of a bigger project which aims at a semantic classification of all Russian predicates. The present study is much more limited in scope and focuses on the possibility of finding a model which may account for the meanings of adjective predicates and deadjectival verbs in a unified, principled way. However, both analyses show that the classifications they offer for predicate adjectives seem to leave certain facts unaccounted for and this necessitates various additional explanations.

Constructions with pseudo-copulas[3] such as *stat' / stanovit'sja, javit'sja / javljat'sja, ostat'sja / ostavat'sja* are also predicative constructions but they indicate additionally that the predicative relation changes over some boundary (Timberlake 2004). He calls these verbs **host predicates.** With them, the predicative is valid only in certain times or worlds; it could differ in other times or other worlds. For example, with

[3] I am grateful to Ian Press for suggesting this term. It reflects the understanding that these verbs are not merely grammatical linkers but true verbs. In fact, the so called copula is also considered as a true verb in Cognitive Grammar.

stat' / stanovit'sja 'become', the state changes from one time to another, with *javit'sja / javljat'sja* 'seeem, appear, turn up', the state holds up in the speaker's world of perception, though it might not hold everywhere.

It is hardly possible to come up with a complete list of pseudo-copula verbs. The reason for this is that it is not clear where to draw the line between copula-like and regular lexical verbs. Thus, some of the verbs can function both as copula-like and as full lexical verbs (e.g., *predstavljat'sja* as a full lexical verb means 'to introduce oneself'). Moreover, many meanings expressed in English with a combination of a copula verb and an AP predicate are expressed in Russian with a full lexical verb (e.g., *krasnet'* 'be red', *bedstvovat'* 'be poor', etc.).

Pseudo-copula verbs are commonly used with the predicative adjective in the instrumental case. Timberlake (2004) suggests that the use of the instrumental case is a consequence of the limited validity of the state denoted by the above verbs. However, Pereltsvayg (2001) reports that *stat'* 'become' allows nominative case on the post-copula phrase in colloquial speech, as noted in Bailyn and Rubin (1991:121, fn.11). The example is quoted from Pereltsvayg so I leave her sentence numbering.

(30) a. Saša stal delovym.
Sasha.NOM became business-like.INSTR
'Sasha became business like.' [Bailyn and Rubin 1991:121]

b. Saša stal delovoj.
Sasha.NOM became business-like.NOM
'Sasha became business like.' [ibid]

According to Bailyn and Rubin, and Pereltsvayg 'as opposed to (a), which indicates a true change in Sasha's state, (b) implies that the world around has changed in such a way

that Sasha is now inherently business-like'.

Thus the argument about the distinctions between copular sentences with a nominative case marker and an instrumental case marker crops up again. In fact, this argument is irrelevant to our discussion. Adjectives with both nominative and instrumental case markers are predicative constructions. The full meaning of a specific instantiation of the adjective predicates should be compositional; it will include the meanings of each of the specific elements including the meaning of the case markers, the adjectival root, etc. The general rule of interpretation will be as the one formulated below in section 5.4. In any case, Pereltsvayg's analysis shows that formal approaches have moved in the direction of loosening the modularity principle in order to include more semantically motivated phenomena to account for syntactic behaviour.

5.3. Property predication constructions from a cognitive linguistic perspective

In the next section I shall outline Croft and Cruse's analysis of predicate adjective constructions, which is essentially Langacker's analyses of *be* and the predicate adjective (and nominative) construction. The form of the predicate adjective construction in many languages including English, Russian and Bulgarian is [NP *be* Adj]. The form differs only in the present tense in Russian, where there is no verbal element, so the form reduces to [NP Adj]. The lack of present tense copula poses a problem for Langacker's analysis as it remains unclear what provides the "temporization" of the stative relationship indicated by the stative complement. This is an issue which requires further consideration and could be the object of another study. One suggestion may rest on the fact that when used in predication with the present tense especially the short form of the Russian adjective is preferred (Timberlake 2004).

The predicate adjective construction is a type of predicate construction which differs from the ordinary verbal construction in requiring the copula verb *be*. The members of the Adjective category have a meaning (see below) that requires them to be combined with the copula *be* in order to be interpreted as signalling the ascription of a property to a referent. The meaning of *be*, on the other hand, requires the copula to be combined with a member of the Adjective category in order to be interpreted as doing the job of ascribing a property to the subject NP (Croft and Cruse 2004: 253). This analysis is similar to Langacker's 1987; 214-22; 1991; 204-5) who has argued that *be* is a meaningful element whose primary function is temporal and aspectual (cf. Seliverstova 1982). I shall quote his description (1991: 65) in full below.

> '*Be* is schematic for the class of imperfective processes: it profiles the continuation through time of a stable situation characterized only as a stative relation: it is a true verb, all of whose components states are construed as being identical, but apart from their being relational it is maximally unspecific concerning their nature. The schematic relationship followed through time by *be* can serve as elaboration site in a grammatical construction, where it is rendered specific by the addition of a stative predication such as an adjective or a prepositional phrase (e.g. *be hungry*; *be on the counter*). Since *be* is the profile determinent, the composite expression inherits its processual character – it profiles the continuation through time of the specific relationship indicated by the stative complement. This "temporization" of a stative relationship allows it to occur as the profiled relationship in a finite clause, which would otherwise be precluded (since a finite clause always designates a process).'

Adjectives are semantically relational, stative, permanent and atemporal (Langacker 1987: 214-22, Croft 1991, 2001, Croft and Cruse 2004: 253). When used in the propositional act function of predication they acquire an additional element, the verb *be*, which like all verbs is relational, processual and more or less transitory. When a property (or state) that the adjective designates is ascribed, asserted or predicated to an object, it is no longer conceptualized as inherent or permanent (contra Bulygina 1982); it has acquired a degree of transitoriness associated with verbs. When the additional element is missing, i.e. the zero copula in the present tense in Russian, a more 'specialized' form comes in, the short form of the adjective.

Being syntactic, this type of property predication is maximally schematic; any stative complement can form a composite expression with the schematic verb *be* (cf. Langacker's analysis of predicate nominative construction (1991). There is ample evidence that the elaboration of the grammatical construction by the addition of various adjectives renders the construction specific and provides it with various interpretations (cf. the examples in Seliverstova 1982). For example, there is a distinction between a predicate adjective construction which involves a colour adjective, which by nature is more stable, and a predicate adjective construction which involves a human propensity adjective, which is more transitory. Similarly, it is the meanings of the case markers, nominative and instrumental, that further elaborate the maximally schematic *be*. In the Russian linguistic tradition *be* has also been considered a lexical item with a bleached semantic meaning, which essentially means the same as 'schematic'. Can schematicity be pushed to such an extent that it can be marked by the zero present tense *byt'* in Russian predicate nominative and adjective constructions? Schematicity is, in fact, what gives the sense of **vnevremennost'** 'being outside time' (Bulygina 1982), but there is not a true lack of temporality (cf. Seliverstova 1982).

The copula (even when it is missing) is an element (the head, the profile determinant) in the predication, which provides temporal and aspectual meanings albeit schematic. Hence, it is unacceptable to describe adjective predicates as lacking temporal localization. The juxtaposition of the subject and the post-positioned adjective can be just as meaningful as the presence of the past tense form of *byt'*, which clearly positions the predicated property in the past. It is not surprising that *byt'* is missing in the present tense, which is used to refer to inherent states such as *I am Bulgarian* or *She is tall.* Ascribing a present state or property to an object almost coinsides with a description of the property, which is primarily achieved by adjectives in their modifying function. Therefore, I suggest that it is more appropriate to analize the various property predication constructions in terms of degree of transitoriness, which is expressed as soon as properties are construed for the purpose of the discourse function of predication, although the sense of transitoriness is closer to zero when there is the zero copula *byt'* in the present tense of predicatives.

Do adjective predicates differ from their parallel deadjectival verbs? According to Pereltsvayg (2001) they are synonymous and indeed their meanings are very close. Bulygina (1982) and Seliverstova (1982) clearly distinguish between the two types of predicating properties and classify them in different semantic classes. In Chapter 4 I described property predicates as mapping onto contiguous areas in the field/space of property predication (see Chapter 4). The Russian *byt' pustoj* 'be empty, uninhabited' and *pustet'* 'be seen as empty', or the Bulgarian *săm mlad* 'be young' and *mladeja* 'look young' share the same lexical root, which belongs to a particular semantic (conceptual) class of properties - full/empty, age, etc. A division such as the one proposed by Bulygina (Fig. 5.2) presents the above predicates as disjointed, which cannot be the case. A proposition such as *Sneg beleet* predicates the property of colour to the NP subject as

much as *Sneg bel* and that property is not simply presumed but is denoted by the lexical root. If we assume that adjective predicates (except human propensities) lack temporal reference and denote essential, inherent properties, how shall we distinguish them from adjectives as modifiers? It has already been pointed out that properties naturally modifiy an object and that this is their prototypical function. In this function they are permanent, atemporal, essential. The moment they are used for the discourse function of predication they acquire some degree of transitoriness and have to be combined with a temporal element. In Russian and Bulgarian this can be done in at least two ways: combining with the copula or derivational morphology which turns the adjectives into verbs, e.g. *Glaza sinie* 'The eyes are blue' vs. *Glaza sinejut* 'The eyes are blue (and we can clearly see that) or *Volosy stanovilis' temnymi* 'The hair was getting dark' vs. *Volosy temneli* 'The hair was getting dark'[4]. Predicate adjective constructions may not be as transitory as the respective verbs but they certainly are not inherent, atemporal, as modifiers are. Adjectival roots as modifiers are inherent, but as predicates in adjective predicate constructions and in deadjectival verbs they exhibit various degrees of transitoriness and I believe that they are best analyzed/classified not in rigid compartments but as occupying contiguous mental spaces differing primarily in the degree of generality/specificity.

Whether one and the same adjectival lexical root can be construed as a permanent property (which is its prototypical meaning, and the history of adjectives from nouns provides evidence for it; a certain object is primarily associated with its colour thus the word for the object begins to be used to refer to the colour, it is a kind of

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[4] In English both structural means are used for the expression of 'acquire + property', e.g. *white* (adj.) vs. *become white* or *whiten* (intr.) but it is also possible the reconceptualization to be covertly expressed as in *yellow* > *to yellow*. Such a process is called **coercion**. In other words, there is a semantic shift from property to action which is zero marked.

metonymy) or will be construed as transitory and thus given the prototypical form expressing transitoriness i.e. a verb, is a matter of a language-specific convention. Besides, in order to be expressed, such a construal must be entertained first. In some languages such a possibility may not exist (as in English in regard to the 'appearance' sense of deadjectival verbs). In other languages, e.g. the Slavic ones, it may be a well-established convention (e.g. colours, dimension, emotional states, etc.) or even created as nonce word forms, e.g. unusual colour verbs such as *kafeneja* in Bulgarian (see Appendix 1).

Predicate adjectives also differ from their parallel deadjectival verbs in terms of specificity vs. schematicity. The former profile the situation in a most general, schematic way, while the latter profiles more details, such as the position of the speaker/observer with respect to the scene conceptualized, or the process of visual perception itself in which the speaker is involved (see Chapter 6).

Furthermore, *be* is not the only additional element that the members of the Adjective category may select (combine with). There are a number of other verbs, the **pseudo-copulas**, which combine with the members of the Adjective category to ascribe a property: in English *become, grow, turn*, etc., in Bulgarian *stavam, stana*, in Russian *stanovit'sja, stat'*. Similarly to *byt'*, these expressions describe the same objective situation in which there is a thing to which a property (in the narrow sense) is asserted or ascribed. However, the **pseudo-copula** verbs are less schematic than *be* and its equivalents in Slavic languages. They are more specific as they signal an additional feature associated with properties, i.e. properties change over time. In other words, they involve change rather than state.

On the other hand, the same situation can be conceptualized with more detail, something we get in the deadjectival static predications. The two constructions, however,

differ in the images embodied by the constructions and by images here I mean the way imagery is understood by Langacker (1987: 110), i.e. it describes 'our ability to construe a conceived situation in alternate ways - by means of alternate images – for purposes of thought and expression. Two images of the same situation may differ as to which features of it are selected for explicit attention, the relative salience of these features, the level of abstractness or specificity at which it is treated, the perspective from which it is viewed, and so on.'

The adjectival root (specific) furnishes most of the semantic content (property) and the suffix (partially schematic) imposes a particular image on this content (ingression, appearance to the speaker/observer, etc.). Compared to the copula, the suffix is less schematic. It instantiates a derivational pattern which combines an adjectival root with the suffix to form an intransitive verb predicating a property to a referent. These verbs, however, have a richer image-schematic structure; they are more substantive. Yet, being derived through a relatively productive and predictable pattern they remain partially schematic (cf. with the results from the productivity test described in Chapter 6).

Let us compare the Bulgarian sentences provided below.

(20) a. *Dolu v ravninata **veče červeneexa** čerešite.*
'Down in the valley **there were the cherries already visiblly red**'
b. *Dolu v ravninata čerešite **veče bjaxa červeni.***
'Down in the valley **the cherries were already red**'

(21) a. *Dolu v ravninata veče **červeneexa** čerešite.*
'Down in the valley the cherries **were reddening.**'
b. *Dolu v ravninata **čerešite veče stavaxa červen.***
'Down in the valley **the cherries were becoming red**'.

There is a major semantic difference between (20) and (21) in terms of possessing the property and acquiring the property red although they share the same verb *červeneja.* Are the two meanings related? In Chapter 6 I propose that they are and provide a possible explanation. The sentences in (20) and (21) are semantically different because they embody substantially different images (construals) although they describe the same objective situation i.e. an object and its relationship to the property of colour and ripeness associated with the red colour. The truth-functional differences are a side-effect of the different construals and this is a major point in cognitive linguistics. Furthemore, in (20a) in addition to ascribed property red, the perceptual construal invokes the presence of the observer and it is not surprising that the English translations use the deictic/presentational *there*-construction (cf. Lakoff's account of *there*-constructions 1987). Compared to (20b) it is more substantive, includes more details of the situation it designates and is more transitory. In (20b) the adjective predicate construction with the past tense copula *bjaxa* 'were' ascribes the property 'red' in its most general sense placing it temporally before the moment of speech. It is less sunstantive, contains fewer details of the situation evoked, and is less transitory.

Similarly, the differences between (21a) and (21b) can be accounted in terms of how the change of property is construed. The pseudo-copula verb *stavaxa* 'were becoming' combines with the adjective *červeni* 'red' to provide the information that there are signs that the property will become a feature of the object (cf. Seliverstova 1990). The verb *červenexa* 'were reddening' structures a situation in which the property is already a feature of the object, which can be further intensified (see Chapter 6).

To recap, Russian and Bulgarian have both syntactic and morphological means to express intransitive property predication. These are the Russian [NP *stat', stanovit'sja* Adj] and the Bulgarian [NP *stana, stavam* Adj] as well as [Adj -*e*-TNS] in both

languages. These expressions ascribe a property to an object in a 'dynamic' way; they denote the process of coming to possess the property, i.e. as a change. There is another set of expressions in Russian and Bulgarian who ascribe a property to an object in a 'static' way. These are the Russian [NP *byt'* Adj], the Bulgarian [NP *săm Adj]* predicate adjective constructions and the same deadjectival verbs, this time in their 'appear, stand out with a property' sense. As the notations indicate, these expressions have been analyzed as constructions. The adjective predicate constructions are complex and general (schematic) syntactic constructions. On the semantic map of property predication they occupy a contiguous place to the complex, less schematic and more substantive[5] intransitive deadjectival verbs in the syntax-lexicon continuum. The derived verbs can be analyzed as partially schematic morphological expressions of the type ADJECTIVE – SUFFIX, where the suffix is a complex marker of the predication of transitoriness of various kinds.

[5] 'Substantive' as a term in cognitive linguistics is used in opposition to 'schematic'. The latter also translates familiar notions such as 'general', 'rule-oriented' while the former translates notions such as 'specific', 'detailed'.

Chapter 6
Verbal Property Predication

6.1. Deadjectival verbs in Bulgarian and Russian

In the previous chapter I showed that predicate adjective constructions are schematic constructions which lack detail and ascribe properties to the referent in the Subject position. The lack of detail is reflected in the choice of the most schematic verb, the copula *be* (*byt'*, *săm*), which does not allow specific temporal localization (Seliverstova 1982) or phrasal structure (Seliverstova 1990) and combines with any adjective (or other stative predications, e.g. NP, AdvP) in order to be rendered specific. I have also studied the constructions [NP *stavam/stana* + Adj] in Bulgarian and [NP *stanovit'sja*, *stat'* + Adj] in Russian, which contain the pseudo-copula verbs with the meaning of *become*. Unlike the copula *be*, *become* is more specific as it not only ascribes a property to the referent in the Subject position but also provides an indication that from a certain moment in time the referent is characterized by the property denoted by the adjective, i.e. it is aspectual by nature. It also involves a change of state, which means a change in the profile of the conceptualized situation. In short, [*become*+Adj] is a profile - changing aspectual construction. There are also corresponding semantic interpretation rules for these schematic constructions.

In this chapter I will show that the Slavic languages possess alternative ways to structure the above relationships, which involve more details and are less schematic, i.e. they contain more details of the conceptualized situation. These are derivational morphological constructions, deadjectival verbs, which also map onto the conceptual space for property predication (see Chapter 4). Comparing syntactic constructions with morphological constructions, it will become obvious that syntax and morphology are not opposed, but are unified on the basis of the understanding of

the term CONSTRUCTION, i.e. syntactic and morphological constructions are like simple words in the lexicon – they consist of pairing of form and (conventional) meaning (see Chapter 2 for more on CONSTRUCTIONS). Syntactic and morphological constructions only differ in their degree of schematicity and boundedness of the elements that construct them. For example, the predicate adjective constructions [NP *byt'*Adj] and [NP *stanovit'sja* Adj] are complex schematic constructions. As shown in Chapter 5, the meanings of these constructions can be determined from the general (schematic) rules of semantic interpretation for the words in them and for the syntactic structure as a whole. These rules are compositional, i.e. the meanings of the parts of each construction are combined to form the meaning of the whole construction. The NP and AP are lexically open elements, i.e. any specific noun or any specific adjective can appear in the relevant position and these words are morphologically free within the sentence. Similarly, deadjectival verbs are morphologically complex: they combine an adjectival root/stem with a suffix to form a verb, but unlike syntactic constructions, their elements are bound morphemes. As with the syntactic constructions mentioned above, their meanings are also compositional, i.e. the meanings of the elements (the adjectival (sometimes nominal) root/stem and the suffix) are combined to form the meaning of the whole word. But the specific semantic interpretation rules associated with these word formations (constructions) are not general (schematic) but unique to these constructions. This is why such formations are words stored in the lexicon[1].

It can be argued that the suffix *-e*, which commonly marks the intransitive deadjectival verbs is as general (schematic) as the copula *byt'*, and its function is to

[1] Like all substantive verbs, deadjectival verbs have a subcategorization frame (argument structure) which handles their verbal syntactic behaviour : [Sbj V]. Such a frame is a schematic construction and in this respect the deadjectival verbs that I study are part of the intransitive construction.

provide an atemporal relation such as an adjective with a temporal profile, in order to be predicated. Under such an interpretation the predicate adjective construction and some deadjectival verbs become synonymous. However, this is not the case. The semantic interpretation rules of such a formation are not derived from another more general syntactic pattern. As will become obvious from the tables of verbs below, not all adjectival stems combine with suffixes to form transitory (process) predicates. Besides, one cannot predict with certainty which of the three possible construals of property predicate a suffix will symbolize: e.g. *-e* in B. *golemeja* 'act importantly' does not combine with the adjectival stem to evoke the acquisition meaning or the perceptual meaning, something which this suffix does with the root of B. *mal-ăk* 'small' > *o/maleja* 'become small' as well as with many other property words. In this respect, deadjectival verbs remind us of idiomatically combining expressions, which have been studied extensively in Construction Grammar (Fillmore et al. 1988, Nunberg et al. 1994). Examples of idiomatically-combining expressions are expressions such as *answer the door* 'open the door when the door bell rings' *pull strings* 'use connections', *spill the beans* 'divulge information'. These expressions are largely fixed in their lexical composition; any substitution leads to ungrammaticality, e.g. **Tom pulled ropes to get the job* (Croft and Cruse 2004: 250). However, given the meanings (albeit figurative) in the words of idiomatically combining expressions, the meaning of the whole expression is compositional. On the other hand, the composite words have these figurative meanings only in the idiomatic expressions. Similarly, the suffix *-e* refers to a kind of behaviour only with some adjectival stems as in B. *golemeja* or R. *ruset'* 'behave like a native Russian', while with others it has the more common meaning of 'become+property' or 'appear+property'.

Finally, I shall repeat something that has been pointed out on several occasions before: predicate-adjective constructions differ from the derivational (morphological) constructions of deadjectival intransitive verbs in the degree of their transitoriness. There is a decrease in transitoriness from a predicate adjective construction to a deadjectival verb; compare the two Bulgarian sentences below:

(1) *Nebeto e svetlo.*
'The sky is blue'.

and (2) *Nebeto svetlee.*
'The sky looks/is getting light'

In (1) the property is 'almost' inherent (compared to adjectives as modifiers), while in (2) it is directly related to the moment of speaking and to the object at this particular moment. In other words, the perception of the colour (brightness) sensation at this particular moment is the focus of attention, not the inherentness of the colour in the object. In both (1) and (2) the conceptualization of the event involves a single participant, which is usually referred to as the **theme**. In fact, the sentences above represent the most elemental kind of thematic relationship, in which the participant simply occupies some location and exhibits some static property. However, Slavic languages have the means to 'complicate' the picture and bring into it yet another participant, the speaker/conceptualizer/observer, who establishes a mental contact with the object and its property at the moment of speaking. That is why, all the sentences that I have collected with this type of verbal property predicates are in the Present Continuous or Imperfect. This is also the source of their deictic characteristics, as previous research has pointed out (Israeli 1996).

In previous studies in the spirit of traditional structuralist or generative models

deadjectival verbs have been analyzed as a result of the operation of a general and productive rule which derives verbs from adjectives by suffixation under particular structural i.e. phonological, conditions. For example, there seems to be a phonological restriction which allows only monosyllabic adjectives finishing in stops or fricatives to combine with the *-en* suffix to form deadjectival verbs, for example *black> blacken, cheap> cheapen , red> redden* but *expensive > *expensiven, blue > *bluen, heavy > *heavyen, green > *greenen.* Many reference grammars of Russian and Bulgarian have been written with this principle in mind (e.g. Scatton 1983, Russian Grammar 1980): there is a structural relationship between the adjectival base, e.g. B. *červen* 'red' and the suffix *-e*, namely the addition of *-e*, which allows for some adjectives to derive verbs with the ingressive meaning 'become red' or the more stative meaning 'be, appear red'.

The present study takes a different approach. As with the syntactic constructions discussed in Chapter 5, the present chapter will focus on the different conceptualizatons that the partially schematic derivational constructions entertain, not the formal (structural) rules that derive verbs from adjectives. Just as a point of reference I should mention here that structural approaches have argued that from the truth-functional equivalence of pairs such as *destroy* and *destruction* it follows that nouns and verbs are purely grammatical classes which lack inherent meaning. It follows that derivational morphemes have no meaning either; they solely have a formal function to derive (generate) one grammatical class into another. In Chapter 5 I presented recent research in the Generative Grammar framework which uses the assumed synonymy (in terms of truth conditions) between *be* + NP/AP and deadjectival predicates to support major claims about copular sentences. Things look different from the point of view of Cognitive Grammar. Derivational morphology,

just as any other aspect of the grammatical expression of a situation, involves conceptualization in one way or another. *Destroy* and *destruction* are not considered semantically equivalent, neither are R. *byt' bel*, *belet'(sja)* and *belyj.* The *e*-suffix deriving verbs from colour adjectives is meaningful, i.e. nonenergetic, perceptual or processual, and so is the *-sja* clitic, which will be shown in the next sections. Besides, it is obviously opposed to the meaning of the *-i* suffix, which captures the energetic construal of adjectives as transitory predicates. Both suffixes figure straightforwardly in determining the composite sense of the overall verbal predicate; thus, they are the means to provide an open-ended set of deadjectical predicates in Russian and Bulgarian. Of course, not all languages have the means to express all of the above conceptualizations; colour verbs designating the perceptual construal are a specifically Slavic phenomenon. It will also become evident that not all adjectives lend themselves to the dramatic semantic shift from 'property', which is permanent to some kind of 'action' which is processual, transitory.

The present chapter will provide a list of core properties which 'allow' themselves to be reconceptualized as transitory predicates. The links between the various construals will also be analyzed. Some of them are very close. For example, it is difficult to distinguish between the perceptual and the processual meaning especially with colour verbs as in the sentence below

(3)Vedroto nebe ošte svetleeše
calmART sky still lightV
The calm sky was still light (and the observer could see it).
or The calm sky was still getting lighter.

There is a strong case to argue for polysemy, and this will be done below.

To recap, the inadequacy of a purely structural approach to grammatical phenomena has already been pointed out at a more general level in previous chapters. I believe that a semantic, i.e. conceptual, analysis of property predicates will account for the existence and specific behaviour of deadjectival verbs in Russian and Bulgarian.

Contrary to previous structural approaches I have approached verbal property predicates from their semantics and tried to classify them initially according to their most general meaning. My reasoning was as follows. What are the possible ways to conceive of properties, which by definition are permanent and stative, as transitory and processual? In fact, we have already discussed two of the syntactic constructions, corresponding to 'be [property]' and 'become [property]', which symbolize the cognitive process of sequentially scanning properties and conceptualizing them as transitory (Bolinger 1967, 1980; Wierzbicka 1986) or processual (Langacker 1987) predications at a very general/schematic level; the former designates a stable situation characterized only as a stative relation whose continuation through time is being profiled, while the latter designates the more specific process of 'coming to possess a property'[2]. In both cases the source is a stative relation which acquires a temporal profile and an aspectual contour as a result of its combination with the copula or the pseudo-copular verb (B.*băda* vs. *săm*, R. *byt', byvat';* B. *stana* vs. *stavam*; R. *stat'* vs. *stanovit'sja,*) (see Chapter 4). It is not accidental that it is the existential *be* verb and verbs of directed movements (*come* in English, *stana, stavam* 'stand up' in Bulgarian and similarly in Russian) which are the sources for the copula and the pseudo-copulas.

[2] In fact, the copula *be* is often referred as a nonverbal predicate type as it does not predicate an action like other content verbs but participates in describing, classifying, locating or identifying a referent (Croft and Cruse 2004: 319).

Deadjectival verbs provide another way to capture the transitory construal of properties. At first glance they seem to lexicalize the same construals as the syntactic constructions, i.e. to be synonymous with the predicate adjective constructions. Indeed, they do this in terms of objective, truth-functional meanings. Ultimately, they all (the syntactic and the morphological predications) are grounded in the basic domains of space, time and the domains rooted in directly embodied human experience, such as the perception of colour, physical qualities, temperature, hardness, loudness, emotional and mental states, socially-defined properties. However, each construction imposes a different imagery, i.e. alternative construals of the same situation (Langacker 1987), and in that way they differ. Different aspects of the same situation are profiled in the different constructions. To put it in a different way, different aspects (elements) of the same situation and different links among these elements and the speaker (conceptualizer) are foregrounded, i.e. made explicit. This will become clear in the analyses that follow below.

The derivational patterns employed in Russian and Bulgarian for the verbal intransitive predication of properties reduce the possible conceptualizations of properties as transitory or processual to a very limited number. I have identified three basic construals which I shall call **perceptual** 'perceive [property]', **processual** 'become [property]' and **behavioural** 'act as having [property]'. There are also transitive verbs derived from basic property stems and often called **factitive**, e.g. R. *u/tončat'* (imperf), *u/tončit'* (perf) 'to make thinner', *prevyšat'* (imperf), *prevysit'* (perf) 'to exceed' (Press 2000); B. *u/golemja* (perf) 'make big or bigger', *s/mekča* (perf) 'to make soft or softer'. They are listed in the last but one column in the tables below and could be analyzed as a fourth construal of properties in terms of **force dynamics** and **energetic interactions** (see the billiard-ball model and the stage

model, Chapter 2). The present study will not be concerned with this construal in detail since it brings the semantics of properties even closer to the semantic prototype for predication, i.e. actions. As was shown in Chapter 4, my main concern will be with the verbal property predicates which are unmarked verbs but nonprototypical and as such are relatively distant from the semantic prototype. However, I have included the transitive deadjectival verbs in the tables below as they clearly stand out as a separate class within the class of 2nd conjugation verbs with a classifying *i*-affix. They are common transitive verbs of high frequency and designate prototypical actions: an energetic interaction between an agent and a patient (Langacker 1991). They are derived from all semantic subclasses of properties and their derivation must have been an old diachronic phenomenon. Besides, the contrast between them and the intransitive verbal property predicates (phonological: *e*- classifying affix vs. *i*-classifying affix[3]; morphological: *e*-suffix vs. zero suffix and semantic: 'be/become' vs. 'make') provide the background against which the nature of the intransitive property predicates can stand out. For example, the verbs derived from the Bulgarian adjective *tesen* 'narrow' *o/tesneja* 'become narrow, especially for clothes, shoes' as in

(4) *Pantalonite mu skoro* ***otesnjaxa***.
'His trousers soon became too small for him'.

is inchoative but so is *s/tesnja se,* 'become narrow' as in

(5) *Izvednăž pătekata* ***se stesni***.
'Suddenly the path narrowed'.

[3] I have deliberately used the term 'classifying affix' for 2nd conjugation verbs derived from adjectives as there is a controversy in the Bulgarian literature as to whether this marker is a word-formative suffix (Stojanov 1999) or a purely grammatical stem vowel which classifies the derived verb in a particular group of formally defined verbs.

Yet, the two verbs are not interchangeable. The difference is hardly due only to the minimal difference in the meaning of the respective prefixes. Both types of inchoatives are highly productive; they structure the construal of properties as transitory in intransitive predication, away from the prototypical energetic transitive predication. However, they differ since they have different sources: the 'genuine' processual verbs come directly from the adjectival stem while the inchoatives come from the adjective via a causal verb which designates the interaction between an active agent and a patient which remains unexpressed or hidden in the inchoative verb.

As has already been pointed out, the ingressive (Stassen 1997), inchoative (Croft 2001), or what I call **processual** construal of properties is cross-linguistically common. It is common in Slavic languages, as the tables below show. So, one of the ways to construe an inherent state or property as transitory is to treat the property as a process, i.e. the process of coming to possess that property, i.e. the inchoative process 'become [property] ' or the process of intensifying the degree of the acquired property. Both processes involve a change of state. The change of state is conceptualized with no essential reference to forces or causes. As Langacker (1991: 286) points out, many changes of state are readily conceptualized with no essential reference to force dynamics: hair growing longer, the fading of a colour, the solidification of a liquid, etc. The situation is presented as occurring spontaneously without an agent. The tables below show that in quite a number of cases there were (historically, as these verbs are all now well entrenched and part of the basic vocabulary) two available routes for the conceptualization of such a situation in relation to properties and states in Slavic. One is to derive a verb directly from an adjectival stem by the *e*-suffix, and the other is to derive a verb from a causative *i*-

suffixed verb by the particle *-sja* in Russian and the clitic *se* in Bulgarian. However, a fine-grained analysis of the semantics of these two types of derivations shows that, below the level of the general conceptualization of 'change'as lacking causes and forces, the two construals differ substantially[4]. Judging from the sheer number of R.-*sja*, B. *se* verbs, it is reasonable to suspect that the conceptualization they express is more easily available, in the sense that it is prototypical.

We will not be concerned with the *-sja/se* inchoative verbs in detail here. My primary aim is to focus on the meaning of what I call 'genuine' inchoative verbs which derive directly from the adjectival root/stem. However, the 'genuine' *e*-suffixed inchoatives, which I shall refer to as **processual**, and the **inchoative/causative** pairs share the same adjectival root; to use a cognitive linguistic term, they have a common **landmark**. They also share a common image schema which either genuinely does not involve a force-dynamic component (processual verbs) or factors it out even for events which are saliently energetic (inchoatives, derived from causatives also called **anticausatives** (Nedjalkov 1969)). The different routes/patterns of derivation stand for different specific conventionalized construals of the semantics of properties and these become obvious when compared to each other. Thus the comparison between genuine processual inchoative predicates and 'anticausative' inchoatives reveals important details. Such a comparison not only provides extra cognitive content for the description of the processual property predicates but also supports the treatment of causative/inchoative pairs in terms of **Idealized Cognitive Models** (Haspelmath

[4] Some of the *e*-suffixed inchoatives and the *-sja/se* inchoatives which share the same adjectival stem have the same meaning, e.g. *ovlažneja* and *ovlažnja se* may be one of them. Native Bulgarian speakers cannot find differences between the two sentences, *Polata šte ovlažnee na prostora* and *Polata šte se ovlažni na prostora,* both meaning 'The skirt will get wet on the line outside'. This is a point which needs further research.

1993, Nedjalkov and Sil'nickij 1969 cited in Haspelmath 1993) rather than objectivist semantics.

It has been argued (Haspelmath 1993, following Haiman 1980) that the principle of iconicity is responsible for the direction of formal basic-derived relationships in the structure of inchoative/causative pairs. The derived form being marked should be also semantically derived, i.e. more complex than the basic one. For example, R. *razširit'* 'to make wide or wider, to widen (tr) ' and *razširit'-sja* 'become wide or wider, to widen (intr)' form a causative/inchoative pair in which the second member is morphologically marked and more complex; subsequently its semantics should be more complex. However, from the point of objectivist semantics *razširit'-sja* is more basic than *razširit'* 'A widens (tr) B means 'A causes B to become wide', but 'B widens' does not mean 'B undergoes the action of X widening (tr) B' because there is no external agent implied in the inchoative *razširit'-sja*. Haspelmath (1987, 1993) as well as Croft (1990) and Nedjalkov (1990 cited in Haspelmath 1993) show that the iconicity principle holds for a conceptual understanding of semantics (see Chapter 2 for the distinction between objective and conceptual meaning).

The above-mentioned scholars argue that conceptual simplicity is at the basis of the semantic relationship between basic-derived froms. They explain the diversity in the derivational patterns of inchoative/causative verbs in the world's languages with the fact that some events (e.g. 'freezing', 'drying', 'melting', etc.) are more likely to occur spontaneously, people experience them more often as occurring spontaneously, and consequently they conceptualize them more easily as happening spontaneously. As a result they will be expressed in a structurally unmarked way. Other events (e.g. 'breaking', 'splitting', 'gathering', etc.) are more often experienced as being **caused** and as a result are associated with a conceptual **stereotype** (or prototype).

Consequently, they will be expressed in a structurally unmarked way. Haspelmath and the others provide substantial typological evidence for the above correlation. Thus the principle of iconicity is preserved.

Let us look at the Russian and Bulgarian data. As Haspelmath (1993: 94-95) points out, the anticausative alternation in Russian is particularly regular with verbs that are derived from adjectives; every Russian factitive derivation can form an anticausative in *-sja*. According to him, the reason why deadjectival factitives systematically appear in the inchoative/causative alternation is that they generally contain only the meaning component of 'cause to become' in addition to the adjectival meaning, and this meaning component is neither agent-oriented nor too specific or unlikely. The data in the tables below overwhelmingly show that if there is a factitive deadjectival verb in the language it has its inchoative *-sja/se* partner which is derived from the factitive. Reasoning backwards this time, if the iconicity principle does operate, the direction of derivation in Slavic shows that the causative verb is basic, i.e. conceptually simpler since it is structurally the unmarked member. If this is the case, we can claim that the causative construal of properties when undergoing a change is basic. Such an understanding is supported by the idea put forth by cognitive grammarians that grammatical structure is rooted in basic conceptual archetypes and one of them is the energetic interaction between an agent (a force, a cause) and a patient. Transitive factitives derived from adjectives are a direct instantiation of the canonical event model which combines elements from the billiard-ball model and the stage model (see Chapter 2). This model represents the normal observation of a prototypical action: from an external vantage point a viewer observes an energetic interaction between an agent and a patient which occurs within an inclusive setting and constitutes a single event. All these elements participate in the conceptualization

designated by a causative deadjectival verb: an object (usually a human being) makes a forceful contact with another thing as a result of which the object acquires a property (most often visible). This basic conceptualization is represented as a single **gestalt** at the level of initial lexicalization. The inchoative derivation is now marked, as it places the agent out of the picture. In this sense the construal is semantically derived and hence structurally marked.

The question that arises now is how to analyze the processual construals which originate directly from the adjective or noun without the initial conceptualization of an agent. I will argue that they are in a different sense non-basic i.e. non-prototypical, since they deviate from the canonical model for structuring events.

But, before I look into the possible ways to construe properties as transitory predicates, I shall briefly recap the basic cognitive issues related to properties and discussed at length in Chapter 4 and provide a few more points relative to their conceptualization as transitory Such a conceptualization is complex; it involves time as well as space as primary domains of instantiation (see Chapter 2).

Properties, in order to belong to a cognitive context, must be comprehended as representing cognitive phenomena, based on sensory events, which are derived from our immediate interaction with objects, other people, or our own bodies. For properties such as 'sweet', 'sour', 'bitter', and 'salty' it is easy to establish a relationship between them and the respective physiological receptors on the tongue. Similarly, it is easy to establish a cognitive relationship between 'warm' and 'cold' and the receptors registering temperature on the skin. As was mentioned in Chapter 2, the links observed between basic colour terms and psychological colour perception have been well researched. For dimensional properties, Ungerer and Schmid (1996:107–108, 127) propose that basic experiences, encoded as image schemas, are

fundamental. Since all these experiences happen in the course of our interactions with objects, it is not surprising that our concepts of properties are inherently connected to our concepts of objects. The close relationship between nouns and adjectives both historically and on a synchronic level has already been made explicit in previous chapters. They share the core semantic (conceptual) characteristics: they are permanent, stative and atemporal (there is no change over time in the state of affairs described by the concept). The only difference between them and nouns is in terms of their relationality. The latter is the feature which they share with verbs.

Whatever the perceptual experiences with properties are, most core properties are conceptualized on a scale between two extremes and the extremes are lexicalized in antonym pairs, e.g. *tall/short, big/little, fast/slow, old/new* or *old/young*, etc. In cognitive linguistics the notion of 'scale' or 'region' is conceptually important. It reduces various specific construals to the most general notion of space and consequently location. Colours have already been discussed as regions in colour space with fuzzy boundaries. Similarly, other properties can be located on scales between two extremes. For example, Langacker (1987: 221) describes *ill* as an adjective, which locates a person on a conceived scale of systemic well-being, and an abstract locative relationship of this sort lends itself naturally to an atemporal construal, and the cognitive process involved in its conceptualization is summary scanning (see Chapter 2). He points out that it is part of our encyclopaedic knowledge of illness that it generally involves a decline from good health, that it can be of variable duration, but the processual (temporal) notions can be put into profile only by integrating *ill* with other expressions, e.g. 'become *ill*', 'be *ill*', 'remain *ill*'. Such constructions are part of the more general (schematic) construction [NP copula Adj] discussed in Chapter 5. The various copular or pseudo-copular verbs elaborate specific temporal

details associated with the construal of *ill* as a processual predication. The means that languages employ to profile properties and states as processual or transitory differ across languages and within a language too. Unlike English, where the processual or transitory construal of *ill* is expressed by the predicate adjective construction[5], in Russian and Bulgarian the equivalent root *bol(e)-* [6] is construed as a process (sequentially scanned) and such a construal is zero-marked morphologically, but is supported by behaviour-potential markers of tense, person and number, mood. When the root is construed as a permanent property of a person it is marked by the adjectival suffix *-n(oj)*. Both Russian and Bulgarian possess the respective predicate adjective constructions, and speakers of these languages could possibly use them for the respective English predicative constructions as in R. *?stanovit'sja bol'nym, ?stavam bolen* and certainly use them in R. *byt' bol'nym* or B. *săm bolen*[7]. However, the verbal uses are preferred to the predicate adjective constructions as in R. *On zabolel* and B. *Toj se razbolja* 'He got ill'. Furthermore, the syntactic and the morphological constructions mark the construal of properties as transitory predicates at different levels of generality and they differ in the specific details accompanying the general construal (see the tables and the analyses).

The upshot of the above discussion is that the same semantic category may be found everywhere, but the construal of specific experiences as belonging to a semantic category is language-specific. Langacker puts it in the following way:

---

[5] There is the verb *to ail* in English, but its use is very limited.
[6] In Gribble's root list (1973) the root *bol-* is provided with the English equivalents *pain* (noun), hurt (verb); *sick, ill* (adjectives). In fact, such roots are referred to by some linguists as **slova-korni** (Sigalov 1963) and they are the lexical source for the derivation of the large part of basic nouns, adjectives and verbs.
[7] The question mark at the beginning of the sentence represents degree of acceptibility of the sentence in terms of its grammaticality

> 'When we use a particular construction or grammatical morpheme, we thereby select a particular image to structure the conceived situation for communicative purposes. Because languages differ in their grammatical structure, they differ in the imagery that speakers employ when conforming to linguistic convention.' (Langacker 1991: 12)

Thus the specific construals of properties as verbal predicates are highly idiosyncratic. This does not mean that they are unmotivated. Besides, the present study suggests that the possible specific construals of properties as transitory predicates in Russian and Bulgarian can after all be classified at an intermediate level of generality, a level between the most general one, which can be characterized only by its transitoriness (superordinate), and the most specific (subordinate) level. In other words, verbal property predicates can be described in some sense at the basic level of categorization (see Chapter 2). Thus the construals (semantic shifts) of permanent properties as transitory are reduced to five, at least in Russian and Bulgarian, and are predictable at least to a certain degree. There are a number of derivational affixes that mark these specific construals. *Russkaja grammatika* (1980) provides the following list of suffixes deriving intransitive verbal predicates from adjectives: *-ova-, -stvova-, -niča-, -e-,-nu-, -i-*. Townsend and Janda (1996: 244-5) point out that historically there has been a good deal of cross-over between the various OCS patterns, for instance, the **ĚJ**-suffix shares the intransitive meaning 'become' with the NU-suffix as in R. *slabet'* or *slabnut'* 'become weak' and transitive, factitive **I**-verbs parallel *i*-affixed intransitive verbs such as, R. *glupit'* 'act in a stupid way, R. *xitrit*' 'act in a cunning way', *grustit'* 'byt' grustnym', etc. While the I-type is a Slavic innovation, the **ĚJ**-type had an older history. In spite of the uneven development of the intransitive **ĚJ**-verbs through time and across languages (many of the other Slavic languages have blurred the distinction more than Russian

and Bulgarian) the tables below show that it is the most common means to mark at least two of the construals of adjectives as transitory predicates, the perceptual and the processual.

The last adjectival property to discuss, and one which, in fact, is the unique property of adjectives, is **gradability**. This is also rooted in our experience, since qualities can be perceptually evaluated on a scale of intensity or quantity. Such a perception is conceptualized and given a linguistic expression in the category of degree, which is a uniquely adjectival category. Languages show that the conceptualization of degree/intensity can be static, comparing two states, two measurements of the quantity of the property at hand, scanning each of the measurements summarily; it can also be dynamic, as a process of intensification of the property, i.e. 'become more [property]', which is achieved through sequential scanning, i.e. a verb. As the Russian data show, some verbal property predicates are directly derived from the suppletive comparative or superlative form of the adjective as in R. *ulučšit'* 'make better', *lučšet'* (coll), from *lučšij* 'better'; *uxudšit'* from *xudšij* 'worst'. Since adjectives are gradable the derived verbs inherit this semantic feature in the conceptualization of the verbal semantics. That is why occasionally there is some ambigutity in meaning of verbs derived from gradable adjectives, e.g. *tjaželet'* 'become heavy or become heavier'. In other words, sometimes the intensification of the property comes to the fore, i.e. is profiled, at other times the acquisition of the property (**stanovlenie**) is in profile as the example in (6) shows:

(6) *Vozdux vlažnel i tjaželel s každym dnem*
'The air was becoming wet(ter) and heavi(er)'.

To recap, it is part of our encyclopaedic knowledge that properties are **permanent** (they must last as long as the nominal image/referent), **relational** (they add a feature to an existing nominal image/referent), **stative** (there is no change over time in the state of affairs described by the concept), and **gradable** (the quality can be quantitatively evaluated since most properties are measured on a scale between two extremes). It is also part of our encyclopaedic knowledge that properties can undergo 'changes' in relation to the objects that they pertain to: properties can be acquired or lost, they can change their intensity or quantity. Prototypical adjectives are states, but they can denote inherent states as well as temporary, transient states. Some properties like human propensities ('happy', 'sad', 'hungry'), physical states ('hot', 'cold') are easily and commonly 'seen' and conceptualized as transitory and linguistically coded in verbs. In addition, as the Slavic languages show, properties are conceived as perceptual entities (primarily visual) and such a conceptualization is verbally encoded in addition to experiential constructions of the type 'appear [property]','feel [property] or the dative with the adverbial-like constructions , e.g. R. *ja bojus'* vs. *mne strašno* 'I am afraid'. They can also be conceptualized as associated with a particular type of behaviour. All these construals find their verbal encoding in the Slavic languages and I refer to them as intransitive verbal property predicates. They will be the focus of fine-grained semantic analyses in the sections below.

6.2 Types of construal of properties as transitory predicates: weaving the web of meaning

Through an extensive dictionary search I have compiled the following data-base for Bulgarian and Russian deadjectival verbs presented in the tables below. There are five columns in each table. Starting from left to right, the first column lists

the source adjectives which lexicalize basic (core) properties as inherent, stative, atemporal relations. It should be pointed out that this is not and cannot be an exhaustive list of adjectives which lend themselves to verbalization. There are many adjectives especially in Russian which derive verbs in order to denote a kind of behaviour associated with the trait denoted by the adjective: e.g. R. *frivol'nyj* > *frivol'ničat'* 'to behave frivolously', *kapriznyj* > *kaprizničat'* 'to fuss', etc. In most cases I have limited myself to the choice of semantically basic adjectival roots/stems which combine with the *e*-suffix, the major marker of the perceptual (visual) and processual construals.

The adjectives are also grouped in semantic subclasses, as the starting point of this study was to verify Stassen's claim that only human propensities (states) can be verbally encoded in Russian (see Chapter 1 and Chapter 3). In cases where the source for the verbal derivation is a root rather than a stem, the root is separated from the affix with a dash. It was pointed out that many derivations in OCS started from **slova-korni** 'root words', so at the level of initial lexicalization it is difficult to say whether a root lexicalized a property, a verb, or a noun (see *bolet'* above). It is hard to give precedence to the conceptualization of temporal relations to spatial ones (objects and the properties associated with them) but as Langacker (1987) points out, the experience of time suggests itself as a primitive dimension of cognitive representation and quotes Givón (1979) that time is somewhat more fundamental than space: the conception of spatial relationships involve scanning, which requires processing time, and our notions of spatial extension are ultimately bound up with time-extended physical actions (e.g. movement and the manipulation of objects).

The other four columns list the existing Bulgarian and Russian verbs derived from the respective adjective and the type of construals they express below the

superordinate level of transitoriness of all verbal predicates. As I have already pointed out, they are comparable to the basic level at which objects are categorized in prototype theory (see Chapter 2). The finer-grained specifications of the verbal predicates are discussed in the course of the analysis below. As there is no infinitive in Bulgarian, the presentational form I have used is 3rd person singular, imperfective as this is the form in which the zero marker for person and number leaves the stem visible. The end of the suffixed verbal stem is marked with a dash. The tables do not list secondary imperfective verbs, only primary imperfectives and perfectives derived by prefixes where primary imperfectives do not exist. The prefixes which also aid structuring the construal of properties as processes with particular aspectual contours are separated from the root by a slash. The Russian verbs are quoted in the imperfective infinitivel form, and prefixes are distinguished from the root in the same way. The rows arrange adjectival properties in semantic subclasses as outlined in previous sections. The cross-cutting of semantic subclasses of properties and the type of verbal (transitory) construal provides a window through which possible relationships can be discerned.

I should make it explicit that the present study focuses only on meanings which are directly related to the basic property designated by the adjective; metaphorical extensions will be simply mentioned in passing. It should also be remembered that my primary interest is focused on the possibilities for different construals and their verbal encoding (lexicalization), not on the particular suffixes that encode them. Historically there has been a lot of mixing up of affixes and stems, and the process most often held responsible for various cross-cutting patterns is analogy (Čakărova 2006, p.c.). Besides, in the modern languages some of the suffixes have been lost after the initial lexicalization of the construal, e.g. *-ok* (Press 2000). The

prefixes are most often used to support a construal rather than as an inventory of prefixes which could combine with the stem. Only one or two most representative examples with prefixation are cited when the imperfective stem does not function independently.

6.3. Colours

Although colours are in the middle of Stassen's adjectival hierarchy and they should not be verbally predicated, they are the subclass that stands out most prominantly as verbal predicates and may well be responsible for the conceptualization captured by the whole pattern [Adj +*e*-suffix+TNS].

Colour verbs are well documented in all Slavic languages. Table (1) below presents colour verbs in Bulgarian and Russian. I have selected 27 common colour adjectives. Most of the basic colour terms are of Common Slavic (CS) origin, others are later borrowings. The respective colour verbs have been taken from dictionaries. The empty slots indicate that dictionaries do not provide entries for the expected verb form. Some verbs are introduced in their prefixed form; when the prefix is in brackets in means that the imperfective form of the verb exists but is less common; when the prefix is separated from the root by a slash it means that the imperfective form does not exist in the language and the verb is always prefixed.

Table 6.1: Colour verbs

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	Behaviour construal
bel- 'white' (CS)	B. *bele-e (se)* R. *belet'(sja)* 'appear, gleam white'	*bele-e* *belet'* 'become white(r)'	*(iz)beli-* 1.make X white(r) 2.peel *belit'* 1.make X white(r); 2.cover X with sth white	*(iz)beli- se* 1.become white(r) 2.be peeled *belit'sja* passive of *belit'*	
čern-'black' (CS)	B. *černe-e (se)* R. *černet'(sja)* 'appear black'	*černe-e* *černet'* 'become black'	*po/černi-* *černit'* 'make X black'	*po/černi- se* *černit'sja* 'become black'	
siv-'grey' (CS) R. *ser-*yj'grey' R. *siz-yj* 'dove-coloured,bluish-grey'	*sive-e (se)* R. *seret'(sja)* 'stand out with grey colour' R. *sizet'* 'stand out with that colour'	B. *sive-e* R. *sivet'* *seret'* 'become grey(er)' *sizet'* 'become this particular grey colour'	*?po/sivi* *serit'* 'cover with suphur'		
B. *červen* 'red' (CS) R. *krasn-yj* 'red'	*červene-e (se)* R. *krasnet'(sja)* 'appear, stand	*červene-e* 'become red(der)' R. *krasnet'* 'become	*(za)červi-* 'make X red, apply lipstick'	*(za)červi-* se 'become red'	

B. *al-en* 'scarlet' R. *al-yj*	out red' B. *alene-e (se)* R. *alet'(sja)* 'stand out, be seen red'	red(der)' R. *alet'* 'become red'			
žălt 'yellow' (CS)	B. *žălte-e (se)* R. *želteť(sja)*	*žălte-e* *želteť* 'become yellow(er)'	*o/žălti-* *želťit'* 'make X yellow'	*o/žălti- se* *želťit'sja* 'passive of *želťit'*'	
zelen 'green' (CS)	B. *zelene-e (se)* R. *zelenet'(sja)*	*pozelene-e* *zelenet'* 'become green(er)'	*o/zeleni-* *zelenit'* 'make X green'	*raz/zeleni- se* *zelenit'sja* 'become green' B. *zelenjasam* 'become covered with weeds, wild'	
sin 'blue'	B. *sinee- (se)* R. *sinet'(sja)*	*(po)sine-e* *sinet'* 'become blue(er)'	*(po)sini-* *sinit'* 'make X blue'	*po/sini- se ?* *sinit'sja* 'become blue (passive of *sinit'*)'	
bled(e)n 'pale'(CS)		B. *blednee-* R. *blednet'* 'become pale'			
svetl- 'light'	*svetle-e (se)* *svetlet'* 'stand out with a light colour'	*svetle-e* *svetlet'* 'become bright(er); light(er) in colour'	*(vy)svetlit'* 'make brighter'	*(vy)svetlit'ja* 'become brighter'	
tăm(e)n 'dark'(CS)	B. *tămne-e(se)* R. *tămnet'(sja)*	*tămne-e* *tămnet'* 'get	*za/tămni-* *temnit'*	*temnit'sja*	*s/tămni- se* *s/temnet'(sja*

		dark'		passive from *temnit'*	
jasn-'clear'	*jasne-e (se)* jasnet'(sja) 'appear clear'	*jasne-e jasnet'* 'become clear'	*iz/jasni- iz/jasnit'* 'make clear'	*iz/jasni- se iz/jasnit'sja* 'become clear'	
rozov-'pink'	*rozove-e (se) rozovet'(sja)*	*rozove-e rozovet'*			
rumen-'light red'	*rumene-e (se) rumjanet'(sja)*	*rumene-e*			
păst(y)r-'motley'	*păstree- (se) pestret'(sja)*	*păstree-*	*iz/păstri-*	*iz/păstri- se*	
s(e)rebr-'silver'	*srebree- (se) serebret'(sja)*	*srebree-*	*po/srebri-*	*po/srebri- se*	
rus-'blond'		B. *iz/ruse-e* R. *ruset'* 'become blond(er)'	*iz/rusi*	*iz/rusi se*	*ruset'*[8]
B. *šaren* 'motley'	*šarene-e (se)* stand out, be seen as motley		*na/šari-* decorate with many colours	*na/šari-se* become motley, or covered with spots	
B. *răždiv*-'rusty' B. *riž-av* 'rye red' R. *rž-(ij)* 'rye coloured'	?*rižave-e ryžet'* 'stand out red'	B. *răždave-e* R. *ržavet'* 'become rusty *ryžet'* 'become red'			
B. *lilav*-'purple' R. l*ilav(yj)*	?*lilave-e lilovet'*	*lilovet'*			
B. *kaf-jav/en*	?*kafene-e*				

[8] *ruset'* has the meaning of 'become blond' and 'become Russian, behave like a Russian' as in *Začastuju inostranec, dolgo živja sredi russkix,* ***ruseet.*** 'Quite often a foriegner who has lived among Russians for a long time **behaves like a Russian.**'

'brown'					
R. *rd-jan(yj)* (arc) 'crimson'	R. *rdet'(sja)* (arc) 'stand out crimson'				
B. *bagr-* 'hue, colour'			B. *o/bagri-* 'to colour '	*o/bagri- se* 'become coloured'	
R. *bagrjan-yj* 'bloodred'	*bagrjanet'* 'appear, stand out red'	*bagrjanet'* 'become red'	*bagrjanit'* 'make X red'	*bagrjanit'sja* 'become red'	
R. *bagrov-yj*	*bagrovet'* 'appear, stand out colourful'	*bagrovet'*	*bagrit'* 'make colourful'	*bagrit'sja* become colourful	
R. *golub-oj* 'light blue'	*golubet'* 'stand out, be seen blue'	*golubet'* 'become blue(r)'	*golubit'* 'make blue'		
B. *zlat-en* R. *zolot-oj* 'gold'	*zolotet'* 'stand out, be seen golden'	*zolotet'* 'become golden'	*po/zlati-* cover with gold	*po/zlati se* become covered with gold	
R.bur-yj 'brown'	*buret'* 'stand out brown'	*buret'* 'become brown'			
R. *koričnev-yj* 'brown'	*koričnevet'* stand out brown	*koričnevet'* become brown(er)			
R. *rjab-oj* 'spotted'	*rjabet'* 'stand out motley'	*rjabet'* 'become motley'			

6.3.1. Previous reasearch on colour verbs

Most often colour verbs with the 'appear' meaning have been analyzed as a subset of a bigger set of verbs in Russian, e.g. a subset of the reflexive verbs (Janko-Trinickaja 1962, Gerritsen 1990), or as a point of comparison with semantically close constructions such as copular-verb constructions (Pereltsvayg 2001) (see Chapter 5). Israeli (1998) has offered the most detailed analysis of Russian colour verbs with the above meaning. Below I shall present the ideas that have been put forth about Russian colour verbs with the 'appear, show, stand out with its colour' meaning.

Wierzbicka (1988:487) suggests that the difference between adjectives and verbs in conceptualization is one of permanence versus transitoriness/temporary state. Her remarks are situated in the context of the bigger discussion of the non-arbitrariness and meaningfulness of grammar.

> "Furthermore, even in a predicative position, a verb tends to suggest changeability, in a way that an apparently 'synonymous' adjective does not. For example, in the Latin pair of sentences (cf. Bally 1920):
>
> a. *Rosa rubra est.*
> '(The) rose is red(ADJ).'
> b. *Rosa rubet.*
> '(The) rose is-red(v).'
>
> the adjective *rubra* suggests a permanent property of the rose, whereas the verb *rubet* suggests a momentary feature of the scenery. Exactly the same is true of the Russian pair of sentences:
>
> a. *Parus bel.*
> '(The) sail is white(ADJ)
> b. *Beleet parus odinokij v tumane morja golubom.* (Lermontov)
> '(A) lonely sail "whites" (is-visible-as-white,v) in (the) blue mist of (the) sea.'"

If there is a scenery, there must be a scene; if there is a scene there must be an observer of the scene. It has been noticed before that "with colour verbs an observer is always present on the scene" (Bulygina 1982, Gerristen 1990). Israeli points out that constructions with colour verbs presuppose a speaker/observer ($P^{s/o}$) of a certain object. The speaker always assumes the point of view of the observer even if the speaker and the observer do not coinside.Thus the necessary elements in the predication are Speaker/Observer ($P^{s/o}$) and Coloured Object (P^{n}_{c}). Neither the speaker nor the addressee (P^{s}_{2}) can be that coloured object. In other words, the only possible sentences are in the third person form. According to Israeli, one of the reasons for this is that colour verbs belong to the existential types of verbs.

Arutjunova and Širjaev (1983: 117-8) discuss the existential quality of non-*sja* verbs of colour. Israeli extends their discussion to the *-sja* colour verbs. In both cases, when the colour verbs are used in VS order, the existential quality is pevalent to the descriptive quality. Here are some examples both with non-*sja* and with *sja* colour verbs from Israeli (1998). The predicate and the subject are in bold.

(7) *Na gazonax* ***zeleneet trava***.
'The grass is green on the lawn.'[9]

(8) *Okolo rodnika* ***zeleneet*** *korotkaja, barxatnaja* ***travka***. (I. Turgenev)
'Near the spring there was short velvety green grass.'

(10) *Prjamo pered nami, na drugom beregu,* ***želteloovsjanoe pole***. (I. Turgenev)
'Directly in front of us, on the other shore, there was a yellow rye field.'

(11) *Množestvo nizenkix domikov...mel'kali iz-za drev, a dal'se* ***sinelis*** *zubčatoju stenoj* ***gory***. (M. Lermontov: *Geroj našego vremeni*)

[9] All of the Russian translations are cited from Israeli (1998).

'A multitude of short houses ...were flashing behind the trees, and farther away there were blue mountains like a cogged wall.'

(12)*...dal'nij bereg Kryma...končaetsja utesom, na veršine koego* ***beleetsja*** *majačnaja* ***bašnja***...(Lermontov: *Geroj našego vremeni*)
'...the far coast of Crimea...ends in a cliff, on the top of which there is a white lighthouse...'

When the colour verbs are used in a SV order the descriptive quality is more prominent although the existential quality of the verb remains. The examples below illustrates this phenomenon:

(13) *Molodye* ***eli*** *nežno* ***zeleneli*** *pušistami molodymi pobegami.* (L. N. Tolstoj: *Vojna i mir*)
'The fluffy young sprouts of the young fir trees looked tenderly green.'

(14) *Ja vernulsja iz Arkony, gde* ***polja*** *ot krovi* ***rdejut.*** (A.K. Tolstoj: *Borivoj*)
'I returnd from Arkona, where th efields are crimson from blood.'

(15) ***Mesec*** *stal nad rekoj, čut'* ***krasneetsja.*** (Polonskij: *Zimnaja pesnja rusalok*)
'The moon stood over the river, faintly red.'

Bulygina's (1982: 15) analysis of colour predicates echoes Wierzbicka's remark about a transitory feature of the scene.

> 'Zaslužaet vnimanie to obstjatel'stvo, čto nekotorye glagol'nye predikaty, v časnosti – neposredstvenno sootnosimye s odnokorennymi adъaktivnymi predikatami (i potomu predstavljajučtimi osobyj interes dlja vyjavlenija smyslovyx različij, svjazynnyx imenno s različnymi grammatičeskimi predstavleniem), naprimer, *belet'(sja), krasnet'(sja), zelenet'* mogut funkcionirovat' TOL'KO v predikacijax, opisyvajuštix konkretnuju, "aktual'nuju" situaciju, v kotoroj naxoditsja (ili v kotoruju pomeštaet sebja)

govorjaštij: 1) *Prozračnyj les odin temneet i el' skvoz' inej zeleneet* (Puškin); 2) *Beleet parus odinikij v tumane morja golubom* (Lermontov); 3) *Svetloe osennee nebo veselo sinelo nad temno-buroj grjadoj obnažennyx lip* (Turgenev)'

In a footnote, however, Bulygina provides a much richer description of the verbal predicates such as *belet'(sja)*. She focuses on their '**sposobnost' aktual'nogo členenija**'. The NP Subject and the V are often an indivisible rheme, and sentences such as 1) and 2) describe specific scenes or fragments of reality which contain the objects denoted by the NP Subject. The property itself, e.g. *be white*, etc., is somehow presumed. These types of predicates are very similar to predicates of existence and location which explains the fact that whatever the word order of the NP Subject and V, the NP Subject is stressed. Even in cases where the attention is focused on the property itself as in 3) *veselo sinelo* the sentence as a whole does not describe the possessor of the property; it describes a situation and locates it in time and space and includes the presence of the speaker.

Finally, Russian researchers (Janko-Trinickaja 1961, 1962; Rozental' 1974, Švedova et al 1980, Gerritsen 1990) have found subtle semantic differences between the colour verbs with *-sja* and without *-sja* in their 'to appear, to show, to stand out with its colour'. They suggest that V_{colour} denotes clearness of manifestation of the colour and its lasting property while $V_{colour\text{-}sja}$ denotes vagueness, property conditioned by circumstances (like distance, fog, vast space, etc.). Following Fillmore (1975), Israeli (1998) unifies the above mentioned circumstances into the deictic feature of 'distance' between the speaker/narrator and the described object, a case of 'place deixis', as defined by Fillmore (1975:16): 'place deixis has to do with linguistic expression of the speaker's perception of his position in three-dementional space'. In

this case, it is the speaker's perception of the distance from the described object. Sometimes the perceived distance can be described as a difficulty of perception, difficulty to see. Israeli presents an abundance of examples in which 'distant' should be considered the meaning of *-sja* when it is attached to colour verbs" (1998:257). In some of them the object is explicitly well-removed from the narrator as in the ones below:

(16) *Posmotrite, doktor; vidite li vy, na skale napravo* ***černejutsja*** *tri figury?* (Lermontov: *Geroj našego vremeni*)
'Look, doctor, do you see that on the rock at the right there are three black figures (three figures seen as black)?'

(17)*...**pestrejutsja** vdali vse bogatstva Rossii.* (V. Sollogub: *Tarantas*)
'...there in the distance are all the motley riches of Russia.'

(18) *Čto tam **sineetsja**? Kak izdali uznat'?...Byt'možet les, byt' možet tuči*...(F. Glinka: *Smert' Fignera*)
'What's that blue thing over there? How can one know from afar?..Maybe a forest, maybe dark clouds...'

Sometimes the 'distance' or 'difficulty to see' is implied as in the following example:

(19)*...okolo kryl'ca meždu kamnjami **zelenelas'** mšistaja travka.* (L. Tolstoj: *Junost'*)
'...near the porch between the stones, there was green, mossy grass.'

As Israeli points out (1998: 257), there is a larger obstruction (the stones) in addition to the smallness of the coloured object described (short mossy grass).

Schenker (1988) explains the semantic distinction between the paired nonreflexive and reflexive colour verbs are a consequence of the invariant meaning of the Slvic reflexive. Since the agent vs. patient opposition is neutralized in reflexive constructions, the subject of a reflexive verb cannot display agentive properties (see the discussion below). Schenker's insightful analysis is summarized in the quote below (Schenker 1988: 372):

> 'Therefore, the whiteness of the subject of *belet'sja* is a matter of subjective perception rather than a manifestation of objective truth. In fact, we do not even know whether the subject is white; it merely appears white to the observer. Hence, the native Russian intuition that *belet'sja* suggests a shifting and shimmering image. On the other hand, the subject of the nonreflexive *belet'* is not limited in such a way; it is agentive and actively displays its whiteness.'

I have gathered a number of similar examples from Bulgarian although I have not been particularly concerned with the issue of the formal expression of the subtle semantic differences between the *se* and non-*se* colour verbs. Besides, the distinction between *-sja* and non-*sja* colour verbs is getting lost in Contemporary Russian (see below).

(20) *V dalečinata* ***nešto se svetleeše.***

Adv_p S_{indef} $seV_{3sg.imp}$

'There was something light-coloured in the distance.'

(21) *Nablizo* *edvam* ***se beleeše*** ***njakakva stena*** ...

Adv_p Adv_{manner} refl V3sg.imp S_{indef}

'Nearby there was a white wall, which could hardly be seen.'

To recap, previous research on Russian colour verbs has identified the

following elements constituting their meaning: there is an observer and a coloured object observed and sometimes the object is difficult to see; the colour predicates are closely related to existential predicates even when their descriptive meaning is prevalent. I believe there is one more element that has not been spelt out explicitly: the locative construction in each of the sentences analyzed by Israeli. As will become obvious in the next section, this is a very important element which delineates the part of space where the coloured object is positioned, and its deictic relationship to the speaker/observer.

The Bulgarian colour verbs, as the sentences in Appendix (2) show, include the same elements. They designate specific currently happening situations in which the speaker is located, or he locates himself relative to a perceptually salient coloured object. My aim below is to provide a unified analysis of the semantic of colour verbs, which ultimately rests on the concept of 'scene' (Fillmore 1977) or 'situation' (Starikova 1974). I shall also try to establish the links between the perceptual and the processual construal of colours as transitory predicates, which are also grounded in the frame of the 'scene'.

Finally, I should mention that processual colour predicates have been prevously studied as a subset of inchoative verbs (Sigalov 1963, Uluxanov 1977), process verbs (Musin'ska-Vol'ny 1996), gradual-dynamic verbs (Hiro-Weber 1990), verbs denoting gradual states (Sil'nitskij 1986), etc.

6.3.2 The semantics of colours as transitory predicates

The analysis below starts from the general construals marked in the headings of the columns and moves towards the specific details in the semantics of the verbal predicates.

The first attempt at some generalization is to determine whether all colours lend themselves to verbal encoding. It is obvious from Table 6.1 that all the primary colour terms[10] (Berlin and Kay 1969) can motivate verbs which predicate colour properties in Bulgarian and Russian in both senses, i.e. as 'acquire + colour' and as 'appear, be seen or stand out + colour'. In addition, adjectives which encode only the brightness dimension, i.e. *bel-* 'white', *svetl-*'light', *jasn-* 'bright, clear', *siv-* 'grey', *tămn-*'dark', *čern-* 'black' follow the same pattern.

It has been mentioned that colour verbs often come in pairs – with or without *se/-sja*. The *se* (*-sja*) verb has only the meaning of 'to appear, to show, to stand out with its colour' (Israeli 1998), or what I have marked as **perceptual construal** while the non-*se* (*-sja*) verb can designate the perceptual construal as well as the processual construal 'become [colour]'. The latter can be given various aspectual or Aktionsart connotations by prefixes which in some cases are marked in the table especially when the primary imperfective is not in use. It has been suggested (Hill 1971, Israeli 1998) that in Contemporary Standard Russian preference is given to the non-*sja* counterpart of the colour verbs in their 'appear' sense[11]. The two forms have become identical in meaning and, as Cruse (1986) points out, complete synonymy is rarely tolerated in languages, so the *sja*-verbs seem to be dying out. Table 6.1 clearly shows that the verbs formed from non-basic colour adjectives tend to lack *-sja*.

What would be a reasonable account of the semantic/conceptual links between 'acquire or intensify+colour' and 'appear, be seen, stand out+colour'? The former conceptualizes a change while the latter conceptualizes some kind of state. In both

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[10] Berlin and Kay (1969) proposed the following criteria for basic colour terms: the terms should consist of just one term of native origin; their application should not be restricted to a narrow class of objects; the words should come to mind readily and should be familiar to all or most speakers of a language.

[11] I am not aware of similar research on Bulgarian data.

cases the object, which acquires or possesses the colour is in the Subject position, which is prototypically the agent's position.

At this stage I can suggest only some initial threads weaving the semantic web of these predicates; the issue deserves a separate treatment. As has already been mentioned, many changes of state are readily conceptualized with no essential reference to force dynamics: hair growing longer, the fading of a colour. The non-energetic, natural or spontaneous acquisition of colour as in leaves becoming green or yellow, the ground becoming white when it is snowing, hair becoming grey with age, etc. can be added to the list of processes. Naturally, the non-energetic acquisition of colour is lexicalized in intransitive predicates. Such a conceptualization contrasts with the energetic construal of change of state which necessarily involves an agent, some force and a patient, which, of course, is lexicalized in transitive predicates. The number of transitive predicates derived from adjectives is, in fact, greater than the number of processual predicates (see the tables below). In our particular case, i.e. the change of colour (and many other properties or states) in the two opposing construals, this is coded by two opposing *e*- suffix and *i*-suffex respectively. This can be presented in the following diagram:

change of colour

(*e*-marked)nonenergetically← →energetically (*i*-marked)

Fig. 6.1 Energetic and non-energetic construal of change of colour

Although "achieving this non-energetic construal is decidedly effortful, a feat of mental gymnastics" (Langacker 1991:289), it is very common in Russian and Bulgarian as the numerous processual, intransitive verbs in the tables below indicate. In fact, it is a very common cross-linguistic penomenon, well-documented in

Stassen's typological research (1997). Frequency as a linguistic parameter is taken seriously in cognitive linguistics. Therefore, we can argue that the non-energetic construal of change of colour (or any other property) exhibits some degree of prototypicality, which must be higher than the perceptual construal of properties, which is limited cross-linguistically (it seems to be a Slavic feature) and stylistically in the Slavic languages (it is most common in descriptive narratives). Certainly, it is not as high as the energetic or force-dynamic construal. In Chapter 2 I pointed out that a force-dynamic construal of events is a prototypical one and is reflected in the simple transitive clause. Thus the perceptual construal of properties as transitory predicates seems to be furthest away from the central and prototypical energetic construal. In other words, we may describe the three meanings of colour predicates as structuring a radial category with the energetic construal as a central member and the other two getting further away from the central meaning.

On the other hand, both perceptual and processual construals are captured by the same verb, e.g. R. *krasnet'* can mean 'become red' and 'stand out with its red colour, appear red'. They both involve a comparatively simple relationship involving just a single participant (Langacker 1991 refers to it as a **theme**). However, when we discuss these verbs at a clause level, it becomes obvious that the conception of the event which ultimately shapes the clause includes other elements such as the speaker, the observer who establishes the relationship between the object and the domain of colour, whether it is perceived as a more dynamic change of colour exclusive of the forces that bring it or as a more static property possessed by the object. Another element present in the conceptualization is the setting or the location in which the object exists (see the analysis of the 'scene' as a frame below). As will be shown below, some of these elements can be foregrounded, i.e. **profiled** on one occasion and

backgrounded, implied on another. Therefore, I suggest that colour verbs are polysemous. To determine a more precise relationship between their two readings will involve psycholinguistic experimentation which is beyond the scope of the present study. Intuitively, the more dynamic meaning 'acquire+colour ' seems central (see the arguments about frequency above), while the more static meaning 'appear, be seen +colour" is an extension of the central one. However, colour verbs in both senses are very old formations (denominative stative -*ē), with clearest examples in Balto-Slavic and Italic (see the example from Latin above, there are similar verbs in Modern Italian as well) and even going back to Late Indo-European (Jasanoff 1978)[12].
So without committing ourselves to the centrality of one meaning or another, the diagram in Fig. 6.1 above can be rewritten in the following way:

change of colour

(e-marked)nonenergetic← →energetic (i-marked)

perceptual(ø marked)← →inchoative(-sja marked)

deictic(-sja marked)←

Fig. 6.2 'Change of colour' verbs

What I have referred to as the deictic *-sja* marked construal of colour predication is a further extension of the perceptual meaning. It captures the subtle semantic differences between colour verbs with *-sja* and without *-sja*.

I still have not addressed the question whether all colour terms, basic and non-basic can be verbalized as a result of the construal of properties as transitory. To begin with, Table 6.1 shows undoubtedly that virtually all colours can be construed as processual, i.e. as matter of acquiring the respective colour. The only verbs which dictionaries do not quote as processual are the Bulgarian and Russian derivatives from

[12] I am grateful to Stephan Pugh for pointing this out to me.

the adjectives for 'bright red', R. *rdet'* and the B. *aleneja,* the Bulgarian and Russian derivatives from the adjective for 'motley', i.e. *šareneja* and *pestret',* as well as the Russian *serebret'*. Similarly, all basic colour terms can be verbalized with the perceptual meaning 'appear, be seen with [colour]'. Table 6.1 shows that only R.*ruset', blednet'* and *rždavet'*, B.*ruseja, bledneja* and *răždaveja* have not been quoted in dictionaries with the meaning 'appear, be seen with [colour]'. All in all, Russian seems to have a greater number of fully conventionalized colour verbs than Bulgarian.

However, Bulgarian dictionaries are inconsistent in their entries of colour verbs. In fact, dictionaries reflect synchronic productivity very weakly. For example, *Rečnik na Bălgarskija Ezik* (1993) has *kafeneja* 'become or appear brown', but *Bălgarski Tălkoven Rečnik* (1994) does not list it. The verb *lilaveja* 'appear or become lilac' is not listed in Bulgarian dictionaries. Yet, my native speaker's intuition suggests that the verb *lilaveja,* which is mentioned only by the Bulgarian-Russian Dictionary (1960) as an equivalent of the Russian *lilovet',* is a legitimate verbal predicate in Bulgarian, too. To my mind, the sentence

(22) Ti kazvaš, če tozi pantalon e sin, no na men **mi *lilavee.***
'You say that these trousers are blue but they **appear/look purple to me**.'

is a legitimate sentence with the interpretation given underneath it. However, the same Bulgarian - Russian dictionary uses the paraphrasis *stavam lilav* 'become purple' to refer to the processual meaning of the Russian verb *lilovet'*, instead of *lilaveja*, a form which is not found in dictionaries but could well be used as in

(23) Ot suda răcete mu bjaxa ne posineli, ami polilaveli.
'From the cold his hands had become not blue but purple.'

Finally, in the elicitation test I conducted among native Bulgarian university students (see Appendix 1) *lilaveja* was commonly derived from the adjective with the 'appear, be seen with its colour' meaning.

I have also found real uses of some non-basic colour verbs in the corpus of Bulgarian literary texts but certainly not many.

(24) *Momičetata šepnexa i mrăštexa nosletata: starecăt mirišeše na politura i răcete mu* **kafeneexa** (B. Josifova)
'The girls were whispering and wrinckling their little noses: the old man smelt of varnish and his hands **were brown**.'

(25) *Tja, sgradata,* **kafeneeše** *sred snežinkite v prozoreca, na mjastoto si beše, no znae li čovek.* (Čavdar Cenov 'Štrausovete na Vals')
'Looking at the snowflakes through the window **he could see the brown building standing** at its usual place'

The results of the elicitation test conducted among native Bulgarian speakers show similar uncertainty. Eighteen informants were presented with 33 common colour adjectives (see Appendix 1) and were asked to form verbs with the meaning of 'appear, be seen+colour'. Basic colours such as *bjal, čeren, zelen, červen, žălt* and *sin* as well as colour terms on the brightness scale such as *tămen* 'dark' and *svetăl* 'light' were easily verbalized while secondary colours such as *kestenjav* 'chestnut colour', *lazuren* 'azure', *bežov* 'biege', *violetov* 'violet', etc. were rarely if at all verbalized. At the same time adjectives such as *rumen* 'light red', *rozov* 'pink', *kafjav* 'brown' and *oranžav* 'orange' were also easily verbalized by the informants.

The results are difficult to interpret. One may be tempted to look for phonological constraints: only monosyllabic and disyllabic adjectives allow verbal

suffixation in Bulgarian. However, *oranžav* is trisyllabic and gets easily verbalized while *rus* 'blond', which is monosyllabic, scores zero. The colour verbs, which appear inconsistently in dictionaries and in the elicitation test are derived from non-basic colour terms. They themselves are derived from nouns, many of them borrowings from non-Slavic languages. For example, the Bulgarian k*afjav* 'brown' comes from *kafe* 'coffee', the Russian *buryj* 'reddish grey brown' comes perhaps from the word for Afrikaans people *bury* or *rjabyj* 'motley' from the noun *rjab* 'a trace, a dent', others are motivated by borrowings as in *lilovyj* 'lilac'.

It has already been pointed out (see section 4.5) that this situation is not unusual. Many of today's simple, underived colour adjectives were probably derived from nouns: *bel'* < *bal* 'fire' Old Icelandic (Townsend and Janda 1996: 135), P. *zielony* 'green' is etymologically derived from *ziołо* 'herb or grass'; P. *czerw-* 'red' is believed to have come from the name of a red worm (Wierzbicka 1996). The conceptual, not only etymological, relation of colours to substances comes in another way, which has already been presented in detail in 4.3. In short, the mechanics of colour perception are responsible for conceptualizing colours as regions in colour space which is reflected in their linguistic behavior in nominal and adjectival constructions.

The close conceptual links between colours and substances do not prevent colours to be construed as relational predications, i.e. adjectives. In fact, their construal as adjectives is possibly more common than their construal as nominals. In addition, colours can be construed as transitory and naturally such a construal is lexicalized in verbs in Slavic languages with a relative ease and productivity. This is not surprising since it has already been pointed out on various occasions that adjectives, like verbs, are relational. Even if all the colour verbs are not fully

conventionalized, they can be coined *ad hoc* following the partially schematic construction [colour-*e*-TNS] with the predictable interpretation of either 'acquire + colour' or 'appear, be seen with +colour'. In other words, there are two ways to construe an inherent property such as colour as transitory[13] - one is to treat the property as a process, the process of coming to possess the property, and the other is to treat the property as temporary feature of a scene as perceived by the observer rather than as inherent property. It is quite an unusual conceptualization which will be further analyzed in the section below. At the same time a unified account of both construals can be given if we anchor them in what Fillmore (1977) and Langacker (1987) call a 'scene'. Such an analysis will also reveal the semantic links between colour predication and existential predication that has already been mentioned above. It will also show the links between existential and perceptual sentences[14] in Bulgarian and English, which have previously been analyzed by Alexieva (1990, 1991) in a similar model.

6.3.3. Alternate construals of a scene

It is well known that every sentence, even the simplest one, is like the tip of an iceberg (Kacnel'son 1972) and carries much more information than is explicitly stated. Therefore, in order to gain a better understanding of sentences with colour predicates we should go deeper, below the level of the initial lexicalization of the event in order to find out more about the event components. For our purpose, figure 6.3 below introduces the participants and the semantic links between them which participate in the construal of colour verbs. In fact, the 'scene' is the base for the

[13] I have already mentioned that the present study will focus on intransitive verbal property predication.

[14] Perceptual sentences in Bulgarian are sentences which contain the so called passive perceptual predicate, e.g. *vižda se* 'be seen', *usešta* se 'be felt, *čuva se* 'be heard' etc.

construal of other verbal property predicates but they will be discussed separately below.

In Chapter 2 I introduced the basic understanding in cognitive grammar that meanings are characterized relative to cognitive domains, many of which are idealized cognitive models as discussed by Lakoff (1987). In addition, cognitive models fundamental to our experience and our conception of the world are also responsible for grammatical structures pertaining to clause structure. Therefore, I assume that the structure of events - or more precisely the structure of our conception of events - is also grammatically significant. The scene is one such conceptual structure, which is comparatively simple. It involves a single participant (a theme), which merely occupies some location or exhibits some static properties or both as is the case with colour predicates in Russian and Bulgarian. The scene below describes an autonomous thematic relationship without any relation to time.

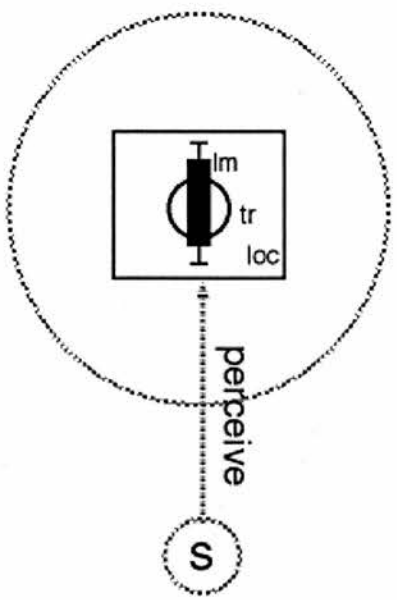

Fig. 6.3

Figure 6.3 is an adaptation of Langacker's viewing arrangement sketches (1987: 129,

Fig. 3 (a) and (b)), which demonstrate the construal relationship between the speaker/observer and a scene. In the diagram S stands for the speaker, and the dark circle stands for the object being observed; it also may be interpreted as a shorthand notation for Objects. O is located in a square which represents the portion of the objective scene in which the object is located. The object is also placed along a scale/region which designates the property characterizing the object. The arrow indicates the preceptual relationship between O and S. The broken-line circle represents the objective scene. In prototypical cases S is outside the circle. The heavy lines indicate prominence of the entity, i.e. it is profiled against a base, which is marked by broken lines.

6.3.3.1 The Perceptual Construal

Before we go deeper, I should recap what is 'on the surface', i.e. the clausal elements when colour verbs designate the perceptual construal of colour predicates. All the sentences I have extracted from Bulgarian texts containing perceptual colour verbs also contain a locative adverbial explicitly specifying the portion of space occupied by the object in Subject position. Being clausal predicates colour verbs are marked for tense, i.e. the event is located in time as well as in space and this is represented by a heavy-line arrow placed under the profile of the object in subsequent diagrams. Many of these sentences are translated in English either by existential *there*-constructions (see Israeli 1998) or by verbs related to vision, e.g. *look, gleam, loom*, etc., or by the *stand out+colour* construction which refers both to existence and vision (see Appendix 2). Thus the semantic components of the scene as represented above compose the meaning of colour verbs: the observer/speaker (or

conceptualizer), the location, the object itself marked by **O** and the region in the colour spectrum that the object is placed in, which in the examples below is 'white'.

Now compare the following sentences in Bulgarian:

(29) Goljama bjala varna jama se viždaše v dvora.
BigFEM.SG white lime pit REFL see3SG.IMP.P in yardART
'A big white lime pit could be seen in the yard.'

(30) Imaše[15] goljama bjala varna jama v dvora.
Have3SG.IMP.P big white lime pit in yardART
'There was a big white lime pit in the yard.'

(31) Goljama varna jama beleeše v dvora.
BigFEM.Sg lime pit whiteV in yardART
'A big white lime pit could be seen in the yard.'
or 'There was a big white lime pit in the yard.

All three can be accounted for through the following description: the Observer (most often this coincides with the Speaker) perceives, in this case through his vision, an object which exists in a specified location of the spacio-temporal continuum. The object is also located within the region of colour space (hue or brightness). The Speaker is never explicitly mentioned in any of these sentences, yet, intuitively it is felt that the speaker positions himself in various ways relative to the objective scene.

However, the three sentences represent alternative construals of the same scene. They all refer to the scene outlined above and in terms of truth-conditions they are almost synonymous. I shall suggest that the above sentences and the lexico-grammatical differences they exhibit are results form different construals of the above

[15] The relation between an object and space in Bulgarian is expressed through the impersonal possessive .

scene. More specifically, the selection of the different verbs is a manifestation of our ability to attend to parts of out experience which are relevant to the purpose at hand and ignore aspects which are irrelevant. The phenomenon of profiling a concept in a semantic frame or domain (see Chapter 2) is an example of selection. Often different words in the same semantic frame or domain focus our attention on the different elements in the frame (B. *vižda se*, *ima*, etc.). In other cases, derivational morphology shifts the profile, as is the case with colour verbs derived from colour adjectives where the *e*-suffix shifts the profile of colour from 'property' to 'action', the details of which will be discussed below.

Sentences of the type in (29) are referred to as perceptual in the Bulgarian linguistic literature, and sentences of the type in (30) as existential. At a sublexical, conceptual level they all can be represented by the following predications: Perceptual_1 [A_1(observer) + P(perceives:Vision) + A_2 (object)], Existential [A_2 (object) IS in Location] and Perceptual_2 [A_1(observer) + P(perceives:Vision) + property (colour)] which represents the perception of the properties, in our case colour, which the object either inherently possesses (modifiers) or the colour is being ascribed to it (adjective predicates). The presence of these predications in the sentences above explains their ostensibly synonymous character. However, they differ in which part of the scene is explicitly expressed, or in cognitive linguistic terms, which part is profiled. In the Bulgarian existential sentences with the *ima* 'have'-construction the existential predication is achieved through a metaphorical mapping of the idea of possession onto existence in space (Alexieva 1991). The metaphor underlying *ima*-sentences in Bulgarian is EXISTENCE IS POSSESSION. Space is conceived of as a container. The relationship between a container and the thing contained is conceptualized in terms of the possessor and the possessed. The shaded area in the diagram below

represents this relationship. In existential sentences it is in profile while the observer and the perceptual process are left in the base, i.e. they are backgrounded or implied. This construal can be represented in the following way:

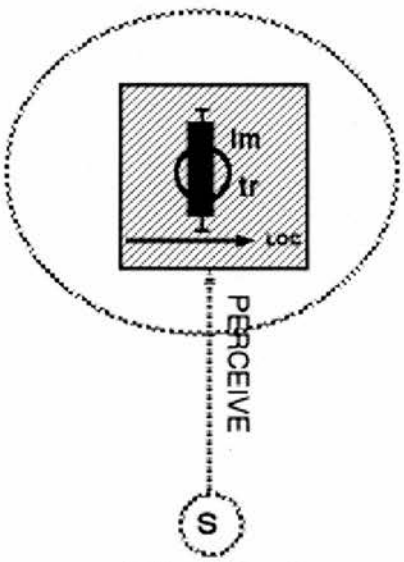

Fig. 6.4

Evidence in support of the metaphorical analysis of the Bulgarian impersonal *ima* 'there is' comes from its history. The verb *imam* 'have' comes from the perfective form of Proto-Slavic *vъz-ьm-a-ti* 'have taken' (Dobrev 1982: 80-81, Georgiev 1985: 177-179). This meaning underlies the metonymic chain in which Y takes X > Y has X > Y contains X, i.e. the scene as represented in Fig. 6.4

In perceptual sentences with verbs such as the Bulgarian *vižda se* 'be seen' the perceptual predication [A_1(observer) + P(perceives:Vision) + A_2 (object)] is profiled while the existential predication is in the base. This is represented in Figure 6.5 below. The perceptual process is profiled by the verb of preception, which is represented by the heavy line connecting the speaker/observer to the object. The speaker himself remains unprofiled, which is marked by the *se* clitic in the form of the verb (Schenker 1988).

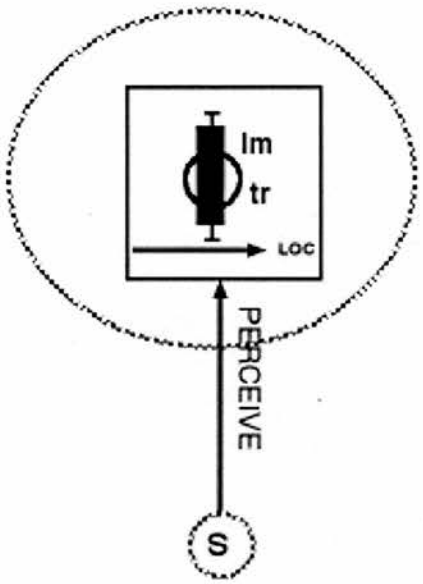

Fig. 6.5

Each of these construals involves an imperfective verbal predicate which provides the predications with a temporal profile. The situation is conceived as stable through time which is represented by the dark arrow at the bottom of the diagram.

In sentences (29) and (30) the adjective 'white' is used as a modifier; it represents an inherent property, which is perceived most probably simultaneously with the object; it adds a feature to the object. The object (the small heavy-line circle in the middle of the scene) and its modifier (the black, thin area, which represents the whire region in the colour spectrum) are profiled and the relative position the two profiled entities is given directly in the diagram.The property 'white' is a relational, stative, atemporal entity; it is summarily scanned. The heavy-line arrow provides the temporal profile of the verbs *ima* in (29) and *vižda se* in (30). In fact, it may be more precise to draw the temporal arrow outside the shaded square for (29), i.e. Fig. 6.4 and along the 'perceive' line in Fig. 6.5., which represents sentence (30).

What is the configuration when a colour adjective derives a verb? Unlike an adjective which profiles a single internally consistent configuration, i.e. a state, a

verb inherently represents a higher level of conceptual organization because it incorporates not just one but a sequence of stative relations.

The non-prefixed colour verbs are imperfective and ambiguous between perceptual construal and processual construal. In the case of the processual construal colour verbs can become prefixed, i.e. perfective, profiling various parts of the process e.g. conception, end, intensification of the property, etc. In the case of 'visual perception' colour verbs can be only non-prefixed imperfective; the situation conceived is stable through time although it is sequentially scanned (Langacker 1987:145). Langacker (1987: 122-123) also points out that conceptions grounded in visual experience require notions such as viewpoint, vantage point and orientation. Specifications of vantage point and orientation are central to the meaning of many relational expressions. I believe that the meanings of colour verbs can be accounted for in the same principled, unified way as for the existential and perceptual sentences. Colour verbs profile the same situation or scene as the existential and perceptual sentences discussed above. However, crucial for the meaning of these verbs is the presence of the Observer as a participant. That is why in sentence (31) his presence is most strongly 'felt'. This intuition is spelt out in Fig.6.7. It is this presence of the speaker in the conceptualization of colour verbs that gives them the deictic character already noticed by Israeli (1998).

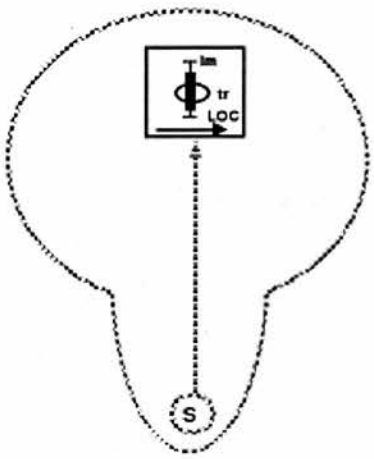

Fig. 6.7

The new element in the profiled situation is the position of the observer. He is now inside the objective scene and can position himself in one way or another relative to the object's location. When his position is such that it allows him/her to see the object and its colour property in its full manifestation, the non-*sja / se* colour verbs are used. Furthermore, the speaker's visual perception of the distance from the object whose quality is being predicated by the colour verb can be profiled in the meaning of the verb by the reflexive clitic or particle. This is where the difficulty or lack of clarity in the *-sja/se* colour verbs come from and such a situation is presented in Fig. 6.8:

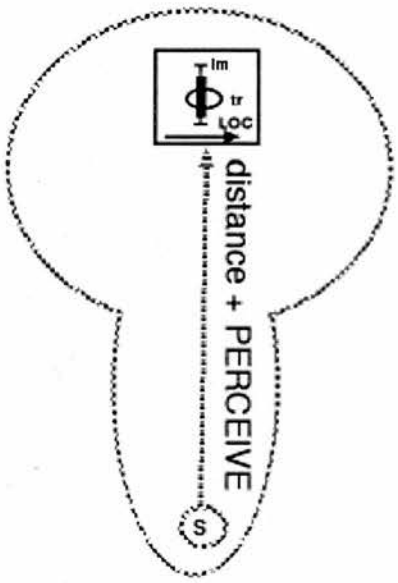

Fig. 6.8

In Bulgarian colour verbs are often used with indefinite nouns and with the distal *tam* 'there' rather than the proximal *tuk* 'here' as in the example (32):

(32) ***Nešeto*** *se* *červenee* ***tam*** *v trevata.*
Something REFL redV there in grassDEF
'There was something red over there in the grass' or
'I could see something red over there in the grass'.

The indefiniteness is, in fact, a consequence of the deictic feature of 'distance' or 'difficulty to see'. Something that is far or is difficult to see is difficult to identify. The colour property predicated by the verb becomes its primary identifying feature.

There is yet another sense in the meaning of colour verbs which has been mentioned in previous research, i.e. the sense of an individual, subjective perception/experience of the speaker as in the sentence cited above

(33) Ti kazvaš, če tozi pantalon e sin, no ***na mene mi*** *<u>lilavee</u>.*
You say that these trousers are blue but to me they look purplish.

The experiencer is explicitly marked by the dative form of the personal pronoun. Such cases involve the profiling of S as an experiencer, a locus of the perception, which is represented in Figure 6. 9 below:

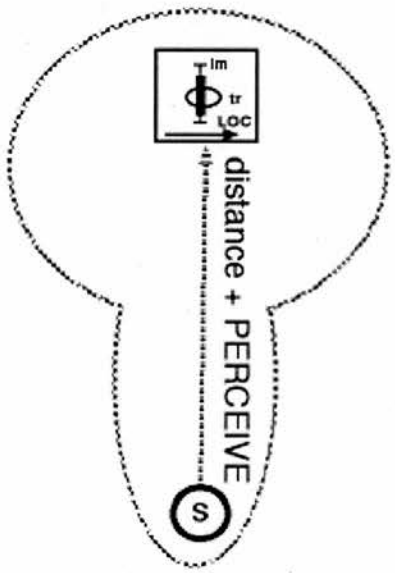

Fig. 6.9

Being deictically marked, i.e. grounded at the moment of speech, colour verb sentences as well as existential sentences are 'defective'. Ivanova has studied verbs with existential semantics and provides the following constraints on their grammatical paradigm as a result of their meaning:

1. There are constraints on their aspectual forms. As a rule existential verbs are imperfective. In the corpus I have studied there is not a single example of perfective deictic colour verbs.
2. The subject is a non-living thing, the verbs are always used in 3 p.
3. Reflexive passive/impersonal passive froms are often used.
4. The existential semantics has an impact on the syntax: the place adverbial is obligatory.

To recap, I have presented a unified analysis of the various senses of the perceptual construal of colour verbs, which are all anchored in the conceptualization of an event structure referred to as the scene. In addition, it explains the similarities between colour verb predicates and existential sentences mentioned by Russian researchers and the similaries between existential sentences and perceptual sentences noticed by Bulgarian linguists (Ivanova 1978, Barakova 1979, Alexieva (1990).

6.3.3.2 Processual Construal

In the deep semantic structure of processual colour verbs there are the same participants as in the semantic structure of the perceptual colour verbs: the object, the perceiver of the object, who most often coincides with the Speaker, the object must be somewhere in space in order to exist and there must be the conception of a property which characterizes the object at a specific moment in time (see below the diagram). Let us analyze the sentence in (34).

> (34) *No dni proxodili, solnce peklo,* ***zelen' černela i soxla,*** ....(K.A. Fedin: *Sad*)
> 'But the days passed, the sun shone, **the vegetation got blacker and drier**'

The semantic components that are present on the surface, i.e. have been selected for the presentation of the situation are the object *zelen'* 'greenery, vegetation' and the object is profiled against the black region of the colour spectrum and against the scale of physical quality of driness/wetness. What is missing is the location of the object but it is implied since an object in order to exist must be located somewhere. It is also possible that previous context has alredy introduces the location. The location is also

not in profile since the observer is back to his neutral, canonical position outside the scene and a relationship between his position and the location is not profiled as is the case with the deictic meaning of colour verbs discussed above. In other words, elements of the scene such as location, the observer or the perceptual process itself are backgrounded. However, it is not difficult to find a context which can bring them to the front as in the sentence in (35) where the visual perception is profiled by the adverb

(35) *Ona **vidimo** tolstela*
'She was **visibly** getting fat'.

I believe that meanings of processual colour verbs can also be analyzed as anchored in the scene; however, there is a new element which becomes profiled, i.e. the gradable property scale. Figure 6.10 represents the scene and its participants when a processual construal is profiled.

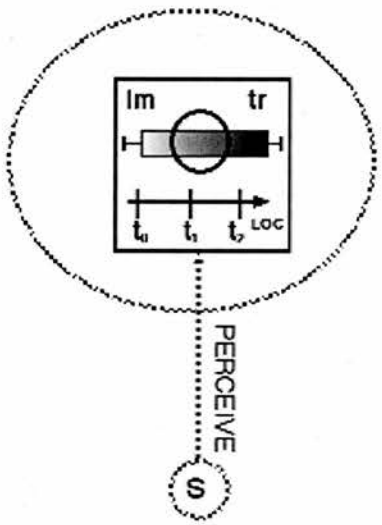

Fig. 6.10

The focus in such predications falls on a single participant, the object and the property. However, the property is not conceptualized as static but as a dynamic

relationship which has a temporal and aspectual contour. The processual construal involves the conception of an object which at a particular moment of time (t_1) acquires a property which the same object has lacked until now (t_0) and at the end of this process (t_2) the object will be fully characterized by that colour. Thus the process of acquiring the colour (or any other property) occupies the middle stretch on the time line below:

t_0 ---> t_1--->t_2

Such a construal involves the contrast between the acquisition or intensification of a property at t_1 and the non-existence of the property at t_0 as well as the full possession of the property at t_2:

ne byt' belym > *belet'* > *pobelet'*

(Mušinska-Vol'ny 1996, see Selivestrova's analysis of 'stanovit'sja+property' in Chapter 5).

The dark black arrow in figure 6.9 represents the temporal profile of the event. The object can be seen metaphorically as moving along the scale of wetness/dryness or along the hue dimension of the black region in the colour spectrum. Its intransitivity immediately follows. Process verbs are imperfective but they regularly form perfective verbs through prefixation which are resultative. Process verbs have often been studied for their aspectual qualities. Stassen (1997) provides examples for verbal encoding of predicative adjectives which carries a dynamic phase of 'becoming'. Previous semantic studies of English deadjectival verbs (Hay 1998, Hay, Kennedy, Levin 1999) have classified them as 'degree achievements' and studied their peculiar behaviour in terms of telicity. It turns out that their telicity crucially depends on the scalar structure of the base adjective. It is an issue worth investigating

in Slavic languages as well, as the present study has also noted a tendency for one end of the scale of an adjective to get verbalized especially in the perceptual sense (e.g. R. *vysit'sja* from *vysok(ij)* 'tall' but there is not an intransitive verb from *nizk(ij)* 'low, short'; B. *grubeja* from *grub* 'rough' but there is not an intransitive verb from B. *gladăk* 'smooth', etc.).

Out of context it is difficult to distinguish between the possible interpretations of a nonprefixed colour verb such as *belet'*: 1) become white, 1) become whiter and 3) gleam white. We assume that there is a case of polysemy anchored in the scene to which the conceptualization of colour predicates can be reduced. The link between the acquisition and intensification is quite obvious. The acquisition itself is construed as a gradual process which involves measuring out, hence the relationship between deadjectival verbs of this kind with degree achivement, which have been mentioned above. I believe that the degree achievement is directly linked to the gradability of adjectives; the derived verbs inherit this semantic feature in the conceptualization of the verbal semantics, thus there may be either the comparative degree in the profile or the non-comparative sense in the profile: e.g. R. *tjazelet'* 'become heavy' or 'become heavier'. The context foregrounds one or the other construal. Some verbs are even directly derived from the compative form, as has already been pointed out, e.g. R. *uxudšit'(sja)* 'become worse', R. *ulučšit'* 'become better'.

6.4. Other properties

How applicable is the above model to the conceptualization of other properties as transitory predicates? My hypothesis is that it is applicable to the description of intransitive verbal predicates derived from visually observable properties. After all, the main aspect of the model of the scene exploited in the previous section is the

presence and the position of the observer/speaker in the scene. The lexical items listed in the tables below seem to confirm the hypothesis. In addition, they show that there is another possible construal for some properties in terms of transitoriness, i.e. the behavioural construal.

Table 6.2 Dimension: measure, body size

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	Behaviour construal
B. *vis-ok* 'high' R.*vysok(ij)* 'high'	B. *izvisi-se* 'stand high' *vysit'sja* 'stand high'		*po/viši*-increase 'make X high(er)' *po/vysit'*	*po/viši- se* 'become higher' *po/vysit'sja*	
B. *nis-ăk* 'low' R. *niz-k* (ij) 'low'			*s/niši-* make X low(er) R. *po/nizit'*	*s/niši- se* become low R. *po/nizit'sja*	
B. *goljam* R.veli-k(ij) 'big'			*u/golemi-* *u/veliči-* *u/veličit'*	*u/golemi- se* *u/veliči- se* *u/veličit'sja*	*goleme-e se* *veličat'sja* (arc) 'act importantly'
B. *mal-ăk* R. *mal-yj*		*na/u/male-e* *po/malet'*(coll) 'become small(er)'	*u/mali-* *u/malit'*	*u/mali- se* *u/malit'sja*	
B. *ed(ă)r-* 'large'		*edre-e*	*u/edri-*	*u/edri se*	
B. *dreb-en* 'tiny'		*drebne-e*			*iz/drebne-* 'be petty, behave in a petty way'
B. *sit-en* 'tiny'			*na/sitni-*		
B. *dălb-ok* R. *glub-ok-ij*			*za/dălboči-* *u/glubit'* 'make X deep(er)	*za/dălboči-(se)* *u/glubit'sja*	
plităk	NONE	NONE	NONE	NONE	NONE
B. *dăl-ăg* R. *dlin-nyj* 'long'		*dlinnet'* 'become	*u/dălži-* *u/dlinit'* 'make X long(er) in	*u/dălži- se* *udlinit'sja* 'become	

		long(er)' (coll)	space or time'	long(er)'	
B. *kăs* 'short'		*o/kăse-e-* become short (clothes)	*s/kăsi-* 'make X short'	*s/kăsi-se* 'become short'	
B. *krat-ăk* R.*korot-kij* *krat-kij* 'short'			*să/krati-* 'shorten' (tr.) *so/kratit'* *okorotit'* 'make shorter than needed(clothes)'	*să/krati- se* 'shorten'(intr) *sokratit'sja*	*korotat'* 'spend time, life'
B. *šir-ok* 'wide' R.šir-okij		 *?poširet'*	*raz/širi-* 'widen'(tr) *ras/širit'*	*raz/širi- se* 'widen'(intr) *ras/širit'sja*	*širi- se* 'occupy vast space
B.tesen R. *tesnyj* 'narrow'		o/tesne-e- become narrow (clothes,shoes)	s/tesni- *s/tesnit'* 'to narrow' (tr)	s/tesni- se *s/tesnit'sja* 'narrow'(intr)	
B. *debel* 'thick' 'fat'		*debele-e* 'become fat'	*u/debeli-* 'make X thick(er)'	*u/debeli se* 'become thick(er)'	
B. *tlăst* R.tolst(yj) 'fat'		*tlăste-e* *tolstet'* 'become fat'	*(u)tolstit'* 'make X fat'	*utolštat'sja* 'become fat'	
B.šiškav 'fat'		šiškave-e- become fat			
B.slab B. *kljoštav* 'very thin' B. *tănăk* 'thin' R. *slab(yj)* 'weak, thin' *xud(oj)*		*slabe-e-* *ot/slab-n-e-* *kljoštave-e* *o/tăne-e* *slabet'* *slabnut'* 'become weak, thin' *xudet'*	*ot/slabi-* *o/slabit'* weaken (tr)	*otslabi- se* *o/slabit'sja* 'weaken(intr.)	

Table 6.2 illustrates that there are very few intransitive verbs designating various dimesion properties as processual and even fewer as clearly perceptual. In contrast, the force-dynamic construal is achieved in all dimension properties. Obviously change of dimension is easily conceptualized as caused by an external

force. From that basic conceptualization the inchoative one is only a matter of neutralizing the presence of the force which is explicitly marked by the reflexive *se* in Bulgarian and *-sja* in Russian (cf. Schenker 1988).

However, the few 'exceptions' from the general pattern allow some interesting speculations. There is a group of adjectives in Bulgarian which describe body size at both ends of the scale, e.g. *slab, tănăk, kljoštav* for 'thin', *debel, pălen, šiškav, tlăst* for fat. Some of them are expressive and stylistically marked as 'negative', e.g. *šiškav, tlăst , kljoštav*, others are metaphorical extensions of basic senses such as *slab* 'weak'>'thin', *pălen* 'full'>'plump'. They all derive imperfective intransitive verbs with the *e*-suffix to denote a visually perceived change in body size. In fact, it is difficult to dissociate the processual meaning from a perceptual one. The sentences below sound strange if possible at all:

(36) B. ?*Tja nezabeljazano debeleeše.*
(37) R. ?*Ona nezametno tolstela.*
?'She was getting fat unnoticeably'

Another interesting group in Bulgarian are the intransitive processual verbs formed from the negative end of the scale of length and width, e.g. *malăk* 'small', *kăs* 'short'and *tesen* 'narrow'. The respective verbs *u/maleja* 'become small for clothes or shoes', *o/kăseja* 'become short for clothes' and *o/tesneja* 'become tight for clothes' have conceptualized a very specific relationship between the body and items of clothing. The sentence below is from a real-life conversation from Nikolova's corpus of spoken Bulgarian (see Chapter 3).

(38) Njama, štoto **mu omaljaxa**. Măničkі te, te stanaxa, bebeški bjaxa.
'He hasn't got any 'cause they became small for him, they were for a baby.

(A mother talking about her child's clothes)

The experiential dative pronoun links the precessual meaning with a perceptual sense - the clothes feel small. Furthermore, the same verbal stem combined with the prefixes *ot-* or *pri-* and a human subject denotes the final result of the process of losing one's strength, become weak. In other words, the links between the processual and perceptual construal of the property of size in transitory predicates is preserved.

I have found only one verb which clearly brings the visual perceptual construal to the fore: R.*vysit'sja*, B.*izvisja se* 'stand high'. In this respect it is very similar to the colour verbs discussed in the previous section. The existential component is clearly present as the English translations show and the examples below illustrate:

(39) R.*Vdali vysitsja gora.*
'The mountain/A mountain stood high in the distance.'
(40) B. *Na vărxa na xălma se izvisjavaše pametnikăt na geroja.*
'The hero's monument stood on the hill top.'

The only two antonyms that can both be conceived as processual in Bulgarian are *edăr* 'big, huge' and *dreben* 'tiny', e.g *edreja* 'become big' and *drebneja* 'become tiny'. In the example below, however, the underlying assumption of visually perceiving the process is present as usual:

(41) *Zălti kruši* ***edreexa*** *na klonite.*
Yellow pears **were growing** on the branches (and were showing it so that we can see it).
(42) *Samoletăt* ***drebneeše*** *v dalečinata.*

The plane **was getting smaller and smaller** (and I could see it as I was watching it).

Finally, there are a few verbs that capture the behaviour construal. So far I have not discussed this construal since colour verbs are neutral towards this conception of events[16]. English sometimes obscures the links between actions that are characterized by a particular property and the property attributed to a person (behaviour is primarily associated with human or living agents). For example, the English *be late / be early* profiles the achievement of something after or before a stipulatetd moment as ascribing a property to the person, which is expressed by the predicate adjective construction. In Russian and Bulgarian the time-related properties of 'early' and 'late' are construed as transitory and thus expressed by verbs: *zakăsneja, opazdat*' "be late' and B. *pod/ranja* 'be early' (see Table 6.3).

In the same train of thoughts Croft (1991: 96) distinguishes between properties, dispositions, and states. According to him dispositions are technically properties of actions. For example, in his semantic classification of Russian roots *xitr-* 'clever, cunning' is listed under dispositions. A particular action is cunning, for example. Indeed, there is a verb R. *xitrit'*, B. *xitruvam, xitreja* which denote actions with that particular property. But a person who habitually performs actions with that property can also be attributed the property directly as a disposition, i.e. a tendency to perform actions in that fashion.

Be that as it may, unlike the class of human propensities to which *xitr-* belongs in my classification, unsurprisingly, dimension concepts are rarely construed as kinds of behaviour. The following five verbs were found in dictionaries:

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[16] It may look far-fetched, but it is not totally unreasonable to 'see' the manifestation of colour, the 'active display of colour', as a kind of behaviour. The point only shows how closely related the perceptual, processual and behavioural construals are.

B.*golemeja se* 'act importantly', R. *veličat'sja* (archaic) 'act importantly', B. *iz/drebneja* 'be petty, behave in a petty way', B.*širja se* 'occupy, live, have a lot of space', R. *korotat'* 'spend time, life in an easy-going way'. The links with the basic dimension concepts are rather tenuous as the reconceptualization obviously involves metaphorical transfer.

To recap, Table 6.2 and the analysis of the specific lexical items show that prototypically a change of dimension involves a force and patient which is reflected in the overwhelming number of transitive verbs designating a force-dynamic construal and their inchoative counterparts. The visually perceptual, processual and behavioural construals are rarely lexicalized. The few lexicalizations are language-specific and property-specific. Although unpredictable, their meanings are easily motivated.

Table 6.3 Time-related properties including age

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	Behaviour construal
B. *ran-en* R. *ran(nij)* 'early'					*pod/rani-* 'be early'
B. *kăsen* 'late' R. *pozdn(yj)*					*za/kăsne-e* *o/pozdat'* 'be late'
B. *mlad* 'young' R. *molod(oj)*	*mlade-e* 'look, appear young' *molodet'*		*pod/mladi-* 'make sb look young' *molodit'*	*pod/mladi-se* 'become young' *molodit'sja*	
B. *star* 'old'		*stare-e* 'to age	*să/stari*	*să/stari se*	

R. *star(yj)*		gradually' *staret'*	'make sb look older' *starit'*	*starit'sja*	
B. *vext-* R. *vetx(ij)*		*vexte-e* 'become old gradually(obj)' vexne 'whither' *vetšat'* become very old			
B. *nov* 'new' R. *nov(yj)*			*podnovi- obnovit'*	*obnovit'sja*	

The web of meaning is woven in the following way. As with other properties, the above verbal predicates may not be predicted but certainly can be motivated especially when we compare them to each other. To begin with 'early' and 'late'. Their processual construal seems to be precluded by the general knowledge that there is a cut-off point before and after which one cannot be considered late or early. The perfectivizing prefixes reinforce this point, they profiles the result state. The secondary imperfectives *zakăsnjavam*, *podranjavam*, *opazdyvat'* are iterative. Their English equivalents 'be late' or 'be early' give the impression that they predicate properties to entities. However, the Bulgarian and Russian verbal predicates provide evidence that time-related as well as speed-related (see below) predicates are conceived as properties of particular actions rather than properties of entities as such. That is why I have placed them under 'behaviour construal'. The only property construed as visually perceptual is 'young'. However, it easily can be seen as behavioural as the verbs B. *mladeja,* R. *molodet'* can also be translated as 'act, behave

like a young person'. The explanation also resides in our general knowledge: you can get older, R. *staret'*, B. *stareja*, but you cannot acquire the property 'young', you can simply act like a young person or look like a young person.

There seems to be a division in the transitory construals of properties such as 'old' and 'new' on the one hand, and 'old' and 'young' on the other. Seemingly, both 'young' and 'old' can be construed as processual, expressed in the verbs *mladeja* and *stareja*. However, while the natural process of aging can be experienced and conceptualized as a gradual process, the same experience and construal is impossible for the 'young' property. Therefore, all dictionaries provide a description which includes 'look, appear'. It is also reasonable to treat *mladeja* as a kind of behaviour typical of young people. This meaning could be an extension of the 'appear' meaning - somebody who looks young (face, clothes, etc.) would also act young. As to the verbalization of the concept 'new', although I have listed it under the force-dynamic construal, it does not strictly translate as 'make X new'. Experience teaches us that we cannot force something to become new. So verbs such as B. *podnovja*, R. *obnovit'* are mainly used to refer to replace an old thing with a new thing.

To recap, it seems that in this semantic subclass of properties the only one which can be construed as a 'natural', gradual acquisition and intensification of property is the concept of 'old', as in R. *staret'*, *vetšat'*, B. *stareja, vexteja,* which again is rooted in the human experience of time and age. However, they are not easily conceptualized in terms of force-dynamics either.

Table 6.4: Speed-related properties

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	Behaviour construal

B. *bărz* 'fast' R. *bystr(yj)*					*bărza* 'be, act in a hurry'
B. *bav-en* 'slow' R. *medlenn(yj)*			*bavi-* 'delay'		*bavi- (se)* 'act slowly' *medlit'*

The range of basic speed-related adjectives is rather limited. However, they show remarkable similarity to time-related deadjectival verbs. As we see from the examples, the English locational construction 'be in a hurry' translates the verbal predicates in Russian[17] and Bulgarian. This is again evidence for the semantic links between existential, perceptual and behavioural construals. They are linked by the general frame of the scene which was discussed in previous sections.

Table 6.5: Shape

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	Behaviour construal
B. *prav* 'straight' R. *prjam(oj)*			*pravi-* 'do' *iz/pravi-* 'straighten (tr)' *vy/prjamit'*	*iz/pravi se* 'straighten (intr.)' *vy/prjamit'sja*	*pravi se* 'act as if' many derivatives from *prav(da)*
plosăk 'flat' *plesk-*'clap, splash			*s/pleska-* 'flatten' (tr) R. *s/pljuštit'*	*s/pleska se* 'flatten' (intr) *s/pljuštit'*	

[17] In Russian the verb *toropit'sja,* which is not a cognate of the adjective *bystryj* translates the English 'be in a hurry'.

R. *plosk(ij)*			*ploštit'*(arch)	*ploštit'sja*(arch)	
krăg-ăl 'round' R. *krugl(yj)*		*kruglet'* 'become round'	*za/krăgli-* *kruglit'* 'make round'	*za/krăgli se* *kruglit'sja* 'become round'	
obăl 'round'			*za/obli-*	*zaobli- se*	
raven 'equal''flat' R. *ravn(yj)* 'equal' *rovn(jy)*'flat'			*iz/ravni-* *ravnjat'* *rovnjat'*	*iz/ravni se* *ravnjat'sja* *rovnjat'sja*	

I have deliberately used the noun *shape* as a heading to this section. The ease with which shapes are construed as things has often been pointed out (Wierzbicka 1988). Compared to colour and size, they are more likely to be described by nouns. According to Wierzbicka (1988: 477) the reason why shapes are more nouny than either colours or sizes is that shapes delimit certain portions of reality and make them into countable entities. It is also understandable why shapes resist the processual construal and consequently the perceptual or behavioural. A change in shape cannot be conceptualized as happening naturally as if from inside; it has to come from an external agent and force. Hence, as Table 6.5. below shows, there are only transitive and inchoative verbs derived from adjectives in Russian and Bulgarian.

Table 6.6: Touch-related physical properties

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *sux* 'dry' R. *sux(oj)*		*săxne-* 'become dry' *soxnut'*	suši- 'to dry'(tr) *sušit'*	*suši se* 'to dry' (intr) *sušit'sja*	
B. *mok(ă)r*	*mokre-e* 'feel	*mokre-e-*	*na/mokri* 'make	*na/mokri se*	

'wet' R. *mokr(yj)*	wet by touching'	*moknut'* 'become very wet'(intr.)	(obj) wet' *močit'*	'to get wet'	
B. *vlaž(e)n* R. *vlaž-n(yj)*	*vlažne-e*	*(o)vlažne-e* *vlažneet'* 'become wet'	*na/vlažni-* *u/vlažnit'*	*na/vlažni-se* *u/vlažnit'sja*	
B. *grub* 'rough' R. *grub(yj)*	*grubee*	*(za)grubee* *grubet'* 'become rough(er)'	*za/grubi*	*za/grubi se*	
B. *glad-ăk* R. *glad(kij)*			*za/gladi* *zagladit'*	*za/gladi se* *zagladit'sja*	
B. *tež-ak* R. *tjažol(yj)* R. *tjažk(ij)* (arc)	*teži-* be heavy,weigh	*na/teži-* 'become heavi(er)' *tjažalet'* 'become heavier'	 *tjažalit'* 'make X heavier'		*težkaree*-se 'act big'
B. *lek* R. *legk(ij)*		*o/lekne-* 'become light(er)' *legčat'* 'become weaker'	*ob/lekči-* 'make light(er)' *ob/lekčit'*	*ob/lekči se* *ob/lekčit'sja*	
B. *găst* 'thick' R. *gust(oj)*	 *gustet'* 'appear, be seen as thick'	 *gustet'* 'become thick(er)'	*s/găsti-* *gustit'* make thick(er)	*s/găsti- se* *gustit'sja* become thick(er)	
B. *rjad- ăk* 'thin','runny' (liquid) R. *redk(ij)*		*(o)redee-* 'become thin(ner), rare(r) *redet'*	*raz/redi-* 'make thin(ner), rarer' *raz/redit'*	*raz/redi- se* 'become thin(ner)' *raz/redit'sja*	
B. *tvărd*			*v/tvărdi-*	*v/tvărdi- se*	

R. *tverd(yj)* 'hard'		*tverdet'*			
B. *mek* R. *mjagk(ij)* 'soft'		*(o)mekn-e (raz)mjaknut' mjagčet'* (coll) 'become soft(er)'	*s/mekči- s/mjagčit'* 'make X soft'	*s/mekči se mjagčit'sja*	
B. *ostăr* R.ostr(jy) 'sharp'			*(pod)ostri- ostrit'* 'make X sharp'	*(pod)ostri-se ostrit'sja* 'become sharp'	
B. *tăp* R. *tup(oj)* 'blunt' 'stupid'		*(za)tăpe-e* *tupet'* 'become blunt or studpid'	*iz/tăpi-* 'make blunt' (tr.) *tupit'* 'make blunt'	*iz/tăpi se* *tupit'sja* 'become blunt'	*tăpee-* (coll) act stupidly
B. *stud-en* R. *studen(yj)* 'very cold' (coll)	*studene-e* 'feel cold by touching '	*studene-e studenet'* 'become very cold'	*iz/studi- vy/studit'* 'make X cold'	*iz/studi- se vy/studit'sja*	
B. *top(ă)l* 'warm' B. *gorešt* 'hot' R. *tepl(yj)* 'warm' R. *gorjač(ij)*		*teplet'* 'become warm(er)' (weather)	*za/topli- 'warm up' tr.* *s/gorešti-'heat up' (tr.)* *gorjačit'*	*za/topli se 'warm up' intr.* *s/gorešti- se* 'heat up' *(intr.)* *gorjačit'sja*	*(raz)gorešti- se o/teplit'* *gorjačit'sja*
B. *xlad-en* R. *xolodn(yj)* 'cool'	*xladne-e*	*xladene-e xolodet'* 'become cold(er)'	*o/xladi- xolodit'* make X cold	*o/xladi- se xolodit'sja*	
B. *kamenen* 'stone-like' R. *kamen- n(yj)*	*kamene-e*	*kamene-e* *kamenet'* 'become like stone, acquire the properties of stone: hard,	*v/kameni-* *o/kamenit'* make X like stone'	*v/kameni se*	

		immobile, etc.			
B. *led-en* R. *led-jan(oj)* 'icy'	*ledene-e*	*ledene-e* *ledenet'* 'turn into ice, become icy cold' (intr.)	*v/ledeni-* *ledenit'* (tr&intr) 'turn into ice'	*v/ledeni se*	
R. *derv-* *jan(yj)* 'wooden'		*derevenet'*			

Strictly speaking, the physical properties encoded by the adjectives in Table 6.6 are not only touch-related. Many of them are anchored in our visual perception as well as in tactile perception, e.g. 'thick' and 'thin', 'soft' and 'hard', 'sharp' and 'blunt'. I believe that this is the reason why physical qualities, unlike taste-related qualities (see below), lend themselves to the perceptual, processual and behavioural construal.

In addition, properties such as B. *kamenen,*R. *kamennyj* 'stony', B. *leden,* R. *ledjanoj* 'icy' are not core adjectives[18]. They are derived from nouns which denote objects characterized by the properties the derived adjectives signal: cold, hard, etc. This is a common pattern both synchronically and historically. Once an object is 'seen' as possessing a quality which is experientially salient, it can easily turn into, i.e. be conceptualized as, relational (see Chapter 4 for a discussion of relational adjectives in Russian and Bulgarian). The reason I have included them is to discuss them as representatives of the subclass of property words related to 'material' or 'substance', and this is done together with 'gender' further below.

[18] In many of the subclasses of properties there are some examples of non-basic properties. In fact, only basic colours have been defined on the basis of Berlin and Kay's research. Non-basic adjectives, i.e. derived adjectives provide additional clues as to how to approach derivational morphology in general.

As in all of the previous groups, the force-dynamic construal and consequently the inchoative construals are designated by a large number of transitive verbs and their *-sja/se* counterparts. However, there is also a relatively regular pattern representing the processual construal. In fact, the only property which cannot be conceptualized as a process of acquisition is designated by the root *ostr-* 'sharp' . The collected data reveal a difference between Russian and Bulgarian in the area of the perceptual construal. While in Russian *gustet'* 'become thick' is the only verb derived from adjective by the *e*-suffix, which coerces (induces) the perceptual construal of 'appear, be seen as thick', in Bulgarian the perceptual construal is quite common, e.g. *mokreja, vlažneja* 'feel wet by touching', *grubeja* 'look rough or feel rough by touching', *studeneja, ledeneja, xladneja* 'feel cold by touching', *kameneja* 'look hard, cold, etc. like stone'.

(43) Nozete mi sjakaš potăvaxa v kamănite na pătja i sam **kameneex**.
(Javorov, *Xajduški kopnenija*)
'My feet felt as if they were sinking in the street cobbles
and **I felt like stone/was turning into stone.'**

Interestingly enough, these verbs are used both in very colloquial speech (*vlažneja*) or literary styles as the example in (40). In any case, what unites the above predicates is again the presence of the perceiver, who establishes a contact with the object possessing the property. In other words, the situation is somewhat deictic; the participant in the speech act event is positioned even closer to the object so as to have a tactile contact with it. Again, the situation is comparable to the one with colour verbs.

As the data show, there seems to be a split in antonym pairs: properties from one end of the scale seem to be preferred for intransitive predication. The examples

from Bulgarian above were mainly from the wetness end of the wet / dry scale and the cold end of the scale for temperature. Similarly, 'sharp' does not seem to 'deserve' either a processual or perceptual construal.

Finally, a comparison between the processual B. *xladneja, o/xladneja* 'become cool, cool (intr.)' and the inchoative *o/xladnja se* 'cool (intr.)' show a very close similarity in meaning. Could languages be so profligate? A further investigation is needed to answer the above question.

As Table 6.6. shows there are just a couple of 'genuinely' intransitive verbs which capture the behavioural construal. There are a few which do that metaphorically from the inchoative construal.

Table 6.7: Taste-related properties

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B.*slad-ăk* R.*sladk(ij)*	*u/sladi-*		*pod/sladi* *podsladit'*	*?pod/sladi se*	
B. *gorčiv* R. *gor'k(ij)* 'bitter'	*gorči-* *gorčit'*	*za/gorči-* *gorknut'* 'become bad, bitter'			
B. *kis-el* R. *kisl(yj)*	*kisele-e*	*kiselee- v/kisne-* *kisnut'* 'become sour, bad'			
B. *ljut* R. *ljut(yj)* hot, pungent'	*ljuti-*	*za/ljuti-*			*raz/ljuti se* *ljutovat'* 'act in an angry way'

To begin with, Table 6.7 shows a pattern, which has not been encountered so far: all the verbs are derived directly from CS roots and are marked by the *i*-affix, which can be considered simply a classifying affix, or the *nu*-suffix as in R. *kisnut'* 'become sour or bad' (see 6.1. about various affixes). There is only one *e*-suffixed verb, B. *kiseleja* which is derived from the adjectival stem *kisel* 'sour'. There is only one concept, i.e. 'sweet', designated by the Slavic root *slad-* that entertains a force-dynamic construal. The intransitive verbs which capture the conceptualization of taste-related properties in Slavic languages are translated only by predicate adjective constructions, e.g.

(44) *Kafeto gorči.*
'The coffee is/tastes bitter.'

Similarly, an interpretation test among native Bulgarian university students has shown that the closest parallel construction to the intransitive taste-related verbs is the predicate adjective construction. Very few of the informants interpreted the situation with the general verb of perception *usešťam* 'perceive' (see Appendix 1). In fact, there is not an intransitive verb designating the perception of taste. There is only a transitive verb *vskusja, vkusvam* 'to taste, to try the taste of something'. A behavioural construal is achieved only from the property *ljut* 'spicy, hot' through a metaphorical extension of its meaning to refer to a kind of angry behaviour.

I am not certain that these verbs should be listed under the heading of **perceptual construal** since by 'perceptual' I mean primarily visual perception. To my mind, a reasonable account for this situation has to start from the fact that taste-related properties, unlike the type of properties discussed so far, are not observable. The *e*-suffix seems to derive perceptual and processual predicates primarily from

visually observable properties. In other words, the stage model and the scene model seem inapplicable to these property predicates. In fact, the *i*-affix suggests that they may be rooted in some image schema more closely related to force-dynamic construals. A dative construction, which is the prototypical construction for the experiencer, can bring this role into the picture, on stage, so to speak, but somehow a scene with an internal observer cannot be conceptualized as is the case with other properties. I have not got a solution for this problem other than the above-mentioned intuition that taste-related predicates cannot be observed.

There is a division between the visually and nonvisually perceived properties when it comes to the patterns of verbalization and it is exemplified by the hearing-related adjectives as well as by the taste-related properties. Table 6.7 'Taste-related properties' and 6.8 'Hearing-related properties' look very similar. Of the two antonyms 'quiet' and 'noisy', only 'quiet' can achieve a processual construal. The verbs B. *šumja,* R. *šumet'* 'make a noise' are derived straight from the nominal root and they have 'act in a manner that creates noise' as the base for the conceptualization of the property 'noisy'. There is yet another root *glux-/glăx-* which can be construed as processual 'become deaf' B. *o/glušeja*, marked by the e-suffix; force-dynamic 'make X deaf' or 'make X quieter' *o/za/gluša, -iš*, marked by the *i*-suffix; inchoative *o/za/gluša, -iš se*, and even the perceptual *glăxna, -eš* best described as 'X is so quiet that one can almost hear the silence.'

Table 6.8: Hearing-related properties

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *tix* 'quiet, silent'		*za/tixne-*			

R. *tix(ij)*		*tixnut'* *za/tixat'* 'become quiet(er)'			
šum-en R. *šum-n(yj)*					*šumi (se)* *šumet'* be noisy, make a noise
B. *glux* 'deaf' *glăx-/glux-* 'quiet (voice, sound)' R. *glux(oj)*	*glăxne-* 'perceive the quietness of X'	*o/glušee-* 'become deaf, become quiet' *gloxnut'* 'become deaf, become quieter'	*o/za/gluši-* 'make X deaf make X quiet' *za/glušit'* 'make X deaf; make sound, noise quieter	*za/gluši se* *za/glušit'sja*	 *gloxnut'* 'grow wild'

Value-related properies listed in Table 6.9 below are primarily conceived as transitory in terms of external forces responsible for the change of the property. The property 'cheap' can be construed as changing somehow on its own, without an external force, i.e. a processual construal. However, various acts (the behavioural construal) associated with value properties are possible, but they all are based on metaphorical extensions of the basic values. For example, the specific details in the behavioural construal of the adjective R. *dobryj*, expressed by the verb *zadobrit' / zadabrivat'* 'to secure someone's support by giving them presents, doing them

favours' (Ožegov 1990), in short, 'to bribe' makes it a language-specific conventionalized construal, which can not be predicted from more general principle. Perhaps, it can not even be conceived of by other cultural mind sets. Similarly, R. *sploxovat', oplošat'* 'make a mistake' is a language-specific convention, which does not transfer across language nor across properties. Finally, the two verbs *dorožat'* 'become (more) expensive' and *dorožit'* 'to value highly, to cherish' illustrate two separate construals of the property *dorog(oj)*, the latter one obviously deriving from a metaphorical extension of the base adjective.

Table 6.9: Value-related properties

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *dob(ă)r* R. *dobr(yj)*			*po/dobri-* *podobret'* make X better	*po/dobri se* 'become better'	*dobruvam* 'live well' *zadobrit' / zadabrivat'* 'to bribe'
B. *loš* R. *plox(oj)*			*v/loši-*	*v/loši se*	*sploxovat'* *oplošat'* 'make a mistake'
B. *evtin* R.dešev(yj 'cheap'		evtine-e *deševlet'* 'become cheap(er)'	*po/evtini-* *u/deševit'* 'make X cheap(er)'	*u/deševit'sja* 'become cheap(er)'	*evtine-e* *deševit'* 'to sell cheaply'

Table 6.10: Full/empty states

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *pălen* R. *poln(yj)* 'full'			*na/păln- polnit'* 'to fill'	*na/păln- se polnit'sja* 'become full'	
B. prazen R.			*iz/prazni*	*iz/prazni se*	
B. *pust* R. *pust(oj)* 'empty, uninhabited'	*pustee- pustet'* 'be,stand empty'	*pustee - pustet'* 'become empty'			

The concept 'full' and 'empty' have no non-energetic construal except for the metaphorical meaning of R. *polnyj*, B. *pălen* 'plump' > R. *polnet'*, B. *pălneja* 'become plump'. The adjectives B. *pust*, R. *pustoj* 'empty, uninhabited' can be conceptualized as processual and perceptual in the frame of the scene, in which the observer although not explicitly stated, i.e. profiled, is brought forward as a participant in the event.

The threads weaving the semantic web of verbal property predication have finally reached the area which, according to Stassen's research, is the only one which can be verbally encoded in Russian. I have shown that this is not quite right (see the conclusion about support for Stassen's claim). However, the claim that human propensities are encoded verbally on a large scale in Russian and Bulgarian is fully supported by the data. The tables overwhelmingly show that human propensities are most readily conceptualized as processes both in terms of force-dynamics and nonenergetically. The phenomenon has been noticed in previous research. There are numerous verbs in Russian and Bulgarian that designate human physical, mental and emotional states. The emotions designated by verbs with the experiencer in a Subject position (Nominative case) are called by Wierzbicka (1988)

'active emotions', emotions to which people 'give themselves' almost voluntarily and which they outwardly express, e.g.

(45) *Ja veseljus'*
'I am happy'

There are, of course, other grammatical means such as **kategorija sostojanija** 'category of state', which expresses human states by an adverb and the experiencer in the dative case, e.g. R. *mne veselo* 'I am happy'; there is also the predicate adjective construction, e.g. *ja veselyj* ' I am happy'. The diffrence between the last two constructions and the emotion verbs is in the outward expression of the emotions. Wierzbicka's interpretations of the constructions with Russian emotion verbs are revealing:

(46)a. Ivan styditsja
'Ivan is "giving himslef" to shame (and is showing it)'
b. Ivan sku`aet.
'Ivan is "giving himself" to boredome (and is showing it.)'
c. Ivan grustit.
'Ivan is "giving himself" to sadness (and is showing it.)'
d. Ivan raduetsja.
'Ivan rejoices.'

The data show that the force-dynamic construal is a powerful as ever with the inchoatives following suite. What is particularly interesting is the fact that the inchoatives are the only intransitive predicates which predicate a property to the human Subject as if they have taken over the processual construal entirely, e.g. B. *gneven* 'angry > *razgnevja, razsărdja* 'make angry' > *razgnevja se, razsărsja se* 'become angry'; B. *vesel'* 'happy, joyful' > *veselja* 'make X joyful' > *veselja se*

'rejoice'; R. *rad* 'happy, joyful' > *radovat'* 'make X happy' > *radovat'sja* 'become happy'.

The derivational patterns also vary. In many cases the verbs denoting human states are derived directly from a root, which is a common Slavic root, the type that are referred to as **slova-korni** 'word-roots'. This type of derivation has been discussed above. When the roots are construed as processes they are most often zero marked[19], when they are conceptualized as inherent properties they are marked by adjectival suffixes such as *-n-, -ok, -av* and others. The root *bol-* has already been discussed; other examples include *gnev-, rad-, styd-, grust-*. The *e*-suffix structures the processual construal of human state as in R. *svirepet'*, B. *osvirepeja* 'become fierce'. The processual construal is most common with socially defined states such as R. *bogatet'*, B. *bogateja*, 'become rich', R. *bednet', bedneja* 'become poor'; with mental states, R. *umnet'*, B. *umneja* 'become clever', although in Russian particularly, there is a cross-over between the *e*-suffix and the *i*-suffix. The only visual perceptional construal structured by the *e*-suffix is R. *mertvet'*, B. *mărtveja* 'look dead'.

Finally, various verbalizing suffixes capture the behaviour construal of human propensities as transitory predicates. To my mind, this is due to the way human beings experience other people's emotions, mental states, etc. The way to judge somebody's internal mental or emotional state is to externalize it through a kind of behaviour (see also the discussion about dispositions above). Such an explanation complements Wierzbicka's interpretation of emotional states as being externalized through emotion verbs in Russian.

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[19] The stem vowels *-e-* and *-i-* as in *bolet'* and *obez/bolit'* are often referred to as classifying affixes but from my point of view they have a semantic function since they distinguish intransitive vs. transitive predication.

Table 6.11: Human propensities (states) : physical states

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *bol-en* R. *bol'n(oj)*	*boli-* 'feel pain' *bolet'* 'feel pain'	*za/bole-e* 'become ill' *zabolet'*	*raz/bole-e* 'make X ill' *obez/bolit'* kill the pain	*raz/bolee se* become ill	*bol-e-duva* 'be sick for a long period *bolet'* 'be sick'
B. *zdrav* R. *zdarov(yj)*		*o/zdrave-e*	*za/zdravi-*	*za/zdravi se*	
B. *glad-en* R. *golod-n(yj)*		*o/gladne-e* 'get hungry' *iz/golodat'sja*			*glad-uva* 'be hungry for a long period' *golodat'*
B. *živ* 'alive' R. *živ(oj)*			*să/živi-* *o/živit'*	*să/živi- se* *o/živit'sja*	*žive-e* *žit'* 'live'
B. *mărtăv* 'dead' R. *mertv(yj)*	*mărtve-e*	*mărtve-e* *mertvet'* 'begin to look like dead'	*u/mărtvi-* *u/mertvit'* 'to kill'	*u/mărtvi(se)* *u/mertvit'sja* 'become dead'	
B. *gol* R. *gol(yj)* 'naked'		*o/gole-e* *o/golet'* 'become naked'	*o/goli-* *golit'-* 'make X naked or look like naked'	*o/goli se* *golit'sja* 'become naked'	
B. *bos* 'bare-footed'		*o/bosee* 'become barefooted'			

As with taste-related properties I am not certain that B. impersonal *boli* , R. *bolet'* 'feel pain' should be in the first column, since they designate an entirely internal state which cannot be 'observed' by an external observer.

Table 6.12: Human propensities (states): emotional states

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *vesel* 'cheerful' R. *vesel(yj)*		*veselet'* 'become merri(er)'	*veseli-* 'make X merry' *veselit'* 'make X merry'	*raz/veseli- se* *veselit'sja*	*veseli se* *veselit'sja*
B. *tăž-en* R. *grust-n-(yj)*			*na/tăži-* 'make X sad'	*na/tăži- se* 'become sad'	*tăži-*, *tăguva-* *grustit'* 'be, feel sad'
B. rad-ost-en R. rad			*radva-* R. *radovat'* 'make X happy'	*za/radva- se* *(ob)radovat'sja* 'become sad'	*radva- se* *radovat'sja* 'be happy'
B. *gnev-en* B. *sărdit* R. *serdit-(yj)* 'angry'			*(raz)gnevi-* *(raz)sărdi-* 'make X angry'	*raz/gnevi- se* *(raz)sărdi- se* 'become angry'	*gnevi- se,* *sărdi- se* *serdit'sja* 'be angry'
B. *skuč-en* R. *skučn(yj)*					B. *skučae-* R. *skučat'* 'be bored'
B. *sram-en* R. *styd-n(yj)* 'shameful'			B. *za/srami-* R. *stydit'*	*za/srami- se*	B. *sramuva- se* R. *stydit'sja* 'be ashamed'
B. *gord* R. *gord(yj)*		*pogordet'*(coll)			B. *gordee- se* R. *gordit'sja*

'proud'		'become proud'			'be proud'
B. *zlob-en* 'spiteful' R.zlob-n(yj) R. *zl(o)*			*o/zlobi-* 'make X feel spite' R. *o/zlobit'* 'make X feel' spite' *zlit'* 'make X angry'	*o/zlobi- se* 'become full of spite' *o/zlobit'sja* become furious spiteful *zlit'sja* 'feel anger towards'	*zlobee-* 'act in a spiteful way' R. *zlobit'sja* zlobstvovat' 'feel, show spite'
B.mil R. *mil(yj)* 'dear, loving'			*u/mili-* 'make X feel mercy' *u/milit'*(arch)	*u/mili se* 'start to feel mercy' *u/milit'sja*	*mile-e* 'act in a merciful way' *milva-* 'caress' *po/milva-*'to pardon' *pomilovat'*
B. *svirep* 'fierce' R. *svirep(yj)*		*o/svirepe-e* 'become fierce' *svirepet'*			*o/svirepe-e* 'act in a fierce way'
B. *krot-ăk* 'calm, quiet' R. *krotk(ij)*			*u/kroti-* 'make X quiet, calm, timid' (tr.) *ukrotit'*	*u/kroti- se* become quiet, timid, calm *ukrotit'sja*	*krot-uvam* 'act in a quiet manner' *krotni-*'stand or sit quietly'

Table 6.13: Human propensities: socially-defined states

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *bogat* R. *bogat(yj)* 'rich'		*bogate-e* *bogatet'* 'become rich'	*o/bogati-* *o/bogatit'* 'make rich'	*o/bogati se* *o/bogatit'sja* 'become rich'	
B. *beden* R. *bedn(yj)* 'poor' R. *skudnyj*		*bedne-e* *bednet'* 'become poor' *oskudet'* 'become meager'	*o/bednit'* 'make X poor'		

Table 6.14: Human propensities: mental states

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *um-en* 'clever' R. *umn(yj)*		*(po)umne-e* 'become clever(er)' *umnet'*			*umničat'* 'show how clever X is'
B. *glup-av* 'stupid' R. *glup(yj)*		B. *(o)glupe-e* R. o/*glupet'* 'become stupid'			R. *glupit'* 'act stupidly' or 'be stupid'
B. *tăp* 'stupid' R. *tup(oj)* metaphorical from tup(oj) 'blunt'		*tăpe-e* 'become stupid' *o/tupet'*	*za/tupit'* 'make Xdull,stupid'	*za/tupit'sja* 'become stupid'	*tăpee* 'be bored'

B. *xităr* R. *xitr(yj)*		*(iz)xitre-e* 'become dishonest' *xitret'* 'become cunning'			*xitre-e, xitruvam* R.*xitrit';xitrovat'* 'act in a dishonest way', 'be dishonest'

Finally, we have come to the semantic class of gender properties. In Stassen's adjectival hierarchy, which structures the domain of property predicates, the class of gender predicates and the class of material predicates occupy the 'final' region of the property subdomain before it 'turns into' or connects to the subdomain of objects. Obviously, I am using a linear metaphor to refer to the subdomains of conceptual space (see Chapter 2 for the description of conceptual space as an inventory of functional structures and their relationships to each other) in an attempt to express the idea of connectedness among conceptual structures, which is also reflected in linguistic structures. In Chapter 1 I introduced Stassen's explanation for the choice between verbal and nominal encoding of intransitive predication. I shall briefly summarize it here again to provide the immediate context for the discussion of gender predicates below.

According to Stassen (1997) the choice between verbal and nominal encoding depends on the application of the Permanency Parameter. If the property assignment is viewed as permanent, inherent, characteristic, the nominal strategy is used. If the property assignment is viewed as non-permanent, contingent, the verbal strategy is used. It follows from the nature of the parameter that not all property concept words in a language will be equally susceptible to an encoding switch which is monitored by this parameter. For example, a property-concept word, which denotes a permanent

quality such as 'wooden' or 'silver', is unlikely to be verbally encoded, while items which indicate mental or physical states such as 'angry' or 'glad', or 'thirsty' would lend themselves to verbal encoding. As a result, Stassen predicts that only a small subset of the property-concept words in a language will be able to be affected by this type of switch encoding, i.e. the ones which can be given both a permanent and non-permanent interpretation (e.g. good, strong, wet).

I have already shown that permanent properties such as B. *leden*, R. *ledjanoj* 'icy' can be verbally encoded. It can be argued that the Bulgarian verb *ledeneja* 'be icy cold' does not assign the permanent property 'icy' but the contingent property 'cold'. However, the same argument should hold for the nonverbal (nominal)[20] predicative construction. The results of the interpretation test among native Bulgarians show that the verbal predicate *ledeneja* as in

(47) Pipni mu răcete! Napravo **ledenejat**!
'Touch his hands! **They are simply icy (cold)**!

predicates, albeit metaphorically, the properties of ice as much as the parallel nonverbal predication in (45)

(48) Pipni mu răcete! **Te sa ledeni**
"Touch his hands! **They are icy (cold)'**

The informants used the above construction as the closest one to interpret the meaning of the sentence in (47).

Similarly, the gender concepts in Table 6.15 which, in fact, in Bulgarian are nouns, can be construed as transitory primarily in two ways: as acquiring properties

[20] Stassen considers the adjective predicate constructions with the copula as nonverbal encoding of property predication.

characteristic of the respective gender, i.e. processual, and as acting in a way associated with a gender, i.e behavioural. For example, R. *muž* 'man' derives the verb *vozmužat'* 'become, look and behave like a male adult' or B. *moma* 'young woman ready to be married' derives the verb *momeja (se)* 'look or acts like a young woman ready to be married'. In other words, it is not so much the permanency of the property that determines whether it can be verbally or nominally encoded. The verbal encoding is a consequence of a construal operation on part of the speakers of a language. If a property can be 'seen' and is 'seen', i.e. conceptualized as transitory in one way or another, it will shift closer to the prototype for predication, i.e., the verb and will be encoded verbally. Such a shift is often accompanied by a change in the truth-functional semantics of the predicate, but this is secondary[21].

As has already been suggested in previous analyses above, the construal of properties as transitory predicates is done on the three levels of categorization discussed in Chapter 2. The basic level of construals of properties as transitory predicates contains the various types identified so far in the present study, e.g. the behavioural construal, the processual construal, the visual perceptual construal, etc. This is the level at which these construals, or more precisely the verbs that they are encoded by, parellel syntactic constructions such as 'become + property', 'be seen as + property' or 'act like + property'. Below this level, at the subordinate level, these verbs differ in the specifics of detail compared to their parallel predicate adjective or nominative constructions. For example, the verb B. *ergenuvam* "live, behave in a way typical of a bachelor' contains many more details such as 'go partying, having no

[21] Stassen himself provides a description which comes very close to my understanding of the issue. He writes that if the property assignment is *viewed* as 'non-permanent', the verbal strategy is used. However, subsequently he focuses again on the property itself rather than on the way it is seen, i.e. construed by the speaker. Ultimately, the differences in the two approaches are merely differences in perspective.

domestic obligations, etc.' compared to the more schematic construction *săm ergen* 'be a bachelor'. Finally, at the highest level, the superordinate level, all we can say about these predicates is that they are transitory.

Table 6.15 also shows some other nominal concepts, which seem to structure an oppostion between human kind and animal kind and living styles associated with one or the other, e.g. R. *zver' > zveret', o/zveret'* 'become, act like an animal', B. *skot* 'domestic animals, cattle' > *oskoteja* 'live like an animal'. In fact, which properties associated with objects, humans and animals can be verbalized is a highly idiosyncratic matter. In Russian and Bulgarian manhood can be seen as a process of acquiring certain properties, but womanhood is not. In Bulgarian what is verbalized is the external appearance or behaviour of a young woman ready to get married, e.g. *momeja (se)* 'look and act like a young woman ready to get married'. However, in Polish there is a verb *niewieścieć* 'become or act like a woman'. Yet, once such a property has been verbalized, its motivation is not opaque.

Table 6.15: Gender, humans and animals

Property	Perceptual construal	Processual construal	Force-dynamic construal	Inchoative construal	behaviour construal
B. *măž* 'man' R. *muž*		*văz/măže-e* 'become a male adult' R. *vozmužat'*			
B. *žena* 'woman'					
B. *ergen* 'bachelor'					*ergen-uvam* 'act like a bachelor'
B.moma					*mome-e- se*

'young woman'					'act like a girl ready to get married'
B. *sin* R. *syn* 'son'			*o/sinovi-u/synovit'* 'to adopt a child'	*o/sinovi- se*	
B. *siromax* 'a poor man'		*o/siromaše-e* 'become poor'			
B. *sirota* 'an orphan' R. *sirota*		*o/sirote-e* 'become an orphan' *o/sirotet'*	*osirotit'* 'make X an orphan'		
B. *zvjar* 'a fierce animal' R. *zver'*		*o/zvere-e* become fierce like an animal' *o/zveret'*			*zveri- se* 'behave like a wild animal
B. *skot* 'domestic animals,cattle' R. *skotina* cattle'		*o/skote-e* 'become like an animal'		*oskotinit'sja* (pej)	*o/skote-e* 'live like an animal
B. *čovek* R. *čelovek*			*očoveči-očovečit'*	*očoveči se*	

Chapter 7
Conclusion

The story of verbal property predication has come back to where it started. Stassen (1997) claims that human propensities are the only subclass of properties which can be verbally predicated in Russian. According to his adjectival hierarchy,

human prop > physical properties > dimension, colour > value, age, form > material, gender

the further to the right a category is, the less likely it is to be encoded verbally; therefore, colour properties are unlikely to be verbally encoded and concepts related to permanent properties such as 'material' and 'gender' cannot be verbally encoded.

I believe I have provided enough evidence that various semantic subclasses of properties can be verbally encoded in Russian and Bulgarian. The different results come from the different perspectives in the selection of the data. When analyzing property predication Stassen focuses exclusively on morphological inflections, as he defines predication in terms of **inflectional constructions** (subject and/or object agreement, tense-aspect-mood inflection, etc.). However, predication as well as reference and modification are pragmatic (communicative) functions. Inflections only partially define a propositional act function; they are what Croft (2001) calls 'behavioural potential of a stem in a particular syntactic role'. But inflections are not the only markers of predication. In fact, they come 'last' in the prototypical structure of Slavic verbs, if we subscribe to the principle of iconicity in language. What comes 'first' is the conceptualization of objects with which we interact and the events we construe as a result of this interaction. I have shown that there are **derivational**

morphemes which place a lexical root denoting a property in the function of predication: the *e*-suffix and other verbalizing suffixes discussed in Chapter 6. In Slavic languages construals are signalled by overt derivational morphology, which marks them as belonging to the class of unmarked verbs. However, I have argued that intransitive deadjectival verbs when marking the perceptual and behavioural construals are not prototypical verbs; they do not exhaust their behavioural potential, as one might say, i.e. there are various constraints on their forms. For example, there are constraints on their aspectual form: as a rule these verbs are imperfective. Deadjectival verbs marking the perceptual construal usually have a 3p subject, which is most often a non-living thing; reflexive passive/impersonal passive forms are often used; the place adverbial is obligatory. Semantically, they are more closely related to existential sentences or adjective predicate constructions, therefore, they occupy contiguous regions on the semantic map of property predication constructions (Chapter 4). In other words, derivational morphemes are also part of the family of constructions encoding property predication. They share the same cognitive base with the adjective predicate constructions but differ in degree of transitoriness and specificity (see Chapters 5 and 6). Although non-prototypical, intransitive deadjectival verbs are unmarked verbs. They are a result of conventionalized construals, which bring them closer to the prototype for predication, i.e. action verbs. Such construals are achieved by treating properties as 'appearance', 'acquisition' or 'behaviour'. All three are more transient phenomena than the mere ascription of a property at a particular moment or period of time.

On the other hand, both adjective predicate constructions and intransitive deadjectival verbs differ in degree of transitoriness from adjectives, when used as modifiers. In fact, adjectives when used in modifiers are inherent, permanent,

'timeless'. Therefore, the three types of constructions can be arranged on the scale of transitoriness presented below:

adjectives as modifiers	adjective predicates	intrans. deadj. verbs	action verbs
0%			100%

The results of the present study may suggest that the conceptual space for parts of speech should be kept as general as possible. Properties may be conceptually intermediate between objects and actions, but within their category it seems difficult if at all possible to build a detailed hierarchy of properties spread between objects and actions. The possibilities of conceptualization/construal of various properties as more or less transitory are numerous and difficult to predict from general principles. The conceptual map of property predication, which I have suggested in Russian and Bulgarian, reflects, on the one hand, the closeness of the reconceptualized properties to the semantic prototype for predication, i.e. unmarked verbs, and, on the other hand, its distance from the prototypical action transitive verbs. In other words, intransitive imperfective deadjectival verbs are away from the centre of the verbal category and much closer to the adjective predicate construction which is a marked combination of propositional act function and semantic class. Both deadjectival verbs and adjective predicates represent a marked combination of propositional act function and semantic class but through different means: the former are morphological and the latter are syntactic. These facts provide support for the cognitive linguistic idea that morphology, syntax and the lexicon represent a continuum in the form of generalized constructions rather than separate modules in the representation of all grammatical knowledge in the speaker's mind (see Chapters 2, 5 and 6).

I have also suggested that 'transitoriness' is the superordinate level of categorization of properties as predicates. The basic-level categorization is done on the level of the various more or less generalized construals: perceptual, processual, force-dynamic, inchoative and behavioural. The specific verbs with their specific details are subordinate-level categories.

As is usually the case with language, there is some truth in Stassen's claim about verbally encoded properties, and the facts that underlie such 'truth' are the facts that describe prototypes. Prototypically, in a neutral fashion, properties in Slavic languages are predicated through the predicate adjective construction. Whether it is viewed as verbal or nonverbal predication is not of significance to the present study. What is of significance, though, is the presence of deadjectival verbs derived from property words, i.e. adjectives, which also structure the semantic map of intransitive property predication in Russian and Bulgarian. As predicted by Stassen's research, they predominantly capture the processual construal 'coming to possess a property, acquire a property' which he refers to as the Ingressive Parameter. However, what has remained unnoticed is the perceptual construal or more precisely the visual-perception construal of colour predicates. The adjectival root or stem predicates the property while the derivational suffix marks a degree of transitoriness achieved by evoking the speaker/observer as a more or less overt participant in the scene or the situation in which the object and the property are framed. So, in a way Stassen is right - what is transitory is not the property, it is the perception of the property by the speaker/observer as flitting, momentary or subjective.

Colours, being entirely visually perceived, can be easily verbalized as a result of a semantic shift or construal which involves adjustment of their semantic characteristics. Strictly speaking, the construal involves readjustment of the

perceiver/conceptualizer rather than the perceived property. The meaning of ascribing a property remains but in addition there is the presence of the concept of a scene observed from a distance by an observer. In other words, if adjective predicates with the copula *be* are maximally schematic and general, deadjectival verbs are richer in specificity; they have more details in the conceptualization of the scene in addition to the property itself, e.g. the observer, his position in relation to the object, his perception of the property of the object, the existence of the object in a specific location. That is why previous research (Arutjunova and Širjaev 1983) has identified a descriptive sense of colour verbs and an existential meaning. Similarly, in the translation experiment some of the colour verbs were translated with existential *there*-constructions in English and some with verbs such as *gleam*, *shine*, etc. focusing on the descriptive component and its impact on the perception. In addition, Israeli (1998) proposes the deictic feature of 'distance' between the speaker and the described object. The present study suggests that the meanings of colour predicates are all grounded in the same image schema or Idealized Cognitive Model, which has been referred to as the **scene**. The different construals select different elements that the scene is composed of as focal points or profile. In other words, the different constructions, e.g. adjective predicate constructions and their parallel deadjectival verbs, profile different aspects of the same objective reality which is the object of conceptualization and linguistic expression. The cognitive process of figure/ground selection is most probably responsible for this. It is quite possible that there are other languages in the world with the visual perceptual construal, which is an issue for further typological research.

The other semantic subclasses of properties demonstrate predominantly a processual or a force-dynamic construal of properties as transitory predicates while

the perceptual construal becomes less common. But they 'allow' what I have termed a **behavioural** construal, i.e. act like X, where X is the property possessed by the thing that acts. The specific details of such a conceptualization are unpredictable, i.e. language-specific and property-specific but motivated. Very often they involve metaphorical transfer from one domain to another, e.g. from 'size' (B. *goljam* 'big') to socially-defined values such as 'importance' as in B. *golemeja (se)* 'act importantly'.

However, the adjective predicates and intransitive deadjectival verbs are not synonymous. The former are complex schematic constructions, the latter are bound, complex and only partially schematic (Chapter 6) as they have more details from the scene frame and it is impossible to predict which property will lend itself to which construal. However, once the construal is achieved, it is motivated. These construals are language-specific, property-specific and conventionalized.

Being language-specific conventions it is not surprising that verbal colour predicates cause a lot of difficulty for translators into languages which lack verbal colour predicates. The problem is especially well described by Vera Rich who translated the poem "Słuckija Tkačixi" (The Weaver-Women of Słucak) by the Belarusian poet Baxdanovič. She focused primarily on the experiential construal of colour properties.

> '...not all is easy. In particular, in "Słuckija Tkačixi", one has to deal with the lack of what I call intransitive verbs of state of colour. English does possess a few transitive verbs of colour: one may black one's boots, whiten one's tennis shoes, redden one's lips, gild the lily-or even "green" one's politics. It has also some intransitive verbs of change of colour; one can redden with anger, or whiten with fear, while one's hair greys, and one's manuscripts yellow with age. But there are no verbs which, in a single word, indicate that something is

> of a specific (and usually conspicuous) colour. Either one has to use the verb 'to be' plus a colour adjective...or else a more forceful verb appropriate to that colour: 'gleam white', 'shine gold, loom dark', and so on.'

Further on, discussing specific verses, she points out to the two different senses of the verb derived from the adjective *sin-* 'blue: a) become (temporarily) blue in reference to snow, which can be rendered in English by the non-existent transitive verb *to blue* as verbs of becoming a particular colour can exist in English, and b) shine with azure. This is the really problematic translation.

> 'What Baxdanovič is saying, in effect, is that when the women glance out of the windows, the blueness of the cornflowers become piercingly and poignantly apparent. The cornflowers not simply "are" blue, they are, as it were, shouting their blueness to the high heavens.'

The interpretation that Rich gives to these single-word property predicates in Belarusian contains three important elements: the participant(s) observing the scene, i.e. the women weavers, the colour of the object(s) contained in the scene, and the strong appearance of the colour.

Another more practical area, one which could test the validity of the present study, is teaching Russian (or Bulgarian) as a foreign language. The derivational patterns which mark the various construals have a low level of predictability, but there is at least some; that is why they are partially schematic. If a pattern is introduced at the basic level of categorization, i.e. the various possible construals of properties as transitory in addition to the specific meanings of the verbs, memorizing and use may prove easier.

Finally, the present study may look like recasting old ideas about well established facts in new clothes. However, given a new perspective from which well-

established old facts are observed, there is the possibility of seeing new connections between the facts. Just like colour verbs.

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Appedix 1

Elicitation test: Colour verbs

С кои от следните прилагателни за цвят можете да образувате глаголи със значението «изпъквам, забелязвам се с ..... цвят» като, например, в следното изречение «*още предишната нощ на север, в планините отвъд Филибелийското поле, аленеели пожарища.***
Запишете ги.**

ален	бял	черен
червен	зелен	син
жълт	сив	блед
пъстър	рус	шарен
мургав	кафяв	морав
кестеняв	румен	виолетов
бозав	лилав	пурпурен
оранжав	лазурен	резедав
рижав	алест	кремав
пембен	бежов	светъл
тъмен	ясен	розов

Interpretation test 2 Verbs of perception
Приемате ли за възможни следните изречения? Перифразирайте подчертаните глаголи в изреченията по-долу за да илюстрирате значението им

Да не би да си сложила захар в супата, та толкова сладни?

Лекарството ужасно горчи.

Виното киселее, сигурно е менте.

Чушлетата лютят ли?

Иди на балкона и пипни дрехите. Влажнеят ли?

О, колко грубеят ръцете ти! Сложи си крем.

Много ли тежи този куфар?

Той я целуваше пламенно, но устните й все така студенеха.

Прането като че ли мокрее, остави го на простора.

На лицето му нямаше никакъв израз, просто каменееше.

Пипни му ръцете! Направо леденеят.

Дворът на старата къща пустееше.

Appendix 2
English translation equivalents of Bulgarian colour verbs used in contemporary Bulgarian prose

ален

1.Знаело се вече, че е станало предателство, че много села нямало да въстанат и още предишната нощ на север, в планините отвъд Филибелийското поле, аленеели пожарища. Те се виждали като близки овчарски огньове…

… the mountains beyond the Philibe plain were/blazed red/crimson with fires…
……fire sites looked scarlet……
… there were crimson conflagrations …

бял

1. Под балкона на предния Карабельов двор гъмжеха жени. Бай Нако затипа на пръсти. Жените, дигнати из домовете си по бели фусти, белееха сега като видения в гробища. А. Страшимиров

The women, stirred from their sleep/driven from their homes, in their white gowns appeared as white apparitions in the graveyard…
looked white
The women […] stood white as if apparitions in the cemetery

2. Старата отдъхна и се извърна. Заптието се валяше по земята с окървавено лице. Исмаил ага го риташе. То си бе тяхна работа. Голяма варна яма белееше в двора. Откъм яхърите пристъпяха четири сенки и мъкнеха нещо след себе си.

The whitewash pit gaped colourless in the yard.
stood out white
There was an enormous white lime-pit in the yard.

3. Погледна към пътя за кола. Само с кола можеше да ги откара в Устина. Почти закрит от зеленината, пътят белееше тук-таме зад върхарите под бялото обедно слънце. Г. Стоев Цената на златото

Almost hidden/concealed by greenery, patches of the road were blazing white behind the tree tops under the white-hot midday sun
was winding white
… every now and again, behind the tree-tops, the road appeared white under the white sun at noon …

4. Наблизо едвам се белееше някаква стена, забелязваха се едвам очертанията на ниска прихлупена сграда,...Талев Железният светилник

One could hardly see a white wall and the outline of a low squalid structure/building/shack near by…
stood out white
Close by, a white wall was hardly visible …

5. Жената видя, че той беше млад човек, и млъкна смутена, а той, съживил се изеднаж, й се усмихна с розово лице, с разгърнати отпред гърди и зъбите му, отразили синкавия блясък на снега, ярко се белееха под тънките му руси мустачки. Талев Желязният светилник

…and his teeth, reflecting the icy glitter of the snow, appeared white under his thin blond moustaches.

gleamed white
… his teeth, reflecting the snow's bluish glow, appeared brightly white under his blond moustache.

6. Отдалеч градът се белее със своите минарета, струва се на човека, че е много близо, но това е оптическа измама.
3. Стоянов Записки
From afar the town appeared white with its minarets and you would (deludedly) think it was near (but that was an optical illusion).
looked white
The town, with its white minarets, is seen from afar; it appears so very close but this is an optical illusion.

7. Планината до едно място се зеленееше, но най-горните й върхове се белееха като патка, така щото, ако гледаше човек само наоколо си, в ниските места, вярваше, че е месец май, но щом метнеше поглед по-нагоре - дохождаше му на ума и за Никулден.
Захари Стоянов - Записки по българските въстания
The mountain was green up to a point then/further up its tops got as white as a goose wing. In this way if one kept…
looked green, stood out white
The mountains were green up to a point but its tops stood white, like a duck,

8. На пръв поглед това дори не бе и труп, а нещо като парцал. Черепът и ребрата се белееха на някои места покрити с островчета изгнила плът. Всичко това приличаше на домашно куче, смазано от каруца преди години, а след това вързано и влачено от нея.
Ради Радев Глад
At first sight it didn't look like a corpse but a cloth. Its skull and ribs shone white between the patches/shreds of decaying flesh.
on the face of it, looked, stood out white
At first glance this wasn't even a corpse, … The skull and ribs stood white against the occasional isles of decaying flesh.

10. Там, където има стени, върху картони лежат два тъмни силуета, между тях се белее спринцовка.
Румен Тодоров Безсмъртни произведения
On the cardboard near the erected walls, there were two dark human shapes with a white syringe between them.
stood out white
… two dark shapes lying on the card-board, with a white syringe in between the bodies.

11. На часа 5 вечерта генералът пристигна в Плевен. Една група русофили, предводителствувани от кмета Хайдутов и от Бръшлянова, излезе да го посрещне вън от града. Между тях се белееха чалмите на неколцина турци начело с мюфтията.
Among them one could see the white turbans of the couple of Turks lead by …
gleamed white
Among them one could see the white turbans of a few Turks led by the mufti.

12. Дядо ми минал две години след това през полесражението и го видял обсеяно със скелети. "Още им се белееха костите" – казваше той. Радев Строителите
You could still see their white bones, he would say.
gleamed white
The field was still white with their bones

14. Хи, хи, хи... - кискаше се Сенегалецът, облегнат на косата. Голямата му уста се беше разчекнала чак до ушите, а здравите му зъби се белееха на слънцето, сякаш беше лапнал буца сирене.
Чудомир Косачи
... his big teeth shone white under the sun, as if he was about to swallow a lump of white cheese.
looked white
... his strong teeth sparkled white in the sun as if he had a lump of white cheese in his mouth.

светъл
1. Излезе Стоян Глауш да прибере воловете - вече се свечеряваше.... Ведрото небе още светлееше, мек зелен блясък се преливаше по тъмното лице на земята, ала от пълните с вода трапища, от сенчестите долища се надигаше синкава, хладна вечерна мъгла.
The cloudless sky was still light, the dark face of the earth was cast in mellow green...
glimmer
The serene sky was still bright, ...

2. И низите с лански пипер си висяха там, както всякога - в дъжд и сняг поомекваха, а в слънце пак изсъхваха. Само на кьошето под широката стряха синята мазилка бе отпрана. За куршум бе много, за гюлле - малко. Отдолу **сивееха** камъните, червенееше пръстта... Генчо Стоев: Цената на Златото
You could see the gray stones underneath, the red soil...
look grey, look reddish
Underneath, the stones were grey, the soil was reddish.

син
1. Есен е вече, сякаш късна есен - и вали дъжд, и е студено. А беше светло, грееше слънце и небето синееше. ...Да нямаше Мичето поне надежда, да нямаше никаква надежда! О, тогава тя би се решила на нещо. Би свършила със себе си например.
Антон Страшимиров - Хоро
It was light, the sun was shining, the sky was blue...
stood out blue
... the sky was blue.

2. Христофор скочи от пружината и се закова - за разлика от глобуса картата го гледаше. Той също я гледаше, а след време, като си помислеше, защо ли му е трябвало да пита, но пък и как иначе - там горе на върха на картата синееше широка ивица. „Ами да - отговори баща му - България граничи с Румъния чрез...
...there, in the upper corner of the map, there was a wide blue strip...
... a broad blue ribbon ran across at the top of the map

stood out blue

сив

1. Неговата овца изтича, намести се в стадото, а стадото се изниза през вратника и заситни по края на шосето, защото там тинята бе по – мека и не набиваше копитата. Петър Маринков качи жена си в колата и окачи капистрите на ярема. Тримата мъже тръгнаха по средата на шосето.
Беше се съмнало, но полето сивееше още. Йордан Радичков - Свирепо настроение
Dawn broke but the field was still gray.
looked grey
… the field appeared grey still.

жълт

1.Бялата нощ жълтееше: страшно жълти, с раззинати уста, се издаваха простреляните черепи из грамадата трупове.
Антон Страшимиров – Хоро
The white night was yellow: the yellowish scare of bare teeth revealed the shot-through skulls in the heap of corpses.
The white night appeared yellow: frightfully yellow, …
had turned yellow
Антон Страшимиров - Хоро

2. На кръста му се жълтееше ръждив пищовец без кремик, а конят му, без седло, беше вързан за врата само с пояса му, който служеше наместо юзда.
Захари Стоянов - Записки по българските въстания
He had a rusty gun glistening on his waist…
gleam yellow
A rusty gun stood yellow on his waist …

кафяв

1. Макар че, стресна се Серафим, защо ли е толкова тихо, да не би пък... Тя, сградата, кафенееше сред снежинките в прозореца, на мястото си беше, но знае ли човек.
You could see the building, brown through the snowflakes behind the window/glass, it was there alright…
stood out brown
The building stood brown against the snowflakes in the window, it was where it was meant to be, but who could tell what was to come next.
2. До радиото (то упорито си кафенееше на мястото) да прескочи, канеха го да говори за една книга. Само той я бил чел. На текстовете на приятелката си да обърне внимание. Напоследък тя му се обаждаше с нарастваща неувереност в гласа, звучеше подплашено.
Чавдар Ценов - Щраусовете на Валс
He was/got invited to the radio station (a brown building still stubbornly (standing) in its place) to talk about a book.

пъстър

1. А те вече ги боядисваха, едни-еднички хриле останаха, пъстрееха, шаваха, мушеха се под чуждите хриле. Ония изляха върху им кутията и в настъпилата чернилка ясно чуваше как с ударите си собственото му сърце заковава

сандъка.
Чавдар Ценов - Удавената риба
And they were painting them already, the gills were the last to go, colourful, writhing, wriggling under the gills of the others.
?dappled
They were now painting them; there were only the gills left, variegated, stirring, poking under the gills of others.

тъмен
1. Той лежеше с глава в локва кръв, а до нея тъмнееше черна дръжка на забит в земята нож.
Антон Страшимиров – Хоро
His head was in a pool of blood, the dark spot of the black knife handle stuck out from the ground.
stood out dark
… his head was in a puddle of blood and next to it stood dark the black hilt of a knife stabbed into the ground.

2. Всичко тъмнееше вътре, с изключение на две-три места, гдето се виждаше още да блещука слаба светлина; хората си бяха легнали вече, защото наближаваше полунощ, а селото оставаше в разположението не немирните кучета, които се обаждаха оттук-оттам из селото, като нощна стража.
It was all dark inside, except for a couple of places where you could still see faint light…
darkish, looked dark
Everything was dark in there, except a place or two, where feeble light could be seen to flicker

червен
1. Първия и втория ден не се случило нищо особено, което дало още по-голям кураж на селяните. В разстояние на това време тия изпращали на два пъти хора до Пловдив да искат помощ за всеки случай, защото башибозушките байряци се червенеели вече около селото, на Власевец, Вълковици и Мишева могла; а на Блатото се виждал син байряк, около който се групирали стотина черкези, конница.
Захари Стоянов: Записки но българските въстания

Because the red dots of the flags were already scattered around the village…
The red flags dotted the fields around the village…
for red bashi-bozouk flags could be seen around the village …
flapped red
Захари Стоянов: Зап
2.Когато една сутрин Ева спеше под сянката на голям кедър, Сатанаил първица съзря, че тя е хубава. Защото копнееше по нея, но отбягваше да гледа тялото й. И сега я видя, Устните й се червенееха, а веждите засенчваха с теменужен мрак очите й.
Her lips were ripe-red, her brows cast a violet shadow over her eyes.
glow red
her lips crimson, her eyes in the shadows of violet darkness cast by her eyebrows …
3. Княз Дондуков се задаваше след тях, покрит с декорации, придружен от

европейските представители, между които се червенееше аленият фес на турския комисар. Симеон Радев: Строителите на съвременна България
Count Dondukov, his military decorations on display, followed them accompanied by the European representatives and among them the red fez of the Turkish official/major.
… among them there was the scarlet-crimson fez of the Turkish comissioner to be seen.
gleamed red

черен
1. Дядо ми млъкна и се замисли. Погледна през прозореца. Там, по-черни от мрака, чернееха кошерите, строени като шахматни фигури преди първия ход.
Е. Тонев е-2 – е-4
There, darker than darkness itself, the beehives stood black, lined up as chessmen before the first move.
There, darker than the darkness the beehives stood black, as if chess figures lined up before the first move.
stood out black, loomed dark

3. Човекът тъй си и потъна и върху снега остана да се чернее само омърляната му капица. Радичков Суматоха
The man sunk in the snow, his soiled hat remained the only dark spot on the surface.
stood out black
he man sank, as it were, and only his soiled cap remained, black against the snow.

4. Тръгнахме. Надясно се чернееха неприбраните още трупове. Те повечето бяха паднали по лицата си. Любопитството, примесено със състрадание и ужас, приковаваше нашите погледи към тях. Хр. Мирненски Очи
You could still see the black/dark shapes of scattered bodies to our right. Curiosity, mixed with sympathy and horror, compelled our eyes on them.
We left. The dead bodies to the right stood dark / black, most of them with their faces to the ground. Under command of curiosity mixed up with sympathy and horror, we couldn't take our eyes off them.
stood out black
We left. The dead bodies to the right stood dark / black, most of them with their faces to the ground. Under command of curiosity mixed up with sympathy and horror, we couldn't take our eyes off them.