

Active dictionary of the Russian language: theory and practice

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Abstract

The paper is devoted to the Active dictionary of Russian (ADR), which is currently being compiled under the guidance of Yury Apresyan at the Sector for Theoretical Semantics at the Russian Language Institute, Moscow. The paper consists of two parts: 1. General principles of ADR as formulated by Yury Apresyan in the Lexicographer/User Guidelines for ADR; 2. Description of color terms in ADR.

Keywords

Active dictionary, semantics, syntax, co-occurrence properties, color terms.

1 General principles of ADR

ADR is an innovative type of a dictionary which aims at combining the latest achievements of linguistic theory with a practical usefulness for a wide range of language learners. While retaining the best in the European tradition of active dictionaries, ADR is an attempt at its radical modernization in adherence to modern lexicographic principles (integral description of language and systematic lexicographic treatment of kindred linguistic phenomena), with the use of contemporary lexicographic technologies (language corpora and linguistic experiment) as well as the latest theoretical achievements in semantics, syntax, co-occurrence properties and lexicalized prosody. ADR's intended lexical coverage is about 10000 lexical items.

1.1 Semantics in ADR

Semantic innovations in ADR concern (a) semantic definitions; (b) semantic rules.

(a) As for the definitions, they have to meet five major requirements: they have to be systemic, comprehensive, non-tautological, explanatory of co-occurrence properties of lexical items (theoretical requirements) as well as intelligible to a non-professional user (practical requirement).

(b) Under certain contextual conditions, the prototypical meaning of a lexeme as reflected in its definition can undergo changes. Regular semantic modifications, which always occur in the same, strictly verifiable, contextual conditions and can, therefore, be accounted for by semantic rules, are termed different *usages* of a lexeme. These semantic modifications and rules (contexts and the corresponding semantic shifts) are described after the MEANING, in the COMMENTARY part of the dictionary entry.

1.2 Syntax in ADR

(a) Three-level theory of government. The main instrument of describing governing properties of predicates in ADR is Government Pattern (GP), a lexicographic construct, introduced in the Meaning-Text theory of I. Mel'čuk. The starting point for constructing a predicate's GP is its analytic definition, which allows one to establish the number of its semantic valencies. This number equals the number of variables A1, A2, ..., An, which are used in the analytic definition, which, in turn, is determined by the number of obligatory participants in the situation described by that predicate. Thus, in a situation described by the verb *pribivat' / pribit'* 'to nail / to nail down,' there are five obligatory participants: 1) the one who nails (A1, Agent), 2) the object which is being nailed (A2, Patient), 3) the object to which something is being nailed (A3, Patient / Place), 4) the object with the help of which something is being nailed (A4, Instrument), 5) the object which is used as means of fastening (A5, Means). Government is only postulated for cases when semantic valencies of a predicate are filled by words or groups of words that are also its syntactic dependents.

(b) Non-valenced syntactic properties of lexemes. Apart from GP, ADR records a number of non-valenced syntactic properties of lexemes, which trigger their ability or inability to occur in constructions of the so-called "small syntax." A group of Russian existential verbs can provide an example: *byvat'* 'to be,' *byt'* 'to be,' *vodit'sja* 'to be encountered,' *vozniknut'* 'to occur,' *vyjti* 'to happen,' *dut'* 'to blow,' *zavestis'* 'to appear, make one's home,' *imet'sja* 'to exist,' *najtis'* 'to be found,' *proizojti* 'to happen,' *slučit'sja* 'to take place,' *strjastis'* 'to befall,' *suščestvovat'* 'to exist,' etc. The meaning of such verbs is, as a rule, entirely included in the meaning of the subject, or is its pragmatic implicature, thus rendering their own semantic contribution to the meaning of a sentence negligible. The subject thus becomes the rheme of the sentence, as it contains the maximum new information and, as a result, the order of the subject and the predicate is inverted. Instead of the neutral Russian SV order it becomes VS.

1.3 Co-occurrence properties in ADR

ADR is primarily concerned with lexicalized co-occurrence properties, which in MTT are accounted for by the theory of lexical functions (LFs) of I. Mel'čuk and A. Žolkovskij. ADR uses a modified theory of LFs according to which the choice of a specific word L to fill out a given LF is not arbitrary, but motivated (although not one hundred percent motivated) by a shared semantic component in the lexical meanings of L and X. However, the complicated formal apparatus of LFs remains "behind the scenes"; it is used for a targeted collection of material and its systemic representation in ADR. LFs "surface" in the short semantic characteristics that accompany clusters of phrases in the CO-OCCURRENCE part of the entry. For example, in the entry *travma* 'trauma' (by M. Glovinskaja), MAGN and AntiMAGN would be referenced as 'degree' (*tjaželaja* VS. *ljogkaja* *travma* 'heavy VS. light

injury’); CAUS as ‘causing trauma’ (*pričinjat’*, *nanosit’ travmu* ‘to incur an injury’); LIQU as ‘liquidating trauma’ (*lečit’*, *zalečit’ travmu* ‘to treat/to heal an injury’); cf. (Mel’čuk & Polguère 2007), where LFs are also presented informally.

1.4 Lexicalized prosody in ADR

Prosody comprises a wide range of phenomena, out of which ADR is concerned primarily with those that pertain to phrasal stress as the most frequently lexicalized and therefore the most lexicographically interesting prosodic pattern.

Lexicalized phrasal stress is always in some way tied up to the communicative structure of the sentence. There are two groups of prosodic phenomena that are reflected in ADR: a) prosodic syntagmatics; b) prosodic paradigmatics.

a) Prosodic syntagmatics. Certain lexemes, while themselves not prosodically marked, do, at the same time, require prosodic accentuation of the words they are syntactically connected with. Thus, the particle *čto kasaetsja* ‘as for X,’ ‘what concerns X’ marks the NP to the right of it, on which it is syntactically dependent, as the contrastive rheme of the sentence, and requires its accentuation with a logical stress.

b) Prosodic paradigmatics. Prosodic paradigmatics deals with prosodic accentuation as a marker of differences among various lexemes of the same word or different usages of the same lexeme. Prosodic accentuation tends to mark the following categories of meanings: 1) negation; 2) quantification; 3) modalities of desire, necessity and possibility; 4) evaluation; 5) facts and opinions. The presence of one or more of those meanings in the semantics of a lexical item allows one to form expectations concerning its prosodic properties.

This phenomenon can be illustrated with two different lexemes of the word *pozдно* ‘late.’ *Pozдно 1* ‘late 1’ means ‘at a late time’ and can either bear phrasal stress or be prosodically unmarked, whereas *pozдно 3* which means ‘too late for doing X’ and combines the components of quantification, lost possibility, and evaluation, always bears the main phrasal stress.

2. Color terms in ADR

In this part of the paper, I would like to illustrate the above-formulated principles of ADR with the material of color terms. Color terms form a very tightly-knit semantic and lexicographic class, and they display a number of common properties which a systematic lexicographic description allows to reveal. Color terms have been extensively researched in linguistics, and to an extent, semantic principles of their description in ADR are based on Anna Wierbicka’s classical treatise (Wierzbicka 1990:99-150). Many important guidelines to the MTT treatment of color terms were also explicitly or implicitly formulated by I. Mel’čuk and Yu. Apresyan in the lexicographic entry of the word *cvet* ‘color’ in the Explanatory and Combinatorial Dictionary (Mel’čuk & Zholkovsky 1984:931-940).

2.1 Semantic properties of color terms

Within the semantic class of color terms, achromatic colors (*belyj* ‘white’ and *černyj* ‘black’) form an important, even though small, subclass. Due to their semantics in their first meaning, these two terms develop a whole range of meanings which are absent in other color terms.

2.1.1 Semantics of ‘white’ and ‘black’

Overall, the polysemies of ‘white’ and ‘black’ follow two general patterns: gradual semantic “voiding” typical of peripheral meanings, on the one hand, and development of strongly idiomatic peripheral meanings, on the other.

In their primary meaning, *belyj* ‘white’ and *černyj* ‘black’ are defined as ‘the color of milk’ and ‘the color of soot,’ respectively. Because of ‘white’ being the prototypical “light” color and ‘black’ being the prototypical “dark” color, they develop a number of idiomatic meanings where they are used to refer to light and dark, rather than white and black objects, respectively. Those meanings range from those closest to the prototype to much more semantically diluted and void ones.

The first group of meanings can be illustrated with such examples as *belye ruki* ‘white hands’ or *černye glaza* ‘black eyes,’ where the color terms mean ‘very light, close in color to white’ and ‘very dark, close in color to black,’ respectively. The second group of meanings can be illustrated with such examples as *belye figury v šahmatax* ‘white pieces in chess’ vs. *černye figury v šahmatax* ‘black pieces in chess’ or *belyj hleb* ‘white/wheat bread’ vs. *černyj hleb* ‘black/rye bread,’ where the meaning is defined relatively to its opposite in the implied dichotomy of ‘non-dark’ vs. ‘non-light.’ The actual color of chess pieces, bread, and many other objects described with the term ‘white’ can vary anywhere in the light parts of the color spectrum, in the same way as the corresponding objects described as ‘black’ can be color-wise anywhere in dark part of the spectrum.

One of these semantically “diluted” meanings, the terminological ‘white’ and ‘black,’ used for example, in biological, geological and other nomenclature, is inherently *comparative* in nature: ‘white’ is used to refer to objects that are lighter than other objects of the same type, whereas ‘black’ is used to refer to the objects that are respectively darker; cf. *belaja fasol’* ‘white beans’ (white, yellow, pinkish, brownish) vs. *černaya fasol’* ‘black beans’ (black, dark-brown, dark-red), *belyj čaj* ‘white tea’ (whitish, greenish, brownish) vs. *černyj čaj* ‘black tea’ (gray, brown), *belyj kvarc* ‘white quartz’ (greyish) vs. *černyj kvarc* ‘black quartz’ (dark brown), etc. Thus, one of the strategies in the semantic development of achromatic color terms is gradual semantic voiding, which takes place in two stages:

- 1) first, they become general designators of light and dark colors, respectively (as in ‘white skin,’ ‘black eyes,’ etc.);
- 2) further on, they become designators of non-dark and non-light colors, respectively, often in dichotomic oppositions where there are no other color options apart from those two (such as white-black chess pieces, white-black gold, white-black bread, etc.).

This semantic voiding and “abstractization” is paralleled by the development of negation component in the peripheral meanings of achromatic color terms. It is especially strongly

manifested in the polysemy of ‘white,’ as the prototypically least defined of colors (practically, the absence of coloration); cf. the explicitly negative meaning of the lexeme ‘white 4’, as in *belyj holst* ‘white canvas’:

- (1) *Belyj A1* ‘white A1’ (*belaja bumaga* ‘white paper,’ *belyj holst* ‘white canvas’) = ‘Object A1, on which people usually write texts or draw images, uncovered by text or images and therefore close in color to white.’

Negation is also apparent in other meanings of ‘white,’ such as in *Ego volosy stali uže soveršenno belymi* ‘His hair has already gone completely white’ (defined in (2)) or *Ego lico stalo soveršenno belym* ‘His face has gone completely white’ (defined in (3)):

- (2) ‘Having lost natural pigmentation and having acquired a color close to white due to an old age or for another reason’
(3) ‘Having lost natural coloration and having acquired a color close to white due to a strong and unpleasant emotion or sensation A2’ [usually about a person’s face or hands]

The second strategy, typical for the polysemy of ‘white’ and ‘black’ in Russian, is opposite to semantic voiding, and consists in the development of strongly idiomatic meanings containing positive and negative evaluations, respectively. If semantic voiding is triggered by the “real world” denotation of these color terms, their figurative meanings stem from their cultural connotations.

In Russian, as in other European languages, ‘white’ bears the positive connotations of light, goodness, purity, innocence, whereas ‘black’ carries the connotations of badness and dishonesty. These connotations give rise to multiple figurative meanings; to name a few examples of parallelism between ‘white’ and ‘black,’ let us consider the lexemes represented in the following examples: *Nel’zja delit’ mir na černoje i beloe* ‘One cannot divide the world into black and white’; *belaja magija* ‘white magic’ vs. *černaja magija* ‘black magic,’ *belaja zavist’* ‘white <non-malicious> envy’ vs. *černaja zavist’* ‘black <malicious> envy.’ In these essentially LF meanings of Bon and AntiBon, respectively, ‘white’ and ‘black’ are extremely lexically restricted. The meanings of corresponding ‘white’ and ‘black’ lexemes are presented in (4a) and (4b):

- (4a) ‘Morally good, devoid of any bad elements’
(4b) ‘Morally bad, devoid of any good elements’

While the definitions might at first glance seem redundant, I consider the components ‘devoid of any bad elements’ and ‘devoid of any good elements’ to be of paramount importance: they account for the “extreme,” “polar” associations of the white vs. black moral division. While something can be quite, but not entirely, good, or quite, but not entirely, bad, moral ‘whiteness’ or ‘blackness’ are decidedly non-gradual.

Another important figurative meaning of ‘white’ and ‘black’ based on their ‘good’ vs. ‘bad’ connotation is represented in phrases like *belaja zarplata* ‘white <legal> salary,’ vs. *černaya zarplata* ‘black <illegal> salary,’ *belyj nal* ‘white <legal> cash’ vs. *černyj nal* ‘black <illegal> cash.’ This meaning of corresponding ‘white’ and ‘black’ lexemes is explicated in (5a) and (5b):

- (5a) ‘Accomplished or functioning without breaking financial, primarily tax, laws and therefore not concealed’
 (5b) ‘Accomplished or functioning by breaking financial, primarily tax, laws and therefore concealed’

Apart from the ‘good’ vs. ‘bad’ connotation, this meaning stems from another connotation these two color terms possess, namely, that of light vs. darkness. ‘White’ in the meaning of ‘legal’ describes easily observable, unconcealed activities, that are exposed to the “light” of everybody's scrutiny, whereas ‘black’ in the meaning of ‘illegal’ describes hidden, unobservable activities that are deliberately left “in the dark.”

2.1.2 Semantics of other color terms in ADR

There are certain semantic tendencies that are characteristic of all color terms, and one of them consists in developing a meaning of sudden (and usually abnormal) facial color change, which is due to an emotional or physical factor. Adjectival lexemes with this meaning always produce a derivative verb with the meaning of facial color change. This meaning is found in all basic color term adjectives, such as *belyj* ‘white,’ *černyj* ‘black,’ *krasnyj* ‘red,’ *rozovyyj* ‘pink,’ *sinij* ‘dark blue,’ *zelenyj* ‘green,’ *seryj* ‘gray,’ *želtij* ‘yellow,’ *bagrovyyj* ‘purple’ and some others. All the color terms that are used to describe facial color change are in some way associated with the increased (pink, red, black) or decreased (yellow, blue, white, green) blood flow. Most colors tend to describe both emotion-associated changes and changes associated with the influence of physical factors, such as heat, cold, lack of oxygen, disease, etc. This is probably due to the fact that emotions themselves trigger physiological changes, e.g., fear acts as cold, anger acts as heat, etc., which is reflected in the metaphorical conceptualizations of these emotional states (consider classical work by (Lakoff and Johnson 1980) and a later treatise (Kövecses 2000)). Some colors, like *sinij* ‘dark blue’ tend to refer primarily to changes induced by physical factors. Interestingly, certain basic color terms are absolutely unable to develop this type of meaning; notably, it is impossible for *koričnevyyj* ‘brown,’ which can be used to describe a more permanent skin coloring. It is mostly impossible for the majority of “non-basic” color terms, derived from the names of corresponding objects, such as *sirenevyyj* ‘lilac,’ *limonnyj* ‘lemon’ and many others. The following generalized semantic form is proposed for this type of meaning, which can be ascribed to most of the basic color terms:

- (6) *A1 is of the color X because of A2* ‘A part of the human body A1 or a part of the body of the human A1 lost its natural color and acquired color X because of an emotional or physical state A2’ [usually about the face or hands]

This is essentially an LF meaning, as it refers to the symptom of the corresponding emotion or physical state. Syntactically, this adjectival lexeme, as well as its derivative verb possess the valency of cause: *belyj ot užasa* ‘white of terror,’ *belet' ot užasa* ‘to go white with terror, etc.’

2.2 Derivational properties of color terms in ADR

As mentioned before, most adjectival color terms derive a verb with the meaning of ‘to acquire color X.’ This verb has, in its turn, multiple meanings. The typical polysemy of such verbs in Russian is as follows (it is by no means exhaustive, since many verbs have individual additional meanings):

X-t' 'to acquire the color X, to X-en':

1. 'to acquire the color X because of factor A2' [about objects]: *Jabloki krasneli na solnce* 'Apples were reddening in the sun'
2. 'to acquire facial or bodily color X because of a physical or emotional factor A2' [about people]: *Ego lico pokrasnelo ot styda <ot žary>* 'His face reddened because of shame <heat>'
3. 'to appear X-colored to an observer': *V pole krasneli maki* 'literally: Poppies were reddening in the field; Poppies were showing red in the field'

In their second meaning, that of emotion-induced facial color change, these de-adjectival verbs have been extensively lexicographed in the following sources: Iordanskaja's lexicographic entries of emotion words (in Melčuk & Žolkovsky 1984), (Iordanskaja & Melčuk 2007:338-340) (as Sympt Excess^{color} and Sympt STOP^{color} LFs) , as well as in (Iordanskaja & Paperno 1996).

The third, stative, meaning of these verbs is specific to the Russian language. In English, the verbs with the primary meaning of color change, such as *to whiten*, *to blacken*, *to redden* can only be used to describe processes. This specific meaning has been previously referenced in linguistic literature (Yu. Apresyan 1995:643, Yu. Apresyan 2000:229). Yury Apresyan formulated certain important properties of verbs denoting perception of colored objects, namely:

- 1) they all contain a reference to an outside observer, different from the speaker; thus, phrases like *??Moe telo belelo v temnote* 'My body was showing white in the dark,' are impossible or extremely awkward, while phrases like *Ee telo belelo v temnote* are perfectly possible 'Her body was showing white in the dark.'
- 2) the visible object cannot be human (it can be part of a human body); thus, phrases like **Marija belela v temnote* 'Mary was gleaming white in the dark' are impossible.

ADR approach has allowed us to make further adjustments to the linguistic treatment of this group of verbs. This meaning is present in a large group of color change verbs including but not limited to *belet'* 'to turn/appear white,' *černet'* 'to turn/appear black,' *krasnet'* 'to turn/appear red,' *želtet'* 'to turn/appear yellow,' *zelenet'* 'to turn/appear green,' *sinet'* 'to turn/appear dark blue,' *golubet'* 'to turn/appear light blue,' *rozovet'* 'to turn/appear pink,' *bagrovet'* 'to turn/appear purple,' *pestret'* 'to appear colorful, to make splashes of color' and some others. In their stative meaning, most of these verbs have reflexive counterparts with the same meaning; cf. *belet'sja* 'to appear white,' *černet'sja* 'to appear black,' etc.

Below are some examples:

- (7) *Na gorizonte beleli bašni zamka*
On horizon whitened towers castle-GEN
'The castle towers gleamed white on the horizon'
- (8) *V temnote <skvoz' tuman> beleli stvoly berjoz*
In darkness whitened trunks birch trees-GEN
'Birch tree trunks shone white in the darkness <through the fog>'
- (9) *V trave beleli romaški*
In grass whitened daisies
'Daisies were shining white in the grass'

- (10) *Na stole v solonke belela sol'*
 On table in saltbox whitened salt
 'The salt was gleaming white in the saltbox'

The definition proposed for this group of verbs in their stative meaning by Yu. Apresyan in Lexicographer/User Guidelines for ADR is as follows:

- (11) *AI X-eet* 'A1 is X-ing' 'A1 appears X' 'Object A1 of color X is visible to an observer from some distance'

However, the examples above and general corpus study of this class of verbs suggest that the meaning might be formulated more precisely. It seems that the distance is not a necessary pre-requisite for using a verb of this group; in fact, sentences like *Na stole v solonke belela sol'* 'The salt was gleaming white on the table' or *Na tarelke želteli slivy* 'Plums were glistening yellow on the plate' do not point to an observer who is distanced from the object. There are, however, certain situational requirements which have to be fulfilled to justify the use of a verb of this type.

First of all, it is, as formulated in Yu. Apresyan's definition, the presence of an observer. Secondly, as pointed out by Yury Apresyan, the object has to be non-human. This point can be further elaborated upon, as the object cannot be an animal, either; phrases like **Sobaka belela v temnote* 'The dog was shining white in the dark' are equally impossible. At the same time, phrases describing insects, such as *V trave beleli svetljački* 'Fireflies were glowing white in the grass' are considerably better. One might be tempted to say that the ability to co-occur with such verbs is triggered by the degree of animateness – the less animate, the better co-occurrence; however, sentences referring to cars or airplanes appear pragmatically awkward: *Na doroge krasneli mašiny* 'Cars were showing red on the road' or *V nebe černeli samolety* 'Airplanes were showing black in the sky.'

It seems that the second important requirement is that the object be *stationary*; therefore, the best candidates for these contexts are the prototypically immobile objects such as buildings or plants. People, animals, means of transportation are not typically perceived as immobile elements of the landscape; on the other hand, insects sometimes can be, as well as body parts or even whole bodies.

Thirdly, the verbs of this group are stylistically marked, namely, they can only occur in texts of narrative register.

Fourth, the object ought to be visible to an observer *due to its color*. Let us explain this last statement. These verbs, though essentially of an LF type, do add some semantic flavor to the general existential/locative proposition. If the speaker, instead of saying 'There was salt in the saltbox' or 'The salt was in the saltbox' chooses to say 'The salt was gleaming white in the saltbox,' (s)he adds certain information to the utterance.

Note that all the examples include a reference to the place where the object is located. Though this reference is a requirement for existential and locative sentences, in the case of these verbs the requirement is more specific. Consider the following pragmatically awkward phrases:

- (12) ?? *V cvetoch nom magazine želteli hrisantemy*
 In flower shop yellowed chrysanthemums
 ?? 'Chrysanthemums were shining yellow at the florist's'
 (13) ?? *V lesu zeleneli derev'ja*
 In wood greened trees
 ?? 'Trees were gleaming green in the wood'

What makes these sentences pragmatically inappropriate? It seems that the requirement for using verbs of this group is that they should refer to objects which are visible against some contrastive background (as 'in the darkness') or through an obstacle (as in 'through the fog'), and visible due to their color. Sometimes, the objects might be at a distance from the observer (e.g., 'Towers were shining white on the horizon'); sometimes they are close (e.g., 'Birches were shining white in the dark'); what matters, is the background or obstacle against or through which they are seen due to their color. If this condition is absent, as in (12), where 'the florist shop' is not a *background*, or (13), where the green 'wood' is not a *contrastive* background for trees, their use becomes impossible. Thus, the corrected definition for this group of verbs as proposed for ADR sounds as follows:

- (14) *A1 X-eet v A2* 'A1 is X-ing in A2' 'A non-moving object A1 of color X is visible to an observer against a contrastive background or through an obstacle A2'

This definition includes an extra valency – namely, that of a background (obstacle), which is syntactically expressed in a variety of ways. The more traditional locative expressions include the prepositional noun phrase with 'in' + PREP, as in *v temnote* 'in the dark'; there are also ones that point to an obstacle, as in *skvoz' tuman* 'through the fog,' *za elkami* 'behind the fir trees.'

2.3 Syntactic properties of color terms in ADR

Color terms display a number of uniform syntactic properties that often go unnoticed by traditional dictionaries. Due to space limitations, only one of those properties, namely, the construction with the instrumental case in the meaning of 'part' is going to be described here. It possesses, however, a certain degree of universality in relation to Russian color terms and should therefore be recorded in their ADR entries. At least three groups of color terms, namely, adjectives of color, verbs of color change in their second meaning (change of facial color due to an emotional or physical factor) and verbs of color change in their stative meaning (being observable) can occur in the construction with instrumental in the meaning of 'part':

- (15) *Ona byla polna i bela licom*
 She was plump and white face-INSTR
 'She was plump and white in the face'
 (16) *Ona pobelela licom*
 She whitened face-INSTR
 'Her face went white'
 (17) *Cerkvi beleli kolokol'njami*
 churches whitened bell-towers-INSTR
 'Churches were gleaming with their white bell-towers'

Similar examples can be given for other color adjectives and verbs; cf. *krasnyj licom* ‘red in face,’ *černet’ licom* ‘go black in the face,’ *zelenējuščie lužajkami londonskie prigorody* ‘London suburbs gleaming green with lawns,’ etc. This construction illustrates the phenomenon of splitting a semantic valency, in this case, the subject valency. While many verbs exhibit splitting, it has not been previously lexicographed for color verbs. As for the adjectives, the ability to govern an NP in the instrumental case is relatively unusual, and the fact that color adjectives possess it, is revealing. This syntactic ability of color terms to govern an NP in INSTR with ‘part’ interpretation might be rooted in the semantics of color. This construction describes the part of an object which is most noticeable due to its color. Color is, as noted in the above-mentioned description of the word *tsvet* ‘color’ in the Explanatory Combinatorial dictionary, a distinct visual characteristic. It is, one might add, one of the most striking and noticeable visual characteristics. And the fact that visual perception is the most important type of perception for humans might account for this special syntactic ability that color terms possess. After all, Russian does not have expressions like **nežnyj gosom* ‘tender in voice’ or **pušistyj volosami* ‘fluffy in hair,’ with auditory or tactile lexis. There are other, semantically similar classes of verbs, which possess the same syntactic property. These are verbs of ‘light’, such as *blestet’*, *sverkat’* ‘to gleam, to glitter,’ *sijat’* ‘to radiate light,’ *goret’* ‘to burn.’ Among their many meanings, there is a meaning in which they denote ‘being visible due to reflecting bright light,’ as in *Cerkvi blesteli kupolami* ‘Churches were glittering with their cupolas,’ where the same syntactic phenomenon is manifested, and for the same semantic reasons: the part of object which is most noticeable due to being the brightest, gets its own syntactic expression by splitting the semantic valency of the subject.

2.4 Co-occurrence properties of color terms in ADR

While color terms possess many noteworthy co-occurrence properties, perhaps their most interesting combinatorial characteristic stems from their obligatory correlation with a certain prototype. Each color correlates to an object in the real world which possesses this color in its purest form. Some of these objects are cross-culturally universal, which makes defining color terms possible (e.g., white is the color of milk, black is the color of soot, red is the color of blood, etc.), while others are culturally specific. In Russian, for example, the prototypical white objects, besides milk, are snow, cream, marble, pearl, sugar, and some others, and the word *belyj* ‘white’ co-occurs with the names of these objects in comparative constructions: *belyj kak sneg* ‘white as snow,’ *belee snega* ‘whiter than snow,’ etc. This property of color terms has repercussions on other linguistic levels as well: thus, color terms have adjectival synonyms derived from nouns denoting these prototypical objects, cf. *moločnyj* ‘milky,’ *slivočnyj* ‘creamy,’ *snežnyj* ‘snowy,’ *mramornyj* ‘the color of marble,’ *saharnyj* ‘the color of sugar,’ *alebastrovyj* ‘alabaster,’ etc. They also form compound color adjectives incorporating the name of the object and the correlating color: *moločno-belyj* ‘milky-white,’ *slivočno-belyj* ‘creamy-white,’ *snežno-belyj* ‘snowy-white,’ *perlamutrovo-belyj* ‘pearly-white,’ etc. All these properties apply to the majority of color terms, cf. the triads *krasnyj kak ogon’* ‘red as fire,’ *ognennyj* ‘fiery,’ *ognenno-krasnyj* ‘fiery-red,’ *černyj kak ugol’* ‘black as coal,’ *ugol’nyj* ‘coaly,’ *ugol’no-černyj* ‘coaly-black,’ *goluboj kak nebo* ‘blue as the sky,’ *nebesnyj* ‘the color of the sky,’ *nebesno-goluboj* ‘sky-blue,’ etc.

2.5 Polysemy of color terms in ADR

The last illustration of how color terms are treated in ADR is a synoptic outline of all the meanings of the word *belyj* ‘white,’ which, although not entirely applicable to other color terms or even to its closest counterpart and antonym *černyj* ‘black,’ still captures the general logic of the development of “color” semantics. The outline is presented below. In this outline, we can see the gradual dissolution of the prototypical meaning, via the meaning ‘light color’ (second block) and the meaning ‘devoid of natural coloration and therefore light’ (third and fourth blocks), to the meaning ‘non-dark’ (sixth and seventh blocks) and, finally, to the meaning ‘good’ (eight block). This development mirrors the increasing semantic bipolarity and the corresponding loss of gradability: while adjectives in the first three blocks are gradable (*Ee ruki belee moi*h ‘Her hands are whiter than mine’), starting with the fourth block they are decidedly non-gradable (**Èti griby belee teh* *‘These mushrooms are whiter than those’).

belyj 1 ‘the color of milk’: *beloje plat’je* ‘white dress’.

belyj 2.1 ‘of a color close to white’: *belye ruki* ‘white hands’.

belyj 2.2 ‘belonging to the race of people with a relatively light skin [often substantivized]’: *belyj čelovek* ‘white person’.

belyj 3.1 ‘having lost natural coloration and having acquired a color close to white due to a strong and unpleasant emotion or sensation’: *belyj ot straha* ‘white of fear’.

belyj 3.2 ‘having lost natural pigmentation and having acquired a color close to white due to an old age or for another reason’: *belye volosy* ‘white <gray> hair’.

belyj 4 ‘uncovered by text or images and therefore close in color to white’: *belyj holst* ‘white canvas’.

belyj 5 ‘characterized by natural lighting’: *belyj den’* ‘white <light> day’.

belyj 6 ‘starting the game of chess or checkers and having a lighter color than the pieces that do not start the game’: *belyj ferz’* ‘white queen’.

belyj 7.1 ‘having a lighter color than other objects of the same class or a white color’: *beloje vino* ‘white wine’; *belyj medved’* ‘white <polar> bear’.

belyj 7.2 ‘white <porcini> mushroom’ [substantivized]: *V ijune pojavilis’ pervye belye* ‘First white mushrooms <porcini> appeared in June’.

belyj 8.1 ‘morally good, devoid of any bad elements’: *belaja magija* ‘white magic’.

belyj 8.2 ‘accomplished or functioning without breaking financial, primarily tax, laws and therefore not concealed’: *belaja zarplata* ‘white <legal> salary’.

belyj 9 ‘related to the Russian counter-revolutionary movement whose aim was the restoration of monarchy’: *Belaja Armija* ‘White <counterrevolutionary> Army’.

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