# **Emotion and Inner State Adverbials in Russian**

Olga Boguslavskaya Russian Language Institute, Russian Academy of Sciences Russia Boguslavskaya.Olga@gmail.com

#### Abstract

We study a group of adverbials that are composed of a preposition and a noun denoting an emotion or an inner state, such as v jarosti 'in a rage', s udovol'stviem 'with pleasure', ot radosti 'out of joy', s gorja 'out of grief', na udivlenie 'to the surprise of', k dosade 'to one's disappointment' etc. Being collocations, they occupy an intermediate position between free phrases and idioms. On the one hand, some of them are simple adverbial derivatives of nouns and therefore inherit some of their properties. On the other hand, they may have specific properties of their own. Two types of properties of the adverbials are studied: the actantial properties in their correlation with the properties of the source nouns, and the semantics proper. At the end a case study of the adverbials of the gratitude field is given. We show that adverbial derivatives can be shifted in the dependency structure from the subordinate clause to the main one.

# 1. Introduction

We proceed from the obvious assumption that adverbial derivatives refer to the same situation as the source lexical unit (LU). This implies that, given the semantic structure with predicate P, our linguistic description should be able to produce a syntactic structure in which P is realized by means of an adverbial derivative of P and determine possible syntactic positions for LUs that correspond to semantic actants of P. And, the other way round, given sentences such as John replied by a nod and John nodded in reply, we should be able to discover that in both cases the semantic actants of 'reply' are 'John' and 'his nod'. Thus, our aim consists in describing semantic and syntactic properties of adverbial derivatives in their correlation with the source LU. For each predicate, we need to know its possible syntactic realizations (e.g. 'reply'  $\rightarrow$  to reply – in Igor Boguslavsky Universidad Politécnica de Madrid / Institute for Information Transmission Problems Spain / Russia Igor.M.Boguslavsky@gmail.com

*reply*) along with semantic modifications associated with them. For each syntactic realization, we should specify possible ways of valency filling of the LU. The main difference between this approach and traditional valency dictionaries is that we concentrate on adverbial derivatives of predicates in their correlation with the source LU unit and take into consideration a much larger range of possible realizations of their semantic actants.

We study a group of nouns that denote emotions and inner states (EIS nouns). They are often used in specific adverbial prepositional phrases – v jarosti 'in a rage', s udovol'stviem 'with pleasure', ot radosti 'out of joy', s gorja 'out of grief', na udivlenie 'to the surprise of', k dosade 'to one's disappointment' etc. The phrases usually mean that a person is in this state or that this state is the cause or a consequence of some other state or event. For brevity, we will call such phrases EIS adverbials.

Russian explanatory dictionaries usually treat EIS adverbials as free phrases and attribute all their peculiarities, if any, to specific properties of corresponding prepositions. For example, the recent Active dictionary of Russian (ADR 2014), which provides deeply elaborated semantic definitions, lists among the senses of preposition v 'in', sense v 4.1 which «is used to denote the state A2 of a person A1 or his relationship A2 with other people»: On byl v sil'nom razdraženii (v polnom izumlenii, v upoenii, v ekstaze). V jarosti pnul sobačonku. 'He was in a temper (in utter surprise, in ecstasy). In a rage, he kicked the dog'. Other detailed descriptions of semantics of Russian prepositions used in EIS adverbials can be found in Iomdin 1990-91, Iordanskaja-Mel'čuk 1996, Levontina 2004. However, even the most precise and detailed description of prepositions does not fully account for all peculiarities of adverbials. We intend to show that EIS adverbials manifest a number of features that are not derivable from the properties of prepositions or nouns alone but appear only in their combination. Special attention will be paid to semantic and syntactic properties of the adverbials.

In section 2 we will explain what we basically mean by adverbial derivatives and describe their certain properties relevant for our study. Section 3 will characterize EIS adverbials of different types. In section 4 we demonstrate a case study related to adverbials of the field of gratitude. We will conclude in 5.

# 2. Adverbial derivatives.

We consider EIS adverbials as adverbial derivatives of corresponding nouns. An adverbial derivative of lexical unit (LU) L is a LU or a phrase that has the same or a similar meaning to L and has an adverbial syntactic function, which means that it is primarily used as a verb modifier. For more details on syntactic derivatives in general and adverbial derivatives in particular we refer the reader to Boguslavsky 2014.

In Russian, there are three major types of adverbial derivatives: a) grammatical derivatives that can be derived from virtually any verb (deverbal adverbs, *deepričastija*); cf. (1a), b) lexico-syntactic derivatives (prepositional phrases) derived from nouns; cf. (1b), and c) lexical derivatives (adverbs); cf. (1c). The last two cases can be described as values of the lexical function Adv<sub>i</sub>.

(1a) Oni razgljadyvali kartinki, radujas' kak deti.

'they were examining the pictures rejoicing like children'.

(1b) Ja s bolšoj radostju prinimaju vaše priglašenie.

'I accept your invitation with great joy'.

(1c) Deti radostno prinjalis' narjažat' jolku.

'the kids merrily began to decorate the Christmas tree'.

Deverbal adverbs retain the lexical meaning and syntactic properties of the source LU to a greater extent than other types of adverbial derivatives. They serve to express a secondary predication attached to the main one. Their most salient feature is that their subject is always coreferential with the subject of the main clause and is elided from the syntactic structure. As a rule, prepositional phrases and adverbs also retain the lexical meaning of the source word, but they can manifest noticeable semantic modifications. As far as the actantial structure of adverbials is concerned, it is necessary to distinguish between three types of valency slots in the semantic definition of a LU depending on the syntactic position of the argument with respect to its predicate (Boguslavsky 2003)<sup>1</sup>. We call a valency slot of lexeme L ACTIVE if in the syntactic structure of the sentence it is filled by a word syntactically subordinated to L. Active valency slots are instantiated with syntactic actants. We call a valency slot PASSIVE if it is filled by a lexeme that syntactically subordinates L. Finally, we call it DISCONTINUOUS if there is no direct syntactic link between L and the word filling this slot.

To give an example, the valency slots of the verb *to precede* are active because in the proto-typical sentence

#### (2a) The conference preceded the workshop

its actants syntactically depend on the verb. However, if one compares (2a) with the sentence

(2b) *The conference was before the workshop* we will see that, from the purely semantic point of view, the preposition before denotes the same situation as the verb to precede - the situation of the temporal precedence of one event with respect to the other. This situation has at least two participants: an event that takes place earlier and another one that takes place later. These participants can be systematically expressed in a sentence with the given word and therefore the preposition before has the same semantic rights to have valency slots as the verb to precede. The only difference between these slots concerns their syntactic realization. In case of the verb, both slots are filled with phrases which are syntactically subordinated to the verb in the dependency tree (i.e. with the subject and with the direct object) and therefore they are active. With the preposition it is different: one of the slots is also filled with a subordinated NP (*before the workshop*) whereas the other is filled with a phrase which syntactically subordinates the preposition (the conference was before), which makes this slot passive.

Discontinous valency filling can be illustrated by quantifiers, cf. (3):

(3) All the papers [Q] were revised [P].

<sup>&</sup>lt;sup>1</sup> When we speak of syntactic positions of arguments with respect to predicates, we refer to syntactic positions of LUs that correspond to these arguments and predicates.

All has two valency slots, one of which (Q) is filled by the NP it modifies, and another one (P) – by a VP. Using the terms introduced above, Q is filled in a passive way (since *papers* subordinates *all* in the dependency structure) while P is filled in a discontinous way (while there is no direct dependency link between *all* and *were revised*).

As we will show below, EIS adverbial valencies can be filled in all three ways – actively, passively, and discontinously.

It is noteworthy that the passive valencies of adverbial derivatives can have two sources. If we denote an adverbial derivative as Adv(L), where L is the source lexeme of the derivation, then a passive valency may be determined, on the one hand, by the Adv component of this formula, and on the other hand – by the L part. The first case can be illustrated by the adverbial *vo sne* 'in one's sleep' (cf. (4).

(4) Vo sne on gromko stonal.

lit. in sleep he loudly groaned.

'he groaned loudly while sleeping'.

As any adverbial, it is a modifier, and hence the modified word (*stonal* 'groaned ') is its passive argument.

In the second case, a passive valency of an adverbial derivative corresponds to one of the valency slots of L. For example, in (5) *v* naka-zanie 'as a punishment' is subordinated to (= is a modifier of) a VP which denotes the punishment itself:

(5) V nakazanie ego lišili slova.

lit. in punishment him they.deprived of.word

'he was denied the right to speak as a punishment'.

While in (5) the syntactic governor (*lišili* 'they.denied') of the adverbial is an argument of L (*nakazanie* 'punishment'), in (4) the governor (*stonal* 'groaned') has nothing to do with the argument frame of L (*son* 'sleep').

## 3. Syntax and semantics of EIS adverbials.

The range of prepositions used for constructing EIS adverbials is rather wide: s (+Instr, +Gen, +Gen2<sup>2</sup>), ot (+Gen), iz (+Gen), v (+Loc), na (+Loc, Pl), na (+Acc), k (+Dat), po (+Dat). What strikes the eye is that the co-occurence of EIS nouns with prepositions is very selective. As is normal for collocations, even semantical-

ly similar nouns co-occur with different prepositions. The noun strax 'fear' combines with four causal prepositions - ot, *iz-za*, *iz* and *s* (+Gen or Gen2): *posedet' ot straxa* 'turn grey out of fear', skryt'sja iz-za straxa nakazanija 'escape for fear of punishment', soglasit'sja iz straxa pered oglaskoj 'agree for fear of publicity', ubežat' so straxa (so straxu) 'run away out of fear'. Of these four prepositions, bojazn' 'fear' does not co-occur with s (\*s bojazni). Užas 'horror' mostly co-occurs with ot (drožat' ot užasa 'tremble with horror' (lit. 'from horror')). The main causal preposition iz-za 'because of' occurred together with užas only twice in the 230 million-strong Russian National Corpus, although *užas* itself occurred more than 25,000 times. Panika 'panic' rarely co-occurs with ot (only 10 examples in the corpus), even rarer with iz-za (2 examples), and never with *iz*. What is typical for *panika* is an adverbial with v 'in' – v panike 'in panic' (600 examples among the 3,500 occurrences of panika in the corpus).

Below, we will first discuss the actantial structure of EIS adverbials (Section 3.1) and then we will make some remarks about their semantic properties (Section 3.2).

# 3.1 Actantial structure

Most EIS predicates have two valency slots: Experiencer, who feels an emotion or is in a certain state, and Cause of the emotion or state: father's rage, fear of spiders. The Experiencer slot is instantiated with a genitive NP (jarost' otca), a possessive adjective (naše gore) or certain adjectives with the quantifier meaning (vseobščee vosxiščenie 'general admiration; = everybody felt admiration'). The Cause slot is instantiated by a larger range of elements: different prepositions (*ot, s, pered, na* and others), the infinitive (strax byt' ubitym 'fear of being killed'), the genitive case (strax temnoty 'fear darkness'). instrumental of the case (vozmuščenie ego postupkom 'indignation at his behaviour', vosxiščenie ee krasotoj 'admirarion for her beauty'). There are some EIS nouns that have more valency slots, e.g. blagodarnost' 'gratitude' (who is grateful, to whom and for what)<sup>3</sup>, *obida* 'resentment' (who feels resentment, towards whom it is felt, and what caused this feeling).

<sup>&</sup>lt;sup>2</sup> Gen2 is a special case form proper for certain classes of nouns and opposed to Gen: cf. *so straxa* (Gen) – *so straxu* (Gen2)

<sup>&</sup>lt;sup>3</sup> More on the actantial structure of *blagodarnost*' in Section 4.

Now we will comment on the actantial structure of EIS adverbials.

**Experiencer**: The Experiencer slot of EIS adverbials is instantiated either in an active or discontinuous way. The active instantiation of the Experiencer slot has two variants:

(a) the form of the Experiencer is directly inherited from the source noun. Cf. *ego (naš, vseobščij) vostorg* 'his (our, universal) delight' –  $k \ ego \ (našemu, \ vseobščemu) \ vostorgu$  'to his (our, universal) delight'; *razočarovanie roditelej*<sub>Gen</sub> 'disappointment of the parents' –  $k \ ra$ *zočarovaniju roditelej*<sub>Gen</sub> 'to the disappointment of the parents'.

(b) the form of the Experiencer is specific for the adverbial. Cf. *strax*  $vragov_{Gen}$  'fear of the enemies' – *na strax*  $vragam_{Dat}$  'so that the enemies tremble with fear'. The adverbial requires Dat, while the source noun only takes Gen.

For some adverbials, the active filling of the Experiencer slot is obligatory: *k radosti <užasu, vozmuščeniju, zavisti> Ivana* 'to Ivan's joy <horror, indignation, envy>'- \*k *radosti <užasu, vozmuščeniju, zavisti>* 'to the joy <horror, indignation, envy>'.

Very often, the Experiencer is not connected to the adverbial by a direct syntactic link. In (6), the one who feels astonishment is the subject of the subordinating verb and therefore instantiates both the slot of the verb (*perestal* 'stopped') and of the adverbial. In the first case, the instantiation is active, and in the second – discontinuous.

(6) Ot udivlenija on perestal est'.

'he stopped eating from astonishment'

**Cause:** The Cause slot of EIS adverbials is instantiated either in an active or a passive way. When the filling is active, the same prepositions and cases are used as the ones governed by the source nouns: *v* otčajanii ot poraženija 'in despair from defeat', *v* užase pered pytkami 'in horror of tortures', *v* straxe byt' ubitym 'in fear of being killed', *s* vooduševleniem ot otkryvajuščixsja vozmožnostej 'with enthusiasm for opening opportunities', *s* obidoj za to, čto on ne pomog 'with resentment for his failure to help'.

The passive instantiation of the Cause slot can be illustrated by example (7):

(7) K našemu razočarovaniju, predstavlenie otmenili.

'to our disappointment, the performance was cancelled'

Here, our disappointment was caused by the cancellation of the performance, which means that the Cause slot is filled by the subordinating verb (*otmenjat*' 'to cancel').

It is important to emphasize that the adverbials derived from different nouns, even if they are constructed with the same prepositions, may have different actantial properties. Cf. adverbials *s jarostju* 'with rage' and *s naslaždeniem* 'with relish'.

(8) Otec s jarostju vyrval iz ruk Meri pis'mo.

'Father tore the letter out of Mary's hand with rage'

(9) *Otec s naslaždeniem vykuril sigaru.* 'Father smoke a cigar with relish'.

In (8) only the Experiencer of the emotional state is expressed and nothing is known about its cause. The father's rage had obviously been caused by prior events, and this emotion manifested itself in the way in which he tore the letter out of Mary's hand. In (9) the idea of manifestation is also present. Judging by the way father was smoking a cigar one could see that he was enjoying it. But on top of that, the source of the emotion is also explicitly expressed: the relish is caused by the process of smoking.

# **3.2 Some observations on the semantics of EIS adverbials**

EIS adverbials belong to three semantic groups: concomitant state, effect and cause.

**Concomitant state adverbials** are constructed with three prepositions -v 'in' (+Loc), s 'with' (+Instr) and bez 'without' (+Gen): v otčajanii 'in despair', s vooduševleniem 'enthusiastically, lit. with enthusiasm', bez otvraščenija 'without disgust'.

Let us compare two very close prepositions that form concomitant state adverbials with EIS - v 'in' as v *jarosti* 'in rage' and s 'with' as s *jarostju* 'with rage'. First, only one of them allows the cause of emotion to be expressed explicitly:

(10a) V jarosti ot neudači on vybežal iz komnaty.

lit. in rage from the failure he ran out of the room.

(10b) \*S jarostju ot neudači on vybežal iz komnaty.

lit. with rage from the failure he ran out of the room.

Second, the phrases in which the Cause is unexpressed are not entirely synonymous. While phrases with *s* emphasize the external manifestation of the emotion, phrases with v only indicate that the Experiencer is in a certain emotional state, disregarding its external manifestation. This opposition between v 'in' and s 'with' is incidental to a large group of phrases in which the noun denotes a state that can be manifested externally, such as *gnev* 'anger', *radost'* 'joy', *pečal'* 'grief', *vostorg* 'delight' etc. (ECD 1984: 208). It is noteworthy that the s 'with' phrases point at the manifestation of the emotion only when the action they modify itself has external manifestation. If the action is purely mental, the *s*-phrases lose the manifestation component and denote simple concomitance.

(11a) Ona s blagodarnostju <negodovaniem> posmotrela na nego [+ manifestation].

'she looked at him with gratitude <indignation>'

(11b) On s blagodarnostju <negodovaniem> dumaet o svoix kollegax [- manifestation].

'he thinks about his colleagues with gratitude <indignation>'

(12a) *Ona s otvraščeniem otvernulas'* [+ manifestation].

'she turned away with revulsion'

(12b) *Ja s otvraščeniem vspominaju etu scenu* [- manifestation].

'I recall this scene with revulsion'

**Effect adverbials**: There are three prepositions that combine with EIS nouns to convey the idea that a certain emotion or a mental state of person A1 is a result of some situation A2. These are v (+Acc), k (+Dat) and na (+Acc).

The first preposition is used in the predicate position only and combines with a very limited number of nouns. We know of three such nouns – *radost'* 'joy, happiness', *udovol'stvie* 'pleasure', and *tjagost'* 'burden, hard feeling'. Maybe there are some more, but hardly many more. The propositional form that serves as the left part of the lexicographic definition is (13a), and the definition itself is given in (13b). Examples are in (13c,d):

(13a) *A2 (jest') A1*<sub>Dat</sub> v radost' (v udovol'stvie, v tjagost')

lit. A2 (is)  $A1_{Dat}$  in happiness (pleasure, hard feeling)

(13b) 'person A1 feels happiness (pleasure, hard feeling) caused by situation A2'

(13c) Tjaželye trenirovki byli emu v radosť.

lit. hard training-sessions were to.him in happiness

'hard training sessions made him happy'. (13d) *Rabota byla ej ne v tjagost'*. lit. work was to her not in hard feeling

'it was not hard for her to work'.

This construction requires that A2 be some lasting or repeated process or activity. It cannot be just a momentary action; cf. perfectly correct (14a) and dubious (14b):

(14a) Postreljat' v tire bylo ej v udovol'stvie.

'shooting (=giving a series of shots) in a shooting gallery gave her pleasure'

(14b) ??Vystrelit' bylo ej v udovol'stvie.

'firing a shot gave her pleasure'

Another feature of this construction worth mentioning is that it is often used with the negation - cf. (13d) above.

Two other prepositions that make up effect adverbials are *k* and *na*:

(15a) K razočarovaniju poeta ego nikto ne uznaval.

'to the poet's disappointment nobody recognized him'

(15b) Na radost' roditeljam Ivan blagopolučno zakončil školu.

lit. to the happiness of the parents Ivan successfully graduated from school

'the parents were happy that Ivan graduated from school successfully'

Although these constructions convey largely similar meanings, there are several aspects that differentiate them.

1. Both prepositions take A1, the Experiencer of EIS, in the form of the possessive pronoun, but if it is expressed by a noun, preposition na requires the dative case, while kcombines with the genitive.

2. Both constructions are largely lexicalized. One can say *na strax vragam* 'to the fear of the enemies', but not \*na užas vragam 'to the horror of the enemies' or \*na ispug vragam 'to the fright of the enemies'. One can say k našemu *užasu* 'to our horror', but not \*k našemu straxu 'to our fear' or \*k našemu ispugu 'to our fright'. The range of EIS nouns accepted by these prepositions is largely different, although there are some nouns in common. In general, kco-occurs with a larger set of nouns than na. Preposition k combines freely with: radost' 'happiness', sčastje 'happiness', nesčastje 'unhappiness', užas 'horror', udovol'stvie 'pleasure', neudovol'stvie 'displeasure', vostorg 'delight', vosxiščenie 'admiration' etc. Preposition na often co-occurs with: radost' 'happiness'. sčastje 'happiness', nesčastje 'unhappiness', strax 'fear' etc. One can say k našemu (vostorgu, udovol'stviju, vosxiščeniju udovletvoreniju) 'to our admiration (delight, pleasure, satisfaction)', but one cannot use preposition *na* with these nouns.

3. *Na*- and *k*-phrases differ with respect to the temporal correlation between the EIS and the motivating situation A2. In case of *k*, the EIS is simultaneous with A2. Cf.:

(16a) Poet vypustil novuju knigu k radosti svoix počitatelej

'the poet published a new book to the joy of his admirers'.

The joy of the admirers may be caused by the mere fact of publication. For example, the poet was not publishing anything for a long time, and now a new book appeared, and the admirers are happy about that. No information is implied as to whether this mental state will last for a longer period. Phrases with preposition *na* are different. They are usually oriented towards the future and imply that the mental state, once appeared, will last for a certain amount of time. Sentence (16b)

(16b) Poet vypustil novuju knigu na radosť svoim počitateljam

rather suggests another reason for joy: the admirers will be reading the new book and enjoy it. Let us give more examples to support this point. Sentence (17a)

(17a) Na vysokom beregu my postroili krepost' na strax vragam

'on a high riverbank we built a fortress for the enemies to fear us'

means that the fortress was built with the aim of producing durable fear on the part of the enemies and not just to give them a single fright. This is confirmed by verbal paraphrases. An adequate paraphrase requires a verb in the imperfective aspect (as in (17b)) and not in the perfective (as in (17c)):

(17b) *My postroili krepost', čtoby vragi bojalis'*<sub>Imperf</sub> (stative verb).

'we built a fortress for the enemies to fear us'

(17c) My postroili krepost', čtoby vragi ispugalis'<sub>Perf.</sub>

'we built a fortress to frighten the enemies'.

In the same way, sentence (18) does not mean that the daughter did not rejoice at her mother's arrival, but rather that the consequences of this arrival would be sorrowful to the daughter.

(18) Ne na radost' dočeri priexala ona v Peterburg.

'it is not for her daughter's joy that she came to St. Petersburg'

**Causative adverbials**: Causative EIS adverbials are constructed with four prepositions:

ot (+Gen), iz-za (+Gen), iz (+Gen), and s (+Gen): pokrasnet' ot styda 'turn red from shame', mstit' iz-za revnosti 'take revenge out of jealousy', otkazat'sja iz otvraščenija 'refuse out of disgust', pljunut' s dosady 'spit in annoyance'.

Semantic differences between causal prepositions are described in great detail in Iordanskaya-Mel'čuk 1996 and Levontina 2004. These differences are valid for EIS adverbials as well, and we will not repeat them here. We will only make several additional remarks.

As is known, there are several linguistically relevant varieties of cause. In particular, one distinguishes objective and subjective cause, on the one hand, and external and internal cause, on the other<sup>4</sup>. All causal EIS adverbials refer to internal subjective cause due to semantics of EIS nouns.

The causative preposition most widely used with EIS nouns is *ot* 'out of'. It combines freely with all the nouns of this class. However, the use of the main causal preposition *iz-za* 'because of' is rather restricted. It is not appropriate with a single noun. It requires that its group be extended. Cf.:

(19a) \**Iz-za radosti ona zabyla svoe ogo*rčenie.

lit. because of joy she forgot her grief

(19b) *Iz-za radosti, vnezapno oxvativšej ee, ona zabyla svoe ogorčenie.* 

'because of joy that suddenly gripped her she forgot her grief'

(20a) ??On stal agentom oxranki iz-za straxa.

'he became a secret police agent because of fear'

(20b) On stal agentom oxranki iz-za straxa pered arestom.

lit. he became a secret police agent because of fear for arrest.

Other causal prepositions do not have this restriction, cf. preposition *iz*:

(20c) On stal agentom oxranki iz straxa.

'he became a secret police agent out of fear'

Another peculiarity of preposition iz-za is that it is not compatible with the second form of the genitive case of EIS (the form ending in -u), which freely accepts other causal prepositions: *ot straxu, iz straxu, so straxu,* but \*iz-za *straxu.* 

# 4. Case study: gratitude

<sup>&</sup>lt;sup>4</sup> For details, cf. Boguslavskaya 2003, Boguslavskaya and Levontina 2003.

The semantic field of gratitude is represented in Russian by several lexemes, among which there are verbs (blagodarit' 'to thank', ot*blagodarit'* ≈'to do something in return showing one's gratitude'), nouns (blagodarnost' 'gratitude', priznatelnost' 'appreciation'), adjectives (blagodarnyj 'grateful', priznatel'nyj 'appreciative') and adverbs (blagodarno 'gratefully', *priznatel'no* 'appreciatively'- the latter is somewhat obsolescent). All these lexemes (except the adverb blagodarno 'gratefully') can take three semantic arguments: "someone who feels gratitude", "someone to whom one is grateful", and "something for what one is grateful". Semantically, the primary lexeme of this group is the noun blagodarnost', which is defined in the Active dictionary of Russian (ADR 2014) as 'a good feeling of person A1 towards person A2, who did a good A3 for A1'. Contrary to what one could expect, the propositional form of this meaning is not represented by a verb, but by an adjective (in a short form): Ja blagodaren *<priznatelen> emu za pomošč'* 'I am grateful to him for his help'.

As opposed to these adjectives, the verb *blagodarit'* 'to thank' does not convey the idea that person A1 feels gratitude. Instead, it means that person A1 desires to show person A2 that he appreciates good A3 that A2 has done for him and expresses it in a verbal way appropriate for such cases. These are quite different things. One can thank somebody without feeling grateful. And the other way round, one can feel grateful without saying it to person A2; cf.:

(21) Ja blagodaren emu za pomošč', no ne imeju vozmožnosti poblagodarit' ego.

'I am grateful for his help but have no opportunity to thank him'

The verb *blagodarit'* 'to thank', as is wellknown, is performative. When uttering *Thank you* we are not informing the interlocutor of what we are doing, but performing an illocutionary act of gratitude. It is noteworthy that the adjectives *blagodarnyj* and *priznatel'nyj* 'grateful' (in the short form) are also performative. The utterance *Ja očen' blagodaren <priznatelen> vam za pomošč'* 'I am very grateful to you for your help' is a voiced compensation for a good deed, just like the a verbal phrase *Blagodarju vas* 'thank you' or a performative formula *Spasibo* 'thanks'.

The verb *blagodarit'* 'to thank' is nominalized by means of another sense of the noun *blagodarnost'* – *blagodarnost'*<sup>2</sup> 'the act of expressing gratitude ':

(22) Prezident načal svoju reč' s blagodarnosti Vnutrennim vojskam.

'the president began his speech by thanks to the Internal security troops' (= 'began the speech with thanking')

The difference between the two wordsenses of the noun *blagodarnost'* is clearly seen in the pair (23a-b):

(23a) On poblagodaril ee, no blagodarnosti ne oščushčal (blagodarnost'<sup>l</sup> – a feeling).

'he thanked her but did not feel any gratitude'

(23b) Ego blagodarnost' prozvučala neiskrenne (blagodarnost'<sup>2</sup> – an act of expressing gratitude).

'his (expression of) gratitude sounded insincere'

While the verb *blagodarit'* 'to thank' is shifted from the basic concept of a feeling towards deliberately expressing this feeling, the adjective *blagodarnyj* 'grateful' (in the full form) and the adverb *blagodarno* 'gratefully' move towards expressing manifestation: phrases *blagodarnyj vzgljad* 'a grateful look' and *blagodarno posmotrel na nee* 'looked at her gratefully' describe a look in which the gratitude is manifested.

Adverbial phrases of gratitude are composed mostly with the following four prepositions -s 'with', *ot* 'out of', *iz* 'from' and *v* 'in':

(24a) Ja s blagodarnostju prinimaju vaše priglashenie.

lit. I with gratitude accept your invitation

'I am happy to accept your invitation'

(24b) Ot blagodarnosti on daže proslezilsja.

'feeling grateful (lit. from gratitude) he even shed a tear' (the action of shedding a tear is uncontrolled)

(24c) Bol'noj prineset iz blagodarnosti to jaiček, to rybki, to medku.

'out of gratitude the patients bring (to the doctors) sometimes some eggs, sometimes some fish, sometimes some honey'

(24d) V blagodarnosť za konsul'taciju ona podarila vraču korobku konfet.

'in gratitude for the consultation she gave the doctor a box of chocolate'

The adverbials represented in (24a-c) have been commented upon above (section 3.2). In (24a) the adverbial expresses the meaning of concomitance ('feeling grateful for some actions related to this situation'). Examples (24b,c) express causation. Example (24d) is more complicated and we will discuss it below.

The phrase v blagodarnost' 'in gratitude for' is close to two other adverbial phrases - v znak blagodarnosti lit. 'in sign of gratitude' and v kačestve blagodarnosti 'by way of gratitude'. The three expressions are often translated in the same way. However, the two latter expressions seem to be derived from two different senses of blagodarnost': P v znak blagodarnosti means that P is a sign of the fact that the Experiencer feels gratitude (blagodarnost'<sup>1</sup>). P v kačestve blagodarnosti has a slightly different meaning: P serves as an expression of gratitude' (blagodarnost'<sup>2</sup>). This observation is confirmed by the fact that pure feelings do not combine with v kačestve 'by way of': one cannot say \*v kačestve ljubvi <družby> 'by way of love <friendship>', while v znak ljubvi <družby> 'as a sign of love <friendship>' is perfect.

The idea of gratitude implies that person A1 is doing or is willing to do something for A2 to show that he appreciates the good that A2 has done for A1. Usually, this action consists in uttering certain conventional expressions. However, to express the gratitude one can perform any other action that would be pleasant to A2. For example, one can give A2 a bunch of flowers or dedicate him/her a poem. Nevertheless, a phrase denoting such a return action can hardly be attached to a gratitude word. One cannot say \*On poblagodaril ee buketom cvetov <posvjashčeniem stixotvorenija> 'he thanked her with a bunch of flowers < by dedicating a poem>'; \*blagodarnost' buketom cetov <posvjaščeniem stixotvorenija> 'gratitude with a bunch of flowers < by dedicating a poem>'.

A common wisdom is that one can only postulate a semantic valency slot for word L if it is instantiated by a LU directly connected to L in the dependency structure. For this reason, the action performed by A1 is not considered an argument of the verb *blagodarit'*, and still less so of the noun *blagodarnost'*. Nevertheless, this valency slot should be postulated. We can offer the following arguments in favour of this.

First, as mentioned above, a prototypical expression of gratitude consists in pronouncing certain verbal formulae, which cannot be governed by the verb *blagodarit': \*poblagodaril spasibo* 'thanked with a thank you'. However, there exist non-verbal symbolic ways of expressing gratitude – by means of gestures, and they can be easily attached to *blagodarit': poblagodaril ulybkoj <kivkom, poklonom>* 'thanked with a smile <a nod, a bow>. Non-gesture actions can scarcely be used that way, although occasional examples can be found in the Russian National Corpus:

(25) Doma on rasskazal otcu, kak on spas zjablika i kak zjablik poblagodaril ego zvonkoj pesenkoj.

lit. at home he told his father how he saved a chaffinch and how the chaffinch thanked him with a ringing song.

Second, as shown in Mel'čuk 2014:18 (definition 12.2), to recognize a participant of a situation a semantic actant of LU L, it is not obligatory that this participant be directly linked to L in the syntactic structure. What is essential is that it should be expressible alongside L. An immediate syntactic link is not the only way a participant can be expressed alongside L. It may be linked to a LU that is a particular lexical function of L (these include support verbs Oper<sub>i</sub>, Func<sub>0/i</sub>, Labor<sub>ii</sub> and realization verbs Real<sub>i</sub>, Fact<sub>0/i</sub>, Labreal<sub>ii</sub>, as well as complex lexical functions having these verbs as their last component). Here is one of the examples of Mel'čuk: the noun danger ('something dangerous') has two arguments: 'X is a danger for Y'. The dangerous element X cannot be an immediate syntactic dependent of *danger*. If John is dangerous for someone, we cannot say \*John's danger or \*danger *by < from > John*. However, some of the lexical functions of *danger* (support verbs) can link the name of such an element to the noun: John represents an enormous danger for our plans [represent =  $Oper_1(danger)$ ]. The main danger for our plans comes from John [come from =Func<sub>1</sub>(*danger*)].

This is exactly what we see in (24d). The action carried out as a "realization" of the gratitude is expressed alongside the adverbial v*blagodarnost*' by means of the subordinating verb. At the same time, v *blagodarnost*' is the value of the lexical function Adv<sub>1</sub>Real<sub>1</sub>-M<sup>5</sup> of *blagodarnost*'. In (24d), giving a box of chocolate is the action that the Experiencer carries out paying his debt of gratitude.

<sup>&</sup>lt;sup>5</sup> Lexical functions of Real<sub>i</sub>-M and Fact<sub>i</sub>-M group, which supplement Real<sub>i</sub> and Fact<sub>i</sub>, were introduced in the inventory of lexical functions to denote realization of predicates with modal components (Apresjan 2001). Cf. Real1-M(*desire*) = *satisfy*, Real2-M(*challenge*)= *meet*, Real3-M(*advice*)=*follow*.

In this respect, the adverbial v blagodarnost' is similar to phrases v otvet 'in response', po prikazu 'by order of ', po privyčke 'by habit', po tradicii 'according to tradition' etc. that are also values of the same lexical function of the nouns otvet 'response', prikaz 'order', privyčka 'habit', and tradicija 'tradition'. With all these adverbials, the subordinating verb obviously instantiates the valency slot of the corresponding predicate, which is clearly seen in pairs (a)-(b) below.

(26a) V otvet on požal plečami.

'in response, he shrugged his shoulders' (26b) *On otvetil požatiem pleč*.

'he responded by shrugging his shoulders'

(27a) Marija Stjuart byla arestovana po prikazu korolevy.

'Maria Stuart was arrested at the Queen's order'

(27b) *prikaz korolevy arestovat' Mariju Stjuart* 'the Queen's order to arrest Maria Stuart'

(28a) Po privyčke on vo vsem obvinil amerikancev.

'by habit, he accused Americans of everything' (28b) *privyčka vo vsem obvinjat' amerikancev* 'the habit of accusing Americans of everything'

(29a) Po tradicii oni legli spat' rano.

'according to tradition, they went to bed early'

(29b) tradicija ložit'sja spat' rano

'the tradition of going to bed early'

The specific feature of the adverbial v blagodarnost' is that unlike these adverbials, its source predicate (blagodarit' 'to thank', blagodarnost' 'gratitude') cannot attach the actant, expressible alongside the adverbial.

Another derivative of *blagodarit*' 'to thank' that has a slot of the return action is the verb *otblagodarit*' 'to repay somebody's kindness; to show one's gratitude', which expresses the idea of compensation quite clearly:

(30a) *otblagodarit*' (perfective aspect only) = 'person A1 has done good A3 for person A2 as a compensation for good A4, which A2 did for A1'

(30b) Škol'niki otblagodarili šefov za remont školy prazdničnym koncertom.

'the schoolchildren expressed their gratitude to the sponsors by a festive concert'.

Some adverbials including *v* blagodarnost' can undergo an interesting syntactic process called *shifting* («smeščenie», in Russian). It consists in moving a certain element of the dependency structure from its natural position that directly corresponds to its semantic links to a higher position in the dependency tree. This phenomenon was described in Paducheva 1974 for negation and was later generalized in Boguslavsky 1978 and 1985. For example, in both sentences (31a) and (31b) the negative particle *ne* is linked to the preposition v:

(31a) Ivan položil sumku ne v mašinu.

lit. Ivan put his bag not in the car

'Ivan did not put his bag in the car'

(31b) Ivan položil sumku ne v svoju mašinu.

lit. Ivan put his bag not into his car

'Ivan put his bag into the car of another person'

However, in (31a) this is a proper syntactic position for negation, since what is negated is the phrase v mašinu 'in the car', while in (31b) this is the position of shifting, because what is negated is not the preposition but pronoun *svoju* 'his': (31b) = 'Ivan put his bag into nothis car'.

Now, let us look at sentences (32a-b):

(32a) Xozjain trebuet, čtoby v blagodarnost' za učenie ja celyj god besplatno na nego rabotal.

lit. the master demands that in gratitude for apprenticeship I for a whole year without payment for him worked

'the master demands that in gratitude for apprenticeship, I worked for him for a whole year without being paid'

Here, the adverbial *v* blagodarnost' makes part of the subordinate clause and, according to what we showed above, its syntactic governor (*rabotal* 'worked') fills its valency slot. Sentence (32b) shows that *v* blagodarnost' can be moved to the main clause without reinterpretation of its semantic links.

(32b) Xozjain trebuet v blagodarnosť za učenie, čtoby ja celyj god besplatno na nego rabotal.

lit. the master demands in gratitude for apprenticeship that I for a whole year without payment for him worked

'in gratitude for apprenticeship, the master demands that I worked for him for a whole year without being paid'

In (32b), just as in (32a), the in-return valency slot of v blagodarnost' is filled by the verb rabotal 'worked', although this verb is located in the subordinate clause and as such has no syntactic link with the adverbial.

Shifting of an adverbial from the subordinate clause into the main clause, exemplified by (32b), is possible if the predicate of the main clause has a modal meaning (cf. 'demand' in (32b)). Here are examples of the same phenomenon with other adverbials.

(33a) V otmestku za prigovor «čubarovcam» «Sojuz» ugrožal, čto ubijstva i podžogi oxvatjat ves' gorod.

'in retaliation for the sentence passed upon the members of the Čubarov band, "Sojuz" threatened that assassinations and arsons would spread all over the city'

(33b) '«Sojuz» threatened to retaliate... by organizing assassinations and arsons...'.

(34a) On predložil v dokazatel'stvo svoej ljubvi, čto otdast vse svoe sostojanie na ustrojstvo škol dlja bednyx.

'he suggested as a proof of his love that he would give all his fortune for establishing schools for the poor'

(34b) 'he will prove his love by giving all his fortune for establishing schools for the poor'

#### 5. Conclusion

We have described semantic and syntactic properties of EIS adverbials in their correlation with the corresponding source LUs. This perspective makes it possible to treat different syntactic realizations of predicates along the same lines and offer a uniform description of semantic actants of both source LUs and their adverbial derivatives.

#### Acknowledgements

The work reported here was partially supported by the RFH grant (13-04-00343), the President's Grant for the Support of Leading Scientific Schools (HIII-3899.2014.6), and the "Historical memory and Rusian identity" grant.

#### References

- АDR 2014 Активный словарь русского языка. / Отв. ред. акад. Ю. Д. Апресян. — М.: Языки славянской культуры, 2014. — Т. 1.А– Б. — 408 с ; Т 2. В – Г. — 736 с.
- Apresjan 2001 Апресян Ю.Д. 2001. О лексических функциях семейства REAL – FACT. Nie bez znaczenia ... Prace ofiarowane Profesorowi Zygmuntowi Saloniemu z okazii jubileuszu 15000 dni praci naukowej. Białystok, 23-40.
- Водиslavskaya 2003 Богуславская О.Ю. 2003. *Структура значения прилагательного причина*. Русистика на пороге XXI века: проблемы и перспективы. Материалы международной научной конференции. М. С. 102 – 105.

- Водиslavskaya 2004 Богуславская О.Ю. *Причина 2, Основание 5, Резон 1.* Новый объяснительный словарь синонимов русского языка. Отв. ред. акад. Ю. Д. Апресян. — М.: Языки славянской культуры, Wiener Slavistisher Almanach 2004. Pp. 877-882.
- Вoguslavskaya, Levontina 2004 Богуславская О.Ю., Левонтина И.Б. 2004. Смыслы 'причина' и 'цель'' в естественном языке. Вопросы языкознания. С. 68 – 88.
- Boguslavsky 1985 Богуславский И.М. 1985. Исследования по синтаксической семантике. М. Наука.
- Boguslavsky I. 2003. On the Passive and Discontinuous Valency Slots. Proceedings of the 1st International Conference on Meaning-Text Theory. Paris, Ecole Normale Supérieure, June 16– 18.
- Boguslavsky I. 2014. Argument structure of adverbial derivatives in Russian. In: Proceedings of COLING 2014, the 25th International Conference on Computational Linguistics: Technical Papers, pp. 1071–1080, Dublin, Ireland, August 23-29 2014.
- ECD 1984 Толково-комбинаторный словарь современного русского языка (под ред. И.А.Мельчука и А.К.Жолковского). Wiener slawistischer Almanach. Sonderband 14, Wien, 1984.
- I. Mel'čuk, Iordanskaja, L. 1996. *K semantike russkix pričinnyx predlogov (IZ-ZA ljubvi ~ OT ljubvi ~ IZ ljubvi ~ S ljubvi ~ PO ljubvi)*. The Moscow Linguistic Journal, 2, 162-211.
- I. Mel'čuk. 2014. *Semantics. From Meaning to Text.* v.3, John Benjamins Publishing Company.
- Iomdin 1990 Иомдин Л.Л. 1990. Русский предлог ПО: этюд к лексикографическому портpemy. Metody formalne w opisie języków slowiańskich. Z. Saloni (ed.). Dzial wydawnictw Filii UW w Białymstoku. C. 241-260.
- Iomdin 1991 Иомдин Л.Л. 1991. Словарная статья предлога ПО. Семиотика и информатика. М. Вып. 32. С. 33-60.
- Levontina 2004 Левонтина И.Б. Из-за 4, из 8.1.... Новый объяснительный словарь синонимов русского языка. Отв. ред. акад. Ю. Д. Апресян. — М.: Языки славянской культуры, Wiener Slavistisher Almanach 2004. Pp. 430-437.
- Раducheva 1974 Падучева Е.В. 1974. *О семантике синтаксиса*. Материалы к трансформационной грамматике русского языка. М.: Наука, 291 с.