

Remarks on Semantic Prepositions and Endings in Russian

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Résumé – Abstract

On peut montrer que les prépositions et flexions finales, quand elles sont représentées au moyen d'un graphe sémantique, sont de même nature sémantique que d'autres signes linguistiques. Leur fonction est soit syntaxique soit sémantique. Dans ce dernier cas, elles correspondent à des noeuds dans le graphe et en grande majorité prennent deux actants, rarement un ou trois. Elles peuvent aussi en même temps être en position d'actant. Leur signification est établie par référence à des signes linguistiques équivalents qui appartiennent à d'autres types d'expression.

When represented by means of a semantic graph, prepositions and inflectional endings can be shown to be of the same semantic nature as other linguistic signs. Their function is either syntactic or semantic. In the latter case they correspond to nodes in the graph and most typically take two actants, rarely one or three. They can also at the same time be in an actant position. Their meaning is established by reference to equivalent linguistic signs belonging to other expression types.

Keywords – Mots Clés

Russe, sémantique, prépositions, flexion, valence.

Russian, semantic, prepositions, inflection, valency.

It is quite obvious that there exist unilateral linguistic units. For instance, phonemes and distinctive features are void of meaning and thus cannot be considered linguistic signs. But are there units which are void of expression? In MTT such units are supposed to constitute the so-called semantic representation. In this paper I will advocate another solution, namely that linguistic signs are semantically atomic, non-decomposable. They are elementary in two respects: they do not consist of some purely semantic units and they cannot be combined into complex signs (the result of their being combined are constructions, not signs).

The only way to establish the meaning of a linguistic sign is by studying its relations with other signs. The level of representation convenient for such a study is one that quite closely corresponds to the deep syntactic representation in the MTT framework. However, since what

I propose is a semantic rather than syntactic dependency representation it has the formal properties of a graph, rather than a tree. Every node in this graph is occupied by exactly one linguistic sign, but not every sign in a linguistic expression corresponds to a node in the graph. Those corresponding to nodes I call semantic, those not corresponding to nodes I call syntactic. The latter often correspond to arrows uniting the nodes.

There is no immediate correspondence between the properties of the content level and classifications based on the expression level. With reference to the latter level we can distinguish three main types: free explicit signs, i.e. words; bound explicit signs, i.e. morphemes; and implicit signs, the expression of which can be elicited only through translation into equivalent explicit signs.

The functional content distinction adopted here (semantic vs syntactic) has nothing to do with oppositions like autosemantic : synsemantic or lexical : grammatical. To make this clear, and using as examples the kinds of units that will be investigated in this paper, I will now give four representations, demonstrating: (1) a semantic use of the preposition *na* ('on'), (2) a syntactic use of the same preposition; (3) a semantic use of the accusative ending; (4) a syntactic use of the same ending (syntactic free signs are included in parentheses):

(1) On spit na divane.¹



(2) On nastai vaet (na) ètom reshonii.²



(3) Ona bolela ves' ètot den' <ACC>.³



(4) Ona pomnila ves' ètot den'.⁴



Needless to say, each of these examples contain a number of syntactic endings, for instance, the nominative indicating the first actant of a predicate expressed by an active verb. I have chosen to mark the node containing a semantic ending with the deep morphological representation of the morpheme in question (a grammeme included in angular brackets).

As syntactic signs, i.e. in (2) and (4), *na* and <ACC> have the function of uniting a predicate with its second actant. Their full meanings as semantic signs, i.e. in (1) and (2), can be determined by “translating” them into more restricted and transparent signs occurring in paraphrases. For example, <ACC> corresponds to verbs like *dlit'sja*, *prodolzhat'sja* ‘last’, although these verbs do not cover the whole range of its meaning.

¹ ‘He sleeps / is sleeping on the sofa.’

² ‘He insists on this decision.’

³ ‘She was sick all this day.’

⁴ ‘She remembered all this day.’

Semantic signs can be predicates, actants, or have both functions at the same time. However, words denoting “things” can never be predicates; they have no valency, which formally corresponds to the fact that no arrows depart from their nodes. The signs of interest to us here, semantic prepositions and endings, do have valency. Most of them are two-place predicates, as in the examples demonstrated above.

A semantic preposition in an intermediate position, i.e. functioning as both predicate and actant, is demonstrated in the following example:

(5) Otec umer *cherez dva dnja* *posle rozhdenija vnuchki*.⁵

Here, the preposition *cherez* takes another preposition, *posle*, as its first actant. This makes the prepositional phrase *cherez dva dnja* an adverbial of measure, instead of its more normal meaning as an adverbial of time, as in *Cherez dva dnja on umer* ‘After two days he died’.

The next example shows the same position for the comparative morpheme <COMP> (corresponding to the word *bolee* ‘more’):

(6) Djadja umer *godom<INS>* *ran'she<COMP>* *otca*.⁶

In this case, too, the “superior” predicate is an adverbial of measure.

The next example, (7), presents a real problem. In the phrase *pobeda nad Napoleonom* the preposition is undoubtedly syntactic, but can nevertheless be coordinated with a semantic preposition:

(7) *pobedy pod Poltavoj i (nad) Napoleonom*⁷ (A. Rybakov)

As can be seen from this representation, I permit the preposition *nad* to be both semantic and syntactic at the same time, thus saving the symmetry in the coordinate construction.

All six Russian cases, apart from the locative, can perform both functions. Here I will give a few additional examples with semantic nominative, genitive, dative and instrumental:

(8) *Vino stoit sorok rublej butylka<NOM>*.⁸

(9) *krysha doma<GEN>*⁹

⁵ ‘Father died two days after the birth of his grandchild.’

⁶ ‘My uncle died a year earlier than my father.’

⁷ ‘The victories at Poltava and over Napoleon.’

⁸ ‘The wine is forty roubles (for) a bottle.’

⁹ ‘The roof of the house.’

(10) Rebenku<DAT> tol'ko god.¹⁰

(11) On rezhet chleb nozhom<INS>.¹¹

As always, it is more or less easy to find suitable paraphrases. In (11) the meaning in question is quite accurately rendered by the verb *ispol'zovat'* 'use'. For a valency investigation of genitive nominal phrases, see Lönngren 2001.

In addition, one more case must be introduced, namely the "agreement case". This is necessary in order to account for the well-known difference in syntactic behaviour in cases like these:

(12a) ozero Bajkal<NOM>

(12b) gorod Kiev<AGR>¹²

In both examples the semantic inflection can be paraphrased by the verb *nazyvat'sja* 'be called'.

Most of the inflectional morphemes in the conjugation system are semantic, except <INF>, which is more typically syntactic. Here are some examples:

(13) Idja<GER> domoj, on dumal (o) Vere.¹³

(14) Ja poexal (v) Kareliju lovit'<INF> rybu.¹⁴

(15) «Govorju, (chto)» On uexal<PRET>.¹⁵

(16) «Ja» Idi<IMP> domoj!¹⁶

¹⁰ 'The child is only one year old.'

¹¹ 'He cuts the bread with a knife.'

¹² 'Lake Baikal' and 'the city of Kiev', respectively.

¹³ 'When walking home he thought of Vera.'

¹⁴ 'I went fishing to Karelia.'

¹⁵ 'He has left.'

¹⁶ 'Go home!'

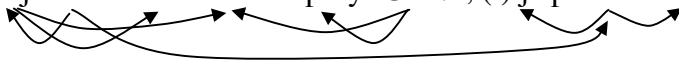
The predicates in (15) and (16) have implicit actants (second and first, respectively). Implicit signs are included in quotation marks («»).

In two derived constructions, <IMP> takes explicit actants:

(17) (Sluchis')<IMP> chto – ja okazhus' vinovatym.¹⁷ (A. Marinina)



(18) Daj<IMP> mne tochku opory<GEN>, (i) ja perevernu mir!¹⁸



In the rest of this paper I shall explore some less frequent uses of predicates expressed by prepositions and endings, namely their use as one-place and many-place (more than two-place) predicates. (These observations contradict the statement made by Gurevich 1991, p. 78, that adverbials always have exactly two actants.)

The only instances of genuinely one-place prepositions that I can think of are *okolo* and *s* (+ACC), both meaning *primerno* ‘approximately’, for example:

(19) S mesjac<ACC> loshad' zhila (vo) dvore.¹⁹ (F. Iskander)



Here <ACC> is triggered by the preposition *s* and thus becomes syntactic, and to make up for the loss of the two-place predicate which is needed to connect *zhila* with the time adverbial, we have to introduce an implicit predicate, namely «ACC». This predicate corresponds to <ACC> in the more basic phrase *Mesjac loshad' zhila...* (‘For a month...’). Cf. also example (3) above.

If, on the other hand, the inflection is not semantic in the underived construction, the insertion of the preposition merely has the effect of replacing one syntactic ending (<NOM>) with another (<ACC>), as in *Proshlo s nedelju* ‘About a week elapsed’ (also F. Iskander) compared to *Proshla nedelja* ‘A week elapsed’.

One-place inflectional endings are also very rare. The most obvious example seems to be <SING> and <PLUR>, i.e. the grammemes of the number category, at least in focus position:

(20) Vo dvore igrali deti<PLUR>.²⁰



¹⁷ ‘Should something happen, I will turn out to be guilty.’

¹⁸ ‘Give me a place to stand, and I will move the earth.’

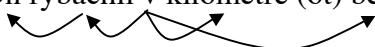
¹⁹ ‘For about a month the horse lived in the yard.’

²⁰ ‘In the yard there were children playing.’

In the topic position it can be argued that number is syntactic, since it is induced by agreement from the antecedent, the carrier of the semantic ending (a noun in topic position, or a personal pronoun, is connected to its antecedent through an implicit coreference predicate). The closest, but not very accurate equivalent to <PLUR> is perhaps *neskol'ko* ‘some’ (cf. Mel'chuk 1974, p. 185).

There are quite a few candidates for many-place predicates, amongst prepositions as well as inflectional endings (three-argument prepositions are considered in Boguslavskij 1996). A clear example is the preposition *v* ‘in’, used in adverbials of measure:

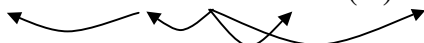
(21) On rybachil *v* kilometre (ot) berega.²¹



The preposition takes as actants not only the verb expressing the situation and the noun designating the measure, but also a prepositional phrase expressing a point of reference or orientation. The same phrase is needed in a close paraphrase: *na rasstojanii kilometra ot* ‘at a distance of a kilometre from’ or with the predicate *daleko ot* ‘far from’, which suppresses the second actant.

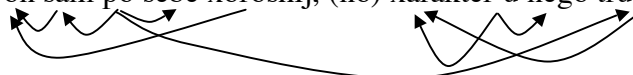
The same kind of prepositional phrase in the position of the third actant is used with the preposition *k* ‘towards’:

(22) Zabastovki nachalis' *k* vostoku (ot) Kieva.²²



Quite a different kind of three-place prepositional predicate can be observed in the following example:

(23) (Chelovek) on sam po sebe xoroshij, (no) xarakter u nego trudnyj.²³



Even if this analysis is not so clear as the preceding cases, it seems difficult not to include also the indispensable pronoun *sam* ‘himself’ in the valency of the preposition. The third actant is a clause introduced by a syntactic conjunction (cf. above, ex. 18). The preposition in this context is paraphrasable as concessive expressions like *pravda* ‘it is true that’, *xotja; ne-smotrja na to chto* ‘although’.

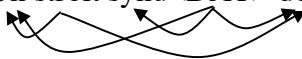
Now let us turn to inflectional endings with three or even more actants. Our first example is with the morpheme <DAT>:

²¹ ‘He was fishing a kilometre from the shore.’

²² ‘The strikes started east of Kiev.’

²³ ‘He is a good man in himself, but his character is difficult.’

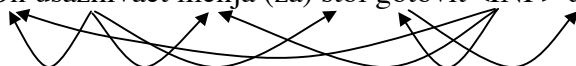
(24) *On stroit synu<DAT> dom.*²⁴



There is no convenient more restricted predicate combining just the actants *syn* and *dom* – as is the case, for example, in sentences like *On poceloval ej ruku* ‘He kissed her hand’ (Kibrik 2000 rightly derives these constructions from genitive nominal phrases). The best equivalent is probably the three-place predicate *darit* ‘give’, from which <DAT> in this context has inherited its valency properties.

In much the same way one may establish a three-place morpheme <INF>:

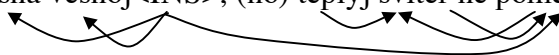
(25) *On usazhivaet menja (za) stol gotovit'<INF> uroki.*²⁵ (M. Girshin)



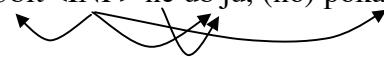
Cf. the paraphrase: *On zastavljaet menja gotovit' uroki* ‘He forces me to do my homework.’

A three-place predicate can also be the result of an actant being duplicated, as in the following examples:

(26) *Vesna vesnoj<INS>, (no) teplyj sviter ne pomeshaet.*²⁶

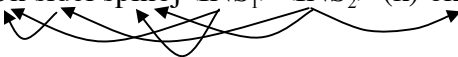


(27) *Ubit'<INF> ne ub'ju, (no) pokalechu.*²⁷ (V. Zalotuxa)



As indicated (or, rather, proposed) above, a morpheme can be semantic and syntactic at the same time. Quite another matter is the fact that two morphemes can have the same signifiant. For example, the ending *-it* in *spit* (see ex. 1) carries not only the semantic content <PRET> but also the syntactic content <3.PERS>, which it receives by agreement. But even in cases when both expression and content are absolutely identical we may sometimes be dealing with two different morphemes. This can be illustrated by the following sentence:

(28) *On sidel spinoj<INS₁><INS₂> (k) oknu.*²⁸



We have to postulate two morphemes here, because they have different paraphrasal equivalents and different valencies. The first morpheme refers to the whole : part relationship between a person and his bodypart, the second describes spatial orientation. It is essential that

²⁴ ‘He builds his son a house.’

²⁵ ‘He puts me at the table to do my homework.’

²⁶ ‘True enough, spring is here, but a warm sweater does not harm.’

²⁷ ‘I won’t kill, but I will cripple.’

²⁸ ‘He was sitting with his back towards the window.’

the phrase *k oknu* cannot depend on the verb *sidet'* and that it denotes direction, which is quite a clear indication that the preposition is syntactic. The same, third, actant can also be expressed by an adverb:

(29) *krivizna nog kolenkami<INS₁><INS₂> vnutr'*²⁹

A similar case is the split morpheme <NOM> in the following example:

(30) *Ona sidela (v) kresle noga<NOM₁><NOM₂> (na) nogu i kurila.*³⁰

Hopefully, I have managed to show that prepositions and inflectional endings are semantically no different from other kinds of linguistic signs. I have also tried to demonstrate that a semantic graph, in combination with the extremely rich paraphrasing system of natural languages, is an adequate tool to describe the relations holding between linguistic signs, which is also a key to fully understanding their functions and meanings.

To my knowledge, the MTT has, on the whole, remained unchanged since Mel'chuk's version of 1974. Unfortunately, the core of the theory, its stratificational structure, has not been utilized to the extent it deserves. It is my conviction that a modification along the lines proposed here, i.e. collapsing two levels, the deep syntactic and the semantic representations, would turn MTT into an even greater methodological framework and a serious competitor to the theories now dominating the linguistic scene.

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²⁹ 'Knock-knee.'

³⁰ 'She was sitting smoking in an armchair with her legs crossed.'

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Mel'chuk, I. A. (1974), *Opyt teorii lingvisticheskix modelej «Smysl ↔ Tekst»*, Moskva, Nauka.