

## Argument structure in Russian deverbal nouns in *-nie*

**Problem.** This paper investigates transformations of verbal argument structure occurring in the course of nominalization in Russian. One can find in literature at least three different hypothesis about what happens to arguments of a transitive verb, when it nominalizes:

1) the external argument, expressed by the verbal subject, gets suppressed and eliminated from the argument structure (Grimshaw 1990); the *by*-phrase, corresponding to this argument in the nominalized structure, is an adjunct;

2) a transitive verb can nominalize only after an obligatory passivization, which promotes the internal argument to the subject position and demotes the subject to an adjunct position, so that it can be expressed by means of a *by*-phrase (see Giorgi&Longobardi 1990 and criticism of this view in Rozwadowska 2000).

3) a nominalized verbal stem inherits from the corresponding verb the vP projection, which is, however, deficient and cannot host a DP and assign case, its agentive argument is existentially bound (see Alexiadou 2001).

**Attested patterns and their explanations.** Let us try to find some evidence in favour or against these hypotheses in nominalizations of transitive verbs in Russian. Deverbal nominals formed on the basis of transitive verbs show three different patterns: there are nominals allowing for both transitive and intransitive interpretations, nominals with only transitive (causative) meaning, and only intransitive nominals. Let's have a closer look on each type.

1) nominals allowing for both transitive and intransitive meanings show an alternation very close to causative-inchoative (Borer 1991), or transitivity (Hale&Keyser 1993) alternation, attested for verbs, e.g., in English:

<i>razrushe-nie</i>	<i>dom-a</i>	'destruction of the house'
destruct-NMN	house-GEN	
=	1.the fact that the house destroyed by itself	
	2.the fact that someone destroyed the house	

Note that verbs in Russian do not exhibit this alternation, decausativization being obligatorily marked by a reflexive morpheme *-sja*:

<i>vrag</i>	<i>razrushi-l</i>	<i>dom</i>	'the enemy destroyed the house'
enemy	destroy-PST	house	
* <i>dom</i>	<i>razrushi-l</i>	/	<sup>OK</sup> <i>dom</i> <i>razrushi-l-sja</i> 'the house destroyed'
house	destroy-PST	house	destroy-PST-REFL

One can argue that nominals like *razrushenie* in their decausative meaning incorporate a covert reflexive morpheme, more or less identical to *-sja*. This account, however, doesn't seem unproblematic. It violates the monotonicity condition and isn't borne out empirically: one can show that in Russian there are verbal stems that form *-sja* verbs with decausative meaning, but corresponding deverbal nouns show only causative meaning.

Events that can be described by nominals allowing for the causative-inchoative alternation share in generally the properties of events that can be denoted by decausative *-sja*-verbs. The properties of verbs generally allowing for decausativization have been described by Haspelmath (1987, 1993) and confirmed for Russian verbs in Paducheva 2001. Verbal stems, allowing for decausativization, are those stems where the Agentive component of meaning is not clearly specified and thus can be eliminated from the situation. Indeed, decausative meaning is generally possible for nominals derive from "result" verbal stems and corresponding to result verbs (in the sense of Rappaport Hovav&Levin 1998), and not possible for nominals involving "manner" verbal stems.

2) nominals with only transitive meaning:

<i>sazhanie (derevjev)</i>	'planting (trees)'
=	1. The fact that someone planted trees
=	2. *The fact that trees were planted by themselves

Nominals of this type cannot decausativize. One class of these nominals are nominals with a clearly specified agentive component, derived from stems that form "manner verbs" described in

Rappaport Hovav & Levin 1998: e.g., *podmetanie* ‘sweeping’ or *vytiranie* ‘wipening’. Transitive verbs ascending to stems of this type don’t form decausative verbs even with *-sja*: \**podmetat’tsja* is quite impossible, and *vytirat’sja* allows only for a reflexive interpretation.

Another class of nominals with only causative meaning consists of nominals with an explicit morpheme in their derivational structure that is responsible for causativization, e.g., with a causative suffix *-a-* (as in *sazhanie* ‘planting’) or *-i-* (*gashenie* ‘extinguishing’). Note that these verbal stems being realized as verbs allow for *-sja*-decausativization: *gasit’sja* means ‘to get extinguished’.

3) nominals with only intransitive meaning: *spletienie* ‘interlacement’, *obledenienie* ‘ice covering’, *izumlenie* ‘amazement’.

Nominals with only decausative meaning lose together with the causative component a substantial part of the event structure, corresponding to the dynamicity of the situation. In fact, they are not event, but result nominals (Chomsky 1970), denoting the stative result of the situation, the resultant state, attained by the patient argument. As it is usual for result nominalizations, they don’t inherit the original aspectual and event structure and are formed in the vocabulary, by an unproductive derivational process. The necessary, but not sufficient condition is the presence of a resultant state in the event structure.

The mechanism that derives meaning of these nominals from the meaning of a transitive verb is very close to that of stative passive formation, as described in Kratzer 2000. A special operator, Stativizer ( $\|STAT\| = \lambda R \lambda s \exists e R(s)(e)$ ), existentially closes the dynamic stage of the event and returns the resultant state.

**Conclusions.** Data of Russian nominalizations show that all the three above listed hypotheses hold, but for different cases and with some changes. Existential binding of the external argument with reduced referentiality and eliminated case-assigning properties is the case within only transitive nominals, as well as with the nominals allowing for the causative-inchoative alternation under the transitive interpretation. Suppression of the external argument can be found in those nominals that allow for both transitive and intransitive alternations under intransitive interpretation. And, finally, as passive one can treat intransitive nominals with result stative meaning, with the only difference from the previous proposals in that the external argument is not only demoted in the structure, but completely eliminated together with the dynamic part of the situation.

## References

- Alexiadou, Artemis. 2001. *Functional Structure in Nominals*. Amsterdam-Philadelphia: John Benjamins.
- Borer, Hagit. 1991. The Causative-Inchoative Alternation: A Case Study in Parallel Morphology. *The Linguistic Review* 8:119-158.
- Chomsky, Noam. Remarks on nominalization. // Jacobs, R. A. & P. S. Rosenbaum (eds.). *Readings in English Transformational Grammar*. Georgetown, 1970.
- Grimshaw, Jane. *Argument Structure*. MA: MIT Press, 1990.
- Giorgi, A, and G. Longobardi. 1990. *The syntax of noun phrases: Configuration, parameters and empty categories*. Cambridge University Press.
- Hale, Ken and Keyser, Samuel J. 1993. On argument structure and the lexical expression of syntactic relations. In K. Hale and S.J. Keyser, eds., *The View from Building 20: A Festschrift for Sylvain Bromberger*, Cambridge, Massachusetts: MIT Press.
- Haspelmath, Martin. 1987. *Transitivity Alternations of the Anticausative Type*. Köln: Institut für Sprachwissenschaft. Arbeitspapier 5.
- Haspelmath, Martin. 1993. More on Typology of Inchoative/Causative Verb Alternations. // Comrie, Bernard, and Maria Polinsky. (eds.). *Causatives and Transitivity*. Amsterdam/Philadelphia: John Benjamins, pp. 87-120.
- Kratzer, Angelika. 2000. Building Statives. In *Berkeley Linguistic Society* 26.
- Paducheva, Elena V. 2001. Kausativnye glagoly i dekausativy v russkom jazyke (Causative verbs and decausatives in Russian). // *Russkij jazyk v nauchnom osveshchenii*, #1, pp. 52-79.
- Rappaport Hovav, Malka, and Beth Levin. 1998. Building verb meanings. In *The Projection of Arguments: Lexical and Compositional Factors*, eds. Miriam Butt, and Wilhelm Geuder, Stanford: CSLI, 97–134.
- Rozwadowska, Bozena. Event Structure, Argument Structure and the by-phrase in Polish Nominalizations. // Coopmans, Peter, Martin Everaert & Jane Grimshaw (eds.). *Lexical Specification and Insertion*. Amsterdam; Philadelphia, 2000, pp. 329-347.