

**Type-shifting and lexical semantics in the interpretation of
Russian conjoined relational nouns.**

This paper investigates the semantic behavior of Russian relational nouns in the coordination construction.

It has traditionally been assumed (Šmelev 1998, Partee 1989 among others) that the correlate¹ of relational nouns is established as the speaker, addressee, subject or narrator depending on the context.

I analyze the examples² that are difficult to describe within these assumptions. In (1) neither of the mentioned options is available.

- (1) V roman'-e r'eč id'et o muž-e i žen'-e
in novel-PRP discourse go.3sg about husband-PRP and wife-PRP
The novel is about a husband and a wife.

This example demonstrates what I call the **reciprocal** interpretation of conjoined relational nouns. This sentence can be used only when the *novel* is about two people who are husband and wife of each other. The referent of one relational noun is the correlate of another one and vice versa.

Example (2) demonstrates that the reciprocal interpretation arises independently of the pragmatic principles described above.

- (2) Vas'a pozva-l brat-a i s'estr-u na prazdn'ik
Vasia call-PST.M brother-ACC and sister-ACC to party.ACC
Vasia called brother and sister to the party.

This sentence is ambiguous between at least two interpretations:

- (i) Vasia called his brother and sister to the party.
(ii) Vasia called to the party two people who were brother and sister of each other but were not his relatives.

To sum up the reciprocal interpretation can not be due to the pragmatic principles that are normally at work for relational nouns. Neither can it be described as a case of presupposition accomodation (cf. Barker 1999). Further evidence for these claims comes from predicative and negative uses of conjoined relational nouns.

Clearly not all the pairs of relational nouns allow for the reciprocal interpretation (cf. *brat i drug* 'brother and friend'). Similarly to some other proposals that deal with implicit variables (Vikner and Jensen 2002, Jensen and Vikner 2004, Breheny 2003 among others) I make use of Pustejovsky's [1995] *qualia structure* in formulating the lexical restrictions on reciprocal interpretation.

Roughly speaking the idea is that to derive the reciprocal reading two relational nouns must have the same qualia specified as inverse relations. For example in case of *p'isat'el' i kn'iga* 'writer and book' we don't get the reciprocal reading because these two words differ in qualia structure. *P'isat'el'* has the telic and *kn'iga* has the agentive role specified as $\lambda x[\lambda y[\text{compose}'(x,y)]]$ (with the appropriate order of variables in each case).

I propose to derive the reciprocal interpretation making use of Winter's [2001] minimum sort operator that takes the *minimal set* of a quantifier. I will demonstrate that for example the minimal set of the quantifier corresponding to *brat i s'estra* 'brother and sister' can be traced out to the set of pairs of people who are siblings of different sex.

¹ I use the term *correlate* for the entity corresponding to the implicit variable of a relational noun following [Lander unpublished].

² Grammaticality of all the examples is confirmed by at least 3 native speakers of Russian.

In the rest of the paper I discuss the interaction of this operator and the lexical constraints on reciprocal interpretation. Contrary to what Winter [2001] assumes I will argue that the constraints on type-shifting can be of lexical, not only syntactic nature. Finally I will consider the theoretical consequences of lexically restricted type-shifting.

References.

1. Barker, C. 1999. *Temporary Accomodation: I am the Oldest of My Siblings*. Studies in the Linguistic Sciences 29.
2. Barker, C. & D. Dowty. 1993. *Non-verbal Thematic Proto-Roles*. // Proceedings of NELS 23.
3. Borschev, V. and Partee, B. H. 2004. *Genitives, types, and sorts: the Russian genitive of measure*. // Possessives and Beyond: Semantics and Syntax (UMOP 29), eds. Ji-yung Kim, Yury A. Lander and Barbara H. Partee, 29-43. Amherst, MA: GLSA Publications.
4. Breheny, R. 2003. *A Lexical Account of Implicit (Bound) Contextual Dependence*. // Proceedings of SALT XIII, eds Rob Young and Yuping Zhou. CLC Publications. Cornell.
5. Eschenbach, C. (1993) *Semantics of Number*. // Journal of Semantics 10. Oxford University Press.
6. Jensen, P. A. and Vikner, C. 2004. *The English prenominal genitive and lexical semantics*. // Possessives and Beyond: Semantics and Syntax (UMOP 29), eds. Ji-Yung Kim, Yury A. Lander and Barbara H. Partee, 3-27. Amherst, MA: GLSA Publications.
7. Krifka, M. 1990. *Boolean and non-boolean "and"*. // Papers from the second symposium on Logic and Language, eds. László Kálman and László Polos, Akadémiai Kiadó, 161-188. Budapest.
8. Lander, Yu. A. Unpublished. *K tipologii reljacionnyh imën [Towards a typology of relational nouns]*. (presented May 23, 2000 at Barbara Partee's seminar, available at <http://yulander.narod.ru/>).
9. Partee, Barbara. 1989. *Binding implicit variables in quantified contexts*. // CLS 25: Papers from the Twenty Fifth Meeting of the Chicago Linguistic Society, eds. C. Wiltshire, B. Music and R. Graczyk, 342-365. Chicago: Chicago Linguistic Society.
10. Partee, B. H. and Borschev, V. 2003. *Genitives, relational nouns, and argument-modifier ambiguity*. // Modifying Adjuncts, eds. E. Lang, C. Maienborn and C. Fabricius-Hansen, 67-112. Berlin: Mouton de Gruyter.
11. Pustejovsky, J. 1995. *The Generative Lexicon*. Cambridge, Massachusetts: MIT Press.
12. Šmelev, A. D. 1998. *Tipy «nevyražennyx valentnostej» [Types of «implicit valencies»]* // Semiotika i Informatika [Semiotics and Informatics], 36. URSS, Moscow.
13. Vikner, C. and Jensen, P. A. 2002. *A semantic analysis of the English genitive. Interaction of lexical and formal semantics*. Studia Linguistica 56:191-226.
14. Winter, Y. 2001. *Flexibility principles in Boolean Semantics: the Interpretation of Coordination, Plurality and Scope in Natural Language*. Current studies in linguistics, 37, MA: MIT Press.