

Possessive pronouns in Russian: a corpus and experimental study

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Russian has two types of possessive pronouns: pronominals (*moj* ‘my’, *ego* ‘his’ etc.) and the reflexive anaphor *svoj*. We focus on possessives used with 3rd person antecedents. Timberlake (2004) starts with the following generalization: “When a reflexive pronoun is used, the antecedent must be the subject of the finite predicate [...]. Non-reflexive third-person pronouns [...] must refer to some other entity, which can be another argument of the same predicate or an individual that is not mentioned as an argument of the predicate at all” (p. 240). See (1)–(2).

(1) *Petja_i peredal Vase_j svoju_{i/*j/*k} / ego_{i/j/k} knigu.*

P_{NOM} passed V_{DAT} self’s his book_{ACC}

‘Petya passed Vasya his book’.

(2) *Každy_i sčital, čto *svoja / ego_{i/j} kniga lučše drugix.*

each_{NOM} thought that self’s his book_{NOM} better others_{GEN}

‘Everybody thought that his book was better than the others’.

However, as is well known from the subsequent sections of Timberlake (2004) and many other sources (Antonenko 2012; Avrutin 1994; Klenin 1974; Padučeva 1983, 1985; Rappaport 1986; Timberlake 1979; Zubkov 2018 etc.), the full picture is much more complex. In section 1, we review several problems most relevant for the present study. There is also another major problem that remained largely undiscussed: while some examples, like (1), are unanimously rated as good or bad, the others are subject to inter-speaker variation and/or are judged as marginally acceptable by many speakers. Even the authors who used questionnaires (e.g. Zubkov 2018) eventually present their examples as grammatical or not, while it would be more informative to show average ratings and variation. We collected corpus and experimental data testing some potentially relevant factors. As a result, we made several new generalizations.

1. Problems identified in the previous studies

Non-anaphoric *svoj*. *Svoj* can remain unbound, as in (3). Rappaport (1986) describes such examples as non-anaphoric, arguing that *svoj* has arbitrary reference. Zubkov (2018) believes that “in such occurrences *svoj* appears to be a non-possessive adjective, a development historically not uncommon with possessives” (p. 62). Unfortunately, while it is clear that we deal with non-anaphoric *svoj* in some examples, like (3), other cases are more controversial.

(3) *Každy_i sčital, čto svoja / ego_{i/j} kvartira lučše s'emnoj.*

each_{NOM} thought that self’s his apartment_{NOM} better rented_{GEN}

‘Everybody thought that a private apartment / his apartment is better than a rented one’.

The role of syntactic positions. The simplified generalization above breaks down in several cases. Firstly, some Nom DPs cannot bind *svoj* if they are too low. E.g. Slioussar (2011) argues that this is true for internal arguments in situ, but other cases have been discussed as well. Secondly, non-Nom DPs are often claimed to bind *svoj* when they raise to a particular position — but the nature of this position and the grammaticality of the relevant examples is a matter of debate. Consider (4). Bailyn (2003) presents it as grammatical and uses it to argue that Dat experiencers occupy the Spec-TP. In Bailyn (2012), the same sentence (with a different proper name) is rated as degraded (?). Slioussar (2011) who conducted a small questionnaire reports that (4) received ratings from ‘fully grammatical’ to ‘ungrammatical’ and mentions that an analogous sentence with a pronominal is rated as grammatical. The fact that non-anaphoric usage of *svoj* is difficult to exclude further complicates the picture. Thirdly, the position of the DP or PP containing the possessive is also important. Zubkov (2018) analyzes various examples, and, while some contrasts seem uncontroversial, the grammaticality status of many constructions may be blurred or subject to variation.

(4) *Maše_i nrvavitsja svoja_i rabota.*

M_{DAT} appeals self’s work_{NOM}

‘Masha likes her (own) work/job’.

Animacy and mental involvement. Several authors noted that *svoj* is more readily bound by animate antecedents and by agents or experiencers (e.g. Padučeva 1983; Zubkov 2018), see (5).

(5) *Eta pesnja byla speta Vaseji / Vasej v svoem_{i*/j} / ego_{ij/k} dome.*

this song_{NOM} was sung V_{INS} V_{DAT} in self’s his house_{LOC}

‘This song was sung by Vasya / to Vasya in his house’.

2. The present study

In the present study, we collected several types of naturally occurring examples (mostly using the National Russian Corpus, but also other sources) and conducted several experiments (eliciting grammaticality ratings on a 1 to 10 scale). In the corpus part, we focused primarily on sentences with different word orders that contain (a) Dat or Acc experiencers, as in (4); (b) possessive PPs; (c) passive verb forms, as in (5). We also explored animacy effects.

In the experimental part, we compared sentences with different word orders; with animate and inanimate, Nom and non-Nom, quantificational and non-quantificational antecedents; with different predicate-argument structures (in particular, sentences with Nom, Dat and Acc experiencers); with possessive pronouns inside DPs and PPs in different positions. These materials were distributed across several questionnaires (30 or more participants in each), and for space reasons, we can only present one of them here.

In Experiment 1 (divided in three sessions to include stimulus sentences in several conditions and fillers) the following factors were tested: (a) SVO, OVS and OSV word orders; (b) quantificational and non-quantificational antecedents; (c) predicates with different argument structures (with a Nom experiencer and an Acc theme or with a Dat experiencer and a Nom theme: we tried using *svoj* and *ego/ix* ‘his/their’ with all these DPs). Table 1 presents average ratings in different conditions.

Nom exp / Dat exp	word order	antecedent	Q- self	Q+ self	Q- his	Q+ his
Nom	SVO	Nom	9,6	8,7	3,5	3,6
Nom	OVS	Nom	5,0	6,8	2,4	2,7
Nom	OSV	Nom	6,0	5,8	3,0	2,5
Dat	SVO	Nom	6,8	6,2	5,8	5,0
Dat	OVS	Nom	3,3	3,1	2,3	3,0
Dat	OSV	Nom	3,4	3,8	3,7	2,8
Nom	SVO	non-Nom	3,3	3,2	2,7	2,6
Nom	OVS	non-Nom	3,5	3,9	6,7	6,0
Nom	OSV	non-Nom	3,7	3,3	5,4	5,3
Dat	SVO	non-Nom	4,1	4,9	3,9	3,0
Dat	OVS	non-Nom	5,5	5,7	8,3	7,6
Dat	OSV	non-Nom	5,9	5,4	6,9	6,6

Table 1. Experiment 1: average ratings in different experimental conditions.



The main results include:

- Bailyn (2003, 2012 etc.) and several other authors claimed that the Dat experiencer is in Spec-TP in OVS and in a higher position in OSV, while e.g. Slioussar (2011) argued that it is in a higher position in both cases. No relevant significant differences were found between OVS and OSV, although small differences in average ratings can be observed. NB: this does not mean that Slioussar’s (2011) account is correct, it has independent problems with reciprocal binding.
- On average, canonical word orders received higher ratings than non-canonical ones, presumably because the latter are normally not felicitous in zero context (a separate experiment showed that this is also true for sentences without possessive pronouns).
- Sentences where possessive pronouns preceded their antecedents mostly received low ratings. Presumably, in some cases the problem is syntactic (backward pronominalization in Russian is discussed e.g. in (Avrutin & Reuland 2004; Kazanina 2005)), in the others it is context-related: as a separate study showed, the latter, but not the former improved in appropriate contexts.
- Out of sentences with backward anaphora, examples where a pronominal possessive has the

same referent as the last constituent, received especially low ratings. This may be explained by a well-known ban on coreference with focus (e.g. Chomsky 1976; Rochemont 1986).

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