## On Genitive and 'Stability': Evidence from Russian

# Ekaterina Rakhilina, VINITI RAN, Moscow

### 1. Introduction

The paper describes some crucial semantic properties of the Russian Genitive<sup>\*</sup>. It presents further development of the formal model of the Russian Genitive proposed in Borschev & Partee 1999, Partee & Borschev 1998, 2000 et al. and modified on the basis of ideas suggested first in Rakhilina 2003.

According to the model proposed by Partee and Borschev (henceforth P&B), the Genitive construction marks argumental or quasi-argumental relations, so that in nominal constructions the Genitive coerces non-relational nouns like koška 'cat' in constructions of the type koška Ivana 'Ivan's cat' to shift to relational nouns like brat [Ivana] '[Ivan's] brother' brat Ivana. This approach to the Russian Genitive is the starting point of my investigation. In Rakhilina 2003, I suggested that the relationship was not just argumental (or quasi-argumental), but presupposed a special semantic component named 'stability'. My analysis was based primarily on a detailed survey of Genitive constructions with Nomina agentis including both grammatical and ungrammatical examples, such as učitel' Petra I 'teacher of Peter I', učenik Sokrata 'student of Socrates', portnye korolja 'tailors of the king', pomoščnik prezidenta 'assistant of the president', on the one hand, and \*rasskazčik re*bënka* 'story-teller of the child', *\*skul'ptor Šekspira* 'sculptor of Shakespeare', \*kontrolër passažirov 'ticket collector of passengers', \*vor staruški 'thief of the old woman', on the other hand.

Two "lexicographic" questions were raised in Rakhilina 2003 concerning the Genitive construction as a possible marker for (quasi-)argumental relations:

- (1) Is it true that in all cases of argumental relations, the Russian Genitive is possible as a surface marker thereof?
- (2) Is it true that every non-relational noun introduced into a standard Genitive construction (say, the so-called Genitive-of measure-construction, like *stakan vody* 'glass of water') and following the general restrictions on the construction (e.g., being a container) will obligatorily undergo type-shifting, i.e., will be observed to form an acceptable Russian phrase?

In order to answer the first question, Russian nomina agentis (as a

<sup>&</sup>lt;sup>\*</sup> This study is part of a joint project supported by the National Science Foundation under Grant No. BCS-9905748 "Integration of lexical and compositional semantics: Genitives in English and Russian". I am grateful to all participants of the project (Vladimir B. Borschev, Elena V. Paducheva, and especially B. Partee, who read and commented upon the English version of this paper), as well as to the participants of the conference on Possession held at the University of Massachusetts, Amherst in May 2002. I would also like to acknowledge comments from Yury A. Lander and Vladimir A. Plungian on earlier versions of this paper.

good example of **relational** nouns) were examined. As it turns out, there are many cases when nomina agentis do not allow Genitive constructions. All of them, however, can be interpreted as lacking *stability* in the relation of nomina agentis and their potential Genitive correlates. Lacking stability can be attributed to different reasons: diversity of correlates, when nomina agentis is related to any possible correlate (as in *nosil'ščik* 'porter', cf. \**nosil'ščik čemodanov / čemodana* 'porter of cases / of a case'), obligatory replacement of the correlate, i.e., an obligatory requirement that the actor shift to another object (as in \**vor staruški* 'a thief of an old woman': a thief is not supposed to steal twice from one and the same person), and others.

Thus, in answer to the first question, one can say that Genitive *is* possible as a surface marker for argument relations, but not for all of them; as it was suggested in Rakhilina 2003, the "proper" arguments should meet some special conditions, generalized in the notion of 'stability'.

The present study focuses on **non-relational** nouns and, in terms of P&B's formal model, restrictions on the type-shifting procedure; the aim is to show the relevance of 'stability' for the description of other semantic types of Russian Genitive constructions, namely:

- 1. Genitive of measure (stakan vody 'glass of water'),
- 2. Genitive of time (pesnja goda 'song of the year'),
- 3. Part-whole Genitive (kraj stola 'edge of the table'),
- 4. Genitive of place (životnye tundry 'animals of tundra'),
- 5. Genitive of image (portret Puškina 'portrait of Pushkin').

Before I start examining the Genitive constructions above, looking for the *stability* presupposed by the relations encoded with Genitive in each of them, some remarks about the notion of *stability* itself are in order.

'Stability' is a metaphor; it has no formal analogues. But metaphors are useful in linguistics, especially in "fuzzy" domains which can hardly be grasped by formulas. Moreover, *stability* in the relation between a glass and water (as in *stakan vody* 'glass of water') is not the same as in the relation between a chair and its leg (as in *nožka stula* 'leg of the chair') and is not the same as in the relation between a creator and his creation (as in *p'esa Šekspira* 'a play of Shakespeare'). One cannot apply the same lexical analysis to these cases and expect the identity of semantic features, and if we want to understand what all of them have in common, the level of generalizations should be much higher.

#### 2. Genitive of Measure

2.1. Facts The most frequent illustration for this type of Genitive construction is *stakan vody* 'a glass of water'. The other examples are *čaška kofe* 'cup of coffe', *bočka mëda* 'a barrel of honey' and the like; no list of possible and impossible phrases is available in grammars or special studies. The construction has been recently described in Apresjan 1999 and Borschev and Partee 1999. Apresjan 1999 claims the existence of a clear rule: each name of a vessel can be used in the Genitive of measure construction. Borschev and Partee 1999 use a broader term 'container'; in pp. 168-169 they formulate a standard pro-

cedure of metonymy for all containers: 'container' (type CN, non-relational noun)  $\rightarrow$  'quantum' (type TCN, relational noun). The procedure describes the type-shifting of any common (non-relational) noun denoting a container to a relational noun meaning quantum; relational nouns are able to encode their arguments with Genitive.

The problem is (and it was taken into consideration and discussed in details in Borschev and Partee 2004) that there is no conventional classification for names of objects (and containers in particular), and there are no definitions of 'vessels' or 'containers' to appeal to. The only "reliable" evidence is native speakers' vague intuition. For native speakers of Russian, a container seems to be a more general notion than a vessel: prototypically, a vessel is an artifact for liquid, while a container is intended to keep solid objects too. Note that Apresjan's suggestion, though it has fewer exceptions, does not cover the bulk of the construction, because solid objects are easily marked by Genitive as in *korzina gribov* 'basket of mushrooms'.

However, there are cases which are to be considered as clear exceptions, both for Apresjan's and P&B 1999's theories. Thus, *reka* 'river', *futljar* 'case', *vaza* 'vase' and *akvarium* 'aquarium' are containers (the two latter are also vessels); nevertheless, they do not allow Genitive:

\*reka <čistoj> vody 'river of <clear> water',
\*futljar očkov lit. 'case of spectacles',
\*vaza cvetov 'a vase of flowers',
\*akvarium vody / ryb 'aquarium of water / of fish'...

Similar examples are analyzed in Borschev and Partee 2004 (for more details see below).

2.2. Interpretation Following Rakhilina 2003, I argue that Genitive of measure is possible only in case of a *stable relation* between a container and its contents. The features which characterize *stability for the relation of containing* are the following:

(1) a "stable" relation container is intended for keeping its substance, cf. *butylka vina* 'a bottle of wine', *čaška kofe* 'a cup of coffee', but not \**reka vody* 'a river of water', because water is not 'kept' in the river – since a river typically flows, its relation to its container is not stable;

(2) a (stable) container keeps its contents *inside*, cf. inappropriate *\*vaza cvetov* 'a vase of flowers', which does not represent a 'stable' relation (the main part of the flowers is outside the vase; therefore, the vase – as a container – does not determine the exact quantity of the flowers);

(3) there should be more than a single object inside, as the container is intended to measure a certain amount of substance; therefore, *\*futljar očkov* lit. 'case of spectacles' does not display stability of relation;

(4) a (stable) container should be of more or less standard and predictable capacity, so as to serve as a measure. Thus, *stakan* 'glass', *butylka* 'bottle', *vedro* 'pail', being prototypical measures, are expected in the Genitive of measure construction, unlike *\*konvert / \*stol bumag* 'envelope / table of papers', *\*košelëk deneg* 'purse of money', *\*akvarium ryb* 'aquarium of fish', which vary in capacity<sup>1</sup>.

(5) 'to contain / to keep in' should be the focal / rhematic component in the semantics of the container (*profile*, in terms of Langacker 1987, *focus*, in terms of Iordanskaja and Mel'čuk 1995, *lexicographic rheme* in terms of Raxilina 2000: 56 ff.). It means that this is the main function of the object, i.e., the object should not only *be able* to contain something, but it should be *made* for the express purpose of containment (cf. (1)). Thus, *\*lift ljudej* 'an elevator of people' or *\*peč' pirogov* 'an oven of cakes', etc. are impossible, though the corresponding objects denote containers, but the focal purpose of these containers is not to contain objects (cf. pail, barrel, basket etc.).

Thus, the "exceptions" from 2.1 prove to be unacceptable exactly because there is no stability between the container and its contents: each name of object mentioned in 2.1 (\**reka* <*čistoj*> *vody* 'a river of <*clear*> water', \**futljar očkov* lit. 'case of spectacles', \**vaza cvetov* 'a vase of flowers', \**akvarium vody* / \**ryb* 'aquarium of water / of fish') lacks a certain component of stability in its relation to its container.

But stability is not necessarily an inherent characteristic for names of containers or measure constructions – it may also be imposed in the context of quantitative constructions (introducing numerals or indefinite pronouns *ne-skol'ko, nemnogo* 'some, several, a few' with quantifying meaning) or constructions with quantifying adjectives like *polnyj* 'full', *celyj* 'whole, entire', *ves*' 'all'. So, if a Genitive construction sounds initially bad, because it violates properties of stability, as with <sup>?</sup>avtobus ljudej 'a bus of people' (because a bus is not intended just to contain people), it could be improved by introducing numerals, quantifying pronouns or adjectives which modify the situation: they add the idea of repetition and hence, regularity, which shifts it closer to measurement. Consider the pairs in (2), where the first phrase is ungrammatical, but the second is acceptable:

(2) \*vaza cvetov 'a vase of flowers' ~ neskol'ko vaz cvetov 'several vases of flowers',
\*karman ključej 'a pocket of keys' ~ polnyj karman ključej 'a full pocket of keys',
\*akvarium vody 'aquarium of water' ~ dva akvariuma vody 'two aquariums of water',
\*poezd passažirov 'a train of passengers' ~ celyj poezd passažirov 'a whole train of passengers', etc.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> A supplementary condition which influences the choice of Genitive is the way objects are put into a container, cf. *\*akvarium ryb* 'aquarium of fish' vs. *bočka ogurcov* 'barrel of cucumbers'. Normally, cucumbers are packed up tightly into a barrel, and then pickle is added. In this case the barrel can serve as measure for the cucumbers (but not for pickle), and Genitive for *bočka ogurcov* is acceptable. As for pickle, *bočka rassola* 'barrel of pickle' is perfect only if it means that there is nothing than pickle in the barrel (cf. *bočka vody* 'barrel of water, *bočka kvasa* 'barrel of kvass', *bočka benzina* 'barrel of oil', etc.), and is unacceptable, if pickle contains cucumbers. The same is true for aquariums: usually, some water is poured in first, and then (some) fish are put into it. Neither water nor fish can serve as measure in this case, cf. *\*akvarium vody / ryb* 'aquarium of water / fish'.

Another interpretation for nearly the same range of facts was proposed in Borschev and Partee 2004. They claim that Genitive of measure requires objects of a certain "sort", which they call containers and which are ascribed some special properties: containers have an inner part, are filled <only> with suitable substances, are functionally directed to their contents, and can be filled partway.

Generally, my solution does not contradict that of P&B: the features proposed above as defining stable relation are very close to those defining sorts of containers according to Borschev and Partee 2004. The main difference is that P&B's approach ignores the question of why Genitive constructions of this type only allow nouns denoting a special sort of objects to be used therein. To my mind, this question can be answered only by dealing with the semantics of other Genitive constructions and with the assumption that all of them display the same restrictions-choice strategy. Below, I argue that the notion of stability could help in solving this problem.

Hence, let us turn to other types of Genitive constructions.

### 3. Genitive of time

3.1. Problem Another type of Genitive construction to be considered is usually called "genitive of time". An important fact about this construction is that expressions with time terms are basically distributed between two different syntactic structures in Russian. The first one uses Genitive, as in <*lučšaja> pesnja goda* [Gen] 'the best song of the year', *glavnoe sobytie dnja* [Gen] / *prošedšej noči* [Gen] 'the main event of the day / last night' while the second one is attributive, as in *nočnoj poezd* [Adj] 'night train', *godovoj otčët* [Adj] 'annual report'.

The semantic difference between the two is considerable, and in most cases genitive cannot be replaced by the adjective, and vice versa, cf.: *\*lučšaja godovaja pesnja* [Adj], *\*glavnoe dnevnoe sobytie* [Adj], *\*poezd noči* [Gen], *\*otčët goda* [Gen].

Here are some other examples illustrating Genitive constructions prohibited in certain contexts:

(3)	vesennjaja odežda [Adj]	_	*odežda vesny [Gen] 'spring wear'
	voskresnyj dežurnyj [Adj]	_	*dežurnyj voskresen'ja [Gen] 'person
			on duty for Sunday'
	vekovye duby [Adj]	_	*duby veka [Gen] 'age-old (lit. cen-
			tury-old) oaks'
	godičnye kol'ca [Adj]	_	*kol'ca goda [Gen] 'annual rings'
	mnogočasovye debaty [Adj]	_	*debaty mnogix časov [Gen] 'long
			debate' (lit. 'many-hours debate')
	nočnaja smena [Adj]	_	*smena noči [Gen] 'night shift'

<sup>&</sup>lt;sup>2</sup> It does not work in all the cases, thus, <sup>??</sup>*polnaja reka vody* 'a full river of water' still sounds strange, and for obvious reasons: *polnyj* 'full' does not affect the opposition of 'flowing' vs. 'kept in', and flowing water still lacks stability.

nedel'naja norma [Adj]	_	*norma nedeli [Gen] 'standard of a
		week'
časovaja strelka [Adj]	_	*strelka časa [Gen] 'hour hand'
mesjačnyj srok [Adj]	_	*srok mesjaca [Gen] lit. 'month's
		term' = deadline in a month

3.2. Interpretation Genitive of time constructions, unlike the attributive one, convey a stable relation between a situation and the corresponding period of time (as with the genitives of measure discussed in section 2). In particular, Genitive of time presupposes that the situation takes place within some specific period of time<sup>3</sup>. Thus, the examples pesnja goda and nočnoj poezd from 3.1 are to be interpreted as follows: 'the song which was sung <= was popular> this year', but not \*'the train which arrived this night' (the right interpretation here is 'the train which arrives at night <regularly>').

On the contrary, the constructions in (4) cannot be transformed into attributive phrases without loosing the definiteness of the time, cf. *osennie vpečatlenija* 'autumn impressions' (as opposed to those which occur in / are typical of spring or winter) and *vpečatlenija oseni*, which convey a clear idea of a fixed and specific period of time (this autumn, the previous autumn etc.).

- (4) somnenija pervyx let 'doubts of the first years' vpečatlenija ètoj oseni 'impressions of this autumn' opyt vtorogo semestra 'experience of the 2<sup>nd</sup> semester' The same opposition holds for (5), as well as for (6), and others.
- (5) minutnoe zamešatel'stvo [Adj] 'momentary confusion'
   \*zamešatel'stvo minuty [Gen] lit. 'confusion of a minute'
   zamešatel'stvo pervoj minuty [Gen] 'confusion of the first minute'
- (6) srednevekovye rycari [Adj] ~ rycari srednix vekov [Gen] 'middle-ages knights'
   dnevnoj svet [Adj] ~ svet dnja [Gen] 'daylight'

#### 4. Part / whole relations

From the preceding discussion, one can expect that the more stable the connection between part and whole, the more likely Genitive construction is used. It means that inalienable possession is more likely to be encoded by Genitive. It is well known that Russian morphology does not distinguish between inalienable and alienable possessive constructions. However, Russian has syntactic means to show the difference in possessive classes which could be considered similar to this opposition. As shown in Raxilina 2000 (42-51) and Weiss and Raxilina 2002, the distinction lies between parts which cannot be detached

<sup>&</sup>lt;sup>3</sup> This strategy corresponds to what grammarians usually say about the opposition between the Genitive construction and the attributive ones: attributive contexts are considered to be "qualitative", while Genitive constructions are said to be applicable to specific referents (see Zemskaja 1992, cf. also Raxilina 2000: 88-93).

from their wholes, e.g., *veršina* 'top', *kraj* 'edge', *poverxnost*' 'surface' and the "normal" parts, like *ručka* <*dveri>* 'handle of the door', *nožka* <*stula>* 'leg <of the chair>' *kryša* <*doma>* 'roof of the house', etc. The representatives of the first group form odd phrases with the preposition *bez* 'without', like 'gora *bez veršiny* 'a mountain without its top', ''*čaška bez kraja* 'cup without edge', ''*stol bez poverxnosti* 'table without surface' and the like, they need special pragmatic context to be interpreted. "Normal" parts represented by the second group of nouns can easily be used in this construction: *dver' bez ručki* 'a door without a handle', *stul bez nožki* 'chair without a leg', etc.

It is clear that the first class displays more stable relations between parts and wholes, than the second one; in a sense, these nouns correspond to the notion of inalienable possession and are opposed to the second group, which could be treated as representing "alienable" possession.

Turning back to Genitive constructions, one can notice that the only possible construction to express "inalienable" possession is the Genitive one; for example, in (7) no Locative constructions are possible:

 (7) kraj stola [Gen] / \*kraj na stole [Loc] 'edge of the table', veršina gory [Gen] / \*veršina na gore [Loc] 'top of the mountain'.

At the same time, "alienable" possessive constructions normally allow both Genitive and Locative, cf. (8):

(8) pal'cy ruki [Gen] / pal'cy na ruke [Loc] 'fingers of / on the hand', polki škafa[Gen] / polki v škafu [Loc] 'shelves of / in the bookcase', stranicy knigi [Gen] / stranicy v knige [Loc] 'pages of / in the book', ručka dveri [Gen] / ručka na dveri [Loc] 'handle of / on the door' etc.

Thus, as expected, the more stable the relation between a part and its whole, the more likely Genitive construction is. Note that Genitive cannot display broken part-whole relations (representing a clear case of non-stable configuration), cf. *ručka ot čaški* 'handle <separated> from the cup', but not *ručka čaški* 'handle of the cup' in the sense above.

Consequently, it is possible to speak about a "scale of stability" for part / whole relations, one pole of which is represented by broken objects (parts separated from their wholes), an extreme corresponding to "alienability" (cf. 'handle <separated> from the cup'), and another pole represented by "inalienable" part / whole relation and "undestroyable" objects which parts cannot be detached from their wholes (cf. *kraj* 'edge'. "Normal" part / whole relations (denoting parts of wholes which can be separated) are situated somewhere in the middle of this scale. One can see that the likelihood of Genitive increases with the increase of stability.

Similarly to the previous group of contexts, part / whole relations can also be expressed by attributive constructions, cf. *okno čerdaka* [Gen] – *čer-dačnoe okno* [Adj] 'attic window'. Again, unlike attributive constructions, a part-whole Genitive prefers (cf. the previous section) individual, non-generic participants of the relationship, i.e. definite and specified whole and parts, cf. the following pair of sentences (9):

- (9) a. *V dome bylo čerdačnoe okno* [Adj] (\**okno čerdaka* [Gen]) 'There was an attic window (\*window of the attic) in the house'
  - b. *Okno čerdaka* [Gen] *bylo otkryto* 'The window of the attic was opened'.

The first sentence in (9) characterizes the type of the window, and requires the attributive construction; the initial position of the noun phrase in the second sentence supposes a specific object and thus privileges Genitive.

Thus, the data of part / whole Genitive construction corroborates the hypothesis that 'stability' is crucial for the semantic analysis of the Russian Genitive.

## 5. Genitive of place

In Russian, the relation between object and its <temporary> location is considered to be *non-stable*, and Genitive does not encode this kind of relations, cf. (10):

(10) *\*ženščiny polja* 'women of the field' (for: 'women <working> in the field');

\**sportsmeny stadiona* 'sportsmen of the stadium' (for: 'sportsmen <training> at the stadium');

\**poezd stancii* 'train of the station' (for: 'the train <stopped> at the station');

\**studenty 32 auditorii* 'students of the room N 32' (for: 'students <having a lecture> in the room 32'), etc.

Thus, in Russian, pure locative relations are considered to be occasional. However, Genitive is possible in case a locative relation is combined with a more stable one, like part / whole relation, cf. *perron stancii* 'platform of the station': on the one hand, the platform is located on the station, on the other hand, it is part of the station.

Interestingly, the situation with *spaces* as places of location is somewhat different: names of spaces (as *tundra* 'tundra', *pustynja* 'desert', *ad* 'hell'), unlike "ordinary" names of places, do allow Genitive constructions: cf. *rastitel'nost' tundry / pustyni* 'flora of tundra / desert', *čudovišča ada* 'monsters of the hell', etc.

The case could be explained by taking into account that an object located in space (unlike that located on the surface) becomes part of space, so locative constructions with names of spaces combine locative and part / whole semantics, and in matching these interpretations they get access to a more stable relation than an ordinary locative one, and hence allow Genitive.

Note that the similar restrictions have been observed in Jensen and Vikner 2004 for English 's-Genitives of place. They consider examples where the Genitive is acceptable, like *Denmark's businessmen* and those which do not allow Genitive construction, like \**the garden's businessmen* and formulate "the world hypothesis": "lexical entries of all nouns contain Constitutive role part-of (y: world)(x)". According to this hypothesis, *Denmark's businessmen* "denotes only those businessmen that are established in Denmark, and who

may thus be conceived as part of 'the Danish world' ". They argue that there are nouns which are "open to a world interpretation", such as *universe*, *society*, *civilization*, *culture*, as well as names of countries, cities and other designations of territories. *Garden* does not belong to this list, so *\*the garden's* businessmen is impossible.

In principle, this interpretation is close to what has been proposed here for the corresponding Russian Genitive construction: I agree that it is partwhole semantics which makes the relation between the object and its location eligible for Genitive construction. The remaining question is what the reason for it is. My idea is that for Russian the reason is of a more general nature: part-whole relation is more 'stable' than locative one. This explanation covers not only the case of Genitive of Place, but also other types of Genitive construction and even the cases of semantic interaction between Genitive construction and its pragmatic context.

As shown in section 2, 'stability' may also be imposed by the context; it could be a lexical context (the role of numerals or indefinite pronouns with quantifying meaning for Genitive of measure was already indicated) or a grammatical one. The role of number as grammatical context which can increase or decrease 'stability' in the situation and thus, influence the Genitive construction, was analyzed in Rakhilina 2003 for the domain of nomina agentis. One of the examples discussed was a pair of phrases with Genitive acceptable in Plural and nearly impossible in Singular non-generic: <sup>??</sup>zritel' Mixalkova [Sg] – zriteli Mixalkova [PI] 'spectator / spectators of Mikhalkov'.

The reason for the different behaviour of the Singular and Plural forms was explained appealing to metaphor of stability: "... *zritel' Mixalkova* 'Mikhalkov's spectator' is acceptable only in a generic singular interpretation, as representing a kind of people, a typical spectator of Mikhalkov's films having some features in common; non-generic singular interpretation ('one specific spectator of Mikhalkov') is very odd. Generic interpretation allows for a Genitive construction, because it privileges a more stable relation with the correlate. The plural is semantically closer to generic uses, therefore plural NP *zriteli Mixalkova* 'Mikhalkov's spectators' is fully acceptable."

Thus, a shift to Plural or generic forms is one of the means to obtain 'stability', and it can be successfully applied to names of places: \**ptica lesa* 'a bird of forest' (for: 'a bird <which lives> in the forest') ~ <sup>?</sup>*pticy lesa* 'birds of forest' ~ *pticy lesov* 'birds of forests' (I owe the latter example to Yury Lander).

#### 6. Genitive of image

6.1. Facts and problems The typical example for this type of Genitive construction is portret Puškina 'Pushkin's portrait' (i.e. an image representing Pushkin). The Genitive marks a relation between a special artifact depicting somebody or something and the model for the image. As there are not many artifacts of the kind, there are not many possible headwords, to wit: *izobraženie* 'image', *kartina* 'picture', *pejzaž* 'landscape painting', *ètjud* 'study, sketch', *karikatura* 'caricature', *značok* 'badge', *bjust* 'bust', *statuja* 'statue', *skul'ptura* 'sculpture', *pamjatnik* 'monument', *figura* 'figure', *ten*' 'shadow; ghost', *profil*' 'profile', *otraženie* 'reflection', *kukla* 'puppet, doll', *čučelo* 'stuffed <animal>', *pugalo* 'scarecrow'.

The problem is that some of these words do participate in the Genitive construction (group 1), while the others (group 2) do not – for no obvious reason.

Below, two lists of examples are given: well-formed Genitive constructions for names of images from group 1 and ill-formed Genitive constructions for those from group 2.

(11) Group 1:

portret Puškina 'Pushkin's portrait',

*fotografija moej materi / našego doma* 'the photograph of my mother / our house'

bjust Napoleona 'bust of Napoleon',

statuja Komandora 'statue of the <knight> Commander', izobraženie / otraženie moego lica 'image / reflection of my face', profil' Ljudovika XIV na monetax 'profile of Louis XIV on the coins', čučelo krokodila 'stuffed crocodile' ten' dereva 'shadow of the tree', figura prezidenta 'figure of the president'

(12) Group 2:

\**kartina derevni* 'picture of a village' (for: 'picture representing a village'),

\*pamjatnik Puškina lit. 'monument of Pushkin',

\*kukla mladenca 'doll of a baby' (for: 'doll representing a baby'),

*\*značok kostra* 'budge of a campfire' (for: 'budge representing a campfire'),

*\*pugalo dvornika* 'scarecrow of a street cleaner' (for: 'scarecrow representing a street cleaner'),

*\*karikatura Gorbačëva* 'caricature of Gorbachev' (for: 'caricature representing Gorbachev').

6.2. Interpretation My interpretation appeals, again, to the notion of 'stability'. Indeed, a stable relation arises between an image and its <specific> model, and all the items from group 1 illustrate this type of relation: for example, a portrait normally relates to a certain specific person depicted. The same is true for photographs, as well as for reflections in the mirror, image, shadow or *čučelo* 'stuffed animal': each case displays a correlation between the image and its unique model. Interestingly, *statuja Komandora* 'statue of the <knight> Commander', implying a specific person, sounds much better than <sup>??</sup>*statuja medvedja* 'statue of bear', because *bear* can hardly be interpreted as some specific individualized representative of this animal species.

There are also nouns representing complex relations of the type both 'image / model' and 'part / whole': cf. *bjust* 'bust', *figura* 'figure', *profil*' 'profile'. Naturally, they can participate in Genitive constructions.

The second group, on the contrary, represents no stable relation between the image and its model, because images belonging to this group do not "copy" their models. Thus, *karikatura* 'caricature' is intended to distort the appearance of the depicted person to produce a comic effect. As for *pamjatnik*  'monument', it is not necessarily an image of the person: a cross or a gravestone may well serve as a monument, and the original meaning of the word is associated with the concept of 'memory', so any <monumental> object made in memory of a certain person can be considered as *pamjatnik*. This lexeme selects for Dative, not Genitive: in literary language, it must be said *pamjatnik Puškinu* [Dat] 'monument to Pushkin', and not \**pamjatnik Puškina* [Gen] 'monument of Pushkin'. Dative is clearly motivated here: monument is dedicated to somebody or addressed to somebody's memory, and the addressive relation is a privileged domain of Russian Dative.

The other nouns from group 2 - kukla 'puppet / doll' *značok* 'badge', *pugalo* 'scarecrow' – do not imply any specific person or situation depicted, because they represent *typical* images, reproducing general characteristics of a baby (for a doll) or a fearful human being (for a scarecrow), etc. Hence, these nouns do not imply stable relations between an image and its model, and, as a result, do not occur in Genitive constructions. The corresponding ungrammatical phrases, like *\*kukla mladenca* 'doll of a baby' (for: 'doll representing a baby'), or *\*pugalo dvornika* 'scarecrow of a street cleaner' (for: 'scarecrow representing a street cleaner'), parallel the effect of *?? statuja medvedja* 'statue of bear' discussed above. The latter, however, contrasts with *statuja Komandora* 'statue of the <knight> commander', which is perfectly correct. In this pair stability is gained by changing the correlate for the headword from a common noun into a proper name, whereas the headword itself shifts from group 2 to group 1 and becomes eligible for the genitive construction.

In general, the group 2 nouns do not take proper names as correlates and do not allow this type of shifting. However, due to some new realities of Russian life one can observe the similar effect: speaking about a recent TV program "Kukly" ('Puppet-show') which presented the well-known Russian politicians, it's possible to say "*kukla Putina / Žirinovskogo / Javlinskogo*" 'the puppet of Putin / Žirinovskij / Javlinskij', meaning puppets imitating real people. In this case Genitive construction becomes fully grammatical in accordance to our expectations, as *kukla* shifts to group 1 and represents a stable relation with its model.

The most interesting case in group 2 is *kartina* 'picture', as opposed to *fotografija* 'photo, picture' from group 1. The latter copies its model more or less exactly, and a stable relation between the model and the picture is obvious. Russian (unlike English, which can use one and the same word for translating both concepts, thus making less difference between the concepts themselves) conceptualizes the semantics of *kartina* 'picture' in another way: *kartina* is usually something more than a pure image of one specific object: it is an interpretation, a "work of art". Accordingly, the relation with the model is not as stable as in the case of *fotografija* 'photo'.

From this point of view, *kartina* as a physical object could be opposed to *kartina* as a visual or mental image of a certain process, seen by an observer, as in: *kartina smerti* or *kartina požara* 'a scene (lit. a picture) of death / fire'. The latter displays a stable relation, implying a specific situation as a starting point for the visual image and thus fits in with group 1.

#### 7. Conclusion

The general idea of the paper is to illustrate the notion of stability as applied to different types of Russian Genitive constructions; thus, 'stability' is the main point of my study. In sum, the following is the role 'stability' plays in the semantics of Genitive.

Starting with P&B's formal model, I accept the idea that Russian Genitive correlates with the argument relations of nouns. If a noun is relational, Genitive reflects its argument relations; if Genitive is used with non-relational nouns, the latter can be conceptualized as shifted to the argumental class.

Another analysis within a similar frame of formal semantics was proposed by Jensen and Vikner (1994). Following Pustejovsky's approach to semantics of nouns, Jensen and Vikner suggest that in case of common nouns argument relation is not *introduced* by the Genitive construction, but revealed by it from the semantics of the noun itself: Genitive marks those relations which are highly characteristic to the noun and which describe its functions or purposes. Thus, *stakan* 'glass' is intended to contain something. In the view of the Moscow semantic school, it cannot be described without appealing to this fact; hence, as a lexical item, it is connected semantically with the class of lexemes denoting its possible contents. Syntactically, that means that it has an argument relation to contents (though, perhaps, not overt).

No matter which approach one subscribes to, the type-shifting of P&B' model, or the revealing of argument characteristics as in Jensen and Vikner's approach, the consensus is that Genitive **coerces** argument relations.

The problem, however, is that it does not do it *always*. A thorough lexicological study in the spirit of the Moscow semantic school shows that there are restrictions on all types of Genitive constructions:

- Genitive of measure does not allow non-standard contents, or containers of non-standard capacity or containers not intended to keep contents inside;
- Genitive of time allows only specific periods of time, corresponding to the specific situation described;
- Genitive of parts and wholes prefers a stable relation between a part and its whole and ignores the cases when part is separated from its whole;
- Genitive of place is possible only when location is not occasional and locative relation is supported by a more stable one binding the two objects more tightly (such as part / whole relation);
- Genitive of image requires a situation when image copies its <specific> model, and other cases do not fit the construction.

This list could be supplemented with the restrictions on Genitive with nomina agentis (see Rakhilina 2003):

- Genitive with nomina agentis is possible only in case the two persons are <directly> related in the course of the whole situation.

These restrictions and the corresponding data can be described independently, with no general picture implied by different groups of examples. But the hypothesis discussed in Partee and Borschev 1998 and Borschev and Partee 1999 (cf. also Borschev and Knorina 1990) implies that different types of uses are representations of the same Genitive construction having a single formal model which implies a unique mechanism of introducing a noun into the Genitive construction. Following this hypothesis, there should be some common strategy in restrictions for different kinds of Genitive constructions. And this was what I intended to show: there is a certain system in different examples of exceptions demonstrated. Informally speaking, the Genitive ignores occasional relations, and the more the objects are independent from each other, the less the probability that the corresponding nouns will form a Genitive construction.

Thus, a thief is connected with its victim just by chance: every time he steals things he is free to choose another one to steal from. This situation could be opposed to that of *spasitel' Petra* 'saviour of Peter', which describes a fact constituting a relation between the two people once and for all. On the other hand, the relation between a thief and his victim is somewhat similar to that of a container with a non-stable capacity and its contents or a train and the time of its (usual) arrival: all these situations imply obligatory changing of the participant.

Naturally, the semantics of these restrictions cannot be compared directly; as the corresponding situations are too far from each other, the question is whether they have what is called the common strategy. I argue that this strategy is covered by the metaphor of 'stability', proposed in Rakhilina 2003: Russian Genitive construction encodes stable relations and do not encode unstable ones.

As for its explanatory force, the notion of 'stability' is far from ideal. First, being an inexact translation of Russian *ustojčivyj* 'stable', it adds the wrong connotations of stability in time (for further detail see Rakhilina 2003). Second, as with the other metaphors, it is too abstract, and is not able to reflect concrete examples and linguistic facts it was based on.

At the same time, as a metaphor, it has some positive aspects: it still gives an idea of a general strategy for the restrictions on the genitive construction motivating the idea that a native speaker does not remember the exceptions one by one, but has a general impression of what is acceptable as a member of Genitive construction and what is not. In other words, 'stability' can be said to organize and determine the domain of Russian genitive and to predict the restrictions which occur in different types of contexts – at least in those analyzed in this paper. Second, this strategy is not *ad hoc*, because the concept of stability seems quite natural as seen in the light of P&B's model, i.e., if we consider that Russian Genitive encodes prototypically> argumental relations: it's well known that, prototypically, argumental relations do reflect the idea of stability of the relationships between the entities denoted by corresponding nouns, as in *Ivan's brother*.

#### References

Apresjan, Ju.D. 1999. Semantičeskaja motivacija nesemantičeskix svojstv leksem. In *Die grammatischen Korrelationen*, ed. Branko Tošović, 96-116. Graz: Institut für Slawistik.

- Borschev, V.B. and L.V. Knorina. 1990. Tipy realij i ix jazykovoe vosprijatie. In *Jazyk logiki i logika jazyka*, ed. Vjač. Vs. Ivanov, 106-134. Moscow: NSK.
- Borschev, V.B. and B. H. Partee. 1999. Semantika genitivnoj konstrukcii: raznye podxody k formalizacii. In *Tipologija i teorija jazyka: ot opisanija k ob"jasneniju*, ed. Ekaterina V. Rakhilina and Yakov G. Testelets, 159-172. Moscow: Jazyki russkoj kul'tury.
- Borschev, Vladimir and Barbara H. Partee. 2004. Genitives, types and sorts: The Russian genitive of measure. This volume.
- Iordanskaja, L. and I. Mel'čuk. 1995. \*Glaza Maši golubye vs. Glaza u Maši golubye: Choosing between two Russian constructions in the domain of body parts. In Russian Language in the Meaning ⇔ Text Perspective by I.A. Mel'čuk, 135-164. Moscow: Jazyki russkoj kul'tury, Vienna: WSIA.
- Jensen, Per Anker and Carl Vikner. 1994. Lexical knowledge and the semantic analysis of Danish genitive constructions. In *Topics in Knowledgebased NLP Systems*, ed. Steffen Leo Hansen and Helle Wegener, 37-55. Copenhagen: Samfundslitteratur.
- Jensen, Per Anker and Carl Vikner. 2004. The English pre-nominal genitive and lexical semantics. This volume.
- Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar*. Vol. 1: *Theoretical prerequisites*. Stanford: Stanford University Press.
- Partee, Barbara H. and Vladimir Borschev. 1998. Integrating lexical and formal semantics: Genitives, relational nouns, and type-shifting. In Proceedings of the 2nd Tbilisi Symposium on Language, Logic, and Computation, 229-241. Tbilisi: Center on Language, Logic, Speech, Tbilisi State University.
- Partee, Barbara H. and Vladimir Borschev. 2000. Genitives, relational nouns, and the argument-modifier distinction. In *Approaching the Grammar of Adjuncts (ZAS Papers in Linguistics* 17), ed. Ewald Lang et al., 177-201. Berlin: Humboldt University.
- Rakhilina, Ekaterina. 2003. The case for Russian Genitive case reopened. In [Formal] Approaches to [Slavic] Linguistics # 11: The Amherst Meeting 2002, ed. Wayles Brown et al., 433-450. Ann Arbor: Michigan Slavic Publications.
- Raxilina [Rakhilina], E.V. 2000. Kognitivnyj analiz predmetnyx imen: semantika i sočetaemost'. Moscow: Russkie slovari.
- Weiss, Daniel and Ekaterina Raxilina [Rakhilina]. 2002. Forgetting one's roots: Slavic and Non-Slavic elements in possessive constructions of modern Russian. Sprachtypologie und Universalienforschung (STUF) 55 (2): 173-205.
- Zemskaja, E.A. 1992. Slovoobrazovanie kak dejatel'nost'. Moscow: Nauka.