# Genitive of cause and cause of genitive

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#### 10.1 Introduction

This paper builds on the interpretation of the Russian genitive offered in the series of works by Barbara Partee and Vladimir Borschev (Partee & Borschev 1998, 2000a, 2003) and applies this analysis to the genitive construction of 'cause' that had previously received little attention in the literature. This construction can be exemplified by (1).<sup>1</sup>

(1) — Nu, značit, esli ogromnoe krovoizlijanie v mozg — pričina smerti, a pričina ogromnogo krovoizlijanija v mozg — udar po golove, značit, tvoja babuška umerla ot udara po golove!

'Well, if the large hemorrhage stroke is the cause of death and the cause of the large hemorrhage stroke is the blow to the head, this means that your grandmother died from the blow to the head!' [Tat'jana Solomatina. Bol'šaja sobaka, ili «Èklektičnaja živopisnaja vavilonskaja povest' o zarytom» (2009)]

The meaning of the Russian genitive is the most varied among all Russian cases. Janda & Clansy (2002: 111) call genitive "the most complex case in Russian" because it is the most frequently used of Russian cases with various submeanings, which sometimes seem almost to contradict each other (cf. genitive of the Source *iz školy* 'from school-GEN' and genitive of the Goal *do tramvaja* 'to the tram-GEN'), and it can be combined with over 100 prepositions.

<sup>1</sup> This article is an output of a research project implemented as part of the Basic Research Program at the National Research University Higher School of Economics (HSE).

The project entitled "Integration of lexical and compositional semantics: Genitives in English and Russian" (with Barbara Partee as the principal investigator) was especially intended for studying the Russian genitive in different constructions: subject genitive (Partee et al. 2012), object genitive (Partee & Borschev forthcoming, Rakhilina 2008), genitive of the container (Partee & Borschev 2012). Partee & Borschev (1998, 2000a, 2003) offer a unified description for the constructions with common nouns, such as koška Niny 'Nina's cat', and relational nouns, such as like učitel' Niny 'Nina's teacher'. They develop an idea first offered by Vikner & Jensen (1994) for genitive constructions in Danish and then explored in a later article by the same authors for English (Jensen & Vikner 2002). Jensen and Vikner analyze all genitives as argument constructions. Genitive assigns additional qualia structure (in terms of Pustejovsky 1993, 1995) and, as a result, non-relational nouns, such as koška 'cat', can be interpreted as argument nouns, which allows them to be used in a genitive construction. Partee & Borschev (2003) argue that this analysis cannot be applied to all genitives in all languages; for example, they propose non-unified analysis for English genitive constructions. However, uniform analysis is possible for the Russian genitive and "Russian genitive NPs are always arguments" (ibid.: 82).

This idea is pursued further in Rakhilina 2004, 2010, where it is proposed that Russian genitive construction can be used only if the relationship between two objects can be described as stable. The semantic component of stability, for example, allows us to explain the restrictions on the genitive of nomina agentis: \*vor staruški 'the thief of the old lady' is ungrammatical, because there is no stable relationship between the thief and the old lady — thieves normally steal from different people. Similarly, the genitive of time can be used only when there is a stable relationship between an object and a noun that refers to a time period. For example, pesnja goda 'the song of the year' is possible because the song is related to this particular year, because it is a song that has appeared and received an award during that year. By contrast, \*odežda oseni 'fall clothing' (literally, 'clothing of the fall') is not possible, because there is no relationship between clothes and a particular fall season. The lexically similar noun phrase, osennjaa odežda 'fall clothing', however, describes clothes that could be worn during any fall season. The Russian genitive of location follows the same restriction. The example, \*ptica lesa 'the bird of the forest', is not grammatical, because there is no stable relationship between the bird and the forest that the bird inhabits. However, the example, pticy lesov 'forest birds' (literally, 'birds of the forest'), is grammatical, because birds that live in the forest have unique features that distinguish them from tundra birds, desert birds, etc. Other genitive constructions, e.g., genitive of the part, genitive of the container, etc., also follow the same restriction.

In this article, we investigate the Russian genitive of cause that has not received special attention in the literature thus far, and argue that the genitive of cause follows the patterns that have been established for the Russian genitive case in general. We suggest that the genitive of cause can be used only when a cause and its effect are strongly related, such that they form a stable, argument-like relationship; otherwise, the genitive construction cannot be used.

## 10.2 Semantics of the causal relationship

Let us first consider the semantics of the causal relationship. Event P can be called the cause of event Q, if event P is responsible for event Q:  $P \Rightarrow Q$ . In Russian, a causal relationship usually is marked with the conjunctions *potomu* 'because' and *potomu čto* 'because', and the question word *počemu* 'why'.

- (2) Kak-to raz ona zaplakala, potomu čto ejo unizili v domoupravlenii.
   'Once she started crying, because she was humiliated at the house manager's office.' [Sergej Dovlatov. Naši (1983)]
- (3) Na otcovskie den'gi mne bylo gluboko naplevat', ja nikogda ne sčital ix svoimi i nikogda na nix ne rassčityval i vovse ne potomu, čto ja takoj bessrebrenik. 'I did not care a damn about father's money, I never had considered them mine, and never counted on them and not because I am so completely unmercenary.' [Vera Belousova. Vtoroj vystrel (2000)]
- (4) **Počemu** ty dumaeš', čto èto sdelali imenno oni?

  'Why do you think that it is them who did this?' [Anatolij Rybakov. Bronzovaja ptica (1955–1956)]

The conjunctions *potomu* and *potomu* čto are used in order to connect two events: the causal event P and the effect Q. For example, in sentence (2), the event P "the wife was humiliated at the house manager's office" caused the event Q, "the wife started crying." The question word *počemu* is used when the speaker is interested in the cause of the event in question: he or she asks what event P is responsible for the observed event Q.

The logical relationship  $P \Rightarrow Q$  seems simple and can relate all types of events. However, if we turn to nominal causal constructions, we see that they have strong restrictions on the types of events that can be described via nominal causative constructions. For example, nominal examples parallel to (2) through (4) are ungrammatical: \*pričina plača 'cause of weeping', \*pričina bezrazličija k den'gam 'cause of indifference towards money', \*pričina mysli 'cause of the thought'. In this article, we investigate these restrictions and show that the compatibility of the word pričina 'cause' follows the general rules for genitive constructions in Russian and that only stable causal relationships can be described via the construction pričina X-a 'cause of Xgen'.

#### 10.3 Nominal causal constructions: cause of genitive

What nouns can be used in nominal causal constructions? Boguslavskaja (2003b,a) lists five nouns that can express causal meaning in Russian: *pričina* 'cause', *povod* 'occasion', *predlog* 'pretense', *osnovanie* 'ground', *rezon* 'reason'. Among these five nouns, the noun *rezon* 'reason' is infrequent; it has only 6 items per million (ipm) in the main part of the Russian National Corpus (RNC),² compare this to the other causal nouns: *pričina* 'cause' — 240 ipm, *povod* 'occasion' — 141 ipm, *predlog* 'pretense' — 20 ipm, *osnovanie* 'ground' — 151 ipm. In addition, this word is becoming obsolete, with examples diachronically distributed as follows: 28 ipm in the 18<sup>th</sup> century, 9 ipm in the 19<sup>th</sup> century, 4 ipm in the 20<sup>th</sup> century, and 5 ipm in the 21<sup>st</sup> century. Due to its infrequent usage and soon-to-be obsolete status, the word *rezon* 'reason' is excluded from the list of causal nouns investigated in this article.

Let us consider the constructions in which the four remaining causal nouns are used. The main construction for the noun *pričina* 'cause' is genitive: *pričina smerti, avarii, provala* 'cause of death, accident, failure'. Each of the remaining three nouns is associated with its own causal construction that involves a preposition. The noun *povod* 'excuse' is used in construction with the preposition *dlja* 'for': *povod dlja spora* 'occasion for dispute', *povod dlja bespokojstva* 'issue for concern', and *povod dlja pokupki* 'purchase occasion'. (Note here that different submeanings of the Russian word *povod* correspond to the English words *occasion* and *issue*, showing that the English semantic

<sup>2</sup> The Russian National Corpus (RNC) can be found at www.ruscorpora.ru, the searches were performed in April 2015 when the main part of the RNC contained around 230 million words and around 86 thousand texts.

field of causal nouns is more detailed than in Russian.) The noun *predlog* 'pretext' combines with the construction *pod predlogom X-a* 'under pretense of X': *pod predlogom ustalosti, proverki, nezdorov'ja* 'under pretense of being tired, inspection, indisposition'. The noun *osnovanie* 'ground' is frequently used in the construction *na osnovanii X-a* 'based on X': *na osnovanii zakona, analiza, dannyx* 'based on the law, analysis, data'. It is also used in construction with the preposition *dlja*, similar to the causal noun *povod* 'occasion': *osnovanie dlja otkaza, razvoda, optimizma* 'grounds for rejection, divorce, optimism'.

However, genitive construction is not available for the nouns povod 'occasion', predlog 'pretense', and osnovanie 'ground': \*povod bespokojstva 'issue of concern', \*predlog nezdorov'ja 'pretense of indisposition', \*osnovanie razvoda 'grounds of divorce'. Why is the genitive construction that is possible for *pričina* 'cause' not possible for the other three causal nouns? In order to answer this question, we employ Construction Grammar theory as a theoretical foundation. (The current state of development of this theory is summarized in Hoffmann & Trousdale 2013.) According to Construction Grammar, a construction is the basic unit of language, has specific semantics and poses semantically motivated restrictions on its slots. Constructions that have a similar form produce a radial network with a common semantic component; Goldberg (2006: 166–182) describes such a network for constructions with Subject-Auxiliary Inversion. We propose that Russian genitive constructions also form a radial network with the common semantic component of an argument-like stable relationship between two objects. Only causal nouns that mark an argument-like stable relationship between the cause and its effect can be used in a genitive construction.

What makes the other causal nouns different from the noun *pričina* 'cause'? Boguslavskaja (2003a: 282) points out that the noun *povod* 'occasion' indicates an event that is juxtaposed with the effect in time; that is, it can be imagined as a cause for the effect, but actually the effect is already present, and the occasion serves only as an *a posteriori* justification for the effect; see (5).

(5) Vse obratili vnimanie na to, kak ja deržu nosilki. Nado bylo najti **povod** dlja vesel'ja, i **povod** byl najden. Okazalos', čto ja deržu nosilki kak Otjavlennyj Lentjaj. 'Everyone observes how I carry the stretcher. They needed a laugh-in and the occasion was found. It turned out that I carry the stretcher as a Notorious Sluggard.' [Fazil' Iskander. Načalo (1969)]

Boguslavskaja (ibid: 281) also shows that when the speaker uses the word predlog 'pretense', the speaker claims that event P is the cause of event Q, which is not true. Predlog 'pretense' is used when the speaker is trying to conceal his true intentions; see (6).

(6) Pri vsjakom udobnom slučae ja staralsja ujti so služby pod predlogom bolezni. 'On every convenient occasion I tried to leave the office under pretense of illness.' [M. A. Bulgakov. Teatral'nyj roman (1936-1937)]

Osnovanie 'ground' points to legal or scientific grounds on which someone can perform an action. Thus, osnovanie 'ground' indicates an event *P* that is necessary, but not sufficient, to cause event *Q*. Even though such grounds allow a subject to perform an action, they do not cause the action; see (7) and (8).

- (7) Jasno, čto nužno najti pokazatel', kotoryj na **osnovanii** analiza otkrytyx ili očevidnyx dannyx pozvoljal by ocenivat' xozjajstvennuju dejatel'nost' ljubogo internetmagazina.
  - 'It is clear that we need to find a measure that is based on open and trivial data, would allow us to estimate the effectiveness of business activities of the Internet store.' [Vasilij Auzan, Daniil Afrin. Kak ocenit' uspešnost' internet-magazina (2001) // «Èkspert-Internet», 2001.03.12]
- (8) Naxodki, izobretenija praktikujuščix psixologov poka čto ne priznajutsja v kačestve osnovanij dlja prisuždenija učjonyx stepenej.

'Discoveries, inventions of the therapy practitioners are not admitted as grounds for a degree certificate.' [E. A. Klimov. Psixologija v XXI veke // «Voprosy psixologii», 2003]

Thus, we see that only *pričina* 'cause' indicates a true causal relationship between two events. The other three causal nouns describe relationships that are similar, for example, an occasion that could be seen as a cause, a pretense that could be used as a cause, and grounds that allow a situation. Thus, *pričina* 'cause' is the only noun that implies a stable relationship between cause and effect, and this is the reason why only *pričina* 'cause' can be used in a genitive construction that requires an argument-like stable relationship between two objects. In the next section, we explore what provides such a stable relationship between two situations.

# 10.4 Collostructional profiling: genitive of cause

In order to deduce the restrictions that a genitive casual construction poses on its elements, we employ collostructional profiling, developed in Kuznetsova 2013. Collostructional profiling characterizes a construction via a list of the most frequent fillers of the constructional slot. Table 10.1 below provides a list of the most frequent fillers of the genitive slot in the construction *pričina X-a* 'cause of Xgen'. The data in this table are culled from the database of bigrams (sequences of two words) in the RNC, where the first word of the bigram is *pričina* 'cause' and the second word is a noun in the genitive case. The second column shows the number of documents that contain such a bigram. The first row of the table indicates that the bigrams *pričina smerti* 'cause of death', *pričina vozniknovenija* 'cause of origin', *pričina gibeli* 'cause of accidental death', *pričina bolezni* 'cause of illness', *pričina pojavlenija* 'cause of appearance', and *pričina otkaza* 'cause of rejection' appear in the corpus in more than 100 documents each.

fillers of the genitive slot	number of documents
smert' 'death', vozniknovenije 'origin', gibel' 'accidental death', bolezn' 'illness', pojavlenie 'appearance', otkaz 'rejection'	≥ 100
avarija 'accident', neudača 'misfortune', katastrofa 'cata- strophe', otsutstvie 'absense'	50 — 99
vzryv 'explosion', proval 'failure', zabolevanie 'sickness', obrazovanie 'formation', uxod 'leaving', uspex 'success', nedostatok 'shortage', rost 'increase', arest 'arrest', zader-żka 'delay', vojna 'war', požar 'fire', krizis 'crisis', ubijstvo 'murder', samoubijstvo 'suicide', padenie 'fall', poraženie 'defeat', tragedija 'tragedy'	20 – 49

Table 10.1: Most frequent fillers of the genitive slot in the construction pričina X-a 'cause of Xgen'

Fillers that are frequent in the construction *pričina X-a* 'cause of Xgen' can be classified according to three parameters: evaluation, control, and aspectual class. In terms of evaluation, fillers that appear frequently in the construction *pričina X-a* 'cause of Xgen' can be divided into several subclasses. The first subclass contains words that describe negative situations, such as *smert*' 'death',

gibel' 'accidental death', bolezn' 'illness', otkaz 'rejection', vzryv 'explosion', proval 'failure'. The second subclass contains nouns that are neutral and indicate different phases of the situation; these nouns refer either to the beginning of the process (vozniknovenije 'origin', pojavlenie 'appearance', obrazovanie 'formation') or its development (rost 'increase'). These neutral nouns most frequently combine with the nouns of the first group: pričiny vozniknovenija požarov 'causes of fire origin', pričiny pojavlenija virusov 'causes of virus emergence', pričiny obrazovanija zadopžennostej 'causes of debt creation', and pričiny rosta ubytkov 'causes of increase in damages'; see (9) and (10).

- (9) Imenno vozgoranie tekstil'nyx materialov začastuju javljaetsja pričinoj vozniknovenija požarov.
  Combustion of textile material is frequently the cause of fire break-out.' [È. Kolomejceva, A. Moryganov. Novye èkologičeski bezopasnye zamedliteli gorenija i ix primenenie dlja tekstil'nyx materialov iz celljuloznyx, polièfirnyx i smešannyx volokon // «Tekstil'», 2003]
- (10) Kakovy osnovnye pričiny rosta deficita?
   'What are the main causes of the deficit increase?' [Egor Gajdar. Gibel' imperii (2006)]

The word uspex 'success' is unique, because it is the only positive situation that appears among the frequent fillers of the construction  $pri\check{c}iny\ X-a$  'cause of X'; see (11).

(11) Glavnuju pričinu uspexa — čelovečeskij faktor — obsuždat' nečego: talanty neob"jasnimy.
 'It does not make sense to discuss the main cause of the success - the human factor - it would be impossible to explain the talent.' [Gennadij Gorelik. Andrej Saxarov. Nauka i svoboda (2004)]

It is well known that negatively evaluated situations are discussed more frequently than positively evaluated situations. For example, according to the tag *evaluation*, the RNC contains 318 positively evaluated adjectives as opposed to 560 negatively evaluated adjectives. So, Russian has almost twice as many negatively evaluated adjectives as positively evaluated adjectives. However, in the case of the genitive causal construction we are dealing with a prohibition rather than a tendency: cf. *pričina nesčast'ja* 'cause of disaster' as opposed to "pričina sčast'ja 'cause of happiness', and *pričina neudači* 'cause of misfortune' as opposed to "pričina udači 'cause of fortune'. Thus, whereas fortune

is seen as spontaneous, misfortune is viewed as being caused by someone or something.

Stubbs (1995) reports a similar distribution for the English word *cause* in the Lancaster-Oslo/Bergen (LOB) Corpus.<sup>3</sup> Collocations of *cause* are presented in (12). Stubbs summarizes his findings as follows: Among the words that co-occur with *cause*, 80 percent have negative connotations, 18 percent are neutral, and only 2 percent are positive. Therefore, similar to speakers of Russian, English speakers are interested in the causes of disasters.

(12) abandonment, accident, alarm, anger, annoyance, antagonism, anxiety, apathy, apprehension, breakage, burning, catastrophe, chaos, clash, commotion, complaint, concern, confusion, consternation, corrosion, crisis, crowding, damage, danger, death, deficiency, delay, despondency, destruction, deterioration, difficulty, disaster, disease, disorganization, disruption, disturbance, disunity, doubt, errors, frustration, habituation (to a drug), harm, hostility, hurt, inconvenience, interference, injury, interruption, mistake, nuisance, pain, pandemonium, quarrel, rejection, ruckus, rupture, sorrows, split, suffering, suspicion, trouble, uneasiness, upset, wholesale slaughter

All of the situations that frequently appear in the genitive slot of the cause construction are either non-controllable or are controlled by a person who is not the focus of empathy. Non-controllable situations can be exemplified by smert' 'death', gibel' 'accidental death', otkaz 'rejection', vzryv 'explosion', proval 'failure', vozniknovenije 'origin', and uspex 'success'. In addition to these examples, the collostructional profile of the cause construction also contains situations that are controlled by an agent. However, all such situations are characterized by a non-standard pragmatic structure; that is, these nouns describe situations where the patient is the focus of empathy, whereas the agent is not. These situations can be exemplified by the nouns uxod 'leaving', arrest 'arrest', ubijstvo 'murder'. When arrest, murder, or leaving are discussed, usually the person who is arrested, murdered, or staying is the focus of empathy, not the person who is making the arrest, committing the murder, or exiting; cf. (13).

- (13) No v čem **pričina** aresta Ismailovoj? Razve dejstvie, soveršennoe eju, javljaetsja osobo opasnym?
  - 'What is the cause of Ismailova's arrest? Were her actions especially dangerous?' [Anatolij Kučerena. Bal bezzakonija (2000)]

<sup>3</sup> The LOB Corpus contains 500 samples of 2,000 words each from written genres, e.g., newspapers, reports, academic articles, and novels.

Thus, the person who is the focus of empathy cannot control the situation that appears in the genitive slot of the construction *pričiny X-a* 'cause of X'. These situations are either uncontrollable or controlled by someone else.

Not all aspectual classes are present among the nouns that frequently appear in the construction *pričina X-a* 'cause of X'. Although the aspectual classification of verbs in general and Russian verbs in particular has long been discussed in the literature (Vendler 1967, Dowty 1979, Maslov 1948, Bulygina 1982, Paducheva 1996), aspectual classes of Russian nouns have received less attention. In this study, we build on the aspectual classifications of Russian nouns developed in Tatevosov & Pazelskaya 2003, Pazelskaya 2006, and Paducheva & Lyashevskaya 2011.

Fillers of the genitive slot of the causal construction belong to two aspectual classes: punctual events and states. Punctual events can be exemplified by nouns such as *smert* 'death', *gibel* 'accidental death', *otkaz* 'rejection', *vzryv* 'explosion', and proval 'failure'. States can be exemplified by nouns such as bolezn' 'illness', zabolevanie 'sickness', and krizis 'crisis'. For punctual events, the construction *pričina X-a* 'cause of X' points to the immediate cause of the event. For states, the causal construction points to the cause of the beginning of the state. For example, the cause of an illness is the event that entails the beginning of the illness, and the cause of a crisis is the event that brought about the beginning of the crisis. Thus, we can conclude that pričina X-a 'cause of X' always combines with the punctual event: either the event that is punctual itself, or the initial point of the state. Such a shift indicates a starting-point metonymy (i.e., the name of the whole state is used to indicate the beginning of the state), as opposed to an endpoint metonymy that is frequently discussed in the literature (cf. Panther, Thornburg & Barcelona 2009, among many others). The fact that the causal genitive construction attracts a starting-point metonymy coincides well with the fact that pričina X-a 'cause of X' frequently combines with nouns that point to the beginning of an event (vozniknovenije 'origin', pojavlenie 'appearance', obrazovanie 'formation'). In such cases, pričina 'cause' also combines with the punctual event. Although the cause of a punctual event and the cause of the initial point of a state are puzzling and therefore intriguing, the cause of an activity (a controlled and fully expected situation) is usually clear. As a result, nouns that denote activities do not appear in the genitive causal construction: e.g., ?? pričina xod'by 'cause of walking', "pričina risovanija 'cause of painting', and "pričina poleta 'cause of flying'.

Thus, we see that speakers of Russian tend to use the genitive construction of cause to discuss causes of negative events. These events are not controlled by a person who is the focus of empathy; they are either non-controllable or they are controlled by someone else. *Pričina* 'cause' mainly combines with punctual events. That is, when the filler of the genitive slot refers to a state, *pričina* 'cause' points to the beginning of such state. We can conclude that native speakers of Russian use the genitive construction *pričina X-a* 'cause of X' in order to discuss sudden unexpected disasters, especially when the causes of such disasters are unclear.

### 10.5 Conclusions

This article explores the Russian genitive causal construction pričina X-a 'cause of X'. We show that this construction belongs to the larger network of genitive constructions in Russian. All these constructions share an important semantic component, as pointed out by Partee and Borschev, i.e., that two objects in a genitive construction have an argument-like ("stable", according to Rakhilina 2004) relationship. Among the near synonyms that describe causal relationships between two situations, only pričina 'cause' points to a causal relationship between two events. The other three nouns (predlog 'pretense', povod 'occasion', and osnovanie 'ground') denote situations that are juxtaposed in time, but are not the true cause of the discussed situation. Thus, only the word *pričina* 'cause' indicates that two situations form a stable relationship, and only the word pričina 'cause' uses the genitive construction. We analyzed the list of frequent fillers of the genitive slot of the causal construction and have shown that this slot usually is filled by punctual events that describe unexpected and uncontrollable disasters. The causal genitive construction is used in order to express interest in the causes of such disasters. Thus, human interest provides the stable relationship that allows the word pričina 'cause' to be used in genitive constructions.