# The bare Dative radial category in Old Church Slavonic and Modern Russian

### Ekaterina Voloshina

### 1. Introduction

In this paper, I will describe the radial categories of the bare Dative case in Modern Russian and Old Church Slavonic based on the scholarly literature and corpus data. As the data show, the radial category of the Dative case has changed since Old Church Slavonic in two ways. Firstly, the radial category has become smaller; it includes only 6 subcategories instead of the 8 subcategories attested in Old Church Slavonic. Secondly, the prototype has changed from the semantic role of Goal to the semantic role of Recipient.

Old Church Slavonic (OCS) is not a direct ancestor of Russian, as Old Church Slavonic is often regarded as a South Slavic language. Nevertheless, Old Church Slavonic is close to Late Common Slavic. Both Old Church Slavonic and Old Russian, which is more closely related to Modern Russian, are descendants of Common Slavic. For this paper, I chose Old Church Slavonic as my source of data, since it has a larger collection of available texts than Old Russian. Therefore, the comparison of OCS and Modern Russian can be seen as an approximation of a comparison of Common Slavic and Modern Russian.

I will discuss what meanings the bare Dative used to have in Old Church Slavonic and will compare those meanings with the Modern Russian meanings of the Dative case. I will examine the type frequency of the predicates that govern the Dative case both in Old Church Slavonic and in Russian. I limit my research to the meanings of the bare Dative, as my main purpose is to explore the semantics of the case. The semantics of the preposition might influence the general meaning of the construction. Therefore, if the goal is to explore the pure meaning of a case, it is reasonable to exclude examples with prepositions. Moreover, constructions with a bare case and with a preposition are not interchangeable. As several researchers (Abraham 2006, Philippova 2017) have shown, the constructions differ with regard to their frequency and their distribution in a corpus.

For my research, I adopt the theoretical framework of Cognitive linguistics. In this framework, the focus of studies is on the meaning, and linguistic phenomena are explained with cognitive mechanisms. The goal of Cognitive Linguistics is to discover motivations behind different meanings and concepts. One of the most prominent themes within this framework is research on polysemy. Lakoff (1987:12) suggests that "related meanings of

words form categories and that the meanings bear family resemblances to one another". Resemblances have a radial character, therefore, they can be modelled with a radial category. A radial category is a structured network that consists of a prototype and peripheral subcategories. Lakoff (1987:83) illustrated the idea of a radial category with the polysemy of the word mother. Other researchers have used radial categories to represent prefixes in Russian (Enderson 2019), grammatical case in Czech (Janda 1990), and the development of the semelfactive in Slavic (Nesset 2013).

The prototype is the most representative member of a radial category, "a central category member or a more abstract (default) schema, representing the core category elements" (Lewandowska-Tomaszczyk 2007:17). The prototype can be selected on the basis of the following criteria:

- In comparison with abstract meanings, spatial and embodied meanings tend to be more prototypical;
- The prototypical meaning should provide motivation for other members of a radial category, and be the meaning that is most connected to other meanings in the category;
- The prototype of a radial category is usually the most frequent member in terms of type frequency or token frequency. Token frequency is the total number of attestations of one entity in a corpus of texts. Type frequency is the number of individual entities that belong to one subcategory. In this paper, type frequency means a frequency of unique constructions with the Dative case in each semantic role. As I will show later, semantic roles describe participants of different situations, and situations are usually described with verbs. So, I compare the frequency of semantic roles expressed with the Dative case.

These criteria can yield different results for prototypes, and one can postulate more than one prototype. Apart from that, the prototype does not have to meet all of these criteria, and they are not sufficient criteria but features that prototypes tend to have.

A radial category is not the only way to present polysemy. In typological linguistics, a semantic map illustrates connections between different meanings of polysemic categories. Although the idea of a semantic map is similar to a radial category, semantic maps are based on data from different languages. On a semantic map, categories are connected only if they have the same morphosyntactic expression in any language. In contrast with radial categories, a semantic map does not directly imply that one category semantically motivates another one (for further discussion see Malchukov, Haspelmath & Comrie 2010). However, a meaning that a grammatical or lexical category shares across languages is considered a prototypical meaning of this category. Sometimes semantic maps show how meanings were diachronically developing from other meanings, and this is similar to the idea of motivation in a radial category.

Haspelmath (2003) first suggested the idea of a semantic map on the example of the Dative case in English and French. He used the inventory of semantic roles to describe meanings of the Dative case. Semantic roles were proposed by Fillmore (1968) as "deep cases".

A semantic role is a linguistic model that unites similar participants of different situations on the basis of their similar morphosyntactic behavior. There exist different approaches to semantic roles and cases, especially to the issue of case universality (Sigurðsson 2003). Chomsky (1981) argues that every language has an overt or covert case system, though typological research (Nichols 1992: 90) indicates that half of the languages have cases, 45% are caseless, and 5% of languages, such as English and French, are casepoor. Both Russian and Old Church Slavonic belong to languages with a morphological case.

Although a case is not a typologically universal category, semantic roles show that functions of cases or prepositions are universal. The set of semantic roles is the same across languages, although their expressions depend on a language. Moreover, in a wide sense, cases could be considered as labels for core semantic roles. For instance, the Dative case is used as a label for the grammatical function of an indirect object (Recipient-like participant) in ditransitive constructions. This meaning is often treated as the prototype of the Dative radial category. For Haspelmath's map is based on French and English data, which are poor-case, Haspelmath describes the Dative case in a wide sense, with Recipient placed in the center of the map (Haspelmath 2003).

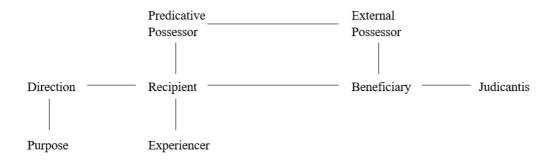


Figure 1: The semantic map from Haspelmath (2003)

In order to make my research comparable to other works about case, I do not use a "fine-grained" set of semantic roles (the term first used in Dowty 1991). Therefore, I prefer an inventory of semantic roles based on cross-linguistic data. The typological criterion to form a set of semantic roles is "the existence of case marking solely dedicated to that semantic role in at least one language" (Luraghi & Narrog 2014:14). I chose Haspelmath's work because it is one of the most authoritative works in this field, and it used an approach to data presentation similar to a radial category.

I will give a brief description of typologically possible meanings of Dative-like grammatical categories in accordance with Haspelmath's model. Here and later, I will provide examples from the Russian National Corpus<sup>1</sup> for each function. The bare Dative case in Russian that I am interested in does not have some of the functions identified by Haspelmath, such as Goal, dativus judicantis<sup>2</sup>, and Purpose. I will illustrate these functions with examples of the Dative or Genitive case and a preposition.

https://ruscorpora.ru/

<sup>&</sup>lt;sup>2</sup> This is the only function on Haspelmath's map that is not a semantic role at the same time.

### Recipient:

(1) Петр дал книгу эсеру Дмитрию.

'Petr gave a book to the SR Dmitry'. [Бери половину акций у Форда — и он сразу запоет «Интернационал» // «Жизнь национальностей», 2002.10.14]

# Beneficiary:

(2) Недавно я купил сыну дачу...

'Recently, I bought a dacha for my son'. [Коллекция анекдотов: врачи (1970-2000)]

## Experiencer:

(3) И мне кажется, я знаю, почему это происходит.

'And it seems to me that I know why it is happening'. [Мария Варденга. Галина Тюнина. Фрагменты белого стиха // «Домовой», 2002.02.04]

### Predicative Possessor:

(4) Я вам не сын.<sup>3</sup>

'I am not your son'.[Александр Вампилов. Старший сын (1965)]

### External Possessor:

(5) Постриги мне ногти!

'Clip my nails!' [Андрей Волос. Недвижимость (2000) // «Новый Мир», 2001]

### Purpose:

(6) Мне кажется, мы были созданы друг для друга.

'It seems to me that we were made for each other'. [В. П. Катаев. Алмазный мой венец (1975-1977)]

#### Goal:

(7) Ершов взял отпуск и поехал к отцу.

'Ershov took a vacation and went to his father'. [Василий Гроссман. Жизнь и судьба, ч. 1 (1960)]

# judicantis:

(8) Это было трудное для Михаила Леоновича время.

'It was a difficult time for Mikhail Leonovich'. [Вадим Баевский. Штрихи к портрету // «Знамя», 2012]

Recipient in Haspelmath's semantic map has the most connections to other functions, which is one of the prototype's criteria. Diachronically, Recipient is usually derived from Beneficiary or Goal (Direction in Haspelmath (2003)), and the latter could be a better prototype for a radial category, since it has a spatial meaning.

However, the prototype of a radial category could change over time, as shown by Dickey (2003) for the Russian prefix po-. My hypothesis is that the semantic role of Goal used to be the prototype of the Dative case in Old Church Slavonic, whereas in Modern Russian Recipient is the best candidate for the prototype. I will discuss the meanings of the Dative case proposed in the scholarly literature (Section 2 for Modern Russian and Section 4 for Old Church Slavonic). I will furthermore present the type frequency based on corpus data

<sup>&</sup>lt;sup>3</sup> This context is very rare in colloquial speech and it is usually expressed with the preposition для.

(Section 3 for Modern Russian and Section 5 for Old Church Slavonic) to compare how the category of Dative has changed (Section 6).

### 2. Dative functions in Modern Russian

In this section, I describe the meanings of the Dative case in Modern Russian based on the dative functions proposed by Martin Haspelmath. One of the methods that I use to distinguish different semantic roles of the Dative was to compare semantic groups of verbs they are used with. To make this analysis possible, it is required that in all the examples the case is assigned by a verb, and not by a preposition or an adjective. Therefore, I limit the discussion to meanings expressed by the Russian Dative case when it is governed by a verb.

I start with Recipient, and I will discuss whether it provides enough motivation for other semantic roles. Recipient in Russian is introduced by verbs of transfer, as дать 'give' or отправить 'send':

(9) Петр дал книгу эсеру Дмитрию.
'Petr gave a book to the SR Dmitry'. [Бери половину акций у Форда — и он сразу запоет «Интернационал» // «Жизнь национальностей», 2002.10.14]

The verb дать 'give' assigns a different semantic role to a noun in the Dative if it is used metaphorically. For instance, in example (10) Dative expresses Addressee because the verb is used in a construction denoting a speech act:

(10) Но я даю вам честное слово, что я не журналистка и статью делать не собираюсь.

'I give you my word, I am not a journalist, and I am not going to write an article'. [Александра Маринина. Мужские игры (1997)]

It is controversial if Addressee (example (11)) is a separate semantic role or a subtype of Recipient. Daniel (2014) considers it as a separate role on the basis of a typological criterion. Janda and Clancy (2002) include examples with verbs of speech into the category of Recipient, as speech can be a metaphor of transfer of words. I regard Addressee as a separate role following typological criteria.

(11) Я скажу тебе сейчас что-то очень важное. 'I will tell you something very important'. [Михаил Шишкин. Письмовник (2009) // «Знамя», 2010]

In addition, Janda and Clancy (2002) consider contexts of "giving the self" as a subtype of Recipient. In these examples a subject and an object of transfer refer to the same object:

(12) Тяжелый вопрос был: кому должны достаться Голицынские имения? 'There was a difficult question: who will inherit Golizyn's estate?' [С. М. Голицын. Записки уцелевшего. Предисловие (1989)]

On Haspelmath's semantic map, Recipient is connected to Beneficiary, Experiencer and Predicative Possessor. Beneficiary receives benefit or harm<sup>4</sup> from the situation.

-

<sup>&</sup>lt;sup>4</sup> This semantic role is sometimes called Maleficiary.

(13) Официант налил мне немного вина для пробы. 'The waiter poured me some wine to taste it'. [Д. А. Гранин. Месяц вверх ногами (1966)]

The semantic shift from Recipient to Beneficiary is an example of metonymy: if transfer is profitable for Recipient, the benefit becomes more important than the idea of transfer. Therefore, the participant expressed by the Dative case becomes Beneficiary. It is a separate role because in many languages it has a morphosyntactic expression different from the expression of Recipient.

Janda and Clancy (2002) consider the role of Beneficiary as a subtype of Experiencer. The argument for merging Recipient, Beneficiary, and Experiencer is that benefit can be seen as a subtype of experience. However, they are two different roles because Beneficiary and Experiencer differ in their prototypical constructions. Beneficiary is a part of ditransitive constructions (see example (13)), whereas Experiencer is the only argument of a predicate (example (14)).

(14) Мне нравится Индия. 'I like India'. [Виктор Пелевин. Желтая стрела (1993)]

According to Janda and Clancy (2002), Experiencer also includes the subtypes "having and needing", "age, environment and emotions", and "modal meanings". These meanings of the Experincer are the most frequent in Russian:

"having and needing":

(15) Коттедж принадлежит профессору из Политеха. 'The cottage belongs to the professor from Polytech'. [Сергей Таранов. Мстители (1999)]

"age, environment and emotions":

(16) Мне минуло шестнадцать лет... 'I turned sixteen'. [И. Грекова. Перелом (1987)]

"modal meanings":

(17) Музыка гремит слишком громко. Ей приходится кричать. 'The music is playing too loud. She has to scream'. [Андрей Геласимов. Фокс Малдер похож на свинью (2001)]

Example (15) can also be interpreted as the Possessor, though the prototypical Possessor is expressed by the Genitive in Russian. However, the Dative case is frequently used in contexts of External Possessor (Eckhoff 2007), which is a peripheral type of Possessor, as in example (18):

(18) Взболтанное шампанское внезапно бьет Семену в лицо. 'Stirred champagne hits Semen in the face'. [И. Ф. Стаднюк. Ключи от неба (1956)]

This example is equal to the following sentence: Взболтанное шампанское внезапно бьет лицо Семена 'Stirred champagne hits Semen's face', though the example with the Genitive is ungrammatical for some native speakers of Russian.

External Possessor is directly connected to Recipient through the idea of possession. After an act of transfer, Recipient becomes the possessor of the object of transfer. If the verb does not express transfer, it still can have the meaning of possession. Therefore, some peripheral contexts of Possessor are expressed by the Dative case. Apart from that, External Possessor is linked to Experiencer, as the latter can be interpreted as a "possessor" of experience or emotions. It is also connected to Beneficiary as External Possessor is the victim of harm (example (18)).

One more semantic role of the Dative case in Russian is Counteragent:

(19) Колюня пробовал подражать отцу. 'Kolunya tried to imitate his father'. [Алексей Варламов. Купавна // «Новый Мир», 2000]

This semantic role is not included in the semantic map by Haspelmath. Counteragent ("Competitor" in the terminology of Janda and Clancy (2002)) is an agentive participant, which is different from proper Agent. This semantic shift can be explained through the position of Recipient on the scale of agentivity. Recipient is situated in-between Agent and Patient. Recipient is not a participant, which commits an act, as the Agent, and it is not a participant, which is an object of an act. Therefore, if the second participant of a ditransitive construction, which is prototypically Recipient, becomes more agentive, its functions will extend. It will be compared to the Agent, and comparison with the Agent is the main characteristic of Counteragent.

In Janda and Clancy (2002), Competitor has two subtypes: "matching forces" and "submission to a greater force". In the first subtype, participants are compared and considered to be equal.

(20) Фунт стерлингов равняется 20 шиллингам. 'A pound sterling is equal to 20 shillings'. [П. Л. Капица. Тридцать два года спустя (1966)]

The second subtype describes the situation when the Agent follows or submits to Counteragent or repeats its actions:

(21) Я Дерябину не подчиняюсь. 'I do not obey Deryabin'. [Сергей Довлатов. Наши (1983)]

As seen from the analysis of the dative functions discussed in the literature, which is summarised in schema 2, Recipient as the prototype of the category explains all the meanings of the Dative. None of the subcategories has a spatial meaning but Recipient can provide motivations for most of the members of the category.

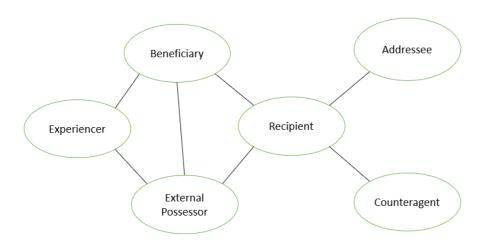


Figure 2: The radial category of the bare Dative case in Modern Russian

# 3. Type frequency in Modern Russian

In this section I will examine the constructions that include an argument expressed by the Dative case and the type frequency of these constructions for every semantic role discussed in the previous section.

For the corpus-based analysis I will use FrameBank, which is a type of FrameNet-like resource. Its approach to semantic roles is different from the typological one. FrameBank describes the lexicon of Russian in terms of "frames". Frames are formalized schemas of usage of words and constructions (Kashkin & Lyashevskaya 2015). The lexical information about every frame includes annotation of semantic roles. Roles are "fine-grained" (Dowty 1991). In FrameBank, 91 semantic roles are used (Kashkin and Lyashevskaya 2015), and they are united into bigger families, for example, the family of Agent, or the family of Patient.

I extracted all the frames with a participant in the Dative case for further analysis, and for non-frequent semantic roles I used the label of a family to make the data more comparable: for example, for the role of "субъект физиологической реакции" ('subject of physical reaction'), which is included in the family of Experiencer, I used the label Experiencer. Some of the roles have a different label in FrameBank, for instance, Recipient is called "конечный посессор" in the FrameBank annotation. For these examples I will use the labels discussed in the previous section and avoid FrameBank labels.

Moreover, FrameBank has more semantic roles for the Dative case than are included in the radial category I propose, such as Background situation, Reason, Agent, Stimulus, Purpose, Place, Parameter, Sphere. These examples were excluded for two reasons: a) they are not frequent; and b) they can be analyzed with the inventory of the semantic roles proposed in Section 2. For example, Parameter is illustrated with the following example in FrameBank:

(22) Дважды два равняется четырем. 'Two by two is equal to four'. (example from FrameBank)

However, this example can be analyzed as a peripheral example of Counteragent subtype "matching forces".

Therefore, I will focus on the following semantic roles: External Possessor, Addressee, Recipient, Experiencer, Counteragent, Beneficiary. The type frequency of the constructions with these semantic roles is shown in Table 1:

Semantic role	Type frequency
Addressee	101
Recipient	79
External Possessor	67
Experiencer	60
Counteragent	57
Beneficiary	51

Table 1: The type frequency of the semantic roles of the Dative case in Russian

Judging from the frequencies reported in Table 1, Addressee might be analyzed as the prototype. However, this seems illogical, considering that Addressee cannot provide motivations for the other semantic roles (see Section 2) and it is highly abstract. I will take a closer look at the correspondence between the constructions and the semantic roles.

With 101 contexts attested, Addressee is the most frequent semantic role. However, all the uses of Addressee can be divided into two big groups: verbs of communication and verbs of giving with a direct object referring to speech. The latter use of Addressee can be illustrated with the following examples:

(23) Как-то раз в Щербаковом переулке ему нагрубил водитель грузовика. 'Other day, in Sherbakov alley, the driver of a van was rude to him'. [Сергей Довлатов. Наши (1983)]

The class of verbs of speech and communication is very wide, and the fact that Addressee can be used with a large number of these verbs indicates that this role is productive and therefore not peripheral. The contexts with a verb of giving and a noun of speech act emphasize the direct connection between Addressee and Recipient.

Recipient, in contrast with Addressee, has a heterogeneous inventory of constructions it is used in. By "heterogeneous inventory or class" I mean that the constructions in which the semantic role is used do not constitute a natural semantic class, and I would use "homogeneous" to refer to a class of constructions with similar meaning that can be united into one semantic class. In this paper, a classification of semantic classes is based on semantic annotation for the Russian National Corpus (Kustova 2011) where a semantic class is defined as a lexeme's thematic class.

For most verbs that govern constructions with Recipient, transfer is not the main meaning and Recipient is not an obligatory valency of these verbs. Compare examples (24) where transfer is the main meaning and obligatory with (25) where it is not:

- (24) Она дала мне деньги и письмо, и так я приехала сюда. 'She gave me money and a letter, and that's how I came here'. [Ольга Тимофеева. Незнайка спешит на помощь // «Русский репортер», 2013]
- (25) Мы будем всегда вместе, и я рожу тебе детей. 'We will always be together, and I will give birth to your children.' [Василий Аксенов. Пора, мой друг, пора (1963)]

In example (24) Recipient is an obligatory argument of the verb дать 'to give', and the omission of Recipient makes the sentence ungrammatical. On the other hand, example (25) will still be acceptable without the Recipient argument because the verb is not primarily ditransitive. So, it does not have a special valency for the Dative-marked participant. However, the usage of Recipient adds a meaning of transfer to the construction: the subject will not only give birth to children but give them to Recipient. Therefore, Recipient can be added as an argument to all verbs that are potentially compatible with a transfer meaning, in other words, all verbs denoting creation. When the Dative case coerces verbs to behave as ditransitive verbs, the argument in Dative receives the role of Recipient. This fact suggests that Recipient role is at least one of the central subcategories.

In constructions with External Possessor, the direct object has the semantic role of Patient, which is one of the most frequent semantic roles in general. The verbs in these constructions usually express the effect that one participant has on another participant, which is the description of the prototypical relationship between Agent and Patient. The role of External Possessor is not obligatory, and most constructions can overtly express only two arguments. In contrast with Recipient, adding External Possessor does not change the general semantics of the constructions. The only difference between the following examples is that in the first context (26) the boy seems to be more important for the situation, and this is the reason why it becomes a verb argument, instead of a noun argument, as in the second sentence:

- (26) Доктор, вырвите мне зуб. 'Doctor, pull out my tooth'. [Коллекция анекдотов: наркоманы (1970-2000)]
- (27) Доктор, вырвите мой зуб. 'Doctor, pull out my tooth'. (constructed example)

Not all constructions with External Possessor have a patient as a direct object. Sometimes the patient can be expressed as the object of a preposition but even in these constructions External Possessor is marked by the Dative case:

(28) Тогда Наташа кинулась на шею Маргарите. 'Then Natasha threw herself on Margarita's neck.' [М. А. Булгаков. Мастер и Маргарита, часть 2 (1929-1940)]

Experiencer is used in constructions with modal verbs and with verbs of feeling. These contexts have a very specific syntactic expression, The Dative case is used for the so-called "logical subject" and the number of these constructions is limited: not every verb of feeling has this specific syntactic construction, compare любить 'to love' and нравиться 'to like' (examples are constructed):

- (29) \*Мне любит Петя. Я люблю Петю. 'I love Petja'.
- (30) Мне нравится Петя. 'I like Petja'.

While Recipient can extend its usage and change the syntax of transitive constructions to ditransitive, Experiencer is limited in the number of its constructions, and this makes it more peripheral.

Counteragent and Beneficiary are limited in the contexts in which they appear. Counteragent is used when the meaning of the construction is connected to comparison of two participants and submission to a greater force. Beneficiary is used in constructions with verbs of creation, benefit and harm. For both semantic roles, the class of the constructions they are used in is homogeneous.

As seen from the type frequency and the analysis of types of these constructions, Recipient is the best prototype by the criterion of type frequency. Only Addressee has a higher type frequency but it has a limited number of semantic classes of verbs, and Addressee is furthermore a metaphorical Recipient.

Besides that, Recipient meaning can appear even in the constructions which do not have a free valency for the Dative case. This argument structure is similar to the argument structure of sentences with External Possessor, which is also an additional argument of a verb. But External Possessor does not add any new meanings to the construction but changes the importance of participants. Therefore, External Possessor changes the syntax of the constructions but it does not have any effect on the semantics. For the Dative case, this means that the semantic role that will be represented in the constructions with no valency for Dative is Recipient, which makes it the prototypical semantic role in Modern Russian.

# 4. Dative functions in Old Church Slavonic

I will compare the functions of the bare Dative case in Modern Russian with the dative meanings in Old Church Slavonic. Old Church Slavonic, which belongs to the South Slavic group of languages, played an important role in the development of literary languages of Orthodox East and South Slavs; the manuscripts in Old Church Slavonic were written in the 10th and 11th centuries. In this section I will illustrate my arguments with examples from these manuscripts taken from TOROT<sup>5</sup>. I will discuss TOROT in greater detail in Section 5. English translations of Bible examples come from the King James Bible.

Referring to the semantic map proposed by Martin Haspelmath, the following functions of the Dative case were attested in Old Church Slavonic: Goal, Recipient, Experiencer, Beneficiary, External Possessor and Purpose. Goal is the semantic role which denotes the endpoint of a movement. Therefore, Goal is the only semantic role on this list which has a spatial meaning. So, it meets the criterion that a prototype should have an embodied meaning.

Now I will look at the examples of these semantic roles and the motivation that Goal can provide for other semantic roles. In this section I will not repeat any connections between Recipient and other semantic roles described in Section 2. Instead, I focus on the differences between the radial categories in the two languages. Other semantic connections are still relevant for this category, but I will compare the connection between Goal and other semantic roles to the motivation that Recipient provides for other subcategories.

<sup>&</sup>lt;sup>5</sup> https://nestor.uit.no/

For Old Church Slavonic it is difficult to decide which semantic role should be assigned in each example as this language does not have any native speakers, and their intuition cannot be used to distinguish between semantic roles. Therefore, for some examples there are two or more possible analyses. Apart from this issue, Old Church Slavonic is a collection of manuscripts, and it is not clear if it had any speakers at any moment and if it reflects the speech of any speech community. In this section I will follow the analysis that is provided in the papers I cite, but I will also mention alternative analyses where it is relevant.

Goal appears in a limited number of contexts with the bare Dative case because the construction with the preposition κ<sub>b</sub> and the Dative case is more frequent (Lunt 2010:148):

(31) се ц́сръ твои градетъ тебѣ 'behold thy King cometh unto thee' (Matthew 21:5)

The following example can illustrate the usage of Recipient in OCS:

(32) идъте и вы въ виноградъ мои. ι еже бждетъ правъда дамъ вамъ. 'Go ye also into the vineyard, and whatsoever is right I will give you.' (Matthew 20:4)

According to Heine et al. (1991:11), semantic roles can extend from the space domain to the domain of human relations but not vice versa. Transfer can be considered as a causation of movement of an object in space, and Recipient as a final endpoint of this movement. However, Recipient, in contrast to Goal, tends to be animate.

The role of Addressee is expressed by the Dative case in OCS:

(33) и слыша то менелае цры и сказа братоу своемоу агаменоу црю 'and the king Menelaus heard that and told his brother Agamemnon' (Троянската притча)

Addressee can be considered a metaphor of Goal or a metaphor of Recipient: speech can be understood as a movement of words into a space or a transfer of words.

Beneficiary is not limited to the contexts of verbs of creation as it is in Modern Russian and can be used in the contexts where in Modern Russian one would find a construction with a preposition, for example:

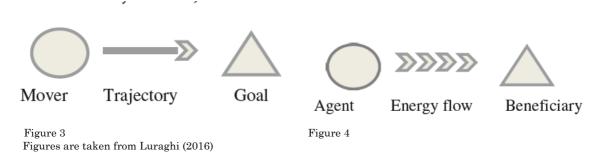
(34) съмотри же ми зълодъиство ихъ 'consider [for me] their crime!' (example is taken from (Lunt 2010:149))

According to Lunt (2010:149), the meaning of benefit in the examples, such as (34), "sometimes verges with the idea of possession". This context can be also considered to be the example of Ethical Dative in Old Church Slavonic. Ethical Dative is a form of pronouns in the Dative case, which is used for a person who has an interest in the situation or the activity described by a predicate.

Beneficiary can be found in the contexts typical for this semantic role in Modern Russian:

(35) і́с же рече не браните моу. 'Jesus said: Don't scold him' (Mark 9:39) The previous example can be also analysed as the example of the semantic role of Addressee. The choice of the Dative case in this sentence is motivated by multiple factors at the same time: the meaning of the noun phrase in the Dative case has both the submeanings of Beneficiary and Addressee.

In Section 2, the role of Beneficiary was motivated through a metonymic shift from Recipient. However, a metaphorical shift from Goal can also explain this semantic extension. Luraghi (2016:344) provides schemas for Goal and Beneficiary. The motion towards Goal is described as "a trajector moves along a path toward a landmark" (schema 3), and Beneficiary can be described as "an agent (trajector) performs an intentional action (path) targeted at a beneficiary (landmark)" (schema 4).



Therefore, for the role of Beneficiary, as for Addressee, both Recipient and Goal can be sources of semantic shift.

The Dative case in OCS is used in limited contexts to express Purpose because these contexts should include an inanimate object:

(36) о̂убиѥ̀нию̂ ножъ́ нао́стри · 'sharpen the knife for murder' (Codex Suprasliensis)

Purpose can be described as a metaphorical goal of an action, but it does not have a direct connection to Recipient.

As shown in Section 2, the role which is directly connected to Beneficiary is Experiencer. In Old Church Slavonic Experiencer can be illustrated with the following example:

(37) дьни же бывъшю. рождьства гродова. пласа дъшти гродиъдина посръдъ. г оугоди гродоу.

'But when Herod's birthday came, the daughter of Herodias danced before the company and pleased Herod' (Matthew 14:16)

In Section 2, I described Experiencer through Beneficiary to connect Experiencer and Recipient. However, I can explain this semantic shift in the functions of Dative with Goal, following the ideas proposed by Rice & Kabata (2007) for the typology of allative meanings. Experiencer is a target of movement of emotions; hence, it would be an abstract metaphor of Goal into the perceptual domain.

External Possessor was widespread in Old Church Slavonic (Nomachi 2016: 462, Eckhoff 2007). An example of this semantic role can be found in Savva's book:

(38) ...videtъ lice отьси mi... 'behold the face of my Father'<sup>6</sup> (Matthew 18:10) (example taken from Nomachi 2007)

In ditransitive constructions Recipient gets something from Agent and, hence, becomes a new possessor. Recipient can be described as a final possessor, which can motivate the semantic shift from Recipient to External Possessor. There is no direct motivation that Goal can provide for this semantic role.

The semantic role of Counteragent, which was not included in Haspelmath's semantic map, can be found in the manuscripts of OCS:

(39) аште речемъ съ небесе. речетъ по что оубо не въровасте емоу.

'If we say, 'From heaven,' he will say, 'Why then did you not believe him?'

(Matthew 21:26)

Both types of Counteragent described in Section 2 are presented in OCS. "Submission to a greater force" can be illustrated with the following example, where Dative is governed by the verb 'follow':

(40) оучителю видъхомъ единого именемъ твоимь изгонашта бъсы. кже не ходитъ по насъ. к възбранихомъ емоу. ъко не послъдова намъ. 'Teacher, we saw someone casting out demons in your name, and we tried to stop him, because he was not following us.' (Mark 9:38)

Contexts with so called Dative of price (Lunt 2010:150) can be considered to be examples of the "matching forces"-subtype of Counteragent (example is taken from (Lunt (2010:150)):

(41) ne pętъ li pъticъ věnitъ sę pěnęzema dъvěma 'are not five sparrows sold for two farthings?' (Luke 12:6)

I cannot motivate Counteragent directly through the role of Goal, because Counteragent tends to be animate and, as mentioned above, one of the most important differences between Recipient and Goal lies in the fact that Goal tends to be inanimate and Recipient tends to be animate. Both the animacy and agentivity of Recipient makes it the best source for semantic shift to the role of Counteragent.

<sup>&</sup>lt;sup>6</sup> In this example 'the father' is External Possessor of 'the face', but the pronoun 'me' is also used in the Dative case and can be analyzed as External Possessor of 'the father' or as Ethical Dative, since it denotes the person who has a general interest in the situation.

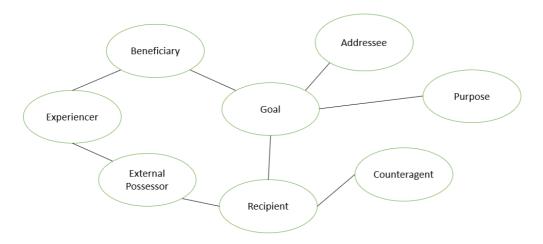


Figure 5: The radial category of the bare Dative case in Old Church Slavonic

I have described the functions of Dative, which can be found in Old Church Slavonic (summarized in Schema 5) and discussed two possible prototypes for the semantic roles of Dative: Goal and Recipient. Some roles, such as Addressee and Beneficiary, can be motivated by both Goal and Recipient. External Possessor and Counteragent cannot be explained with a spatial metaphor, but Recipient provides a natural motivation for these roles. However, Experiencer and Purpose cannot be directly connected to Recipient, but Experiencer can be motivated through a spatial metaphor. The most important argument for Goal as the prototype of the radial category of Dative in OCS is the fact that Goal can be a source for the metaphor of Recipient but not vice versa, as the meaning of Recipient is more abstract than the meaning of Goal, and it is believed that abstract meanings tend to develop from spatial ones.

# 5. Type frequency of Dative in Old Church Slavonic

In this section I will describe semantic roles of the bare Dative in Old Church Slavonic from the perspective of type frequency. I will base my analysis on the data from the Tromsø Old Russian and OCS Treebank (TOROT). TOROT is a corpus of annotated texts in a few languages, including Old Russian and Old Church Slavonic. I am interested in the nouns in the Dative case from the OCS subcorpus of TOROT that are governed by a verb. In total I found 141 unique constructions of a verb and a noun phrase in the Dative case and annotated them manually. In the sample I worked with, examples of Purpose were not attested. Therefore, this meaning is clearly not frequent. The frequency of the other semantic roles is shown in Table 2:

Semantic role	Type frequency
Beneficiary	44
Addressee	27
Counteragent	26
Recipient	19
External Possessor	13
Experiencer	10
Goal	1

Table 2. The type frequency of the semantic roles of the Dative case in OCS

The texts presented in this corpus for Old Church Slavonic are biblical texts. It makes the data from Modern Russian and Old Church Slavonic less comparable as the frequency of words can depend on the genre of a text. However, other genres of texts in Old Church Slavonic are not available.

I will start my analysis with Beneficiary, as this is the semantic role with the highest type frequency. This semantic role is close to Recipient, and in the present study the Dative argument was annotated as Beneficiary only if the construction does not have any meaning of transfer; otherwise, this argument is regarded as Recipient.

The two main classes of the constructions in which the role of Beneficiary is used include verbs of religious acts (example (42)) and work progress (example (43)). Other constructions with Beneficiary cannot be united into natural semantic classes:

- (42) аште же съгръщить тебъ братръ твои запръти емоу и аште покаать см отъпоусти емоу

  'If thy brother trespass against thee, rebuke him; and if he repents, forgive him.'

  (Luke 17:3)
- (43) і аште кто мьнъ слоужить почьтеть і бтць 'if any man serve me, him will my Father honour.' (John 12:26)

Addressee is one of the most frequent semantic roles in Old Church Slavonic. However, its frequency is much lower than the frequency of Beneficiary. All the contexts contain verbs of speech; hence, the distribution of this role is similar to the distribution of Addressee in Modern Russian:

(44) і́сь же слышавъ рече имъ 'But when Jesus heard that, he said unto them' (Matthew 19:13)

The constructions with the semantic role of Counteragent can be described as "submission to a greater force" and they fall into two classes: following the participant and physical actions, such as in example (45), or description of emotions caused by a participant (example (46)), which also can be interpreted as Stimulus. In this work I do not separate the semantic role of Stimulus from other meanings because the aim of this paper is to use the minimal required set of semantic roles and keep the data from the two languages comparable.

- (45) и съниде съ нима и приде въ назаретъ і бѣ повиноум см има 'And he went down with them, and came to Nazareth, and was subject unto them' (Luke 2:51)
- (46) і пришедъ въ отъчьствие свое оучаше ы на съньмиштихъ ихъ ѣко дивлѣхж са емоу и fлхж
  - 'And when he was come into his own country, he taught them in their synagogue, insomuch that they were astonished, and said' (Matthew 13:54)

The frequency of the semantic role of Recipient is low: there are only 19 constructions with this semantic role attested in this corpus. Recipient in OCS occurs only in the contexts of transfer (example (47)) and rarely coerces other constructions. Example (48) was the only example that was found in our data:

- (47) онъ же не хотъше нъ ведъ въсади и въ темьницх доньдеже въздастъ емоу весь длъгъ

  'And he would not: but went and cast him into prison, till he should pay the debt.' (Matthew 18:30)
- (48) не бои са захарие зане оуслышана быстъ молитва твоѣ і жена твоѣ елисаветь родитъ є́нъ тебѣ і наречеши има емоу иоанъ 'Fear not, Zacharias: for thy prayer is heard; and thy wife Elisabeth shall bear thee a son, and thou shalt call his name John.' (Luke 1:13)

External Possessor appears in constructions where the verb has the meaning of damage and the direct object denotes a body part. These contexts are very limited in their distribution:

(49) брынье положи мыть на очию и оумыхъ са и виждж 'He put clay upon mine eyes, and I washed, and do see.' (John 9:15)

The constructions with the meaning of perception or the proper behaviour are the only classes of constructions where the semantic role of Experiencer is used in Old Church Slavonic:

(50) что ти са мьнить симоне 'What thinkest thou, Simon?' (Matthew 17:24)

In the previous section, the role of Goal was proposed as the prototype because of its spatial meaning and the motivation it provides for other semantic roles. However, Goal occurs only in one context in the corpus:

(51) приближають са мынъ людье си оусты своими и оустънами чьтють ма а брдце ихъ далече отъстоить от мене

'This people draweth nigh unto me with their mouth, and honoureth me with their lips; but their heart is far from me.' (Matthew 15:8)

There is one context which does not fit into my classification of semantic roles, which is presented as example (52). However, it was not mentioned in the scholarly literature, and I do not include this example in the final analysis.

(52) милостыни хоштж а не жрътвѣ 'I will have mercy, and not sacrifice' (Matthew 12:7)

The possible explanation for the usage of the Dative case in this example is that the objects are metaphorized as purposes: the subject wants something to be done for mercy and not for sacrifice.

Overall, Beneficiary is the best candidate for the prototype by the criterion of type frequency, and neither Recipient nor Goal meet this criterion.

6. Comparison of Dative in Modern Russian and Old Church Slavonic

In the previous sections, I examined the meanings of the bare Dative case based on the literature about semantic roles and their type frequency in Modern Russian and Old Church Slavonic. In this section I will compare the radial categories of bare Dative in Modern Russian and Old Church Slavonic.

The inventory of semantic roles is similar, except the role of Goal and Purpose, which are not expressed in Modern Russian by Dative without a preposition. However, Goal differs greatly from the other roles postulated for Dative in this paper. Whereas the other semantic roles belong to the domain of abstract meanings, Goal is a spatial semantic role, and spatial and embodied semantic roles tend to be prototypes of radial categories.

The second criterion for prototypes is how they can motivate other semantic roles. In Modern Russian, Recipient seems to be the best candidate for the prototype because it can motivate all the roles. Goal provides more natural explanations for other roles in OCS than Recipient does, as shown in Section 5. According to the first two criteria, Goal is the best prototype in OCS, while in Modern Russian Recipient fulfills only the second criterion.

At this point, we must ask the following question: how did the prototypical meaning disappear? I will compare the type frequency of the two prototypes to try to answer this question.

In Modern Russian, Recipient is a semantic role with high frequency and, apart from that, it is able to coerce constructions which primarily do not have the meaning of transfer. Coercion is not expected to be a feature of non-prototypical subcategories.

In contrast, in the data for Old Church Slavonic only one example of coercion was attested. Recipient is limited to the contexts of transfer, and for this reason it has low frequency. However, Goal has only one example in the data I collected. I suggest that at that moment this semantic role started to be more peripheral. So, at the next stage of development of the bare Dative case, Goal disappeared. Despite that fact, Goal may still be postulated as the prototype of the category, as it might have had more contexts in the past stage of the language evolution, which is not fixed in texts, and it might lose its prototypical context with time.

The main argument for considering Goal as the prototypical member is the way lexical meanings evolve in general. No examples of spatial meanings derived from abstract ones are attested but there are plenty of opposite examples. As Goal is the only spatial meaning in the category, it is the only member that cannot be motivated by other subcategories. Therefore, it leads to a suggestion that earlier it had had more prototypical contexts that became a basis for a transfer from Goal to other meanings of the Dative case.

The reason why Goal role disappeared is not clear. However, I suggest that the less frequent Goal was, the more prototypical Recipient became. This shift from one prototype of the category to another impacted the category structure.

To summarize, the radial category in Modern Russian has fewer subcategories than the radial category in Old Church Slavonic. Besides Goal, the semantic role of Purpose is not attested in Modern Russian. Recipient cannot provide motivation for this semantic role, and Purpose disappeared when the prototype changed. The prototype shifted from Goal to Recipient because the latter has connections with other semantic roles.

### 7. Conclusion

In this paper, I discussed the radial categories of the bare Dative case in Modern Russian and Old Church Slavonic, the written language of the Slavs in the 10th-11th centuries. The radial categories were described in order to find the best prototype for the category.

Three criteria were taken into consideration: if a semantic role has abstract or spatial meaning, if it can motivate other semantic roles, and if it has high or low frequency.

Recipient in Modern Russian meets two criteria, but it has an abstract meaning. For Old Church Slavonic it is logical to postulate Goal as the prototype, because Goal has spatial meaning and it motivates more semantic roles than Recipient does, although Goal has the lowest frequency.

Using the example of the radial category of the bare Dative case in Modern Russian and Old Church Slavonic, I illustrated how the prototype of a radial category changes and how, with the change of the prototype, the radial category gets smaller.

### 8. References

- Abraham, W. (2006). Bare and prepositional differential case marking. Case, valency and transitivity, 77, 115. https://doi.org/10.1075/slcs.77.10abr
- Chomsky, N. (1981). Lectures on Government and Binding. Dordrecht: Foris.
- Daniel, M. (2014). Against the addressee of speech–Recipient metaphor: Evidence from East Caucasian. Perspectives on semantic roles, 207, 205-240. https://doi.org/10.1075/tsl.106.07dan
- Dickey, S. M. (2007). A prototype account of the development of delimitative point Russian. Cognitive paths into the Slavic domain, 329-374. https://doi.org/10.1515/9783110198799.4.329
- Dowty, D. (1991). Thematic proto-roles and argument selection. Language, 67(3), 547-619. https://doi.org/10.1353/lan.1991.0021
- Eckhoff, H.M. 2007. Old Russian Possessive Constructions. A Construction Grammar Account. Ph.D. Dissertation, University of Oslo.
- Endresen, A. (2019). Two origins of the prefix iz-and how they affect the vy- vs. iz-correlation in Modern Russian. Russian Linguistics, 43(3), 205-229. https://doi.org/10.1007/s11185-019-09215-9
- Fillmore, C. J. (1968). The case for case. Universals in Linguistic Theory, eds E. Bach and R.T. Harms, 1-88.
- Janda, L. A. & Clancy, S. J. (2002). The case book for Russian. Slavica Pub.
- Janda, L. A. (1990). The radial network of a grammatical category its genesis and dynamic structure. Cognitive Linguistics 1-3, 269-288.
  - https://doi.org/10.1515/cogl.1990.1.3.269
- Haspelmath, M. (2003). The geometry of grammatical meaning: Semantic maps and cross-linguistic comparison. The new psychology of language, 217-248. https://doi.org/10.4324/9781410606921-11
- Heine, B. & Claudi U. & Hünnemeyer F. (1991). Grammaticalization: A conceptual framework. Chicago: University of Chicago Press.
- Kashkin, E. V., & Lyashevskaya, O. N. (2015). Tipy informacii o leksicheskih konstrukciyah v sisteme FrejmBank. Trudy instituta russkogo yazyka im. V. V. Vinogradova, 6, 464-556.
- Kustova, G. I. (2011). Semanticheskaya razmetka v elektronnyh korpusah i elektronnyh slovaryah. URL:
  - http://lexicograph.ruslang.ru/TextKust/Kustova\_sem\_razm\_el\_sl\_SPb\_11.pdf

- Lakoff, G. (1987). Women, fire, and dangerous things: What categories reveal about the mind. Chicago/London: The University of Chicago Press. https://doi.org/10.7208/chicago/9780226471013.001.0001
- Lewandowska-Tomaszczyk, B. (2007). Polysemy, prototypes, and radial categories. In The Oxford handbook of cognitive linguistics, eds D. Geeraerts and H. Cuyckens. Oxford and New York: Oxford University Press. 139–169.
- Lunt, H. G. (2010). Old Church Slavonic grammar. Walter de Gruyter.
- Luraghi, S., & Narrog, H. (2014). Perspectives on semantic roles: An introduction. Perspectives on Semantic Roles, 1-22.
- Luraghi, S. (2016). The mapping of space onto the domain of benefaction and some unpredicted trends in semantic change. Linguistics, 54(2), 339-379. https://doi.org/10.1075/tsl.106.01lur
- Malchukov, A., Haspelmath, M., & Comrie, B. (2010). Ditransitive constructions: A typological overview. Studies in ditransitive constructions, 1-64. https://doi.org/10.1515/ling-2016-0006
- Nesset, T. (2013). The history of the Russian semelfactive: the development of a radial category. Journal of Slavic linguistics, 123-169. https://doi.org/10.1353/jsl.2013.0000
- Nichols, J. (1992). Linguistic Diversity in Space and Time. Chicago: The University of Chicago Press. https://doi.org/10.7208/chicago/9780226580593.001.0001
- Nomachi, M. (2016). Dative of external possession in Croatian. Jezikoslovlje, 17(1-2), 453-474.
- Philippova, N. (2017). Prepositional phrase vs. bare instrumental. Space in Diachrony, 188. https://doi.org/10.1075/slcs.188.13phi
- Rice, S., & Kabata, K. (2007). Crosslinguistic grammaticalization patterns of the allative. Linguistic Typology, 11(3), 451-514. <a href="https://doi.org/10.1515/LINGTY.2007.031">https://doi.org/10.1515/LINGTY.2007.031</a>
- Sigurðsson, H.A. (2003). Case: abstract vs. morphological. New Perspectives on Case Theory, eds E. Brandern & Zinsmeister. 223–268.

author: Ekaterina Voloshina affiliation: HSE University, Moscow email: evoloshina@hse.ru