

# RUSSIAN DERIVATIVE PREPOSITIONS: A CORPUS-BASED STUDY

Русские производные предлоги: корпусный анализ

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## ABSTRACT

The study presents a corpus-based analysis of Russian complex prepositions, with the goal of classifying them within the functional-grammatical field of prepositions. The central hypothesis is that frequency serves as an effective criterion for determining the degree of grammaticalization and the position of a preposition within the system: highly frequent units are closer to the core, while rare units occupy the periphery.

To test this hypothesis, we conducted a multi-stage analysis: (1) compiling a preliminary list of Russian prepositions and their equivalents from linguistic studies; (2) classifying them into 39 structural models based on their formation patterns; (3) identifying potential prepositions through bigram analysis in the Russian National Corpus; (4) merging all lists into a dataset; (5) calculating frequency rankings to establish the stratification of the prepositional field. Finally, we compiled a dataset of 2 402 prepositions and their equivalents, the most extensive list of Russian prepositional units.

The findings confirm that analogy and frequency play a key role in prepositional expansion and grammaticalization. The frequency-ranked list provides a foundation for linguistic and linguodidactic research, offering a systematic way to distinguish core and peripheral prepositions. This dataset also contributes to the Russian Constructicon, providing a structured inventory of prepositional constructions.

*Keywords:* Russian prepositions, grammaticalization, frequency analysis, functional-grammatical field, structural models, corpus analysis

## РЕЗЮМЕ

В статье продемонстрированы результаты корпусного анализа русских производных предлогов, проведенного с целью их стратификации в функционально-грамматическом поле предлога. Основная гипотеза работы состоит в том, что частотность служит эффективным инструментом определения степени грамматикализации: наиболее частотные предложные средства расположены ближе к ядру поля предлога, чем редкие, которые занимают его периферию.

Для проверки данной гипотезы был проведен поэтапный анализ: (1) на основе различных источников собран исходный реестр русских предлогов и их эквивалентов; (2) выявлены основные модели, на основе которых строятся русские предлоги; (3) с помощью анализа биграмм (в Национальном корпусе русского языка) определены потенциальные предлоги; (4) все списки предлогов объединены; (5) рассчитана частотность всех единиц полученного списка. Результатом исследования стал ранжированный по убыванию частотности реестр русских предлогов и их эквивалентов, состоящий из 2402 единиц.

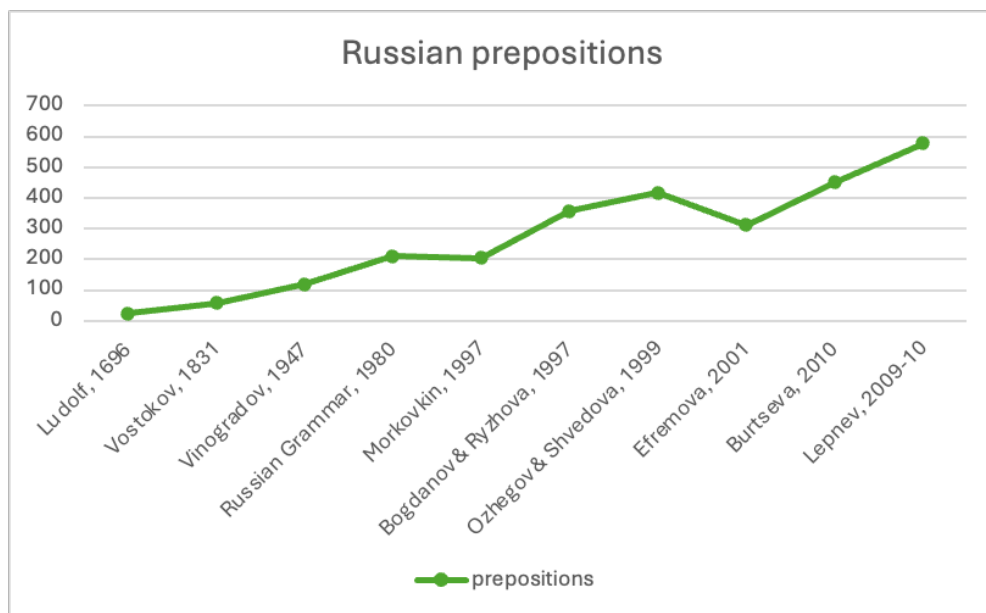
Полученные данные показали, что аналогия и частотность играют важную роль в процессе грамматикализации сочетаний в предлоги. Ранжированный по частотности реестр позволяет проводить дальнейшие лингвистические и лингводидактические исследования, представляя собой эффективный инструмент определения ядерных и периферийных предлогов. Реестр также может стать важной частью русского конструктора.

*Ключевые слова:* русские предлоги, грамматикализация, частотность, функционально-грамматическое поле, структурные модели, корпусный анализ

## INTRODUCTION

The category of prepositions in Russian is notoriously difficult to define due to its fluid boundaries. Beyond the core set, the exact number of prepositions in the language remains uncertain, as no definitive count exists regarding how many prepositions are currently in use in Russian.

As illustrated in Figure 1, there has been a clear trend of growth: since 1696, when H. Ludolf published the first Russian grammar, the number of recognized prepositions has increased significantly – from just 24 in «Grammatica Russica» to nearly 600 in the latest dictionaries (2010). In this study, we consider only grammars that provide closed lists of prepositions, which is not typical for Russian grammars. Generally, prepositions receive little attention in grammatical descriptions, with most grammars devoting only a few pages to them (a notable exception being Plungian (2018)). Instead of providing exhaustive lists, grammars often use phrases such as “and others,” “etc.,” or “and so on.” In this regard, the closed list of 210 prepositions provided by Russian Grammar (1980) has served as a fundamental reference point for our research.

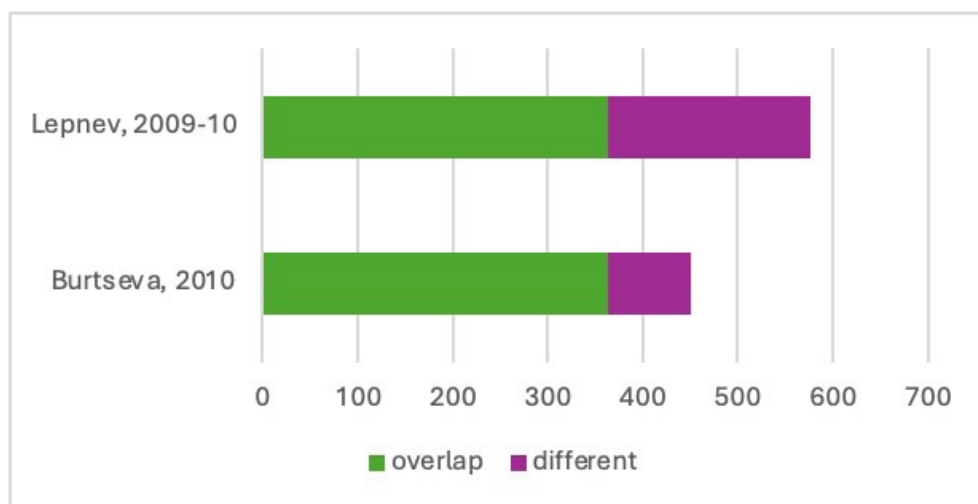


**Figure 1.** Growth of Prepositions in Grammars and Dictionaries (1696–2010, Closed Lists)

The data in Figure 1 highlight two key tendencies.

1. The natural evolution of the prepositional system. Over time, new prepositions have emerged. For instance, in the mid-19th century, derivative prepositions began to appear, with A. Vostokov's Grammar (1831) being the first to acknowledge them. Then, in the mid-20th century, there was a notable increase in complex prepositions. This trend was first identified by V. Vinogradov (1947), who analyzed the expanding role of complex prepositions in contemporary Russian. His work remains a cornerstone of Russian grammatical studies, demonstrating how new prepositional structures emerged and became widely accepted. He argued that the growth of prepositions was closely linked to the development of functional styles in Russian at the time.

2. The subjectivity of linguistic descriptions. A closer analysis reveals that dictionaries and grammars do not always align in their treatment of prepositions. Different sources categorize prepositions differently, raising important questions about their precise definition in Russian. As shown in Figure 2, a comparison of two dictionaries published around the same time – (Burtseva, 2010) and (Lepnev, 2009–2010) – demonstrates not only a quantitative difference (M. Lepnev lists almost 600 prepositions, while B. Burtseva includes only 450), but also a qualitative discrepancy. The overlap between the two lists is only 363 prepositions, meaning that each dictionary recognizes a substantial number of prepositions that the other does not. For more details and further comparisons, see (Klobukova & Vinogradova, 2022).



**Figure 2.** Comparison of Prepositional Lists in (Lepnev, 2009–2010) and (Burtseva, 2010)

The issue primarily concerns complex prepositions, which continuously evolve through grammaticalization. If we adopt Traugott's broad definition of grammaticalization – one that includes the development of both complex prepositions and discourse markers – we understand this process as “the change whereby lexical terms and constructions, in certain linguistic contexts, come to serve grammatical functions and, once grammaticalized, continue to develop new grammatical functions” (Hopper & Traugott, 2003: 1).

For example, *poseredine* evolved from the combination of the preposition *po* and the prepositional case of the noun *seredina* (*seredin-e*). Similarly, we observe the development of derivative prepositions:

*vrode* ← *v rod-e*,  
*nakanune* ← *na kanun-e*,  
*po povodu* ← *po povod-u*,  
*po tipu* ← *po tip-u*,  
*otnositel'no* ← derived from the short form of the adjective *otnositel'nyi*,  
*blagodaria* ← derived from the adverbial participle of the verb *blagodarit'*.

These examples illustrate how complex prepositions emerge, a phenomenon extensively discussed in studies ranging from classical works (Cherkasova, 1967) to more recent research (Vinogradova, 2016; 2023; Kolyaseva & Davidse, 2018; Sheremet'eva, 2019; Aksarina & Basova, 2019; Artemenko, 2020; Zelenin & Rudnev, 2021 among others). This is an active process in Russian, particularly since the mid-20th century.

Many new prepositional constructions are still in the process of becoming fully grammaticalized prepositions, making their classification ambiguous. While several indicators have been proposed to distinguish complex prepositions from free noun-phrase sequences – such as those outlined by Quirk et al. (1985), Eskova (2001), Yadroff & Franks (2001), Vsevolodova et al. (2014), Vinogradova (2016), and Plungian (2018) – the criteria are not strict enough to establish a clear-cut distinction.

Therefore, no definitive boundary can be drawn between prepositions and preposition-like units. This raises a fundamental question: what exactly constitutes a preposition? For instance, are constructions such as *po milosti* +  $N_{gen}$ , *po mere* +  $N_{gen}$ , *po vole* +  $N_{gen}$ , and *po sluchaiu* +  $N_{gen}$  considered prepositions, or are they still in transition? While *po mere* and *po sluchaiu* are classified as prepositions in Russian Grammar (1980), their distinction from the others remains unclear.

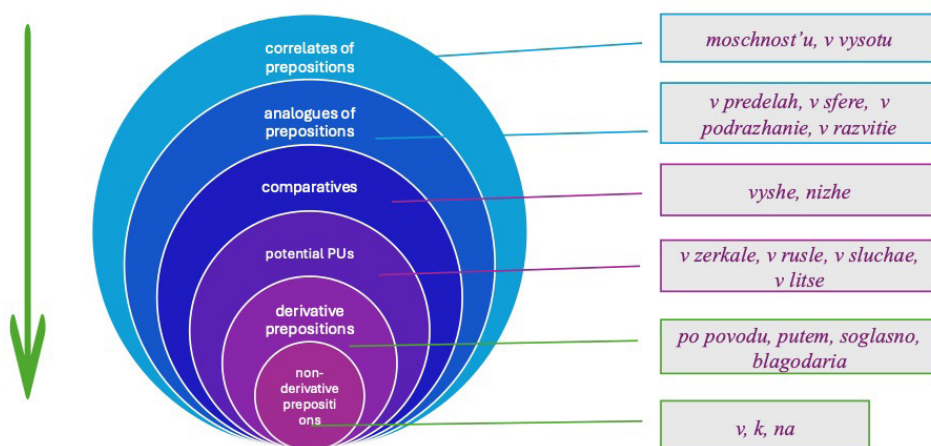
Nonetheless, it is crucial to systematically collect, categorize, and describe all these prepositional constructions. This requires establishing fundamental principles for the description of prepositions.

More than 20 years ago, the international project “Slavic Prepositions: Morphology and Syntax,” led by Professor Maya Vsevolodova, brought together linguists from several Slavic countries. The project’s primary objective was to compile a comprehensive inventory of prepositional constructions and analyze them in detail (Vsevolodova et al., 2003; Konushkevich, 2005; Zagnitko, 2003; Lachur, 2006). As a result, four extensive dictionaries of prepositions were published: Belarusian prepositions (Konushkevich, 2008–2011), Polish prepositions (Lachur, 2019–2022), Ukrainian prepositions (Zagnitko et al., 2007), Russian prepositions (Vsevolodova et al., 2018), with ongoing research by the Russian team.

Throughout this project, several theoretical challenges emerged. Given the difficulty in distinguishing between “true” prepositions and their equivalents, broader terminology was introduced. First, the term “prepositional units” (PUs) was coined to encompass both prepositions and constructions that function as prepositions in specific contexts.

Second, the concept of a functional-grammatical field was proposed as a more effective approach to classifying PUs. In this model, iconic prepositions form the core,

while marginal, less grammaticalized constructions occupy the periphery. As illustrated in Figure 3, the core consists of non-derivative prepositions (e.g., *v*, *k*, *na*). Surrounding this core are strongly grammaticalized derivative prepositions: *po povodu* (+ gen), *putem* (+ gen), *soglasno* (+ dat), *blagodaria* (+ dat) etc. Further from the core, we find metaphorical constructions that could potentially become prepositions (*v zerkale* (+ gen), *v rusle* (+ gen), *v sluchae* (+ gen), *v litse* (+ gen)), comparatives (*vyshe* (+ gen), *nizhe* (+ gen)), already recognized as prepositions by A. Zalizniak (1977), and low grammaticalized constructions (*v predelakh* (+ gen), *v sfere* (+ gen), *v podrazhanie* (+ dat), *v razvitie* (+ gen)) called correlates of prepositions, along with parameters (*moschnost'yu* (how much?), *v vysotu* (how much?)).



**Figure 3:** Functional-Grammatical Field of Prepositions

This field provides an effective framework for description since, as previously mentioned, there are no strict boundaries between these zones: constructions continuously evolve, moving closer to the core. Not all constructions undergo this transition, but many do. In our view, this phenomenon reflects the general lack of strict boundaries in language – both between linguistic levels and between diachrony and synchrony – a perspective well-supported in Construction Grammar (Fillmore et al., 1988; Goldberg, 1995).

Thus, grammaticalization within the prepositional field can be seen as a centripetal force – represented by the green arrow in **Figure 3**. Slightly grammaticalized equivalents and marginal units become more frequent, undergo changes in their grammatical and semantic properties, and gradually shift toward the core.

However, providing an objective description of this field remains a significant challenge. Is there a method that could enable a more accurate and precise representation of the distribution of prepositions within this field? The central hypothesis of this research is that the frequency of PUs can serve as an effective tool for mapping the prepositional field. In other words, this study employs a corpus-based analysis of Russian PUs to investigate their distribution and degree of grammaticalization.

## METHODOLOGY

The objective of this study was to collect as many PUs as possible and position them within the functional-grammatical field of prepositions. The underlying hypothesis is that the most frequently occurring prepositions are positioned closer to the core, while rare, occasional, and context-dependent forms are located on the periphery. This assumption aligns well with the perspective that frequency serves as a key parameter of grammaticalization, as outlined by Brinton and Traugott (2005). Moreover, an examination of multi-word prepositional constructions in the Russian National Corpus (RNC) reveals that among the top 50 prepositional constructions ranked by frequency, 39 are classified as prepositions in Russian Grammar (1980) – a significant proportion. These prepositions are highlighted in Table 1. Conversely, only a small number of prepositions from Russian Grammar (1980) exhibit low frequency in the corpus. Examples include: *sorazmerno s* (+ instr) – 0.11 ipm, *bez soprovozhdenia* (+ gen) – 0.23 ipm, *v ipostasi* (+ gen) – 0.05 ipm, *v kontrast* (+ dat) – 0.11 ipm, *vne granits* (+ gen) – 0.11 ipm. In corpus linguistics, the standard frequency measure is instances per million (ipm) to ensure comparability.

Table 1  
Top 50 Prepositional Constructions Ranked by Frequency  
from (Russian National Corpus Constructions)

№	PUs	ipm	№	PUs	ipm
1	<b>vmeste s</b>	248.28	26	po mere	28.13
2	<b>nesmotria na</b>	139.98	27	<b>na osnovanii</b>	27.11
3	<b>riadom s/so</b>	100.65	28	<b>vo imia</b>	26.70
4	<b>v techenie</b>	97.38	29	<b>pri pomoschi</b>	26.57
5	<b>v kachestve</b>	82.55	30	<b>s tsel'iu</b>	26.03
6	<b>v vide</b>	64.86	31	<b>v ramkah</b>	25.69
7	<b>so storony</b>	60.90	31	v chisle	25.37
8	<b>s pomosch'iu</b>	59.46	33	<b>v hode</b>	23.98
9	<b>po povodu</b>	55.07	34	<b>nachinaia s</b>	23.91
10	<b>v sviazi s</b>	52.19	35	<b>v zavisimosti ot</b>	23.81
11	<b>v sluchae</b>	47.30	36	<b>vplot' do</b>	23.75
12	imeni	46.99	37	v protsesse	22.44
13	<b>vsled za</b>	45.51	38	<b>v usloviiah</b>	22.29
14	<b>v oblasti</b>	42.23	39	<b>na protiazhenii</b>	20.84
15	<b>za schet</b>	37.84	40	<b>nariadu s</b>	20.50
16	<b>v sootvetstvii s</b>	35.83	41	<b>za isklucheniem</b>	19.44
17	ne bez	34.73	42	na meste	19.07
18	<b>sudia po</b>	32.93	43	<b>nezavisimo ot</b>	18.86
19	<b>v pol'zu</b>	32.65	44	nedaleko ot	18.79
20	po mneniiu	32.44	45	<b>v rajone</b>	18.12
21	<b>v otlichie ot</b>	32.04	46	po okonchaniu	16.88
22	<b>v otnoshenii</b>	31.81	47	<b>v chest'</b>	16.86
23	na osnove	31.30	48	ot imeni	16.80
24	<b>v silu</b>	30.55	49	<b>v smysle</b>	16.51
25	<b>po sravneniu s</b>	28.59	50	vo glave	16.47

Thus, frequency can serve as an effective tool for determining the degree of grammaticalization of prepositions and, consequently, their placement within the functional-grammatical field.

The primary steps in this research were as follows.

- 1) Collection of PUs from all available sources.
- 2) Identification of main structural models of prepositional formation.
- 3) Extraction of potential prepositions from bigram data in the RNC.
- 4) Integration of various prepositional lists into a unified dataset.
- 5) Calculation of frequency data for prepositions.
- 6) Synthesis of frequency rankings across all structural models.

## RESULTS

(1) We began by collecting PUs from all available sources (Vinogradov, 1947; Cherkasova, 1967; *Russian Grammar*, 1980; Morkovkin, 1997; Bogdanov & Ryzhova, 1997; Shiganova, 2003; Efremova, 2001; Burtseva, 2010; Lepnev, 2010; RNC constructions). As a result, we compiled a list of 933 PUs.

(2) Next, we identified the main structural models and categorized all PUs accordingly. As a result, we classified them into 7 major structural groups: denominative, deadjective, deverbal, deadverbial, borrowed prepositions, comparatives, and parameters (which exist at the periphery of the field). Given that denominative prepositions constitute the largest category within Russian complex prepositions, they warranted further examination. We identified 33 distinct models of denominative prepositions, which include the following structural combinations:  $v + N_{acc}$ ,  $v + N_{prep}$ ,  $na + N_{acc}$ ,  $na + N_{prep}$ ,  $po + N_{dat}$ ,  $po + N_{prep}$ ,  $po + N_{acc}$ ,  $s + N_{gen}$ ,  $s + N_{instr}$ ,  $pod + N_{instr}$ ,  $pod + N_{acc}$ ,  $za + N_{acc}$ ,  $za + N_{instr}$ , and others, incorporating prepositions such as *pri*, *iz*, *do*, *k*, *ot*, *bez*, *pered*, *vne*, *dlia*, *cherez*, *nad*, *o*, *iz-pod*, *skvoz'*, *u*, *iz-za*. Some formations also include the particle *ne* and are constructed by forms  $N_{instr}$ ,  $N_{acc}$ , or  $N_{gen}$ . Thus, we identified a total of 39 structural groups, which provided a useful framework for understanding the variety and patterns of complex prepositions in Russian. It can be argued that these groups constitute a sector-based (or “pizza slice”) division of the functional-grammatical field of prepositions.

(3) The next step was to identify potential prepositions that were not already documented in available sources. To achieve this, we examined bigrams within each structural model identified in Step 2 using the RNC. We focused on bigrams ranked by frequency within these models and extracted potential prepositions. As a result, we identified approximately 500 preposition candidates, including:

- po slovam* (+ gen) – 38.17 ipm,
- na mesto* (+ gen) – 12.6 ipm,
- na kraiu* (+ gen) – 12.1 ipm,
- po dannym* (+ gen) – 11.24 ipm,
- po delu* (+ gen) – 5.77 ipm,
- po nastoianiu* (+ gen) – 2.6 ipm,
- na zadvorkah* (+ gen) – 0.7 ipm.

These preposition candidates required further validation in the corpus to ensure that they functioned consistently as prepositions.

(4) We then consolidated all prepositions within each model, incorporating both those found in previous sources and those identified through our corpus analysis. This comprehensive approach allowed us to integrate existing prepositions with newly identified potential prepositions. The resulting list comprises **2 402 PUs**. Naturally, this list cannot be considered final, closed, or exact. New prepositional constructions frequently emerge, and PUs exhibit numerous variants that can be counted in different ways. For instance, should *soglasno* (+ dat) and *soglasno s* (+ instr) be treated as one preposition or two? Similarly, how should *poseredine* (+ gen), *posredine* (+ gen), *poseredi* (+ gen), and *posredi* (+ gen) be classified? Likewise, should *mezhdru* (+ gen) and *mezhdru* (+ instr) be considered separate units? Therefore, the number **2 402** is somewhat conventional. Nevertheless, it serves as a reference point for future research and provides a rich dataset for the development of a comprehensive *Grammar of Russian Prepositions* (Vsevolodova et al., 2014; Vinogradova & Klobukova, 2022), which would describe all paradigmatic, syntagmatic, and pragmatic relations within the prepositional field, see also, for example (Figurovskaya 2007; Gainutdinova et al., 2024). Moreover, it should be noted that further advancement of this research could be achieved by refining the corpus search templates — for example, by including additional forms of contextual partners, individual words, punctuation marks, etc. This refinement would enable more precise extraction of genuine prepositions while excluding possible homonymous one-word or multi-word constructions.

(5) The next step involved calculating the frequency of these PUs. To accomplish this, we used the RNC (main corpus), which, as of early 2025, contained **389 470 868** words. This allowed us to compile frequency-ranked lists for each structural model.

As an example, **Table 2** shows the most frequent prepositions of the  $v + N_{acc}$  model. These represent the core group for this model, as our dataset includes 373 PUs constructed with this structure. The bolded items in the table indicate prepositions that appear in *Russian Grammar* (1980) and can be considered “approved” prepositions.

As we can see in Table 2 a significant number of the most frequent prepositions align with those identified in *Russian Grammar* (1980), including *vo vremia* (+ gen), *vmesto* (+ gen), *vokrug* (+ gen), *v techenie* (+ gen), *vdol'* (+ gen), *vsledstvie* (+ gen), *vsled za* (+ instr), *v storonu* (+ gen), *v otlichie ot* (+ gen), *v pol'zu* (+ gen) etc. However, other frequently occurring PUs, identified through bigram analysis, include *v den'* (+ gen), *v period* (+ gen), *v sostav* (+ gen), *v gody* (+ gen), *v ruki* (+ gen), *v moment* (+ gen), *vverh po* (+ dat), *vniz po* (+ dat), *vo vremena* (+ gen), *v epohu* (+ gen), *v dni* (+ gen), *v glub'* (+ gen), *v chislo* (+ gen) etc.

A closer examination of structural groups suggests that within each structural model, specific semantic classes can be identified. For example, for the  $v + N_{acc}$  model, the following semantic classes can be distinguished.

1) Location: *vokrug* (+ gen), *vdol' po* (+ dat), *vpered* (+ gen), *v storonu (ot)* (+ gen), *vverh po* (+ dat), *vniz po* (+ dat), *vnutr'* (+ gen), *v glub'* (+ gen), *v glubinu* (+ gen), *v oblast'* (+ gen), *v rajon* (+ gen), *vsled* (+ dat), *v tsentr* (+ gen) etc;

2) Time: *vo vremia* (+ gen), *v techenie* (+ gen), *v den'* (+ gen), *vplot' do* (+ gen), *v period(y)* (+ gen), *v god(y)* (+ gen), *v moment(y)* (+ gen), *vo vremena* (+ gen), *vpered* (+ gen), *v epohu* (+ gen), *v(o) dni* (+ gen), *v glubinu* (+ gen), *v chas(y)* (+ gen), *v minutu* (+ gen), *v minuty* (+ gen), *v poru* (+ gen), *vpred' do* (+ gen) etc;

3) Purpose: *v otven na* (+ acc), *vo imia* (+ gen), *v znak* (+ gen), *vo izbezhanie* (+ gen), *v prodolzhenie* (+ gen), *v podtverzhdienie* (+ gen), *v obmen na/za* (+ acc), *v dopolnenie k* (+ dat), *v pamiat' (o)* (+ gen/prep), *v zaschitu* (+ gen), *v chest'* (+ gen), *v pomosch'* (+ dat), *v ugodu* (+ dat), *v uscherb* (+ dat), *v zhertvu* (+ dat) etc;

4) Cause: *vsledstvie* (+ gen), *v silu* (+ gen), *v otsutstvie* (+ gen) etc;

5) Concession: *vopreki* (+ dat);

6) Relation: a) part-whole: *v sostav* (+ gen), *v riad(y)* (+ gen), *v krug* (+ gen), *v sistemu* (+ gen) etc; b) limitation: *v oblast'* (+ gen), *v sferu* (+ gen), *v kurs* (+ gen), *v ramki* (+ gen), *v ruslo* (+ gen), *v format* (+ gen) etc; c) juxtaposition: *vsled za* (+ instr), *v otlichie ot* (+ gen), *v protivopolozhnost'* (+ dat), *v protivoves* (+ dat), *v kontrast s* (+ instr) etc; d) substitution: *vmesto* (+ gen), *v schet* (+ gen), *vzamen* (+ gen) etc;

7) Addressee: *v pol'zu* (+ gen), *v ruki* (+ dat) etc;

8) Characteristics: *v razgar* (+ gen), *v pik* (+ gen), *v meru* (+ gen), *vplotnuii k* (+ dat) etc;

9) State: *v sostoianie* (+ gen).

Notably, some PUs exhibit polysemy and belong to multiple semantic classes. For instance, *v glubinu* (+ gen) can denote both location and time.

Table 2  
Top 70 Frequency-Ranked Russian Prepositional Units  
(Model:  $v + N_{acc}$ )

№	PUs	ipm	№	PUs	ipm	№	PUs	ipm
1	vo vremia	205.17	25	vniz po	12.25	49	v uscherb	3.94
2	vmesto	167.61	26	vo vremena	11.97	50	v glubinu	3.82
3	vokrug	132.68	27	v epohu	11.11	51	v riady	3.79
4	v techenie	94.48	28	v dni	10.85	52	v rajon	3.54
5	vdol'	66.40	29	v znak	10.60	53	v ugodu	3.47
6	vsledstvie	60.24	30	<b>vnutr'</b>	9.99	54	v meru	3.41
7	vsled za	50.76	31	v glub'	7.76	55	v poru	3.41
8	v storonu	39.60	32	vzamen	7.55	56	vpered	3.35
9	v otlichie ot	37.37	33	v chislo	7.33	57	v tsentr	3.35
10	v pol'zu	33.66	34	vsled	6.94	58	v zhertvu	3.35
11	v sily	33.08	35	v zaschitu	6.75	59	v obmen za	3.34
12	v den'	28.69	36	v adres	6.42	60	v storonu ot	3.28
13	vplot' do	27.42	37	vo izbezhanie	5.88	61	vpred' do	3.22
14	vo imia	27.13	38	v oblast'	5.83	62	v schet	3.11
15	vopreki	22.18	39	v pamiat'	5.71	63	vplotnuii k	3.11
16	v period	22.09	40	v chas	5.14	64	v tsarstvovanie	3.09
17	v chest'	20.99	41	v protivopolozhnost'	4.83	65	v sferu	3.09
18	v sostav	20.82	42	v minutu	4.61	66	v pomosch'	3.01
19	v otvet na	18.65	43	v raspriazhenie	4.57	67	v krug	2.87
20	v prodolzhenie	14.34	44	v god	4.39	68	v sostoianie	2.72
21	v gody	12.92	45	v razgar	4.21	69	v podtverzhdienie	2.67
22	v ruki	12.58	46	v minuty	4.20	70	v dopolnenie k	2.67
23	v moment	12.48	47	v mir'	4.16			
24	vverh po	12.42	48	v otsutstvie	4.15			

These semantic classes within a structural model provide valuable insights into the process of grammaticalization. Many units with similar meanings tend to evolve into prepositions by analogy with frequent prepositions within the same semantic class. For example, *vo vremia* (+ gen) and *v techenie* (+ gen) are well-established and highly frequent prepositions in the “time” semantic class. Their usage has led to the emergence of numerous similar units, such as *v den'* (+ gen), *v period* (+ gen), *v gody* (+ gen), *v moment* (+ gen), *vo vremena* (+ gen), *v epohu* (+ gen), *v dni* (+ gen), *v chas* (+ gen), *v god* (+ gen), *v minutu* (+ gen), and *v poru* (+ gen), among others. This phenomenon provides important evidence for understanding the mechanisms of grammaticalization in the development of prepositions.

The final PU listed in **Table 2** is *v dopolnenie*, with an **ipm** of 2.67, meaning it appears approximately 1 000 times in the RNC. The subsequent PUs exhibit a steady decline in frequency.

(6) In the final step, we consolidated all the collected lists, resulting in a dataset of approximately **2 400 PUs**, which can be presented in frequency-ranked lists, illustrating the structure of the functional-grammatical field of prepositions, ranging from core prepositions to those at the periphery. **Table 3** presents the initial segment of the frequency-ranked list for derived prepositions.

This list illustrates the arrangement of PUs, beginning with the most frequent prepositions. The units presented here form the **core** of the functional-grammatical field of prepositions, and we can state with a high degree of certainty that they function as prepositions. Their frequent occurrence, as evident from the list, reinforces their central role in the system.

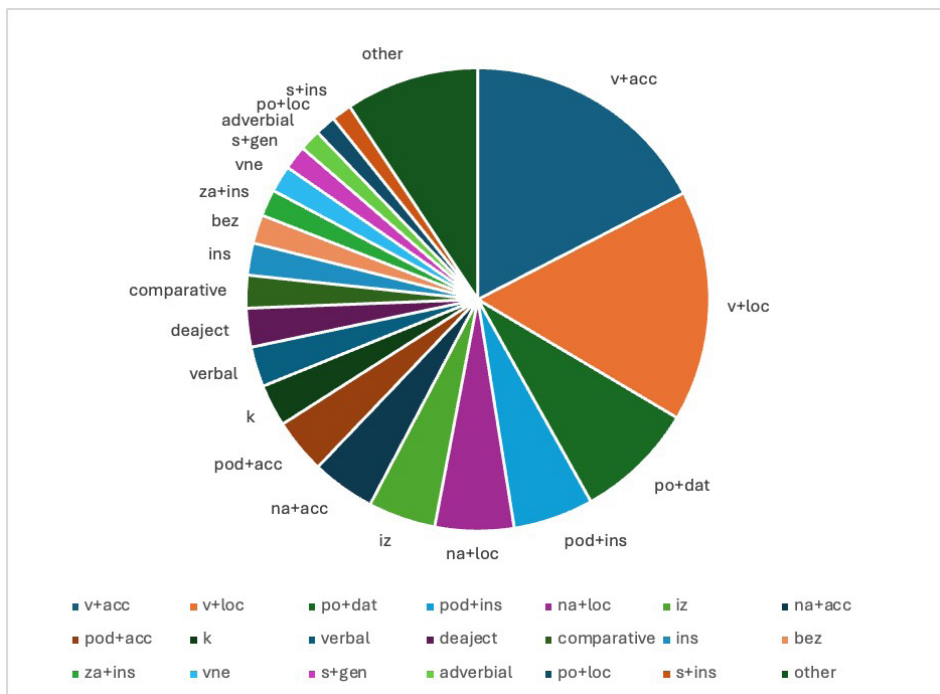
This approach has important implications for **teaching Russian as a foreign language**. It is evident that the most frequent PUs should be introduced earlier in language instruction, while rarer and more marginal ones can be taught at later stages. However, it is worth noting that expressions such as *v vide* (+ gen), *po povodu* (+ gen), or *v oblasti* (+ gen) are rarely included in Russian as a foreign language textbooks, despite their high frequency in actual usage. Incorporating these frequent PUs into teaching materials would greatly benefit learners, enabling them to perform a wider range of communicative tasks more effectively.

Furthermore, this approach to preposition description aligns with **Construction Grammar** findings, as prepositions and their equivalents can be viewed as a type of construction. From this perspective, a **dictionary of prepositions and their equivalents** can be regarded as a collection of constructions, each with a specific form and function. Therefore, a dictionary of prepositions can be conceptualized as part of the **Constructicon** (Zhukova & Janda, 2024), a structured repository of linguistic constructions.

Additional insights can be drawn from this **corpus-based data**. For instance, we can determine which structural models are the most **productive** in the formation of Russian complex prepositions. **Diagram 1** presents the distribution of PUs according to different structural models. The largest segment of the “**pie chart**” corresponds to the  $v + N_{acc}$  model, indicating that it is the most productive in forming complex prepositions. Other significant structural models include  $na + N_{acc}$ ,  $po + N_{prep}$ , and  $v + N_{prep}$ . These patterns provide a deeper understanding of the **structural trends** that shape the development of Russian PUs.

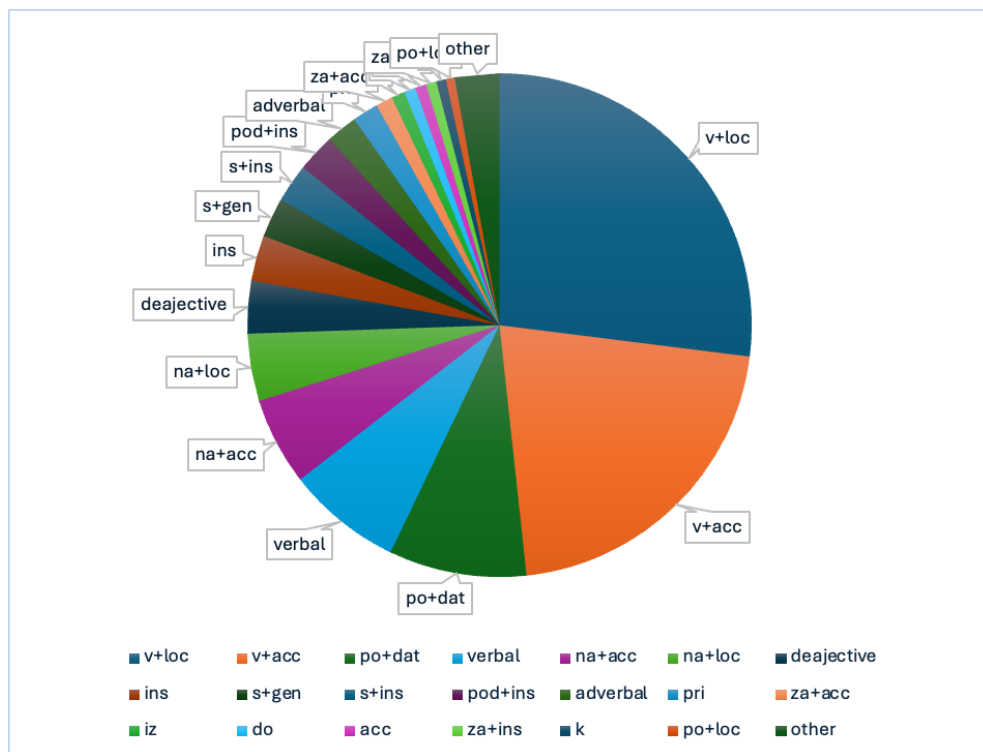
Table 3  
Frequency-Ranked List of Russian Derived Prepositions:  
Top 100

№	PUs	ipm	№	PUs	ipm	№	PUs	ipm
1	vmeste s	258.85	35	za schet	39.36	69	nakanune	23.65
2	vo vremia	205.17	36	... (tomu) nazad	38.77	70	v tsentre	23.42
3	vmesto	167.61	37	po slovam	38.17	71	vperedi	23.34
4	nesmotria na	165.68	38	v otlichie ot	37.37	72	pod vliianiem	22.97
5	vokrug	132.68	39	v otnoshenii	36.33	73	v rajone	22.83
6	..? nazad	112.94	40	ne bez	36.12	74	na fone	22.58
7	riadom s	103.41	41	v sootvetstvii s	35.28	75	vkluchaia	22.36
8	v kachestve	95.38	42	po mneniu	33.74	76	v period	22.09
9	v techenie	94.48	43	v pol'zu	33.66	77	v seredine	21.46
10	blagogaria	93.98	44	posredi	33.60	78	nedaleko ot	21.42
11	v vide	77.19	45	v silu	33.08	79	v chest'	20.99
12	v kontse	75.45	46	bliz	32.44	80	nezavisimo ot	20.93
13	vrode	72.60	47	po mere	32.04	81	v sostav	20.82
14	po povodu	68.12	48	ne do	31.95	82	za isklucheniem	20.22
15	naschet	66.51	49	na osnove	31.41	83	imeni	20.08
16	vdol'	66.40	50	po sravneniu s	31.08	84	v glubine	19.95
17	v nachale	64.33	51	v chisle	28.89	85	na protiazhenii	19.88
18	so storony	63.34	52	sverh	28.79	86	v smysle	19.51
19	s pomozhiu	61.85	53	v den'	28.69	87	po okonchanii	19.20
20	v sviazi	60.87	54	na osnovanii	28.22	88	v prisutstvii	18.88
21	vsledstvie	60.24	55	v ramkah	28.10	89	v otvet na	18.65
22	v sluchae	56.77	56	pri pomoschi	27.63	90	v litse	18.59
23	spustia	55.28	57	vplot' do	27.42	91	v predelah	18.50
24	otnosotel'no	53.12	58	vo imia	27.13	92	pod nazvaniem	18.48
25	vsled za	50.76	59	v hode	26.84	93	vo glave	17.95
26	soglasno	50.74	60	v zavisimosti ot	26.57	94	v ozhidanii	17.92
27	vnutri	49.83	61	navstrechu	26.26	95	v vidu	17.64
28	v oblasti	47.73	62	nachinaia s	25.55	96	ot imeni	17.48
29	podobno	46.18	63	v usloviih	24.65	97	ne govoria o	17.35
30	v resul'tate	43.65	64	po sluchaiu	24.16	98	v sostave	17.19
31	po otnosheniu k	41.25	65	nariadu s	24.15	99	s uchetom	16.76
32	sudia po	40.40	66	v protsesse	24.09	100	s tsel'iu	16.20
33	putem	39.68	67	vvidu	24.06			
34	v storonu	39.60	68	posredstvom	23.83			



**Diagram 1. The Quantity of Prepositional Units Formed by Different Models**

**Diagram 1** visually represents the distribution of PUs according to their structural models, offering insight into which models are most central and which are less frequent. Even more revealing is **Diagram 2**, which presents similar data but focuses on the **total frequency** of each preposition within its respective model. By calculating the frequency of individual prepositions, we can determine the most frequently occurring **prepositional models**. As observed, the  $v + N_{prep}$  and  $v + N_{acc}$  models together account for nearly half of all complex prepositions, underscoring their **central role** in the Russian prepositional system.



**Diagram 2. Total Frequency of Prepositional Units Formed by Each Model (ipm)**

In our view, a **corpus-based approach** to Russian prepositions provides a reliable tool for **stratifying the prepositional field**. The concept of this field also helps explain how **new prepositions** emerge in speech and language. Initially forming at the **periphery** of the field, these units begin as low-frequency constructions. Over time, as their usage increases, they undergo **grammaticalization**, gradually moving toward the **core** of the prepositional system.

## CONCLUSION

In our analysis of PUs gathered from various sources, we identified 39 structural groups of Russian prepositions. The most productive model was found to be  $v + N_{acc}$  (373 PUs). However, when considering the cumulative frequency of prepositions within the same model,  $v + N_{prep}$  proved to be even more frequent (ipm 1970.83). Our findings suggest that PUs involving the prepositions *na* and *po* are particularly frequent and structurally productive, reinforcing the idea that analogy plays a crucial role in the formation of PUs. This analogy facilitates the emergence of new PUs within “priority models” (i.e., productive structural groups).

Within each structural group, PUs were classified according to semantic categories. It has been revealed that PUs within a given structural model tend to be systematically distributed across semantic classes, further supporting the role of analogy in the evolution of PUs. For instance, analogy is evident in the deverbal preposition groups:

- a) *ne dohodia (do)* (+ gen), *ne doezzhaia (do)* (+ gen), *ne dojdia do* (+ gen);
- b) *nesmotria na* (+ acc), *nevziraia na* (+ acc), *ne gliadia na* (+ acc);
- c) (*ne*) *vkluchaia* (+ gen/acc), (*ne*) *iskluchaia* (+ gen/acc), (*ne*) *vykluchaia (i)* (+ gen/acc);
- d) *ishodia iz/ot* (+ gen), *ottalkivaiias' ot* (+ gen), *otpravliaias' ot* (+ gen);
- e) *ne otryvaiias' ot* (+ gen), *ne othodia ot* (+ gen), *ne uhodia ot* (+ gen).

At the same time, while classifying PUs into semantic classes, it became evident that one derivative PU may express multiple meanings. Moreover, there are no strict boundaries between semantic classes, which is expected given that grammaticalization leads to semantic shifts. This phenomenon aligns with the grammaticalization scale proposed by Heine et al. (1991: 48ff): person > object > action > space > time > quality. For example, spatial constructions often evolve to express temporal meanings.

Additionally, our analysis identified a correlation between meaning and actant type within certain prepositional models. For example, in the *bez* (+ gen) model, PUs expressing comitative-1 (Zolotova, 2001: 281), which describe actions or states accompanying the main action, typically combine with event nouns (*bez ogliadki na* (+ acc), *bez teni* (+ gen), *bez prava* (+ gen), *bez doli* (+ gen), *bez ucheta* (+ gen), *bez otryva ot* (+ gen)). In contrast, comitative-2 (Zolotova, 2001: 343), which denotes a person or object not taking part in an action, tends to combine with subject names (*bez pomoschi* (+ gen), *bez vedoma* (+ gen), *bez soglasia* (+ gen), *bez razreshenia* (+ gen), *bez podderzhki* (+ gen), *bez soglasovania s* (+ instr), *bez posredstva* (+ gen)).

Our findings confirm the field-like structure of PUs within each model, validating the distribution of PUs within the functional-grammatical field of Russian prepositions. Nearly every structural group contains a core set of highly frequent PUs, alongside a large peripheral zone comprising less frequent units, which often emerge through analogy to core prepositions or through paradigmatic associations. For example:

- po prichine* (+ gen) – ipm 11.91, *po prichinam* (+ gen) – ipm 0.31;
- navstrechu* (+ dat) – ipm 26.26, *navstrechu k* (+ dat) – ipm 0.76;
- s tochki zrenia* (+ gen) – ipm 13.52, *s positsii* (+ gen) – ipm 1.5.

After consolidating the lists of PUs across the 39 identified models, we compiled a dataset of 2 402 PUs (though this is, of course, an open and non-exhaustive list). The frequency-ranked ordering of this dataset demonstrates the stratification of the functional-grammatical field of Russian prepositions, ranging from core prepositions (high-frequency units) to peripheral prepositions (low-frequency units).

This research provides a valuable foundation for further studies on Russian prepositions and may contribute to future volumes of Russian prepositional dictionaries and Grammar of preposition. Additionally, the compiled dataset can be regarded as a part of the Russian Constructicon, serving as a structured repository for linguistic constructions in Russian. It is also particularly valuable for **teaching Russian as a foreign language**: educators can prioritize the most commonly used prepositions, enabling students to acquire the language more effectively.

## BIBLIOGRAPHY

1. Brinton, L. & Traugott, E. (2005): *Lexicalization and language change*. Cambridge: Cambridge University Press.
2. Fillmore, Ch. J., Kay, P., O'Connor, M. C. (1988): Regularity and Idiomaticity in Grammatical Constructions: The Case of let alone. *Language*, 64 (3), pp. 501–538.
3. Gainutdinova, A. F., Troshkina, T. P., Gabdreeva, N. V. (2024): Russian Preposition Grammar: on the Variability of Position in the Syntaxeme. *Cuadernos de Rusística Española*, 20, pp. 103–112.
4. Goldberg, A. (1995): *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
5. Heine, B., Claudi, U., Hünnemeyer, F. (1991): *Grammaticalization: a conceptual framework*. University of Chicago Press. Chicago.
6. Hopper, P. & Traugott, E. (2003): *Grammaticalization*. 2<sup>nd</sup> edn. Cambridge: Cambridge University Press.
7. Klobukova, L. P. & Vinogradova, E. N. (2022): Who are you, Mr. Russian Preposition? *XLinguae*, 15 (3), pp. 147–165.
8. Kolyaseva, A. & Davidse, K. A. (2018): Typology of lexical and grammaticalized uses of Russian *tip, tipa, po tipu*. *Russian Linguistics*, 42, pp. 191–220.
9. Lachur, Cz. (2019–2022): *Polskie przyimki wtórne i jednostki o funkcji przyimkowej w użyciu realnym. Materiały do słownika (w zestawieniu z językiem rosyjskim)*. Tom 1: a conto – oprócz; Tom 2: pamięci – w kleszczach; Tom 3: w klimacie – zwyczajem; Tom 4: tak zwane przyimki parametryczne. Kępa: Wydawnictwo Nowik Sp. j.
10. Quirk, R., Greenbaum, S., Leech, G., Svartnik, J. (1985): *A comprehensive grammar of the English language*. London: Longman.
11. Yadroff, M. & Franks, S. (2001): The origins of prepositions. *Formal Slavic linguistics*. Zybatow G., Junghanns U., Mehlhorn G., Szucsich L. (eds.). Frankfurt am Main: Peter Lang, pp. 69–79.
12. Zhukova, V. & Janda, L. A. (2024): Russian grammar as a constructicon: beyond a list. *Russian Linguistics*, 48, 15.
13. Аксарина, Н.А., Басова, Л. В. (2019): Лексикографическое описание предлога В ЧАСТИ в разговорно-деловой речи. *Вестник Томского государственного университета. Филология*, 57, с. 5–26.
14. Артеменко, М. В. (2020): Отыменный релятив «ПО ОБРАЗЦУ»: синтаксис и семантика. *Вестник Томского государственного университета*, 453, с. 5–9.
15. Богданов, С. И., Рыжова, Ю. В. (1997): *Русская служебная лексика. Сводные таблицы*. Санкт-Петербург: издательство Санкт-Петербургского университета.
16. Бурцева, В. В. (2010): *Словарь наречий и служебных слов русского языка*. Москва: Дрофа.
17. Виноградов, В. В. (1947): *Русский язык. Грамматическое учение о слове*. Москва-Ленинград: издательство Министерства Просвещения РСФСР.
18. Виноградова, Е. Н. (2016): Грамматикализация в русском языке: от формы существительного к предлогу (на материале соматизмов). *Вопросы языкознания*, 1, с. 25–50.

19. Виноградова, Е. Н. (2023): Грамматикализация, лексикализация и прагматикализация (на материале конструкций, включающих предлог *ПО*). *Вопросы языкознания*, 1, с. 54–87.
20. Виноградова, Е. Н., Клобукова, Л. П. (2022): Грамматика русского предлога: теоретические аспекты. *Русистика*, 20 (1), с. 84–100.
21. Востоков, А.Х. (1831): *Русская грамматика Александра Востокова по начертанию его же сокращенной грамматики польше изложенная*. Санкт-Петербург: в типографии И. Глазунова.
22. Всеволодова, М. В., Клобуков, Е. В., Кукушкина, О. В., Поликарпов, А. А. (2003): К основаниям функционально-коммуникативной грамматики русского предлога. *Вестник Московского университета. Серия 9: Филология*, 2, с. 17–59.
23. Всеволодова, М. В., Кукушкина, О. В., Поликарпов, А. А. (2014): *Русские предлоги и средства предложного типа. Материалы к функционально-грамматическому описанию реального употребления: Введение в объективную грамматику и лексикографию русских предложных единиц. Книга 1*. Москва: URSS.
24. Всеволодова, М. В., Виноградова, Е. Н., Чаплыгина, Т. Е. (2018): *Русские предлоги и средства предложного типа. Материалы к функционально-грамматическому описанию реального употребления: Реестр русских предложных единиц. Книга 2: А – В (объективная грамматика)*. Москва: URSS.
25. Ефремова, Т. Ф. (2001): *Толковый словарь служебных частей речи русского языка*. Москва: Русский язык.
26. Еськова, Н. А. (2001): Первообразные и непервообразные предлоги. Формальный аспект. В кн.: *Избранные работы по русистике: Фонология. Морфонология. Морфология. Орфография. Лексикография*. Москва: Языки славянских культур. с. 261–267.
27. Загнитко, А. А. (2003): Предлог в морфологическом пространстве украинского языка: (синхронно-контрастивные наблюдения). *Вестник Московского университета. Серия 9. Филология*, 3, с. 92–106.
28. Загнітко, А. П., Данилюк, І. Г., Ситар, Г.В., Щукіна, І.А. (2007): *Словник українських прийменників*. Донецьк: ТОВ ВКФ «БАО».
29. Зализняк, А. А. (1977): *Грамматический словарь русского языка. Словоизменение*. Москва: Русский язык.
30. Зеленин, А. В., Руднев, Д. В. (2021): «Что значит этот фон»: история грамматикализации предложно-падежной формы *на фоне*. *Вестник Томского государственного университета. Филология*, 74, с. 43–60.
31. Золотова, Г. А. (2001): *Синтаксический словарь: репертуар элементарных единиц русского синтаксиса*. Изд. 2-е. Москва: URSS.
32. Канюшкевіч, М. І. (2008–2010): *Беларускія прыназоўнікі і іх аналагі. Граматыка рэальнага ўжывання. Матэрыялы да слоўніка. У 3 частках*. ч. 1: Дыяпазон А–Л; ч. 2: Дыяпазон М–П; ч. 3: Дыяпазон Р–Я. Гродна: ГрДУ.
33. Коношкевич, М. И. (2005): Русские и белорусские предлоги: списочный состав, закономерности образования, первый опыт сопоставления. *Вестник Московского университета. Серия 9. Филология*, 4, с. 64–79.
34. Ляхур, Ч. (2006): Проблемы описания предложных единиц в польском языке (к Межнародному проекту «Славянский предлог в синхронии и диахронии: мор-

- фология и синтаксис»). В кн.: *ROSSICA OLOMUCENSIA XLIV (ZA ROK 2005). 1. část*. Olomouc: Ročenka katedry slavistiky na Filozofické fakultě Univerzity Palackého, с. 163–168.
35. Лепнев, М. Г. (2009): *Словарь непроезженных предложений современного русского языка*. Санкт-Петербург: Гуманитарная академия.
  36. Лепнев, М.Г. (2010): *Русские производные предлоги. Проблемы семантики. Словарные материалы*. Санкт-Петербург: ИП «Ефименко Д. Л.».
  37. Лудольф, Г. (1696): *Grammatica Russica*. В кн.: Ларин Б. А. (2002): *Три иностранных источника по разговорной речи Московской Руси XVI— XVII веков*. Санкт-Петербург: издательство Санкт-Петербургского университета.
  38. Морковкин, В. В. (ред.) (1997): *Словарь структурных слов русского языка*. Москва: Лазурь.
  39. Обороты в функции предлога – *Корпусный словарь неоднословных лексических единиц (оборотов) Национального корпуса русского языка*. <https://ruscorpora.ru/page/obgrams/>
  40. Ожегов, С. И., Шведова, Н. Ю. (1999): *Толковый словарь русского языка*. 4-е изд. Москва: Азбуковник.
  41. Плунгян, В. А. (ред.) (2018): *Материалы к корпусной грамматике русского языка. Вып. 3. Части речи и лексико-грамматические классы*. Санкт-Петербург: Нестор-История.
  42. *Русская грамматика* (1980): Шведова Н. Ю. (гл. ред.). В 2 т. Москва: Наука.
  43. Фигуровская, Г. Д. (2007): Значение и функции наречия «одновременно» и предлога «одновременно с». *Cuadernos de Rusística Española*, 3, с. 51–60.
  44. Шереметьева, Е. С. (2019): Релятивные свойства словоформы «В РУСЛЕ» (к вопросу о грамматикализации предложно-падежных словоформ). *Вестник Курганского государственного университета*, 1 (52), с. 135–138.
  45. Шиганова, Г. А. (2003): *Релятивные фразеологизмы русского языка*. Челябинск: издательство Челябинского государственного педагогического университета.
  46. Черкасова, Е. Т. (1976): *Переход полнозначных слов в предлоги*. Москва: Наука.

## BIBLIOGRAPHY

1. Aksarina, N. A., Basova, L. V. (2019): Leksikograficheskoe opisaniye predloga v ChASTI v razgovorno-delovoi rechi. *Vestnik Tomskogo gosudarstvennogo universiteta. Filologiya*, 57, s. 5–26.
2. Artemenko, M. V. (2020): Otymenniy relyativ «PO OBRAZTSU»: sintaksis i semantika. *Vestnik Tomskogo gosudarstvennogo universiteta*, 453, s. 5–9.
3. Bogdanov, S. I., Ryzhova, Yu. V. (1997): *Russkaya sluzhebnyaya leksika. Svodnye tablitsy*. Sankt-Peterburg: izdatel'stvo Sankt-Peterburgskogo universiteta.
4. Brinton, L. & Traugott, E. (2005): *Lexicalization and language change*. Cambridge: Cambridge University Press.
5. Burtseva, V. V. (2010): *Slovar' narechii i sluzhebnykh slov russkogo yazyka*. Moskva: Drofa.
6. Cherkasova, E. T. (1976): *Perekhod polnoznachnykh slov v predlogi*. Moskva: Nauka.

7. Efremova, T. F. (2001): *Tolkovyi slovar' sluzhebnykh chastei rechi russkogo yazyka*. Moskva: Russkii yazyk.
8. Es'kova, N. A. (2001): Pervoobraznye i nepervoobraznye predlogi. Formal'nyi aspekt. In: *Izbrannye raboty po rusistike: Fonologiya. Morfonologiya. Morfologiya. Orfografiya. Leksikografiya*. Moskva: Yazyki slavyanskikh kul'tur, s. 261–267.
9. Figurowskaya, G. D. (2007): Znachenije i funktsii narechiya «odnovremenno» i predloga «odnovremenno s». *Cuadernos de Rusística Española*, 3, s. 51–60.
10. Fillmore, Ch. J., Kay, P., O'Connor, M. C. (1988): Regularity and Idiomaticity in Grammatical Constructions: The Case of let alone. *Language*, 64 (3), pp. 501–538.
11. Gainutdinova, A. F., Troshkina, T. P., Gabdreeva, N. V. (2024): Russian Preposition Grammar: on the Variability of Position in the Syntaxeme. *Cuadernos de Rusística Española*, 20, pp. 103–112.
12. Goldberg, A. (1995): *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
13. Heine, B., Claudi, U., Hünnemeyer, F. (1991): *Grammaticalization: a conceptual framework*. University of Chicago Press. Chicago.
14. Hopper, P. & Traugott, E. (2003): *Grammaticalization*. 2<sup>nd</sup> edn. Cambridge: Cambridge University Press.
15. Klobukova, L.P. & Vinogradova, E.N. (2022): Who are you, Mr. Russian Preposition? *XLinguae*, 15 (3), pp. 147–165.
16. Kolyaseva, A. & Davidse, K. A. (2018): Typology of lexical and grammaticalized uses of Russian *tip, tipa, po tipu*. *Russian Linguistics*, 42, pp. 191–220.
17. Kanyushkevich, M. I. (2008–2010): *Belaruskija prynazožniki i ikh analagi. Gramatyka real'naga žyžyvannya. Materijaly da složnika. U 3 chastkakh. ch. 1: Dyyapazon A–L; ch. 2: Dyyapazon M–P; ch. 3: Dyyapazon R–Ya*. Grodna: GrDU.
18. Konyushkevich, M. I. (2005): Russkie i belorusskie predlogi: spisochnyi sostav, zakonomernosti obrazovaniya, pervyi opyt sopostavleniya. *Vestnik Moskovskogo universiteta. Seriya 9. Filologiya*, 4, s. 64–79.
19. Lachur, Cz. (2006): Problemy opisaniya predlozhnyx edinits v pol'skom yazyke (k Mezhnatsional'nomu proektu «Slavyanskii predlog v sinxronii i diaxronii: morfologiya i sintaksis»). In: *ROSSICA OLOMUCENSIA XLIV (ZA ROK 2005). 1. část*. Olomouc: Ročenka katedry slavistiky na Filozofické fakultě Univerzity Palackého, s. 163–168.
20. Lachur, Cz. (2019–2022): *Polskie przyimki wtórne i jednostki o funkcji przyimkowej w użyciu realnym. Materiały do słownika (w zestawieniu z językiem rosyjskim)*. Tom 1: a conto – oprócz; Tom 2: pamięci – w kleszczach; Tom 3: w klimacie – zwyczajem; Tom 4: tak zwane przyimki parametryczne. Kępa: Wydawnictwo Nowik Sp. j.
21. Lepnev, M. G. (2009): *Slovar' neproizvodnykh predlogov sovremennogo russkogo yazyka*. Sankt-Peterburg: Gumanitarnaya akademiya.
22. Lepnev, M. G. (2010): *Russkie proizvodnye predlogi. Problemy semantiki. Slovarnye materialy*. Sankt-Peterburg: IP «Yefimenko D. L.».
23. Ludolf, H. (1696): *Grammatica Russica*. In: Larin, B. A. (2002): *Tri inostrannykh istochnika po razgovornoj rechi Moskovskoi Rusi XVI–XVII vekov*. Sankt-Peterburg: izdatel'stvo Sankt-Peterburgskogo universiteta.
24. Morkovkin, V. V. (ed.) (1997): *Slovar' strukturnykh slov russkogo yazyka*. Moskva: Lazur'.

25. Oboroty v funktsii predloga – *Korpusnyi slovar' neodnoslovnnykh leksicheskikh edinits (oborotov) Natsional'nogo korpusa russkogo yazyka*. <https://ruscorpora.ru/page/obgrams/>
26. Ozhegov, S. I., Shvedova, N. Yu. (1999): *Tolkovyi slovar' russkogo yazyka*. 4<sup>th</sup> edition. Moskva: Azbukovnik.
27. Plungyan, V. A. (ed.) (2018): *Materialy k korpusnoi grammatike russkogo yazyka. Vyp. 3. Chasti rechi i leksiko-grammaticheskie klassy*. Sankt-Peterburg: Nestor-Istoriya.
28. Quirk, R., Greenbaum, S., Leech, G., Svartnik, J. (1985): *A comprehensive grammar of the English language*. London: Longman.
29. *Russkaya grammatika* (1980): Shvedova N. Yu. (ed.). 2 volumes. Moskva: Nauka.
30. Sheremet'eva, E. S. (2019): Relyativnye svoistva slovoformy «V RUSLE» (k voprosu o grammatikalizatsii predlozhno-padezhnykh slovoform). *Vestnik Kurganskogo gosudarstvennogo universiteta*, 1 (52), s. 135–138.
31. Shiganova, G. A. (2003): *Relyativnye frazeologizmy russkogo yazyka*. Chelyabinsk: izdatel'stvo Chelyabinskogo gosudarstvennogo pedagogicheskogo universiteta.
32. Vinogradov, V. V. (1947): *Russkii yazyk. Grammaticheskoe uchenie o slove*. Moskva-Leningrad: izdatel'stvo Ministerstva Prosveshcheniya RSFSR.
33. Vinogradova, E. N. (2016): Grammaticalization in Russian: From noun to preposition (a case study of body part names). *Topics in the study of language*, 1, s. 25–50.
34. Vinogradova, E. N. (2023): Grammaticalization, lexicalization, and pragmaticalization: Russian constructions with the preposition *PO*. *Voprosy Jazykoznanija*, 1, s. 54–87.
35. Vinogradova, E. N., Klobukova, L. P. (2022): The grammar of Russian preposition: theoretical aspects. *Russian Language Studies*, 20 (1), s. 84–100.
36. Vostokov, A. Kh. (1831): *Russkaya grammatika Aleksandra Vostokova po nachertaniyu ego zhe sokrashchennoi grammatiki polnee izlozhennaya*. Sankt-Peterburg: v tipografii I. Glazunova.
37. Vsevolodova, M. V., Klobukov, E. V., Kukushkina, O. V., Polikarpov, A. A. (2003): K osnovaniyam funktsional'no-kommunikativnoi grammatiki russkogo predloga. *Vestnik Moskovskogo universiteta. Seriya 9: Filologiya*, 2, s. 17–59.
38. Vsevolodova, M. V., Kukushkina, O. V., Polikarpov, A. A. (2014): *Russkie predlogi i sredstva predlozhnogo tipa. Materialy k funktsional'no-grammaticheskomu opisaniyu real'nogo upotrebleniya: Vvedenie v ob'ektivnuyu grammatiku i leksikografiyu russkikh predlozhnykh edinits. Book 1*. Moskva: URSS.
39. Vsevolodova, M. V., Vinogradova, E. N., Chaplygina, T. E. (2018): *Russkie predlogi i sredstva predlozhnogo tipa. Materialy k funktsional'no-grammaticheskomu opisaniyu real'nogo upotrebleniya: Reestr russkikh predlozhnykh edinits. Book 2: A–V (ob'ektivnaya grammatika)*. Moskva: URSS.
40. Yadroff, M. & Franks, S. (2001): The origins of prepositions. In: *Formal Slavic linguistics*. Zybatow G., Junghanns U., Mehlhorn G., Szucsich L. (eds.). Frankfurt am Main: Peter Lang, pp. 69–79.
41. Zagnitko, A. A. (2003): Predlog v morfolozhicheskom prostranstve ukrainskogo yazyka: (sinkhronno-kontrastivnye nablyudeniya). *Vestnik Moskovskogo universiteta. Seriya 9. Filologiya*, 3, s. 92–106.
42. Zagnitko, A. P., Danilyuk, I. G., Sitar, G. V., Shchukina, I. A. (2007): *Slovník ukráin'skikh priimennikiv*. Donetsk: TOV VKF «BAO».

43. Zaliznyak, A. A. (1977): *Grammaticheskii slovar' russkogo yazyka. Slovoizmenenie*. Moskva: Russkii yazyk.
44. Zelenin, A. V., Rudnev, D. V. (2021): «Chto znachit etot fon»: istoriya grammatikalizatsii predlozhno-padezhnoi formy na fone. *Vestnik Tomskogo gosudarstvennogo universiteta. Filologiya*, 74, s. 43–60.
45. Zhukova, V. & Janda, L. A. (2024): Russian grammar as a constructicon: beyond a list. *Russian Linguistics*, 48, 15.
46. Zolotova, G. A. (2001): *Sintaksicheskii slovar': repertuar elementarnykh edinit russkogo sintaksisa*. 2<sup>nd</sup> edition. Moskva: URSS.