Balcania et Slavia

Studi linguistici | Studies in Linguistics

e-ISSN 2785-3187

Vol. 5 – Num. 2 December 2025

Edizioni
Ca'Foscari

e-ISSN 2785-3187

Balcania et Slavia

Studi linguistici | Studies in Linguistics

Edizioni Ca' Foscari - Venice University Press
Fondazione Università Ca' Foscari
Dorsoduro 3246, 30123 Venezia
URL https://edizionicafoscari.unive.it/en/edizioni4/riviste/balcania-et-slavia/

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Studi linguistici | Studies in Linguistics

Semestral journal

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Publisher Edizioni Ca' Foscari | Fondazione Università Ca' Foscari | Dorsoduro 3246, 30123 Venezia, Italia | ecf@unive.it

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Balcania et Slavia
Vol. 5 – Num. 2 – December 2025
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URL https://edizionicafoscari.unive.it/it/edizioni/riviste/balcania-et-slavia/2025/2/
DOI http://doi.org/10.30687/BES/2785-3187/2025/02

e-ISSN 2785-3187

Balcania et Slavia
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Introduction

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The second issue of *Balcania et Slavia* (2025) brings together five contributions addressing central questions at the interface between syntax, semantics, and language acquisition, with particular emphasis on Slavic languages in a comparative perspective. The volume is organized into two thematically coherent parts. The first comprises three studies devoted to binominal constructions and their role in encoding categorization, similitude, and metaphorical interpretation. The second part presents two contributions focusing on the acquisition of pronominal clitics in Serbo-Croatian and on the semantic and translational properties of a specialized verbal construction in Russian.

The first part opens with the article "Binominal Constructions with Instrumental N_2 in Russian: *Pir goroj i piva rekoj*" by Valentina Benigni and Luisa Ruvoletto. The authors examine Russian binominal constructions in which the instrumental noun projects metaphorical meaning onto the head noun. In contrast to genitive binominals, which primarily perform a classificatory function, the instrumental construction encodes manner-based similitude mediated by implicit predication. The analysis identifies a gradient of lexicalization ranging from productive formations to fixed idiomatic expressions and situates these constructions within a broader comparative perspective through a systematic comparison with Italian. The study thus contributes to clarifying the syntactic and semantic

mechanisms underlying metaphorical nominal modification and their cross-linguistic variation.

This is followed by the contribution "Binominal Constructions and Categorization: An Experiment on Categorial Membership in Italian and Russian" by Beatrice Bernasconi and Alessia Lacroce, which investigates the extent to which binominal constructions – specifically the Italian [N1 di N2] and Russian [N1 N2 GEN] patterns – may assume classifier-like functions in languages lacking dedicated classifier systems. Within this framework, the first noun assumes a categorizing function, while the second represents the entity undergoing categorization. Addressing a gap in the literature, the authors provide experimental evidence based on a categorization task conducted with native speakers of Italian and Russian, thereby empirically validating a taxonomy derived from corpus-based observations and contributing to a deeper understanding of the linguistic encoding of categorization.

The third article in this section, "Watercourse Metaphors in Polish and Russian: The Case of the Metaphorical Classifiers *rzeka*, *potok*, *strumień*, *struga* and *reka*, *potok*, *ručej*, *struja*" by Agnieszka Latos and Erica Pinelli, explores binominal constructions in which the classifier element is drawn from the semantic domain of natural watercourses. Drawing on corpus-based analysis, the authors identify the collocational preferences and semantic specializations associated with these metaphorical classifiers and examine the semantic features transferred from the source domain to a range of abstract target domains. Their findings reveal both convergent and divergent patterns in Polish and Russian, shedding light on the interaction between lexical semantics, metaphor, and grammatical structure.

The second part of the issue opens with Boban Arsenijević's article, "Overt, Omitted and Cliticized Structural Arguments in Preschool Speakers of Serbian Dialectal Varieties", which examines the acquisition of direct object expression in Serbo-Croatian across different dialectal contexts. Pronominal clitics, as structurally deficient elements encoding discourse-given referents, alternate with null and lexical expressions and their acquisition reflects the development of both morphological realization and syntactic licensing. Previous research has suggested that overt clitics emerge through a developmental process in which children initially rely on an uninflected pronominal form and subsequently acquire the fully specified clitic paradigm. The study shows that this process is shaped not only by internal grammatical development but also by dialectal input, with varieties displaying a higher degree of clitic grammaticalization facilitating their acquisition. These findings contribute to clarifying the relationship between syntactic structure, discourse representation, and grammatical development.

The volume concludes with Viktoria Lazareva's contribution, "La costruzione russa *tak i ne + V*: prospettive di analisi e soluzioni traduttive", which offers a corpus-based investigation of the Russian construction *tak i ne + V* from both a semantic and translational perspective. The author identifies the grammatical and pragmatic constraints governing its interpretation and demonstrates that the construction encodes a complex configuration of meanings, including counter-expectational, frustrative, and affective nuances, which lack a direct structural equivalent in Italian. The analysis thus provides important insights into the interaction between grammatical structure, semantic interpretation, and cross-linguistic equivalence.

Taken together, the contributions included in this issue offer a coherent perspective on the mechanisms through which languages encode categorization, argument structure, and speaker-related meanings. By combining corpus-based, experimental, and theoretical approaches, and integrating comparative and acquisitional perspectives, the studies presented here contribute to a deeper understanding of the functional architecture of grammar and its development, highlighting the relevance of Slavic languages for broader theoretical inquiry.

e-ISSN 2785-3187

Balcania et Slavia
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Binominal Constructions with Instrumental N_2 in Russian: *Pir goroj i piva rekoj*

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Abstract This paper examines Russian [N_1 N_2.INS] constructions such as *dožd' stenoj*, lit. 'rain [falling] like a wall' (i.e. 'torrential rain'), where the instrumental noun maps metaphorical manner meanings onto N_1. Unlike genitive binominals such as *stena doždja* 'a wall of rain', where N_1 acts as a classifier, the instrumental pattern encodes manner-based similitude via implicit predicates. The study identifies a lexicalization gradient from productive uses to fixed idioms and compares these constructions with Italian counterparts to highlight cross-linguistic syntactic differences and similarities. Ultimately, the research shows how meaning is constructionally mediated through specific syntactic configurations.

Keywords Italian a-phrase construction. Manner-based similitude. Metaphorical mapping. Russian genitive binominal constructions. Russian instrumental binominal constructions.

Edizioni Ca'Foscari

Peer review

Submitted 2025-12-13
Accepted 2026-01-16
Published 2026-03-31

Open access

Citation Benigni, V.; Ruvoletto, L. (2025). "Binominal Constructions with Instrumental N_2 in Russian: *Pir goroj i piva rekoj*". *Balcania et Slavia*, 5(2), -28.

DOI 10.30687/BES/2785-3187/2025/01/001

1 Introduction

The present study investigates Russian binominal constructions of the type [N_1 N_2.INS], in which N_2 appears in the instrumental case and is used metaphorically, mapping its eventive construal onto N_1 (e.g., *pivo rekoj*, lit. 'beer [flowing] like a river', i.e. 'beer in abundance'; *dožd' stenoj*, lit. 'rain [falling] like a wall', i.e. 'torrential rain'). These constructions typically encode a relation of manner-based similitude, with the instrumental constituent profiling the manner or mode of existence attributed to N_1.[1]

The analysis builds upon previous research on a semantically similar but syntactically distinct binominal pattern, [N_1 N_2.GEN], in which the order of constituents is inverted relative to the instrumental pattern. In this pattern, the metaphorical constituent acts as the syntactic head of the construction[2] and functions as a classifier with respect to the second noun (e.g., *reka piva*, lit. 'a river of beer', meaning 'a large quantity of beer').

After a brief discussion of genitive binominal constructions (§2), the paper focuses on the instrumental type (§3), highlighting both the contrasts and points of convergence between the two patterns in terms of syntactic and semantic constraints. A contrastive digression in §3.1 further explores the relation between the Russian instrumental binominal and the Italian *a*-phrase construction, while a parallel is drawn between the Russian genitive binominal and the Italian *di*-phrase construction, thus illustrating how similar conceptual patterns are structurally distinguished at the syntactic level across different languages.

Section 4 begins with a brief discussion of terminological issues, based on a general review of previous studies on this topic in Russian linguistics. In particular, §4.1 focuses on the types of instrumental nouns occurring in the construction, while §4.2 examines the role of the verbal predicate in explicitly or implicitly licensing the noun in the instrumental case. Section §4.3 considers the distribution and competition between genitive and instrumental binominal

1 The article is the result of the close collaboration of both authors; however, for academic purposes only, Valentina Benigni is responsible for Sects. 1, 2, 3, 4, 4.1, and Luisa Ruvoletto for Sects. 4.2, 4.3, 5.

2 Agreement is not a central concern of the present study. However, a targeted search in the Russian National Corpus (RNC) for the binominal pattern [*more/reka* + N.GEN] 'a sea/river of N', functioning as a subject and co-occurring with a past-tense verb (i.e. contexts in which subject–verb agreement in gender and number is overtly marked in Russian), did not yield any instances in which the genitive noun governs gender or number agreement on the verb. In all attested cases, agreement is controlled by the first noun, which functions as the syntactic head of the construction. For example: *Reka pisem issochla* 'the river of letters dried up', where the verb *issochla*.F.SG agrees in feminine singular with *reka*.F.SG and not with *pisem*.GEN.PL.

constructions, highlighting conditions under which one construction is preferred over the other.

Finally, §5 provides conclusive remarks, summarizing the main findings and reflecting on the implications of the study for the broader understanding of metaphorical mapping in Russian.

2 The Genitive Binominal Construction with a Metaphorical N_1

The Russian genitive binominal construction with a metaphorical N_1 relates to the cross-linguistically widespread pattern [N_1 *of* N_2], in which the second noun delimits or specifies the reference of the first. In analytic languages such as Italian or English, this relation is typically expressed by a prepositional of-phrase (cf. It. *una marea di gente*, lit. 'a tide of people', meaning 'a large crowd'; En. *a sea of troubles*). In Russian, by contrast, the same type of relation is realized morphologically through genitive case marking, as in *more problem* 'a sea of troubles', where the genitive N_2 defines the content or domain associated with the metaphorical N_1. In such constructions, N_1 functions as a metaphorical classifier, projecting semantic features of shape, arrangement, or movement onto the target domain of N_2 and thereby contributing to a quantifying or evaluative interpretation of the binominal.

The notion of *classifier* is here adopted in Allan's (1977) broad sense – later elaborated by Aikhenvald (2000) – to refer not only to grammaticalized classifier systems found in languages such as Chinese or Vietnamese, but also to a heterogeneous class of nouns in languages without grammaticalized classifiers. In these languages, nouns occurring in binominal *of*-constructions serve to categorize the referent of N_2 according to salient perceptual or conceptual properties. Within this framework, N_1s in Russian genitive binominals may be viewed as lexical classifiers that help to 'classify' N_2 on the basis of "salient perceived or imputed characteristics" (Allan 1977, 285), such as shape (*grozd' vinograda* 'a bunch of grapes'), arrangement (*svjazka ključej* 'a bunch of keys'), grouping (*stado ovec* 'a flock of sheep'), or quantity, resulting from either subtractive (partitive) or additive operations (*kroška chleba* 'a crumb of bread' vs. *kuča musora* 'a heap of garbage'). For a detailed discussion of nominal classifiers and their semantic functions, see Zhang 2017.

The metaphorical classifiers considered here form a specific subclass in that they tend to undergo semantic bleaching and develop quantifying and/or qualifying meanings, often associated with evaluative overtones. This semantic evolution brings them close to standard classifiers of quantity, shape, or arrangement. A clear example of this process is offered by the quantifiers *kroška* 'crumb'

and *kuča* 'heap', which have grammaticalized into, respectively, a minimizer and a booster in expressions such as *kroška nadeždy* 'a shred of hope' (lit. 'a crumb of hope') and *kuča narodu* 'a crowd of people' (lit. 'a heap of people').

In particular, N_1s from the semantic domain of nature primarily map quantitative features onto N_2, which are derived via metonymical extension from the shape or arrangement of the original referent. Classic examples include *more ljudej* (a sea of people), *reka deneg* (a river of money), *dožd' podarkov* (a rain of gifts), and *volna arestov* (a wave of arrests). These metaphorical classifiers may also project their eventive construal onto N_2, encoding both actional features – such as continuity, iterativity, or dynamicity – and phasal features, marking the onset or peak of N_2, as in *razgar popularnosti* (a peak of popularity) or *vspyška bezumija* (a flash of madness).

The process of their complete grammaticalization into a general quantifier (i.e., denoting 'much' or 'a lot') becomes evident when N_1 combines with N_2 that no longer shares any salient feature of shape or arrangement. For example, *more* (sea) is much more grammaticalized as a quantifier than *luža* (puddle) because it can combine with both liquids and animate nouns: *more krovi* (a sea of blood) vs. *more ljudej* (a sea of people). By contrast, *luža* (puddle) combines just with liquids: *luža krov'i* 'a lake of blood' is a well-established collocation in Russian, while **luža ljudej* (a puddle of people) is not acceptable outside creative use of language.

This grammaticalization trajectory illustrates how metaphors grounded in physical experience map semantic features of [+quantity], based on their literal meaning, while simultaneously serving as a conceptual bridge toward subjective evaluative meanings. *More zabot* (a sea of worries) refers to a quantity of worries that is not only perceived as large, but also overwhelming from the speaker's perspective, thereby conferring a negative connotation upon the entire binominal expression.

For an in-depth discussion of metaphorical quantifiers in the domain of nature, see Latos, Benigni 2025; Benigni, Latos 2024; Benigni, Latos 2023; Benigni 2022, and, more generally, the work produced within the CRAB project (Cross-linguistic Research on Analogy in Binominals), published in Scando-Slavica, 71(1), as well as in this volume.

3 The Instrumental Binominal Constructions with a Metaphorical N_2

Constructions such as *pivo rekoj* (lit. 'beer [flowing] like a river', i.e., 'beer in abundance'), *dožd' stenoj* (lit. 'rain [standing / falling] like a wall', i.e., 'torrential rain'), and *strach volnoj* (lit. 'fear [rising]

like a wave', i.e., 'a wave of fear') instantiate a distinctive syntactic configuration in which N_2 in the instrumental – typically denoting a concrete object (e.g. *stena* 'wall') or a natural phenomenon (e.g. *reka* 'river', *volna* 'wave') – functions in a way comparable to metaphorically used N_1s in the genitive construction (cf. *reka piva* 'river of beer' vs. *pivo rekoj* 'beer like a river'). In both patterns, the metaphorical noun projects salient perceptual features of shape, arrangement, or movement onto the other nominal constituent.

Unlike genitive binominals, however, instrumental constructions overtly encode a comparative relation between N_1 and N_2: the instrumental N_2 acts as a benchmark for the manner in which N_1 occurs or manifests itself.

This semantic difference is reflected in their respective pathways of grammaticalization: metaphorical nouns in genitive binominals tend to develop into subjective, hyperbolic quantifiers (including minimizers and intensifiers), whereas in instrumental constructions they evolve into comparative adverbials of manner.

To conclude this section, it is worth noting the metalinguistic awareness of these parallel structures, as reflected in online lexicographic resources such as the Russian "Wikiquote", which devotes a specific entry to the idiomatic expression *dožd' stenoj* 'rain like a wall'.[3] The anonymous contributor who edited the entry paraphrases it through its specular genitive construction *stena doždja* 'a wall of rain' and glosses it as "a well-established collocation meaning very dense streams of rainwater resembling a wall extending from the ground to the sky".

The entry also lists numerous literary examples where the expression co-occurs with the verb *stojat'* 'to stand', reinforcing the comparison between heavy rain and a standing wall. Notably, the collocation is accompanied by an illustrative photograph of torrential rain, visually reinforcing the metaphorical mapping of *stena* 'wall' onto the perceptual image of a vertical, opaque curtain of rain.

In Russian, certain lexical items can occur in both configurations, giving rise to truly specular and functionally parallel patterns. In example (1a), two comparative instrumental constructions are used: *pir goroj* (lit. 'a banquet like a mountain') and *pivo rekoj* (lit. 'beer like a river'). In both cases, natural images – those of a mountain and a river – metaphorically convey the notion of abundance.

(1) a. *Pir goroj i pivo rekoj* (www.instagram.com/p/C4akULHIWgA/)
b. **Gora pira i reka piva*

3 Search дождь стеной on ru.wikiquote.org.

In *pir goroj*,[4] the mountain evokes a richly laden table where food and dishes accumulate; in *pivo rekoj*, the river image maps onto the beverage the idea of a liquid flowing copiously from brimming glasses. However, if we try to transform the instrumental construction into the genitive one in (1b), we observe that only *reka piva* 'a river of beer' is acceptable, while *gora pira* '*a mountain of a banquet' is not used. This restriction can be explained by the different semantic relations encoded by the two constructions. The instrumental construction establishes a comparison based primarily on shape: the banquet is construed as taking the form of a mountain, which only metonymically evokes abundance. In contrast, when *gora* 'mountain' functions as a metaphorical classifier in a genitive binominal construction, it tends to project onto N_2 the semantic feature of arrangement – that is, an accumulation of matter or of discrete entities – which is hardly compatible with the eventive semantics of *pir* 'banquet'.

This shows that, although the two constructions are similar in functional effect, they are not fully interchangeable, and only a subset of nouns can occur in both. This reinforces Goldberg's (1995, 67) 'principle of non-synonymy', a foundational concept in Construction Grammar, which holds that two distinct constructions must differ in meaning or usage.

Anticipating what will be discussed in the following sections, we may thus say that although the final interpretation of the two constructions built on the same noun often converges at the functional level, their semantic architecture differs. The genitive binominal construction is metaphorical in nature: it relies on an implicit comparison based on the projection of certain features (primarily shape, arrangement, and actional traits) from the source-domain N_1 onto the target-domain N_2. The instrumental construction, instead, is explicitly comparative, as it attributes to N_1 the manner of acting or manifesting itself characteristic of N_2.

4 We report here some of the versions that emerge from non-specialist online discussions concerning the etymology of this idiomatic expression. Some hypotheses link its origin to the traditional placement of drinking cups at the center of the table during large banquets; others refer to the hierarchical arrangement of tables according to the social rank of guests; still others trace it to ritual fires or to decorative "mountain-shaped" incense holders introduced in the 17th century. In the Russian National Corpus, the expression is already attested in 1792 in Krylov's *Pokajanie sočinitelja kraduna*: "vsë dokazyvalo, čto segodnja v ego dome budet pir goroj…" (everything indicated that today there would be a grand banquet at his house…). Regardless of its historical origin, the idiom *pir goroj* is today well-established in the Russian speaker's consciousness and is associated with other instrumental expressions of abundance, such as the collocation *pivo rekoj*, to which it is here paired.

3.1 A Contrastive Digression

An interesting parallel between classifying and manner-based comparative constructions can also be observed in Italian, where the classifying binominal construction [N_1 *di* N_2] with a metaphorical N_1 contrasts with the comparative construction [N_1 *a* N_2], in which N_2 – frequently in the plural and licensed by the preposition *a* 'at; in' – functions as the term of comparison. The two constructions often share the same lexical items, giving rise to formally distinct yet functionally parallel patterns. Consider the following Italian pairs:

- *una valanga di critiche* 'an avalanche of criticism' vs. *critiche a valanga* 'criticism [coming/downpouring] in an avalanche';
- *montagne di libri* 'mountains of books' vs. *libri a montagne* 'books in heaps';
- *un fiume di soldi* 'a river of money' vs. *soldi a fiumi* 'money [flowing] in streams'.

The construction [N_1 *di* N_2] has a classifying function, analogous to the Russian genitive binominal construction: N_1, typically denoting a landscape element (e.g., river, mountain) or a natural phenomenon (e.g., avalanche), serves as a metaphorical classifier quantifying N_2**.** In the corresponding [N_1 *a* N_2] construction, the same nouns appear as N_2 in a manner-based comparative structure, parallel to the Russian instrumental binominal construction. Here N_2 does not classify N_1 but iconically depicts the way in which N_1 behaves, unfolds, or manifests itself, projecting onto it the dynamic or visual schema associated with the relevant natural phenomenon.[5]

For a detailed, systematic analysis of the Italian *a*-phrase construction and its semantic polysemy, see Piunno 2013. In the present study, however, we focus specifically on the comparative subtype, in which N_2 belongs predominantly to the domain of nature and contributes an iconic image that grounds the manner interpretation.

The parallel between the Russian instrumental construction and the Italian *a*-phrase becomes particularly evident through a constrastive approach. In example (2a), taken from the parallel

5 In the examples above, the manner-based comparison often implies quantity, since natural phenomena like avalanches, mountains, and rivers suggest massiveness or continuous flow. However, a quantitative reading is not necessary in all [N_1 *a* N_2] constructions: in *pantaloni a zampa di elefante* 'bell-bottom trousers' or *rughe a zampa di gallina* 'crow's-feet wrinkles', N_2 conveys only shape or arrangement, as in Russian instrumental construction *stojat' stolbom* 'to stand like a pillar'. In other cases, quantity is secondary to manner: in *una pioggia di finanziamenti* 'a flood of funding' vs. *finanziamenti a pioggia* 'funding distributed like rain', the former emphasizes the amount, while the latter emphasizes the mode of distribution, with the quantitative reading emerging indirectly from the manner.

corpus Open Subtitles 18, the abundant flux of ideas is expressed in Russian through a manner-based comparison in the instrumental case: *nepreryvnym potokom* 'like an uninterrupted flow', where *potok* (flow) conveys an image of continuous movement. In Italian, the same conceptualization is rendered by the *a*-phrase construction *a raffica* 'in a burst', which similarly evokes the dynamic, forceful manner in which ideas follow one another (2b).

(2) a. *I dejstvitel'no, inogda byvaet trudno upomnit' vse svoi idei, osobenno, esli oni* ***idut*** *nepreryvnym potokom* […]. (OpenSubtitles 2018)
And indeed, sometimes it is difficult to recall all your ideas, especially when they come like an uninterrupted flow […].

b. *Ed è difficile a volte ricordare di aver avuto un'idea, soprattutto quando* ***ti vengono così a raffica****, come deve succedere nella mente di Joe Pasquale.*
And sometimes it is difficult to remember an idea, especially when they come at you in a burst.

Both constructions thus rely on natural-event schemas to characterize the mode of occurrence of N_1, confirming that instrumental binominal construction in Russian and comparative *a*-phrase in Italian are convergent strategies for encoding manner through iconic comparison.

4 The Instrumental Binominal Construction in the Russian Grammatical Tradition

In this section, the specific properties of the instrumental binominal construction [N_1 (V) N_2.INS] will be examined, with particular attention to the semantic and lexical constraints that determine the type of noun allowed in the N_2 position (§4.1) and the class of verbs co-occurring with the binominal (§4.2). Before turning to these issues, however, it is useful to consider how this specific use of the instrumental has been treated in the Russian grammatical tradition.

Vinogradov (1972, 145-6), referring to Potebnja, observed that a range of instrumental functions are internally related, and distinguished among them the instrumental of manner (*tvoritel'nyj obraza*) and the instrumental of comparison (*tvoritel'nyj sravnenija*). The first label applies to binominal instrumental collocations exemplified by fixed expressions such as *grud' kolesom* 'chest pushed forward / puffed out' (lit. 'chest wheel.INS'), and *volosy ëžikom* 'crew cut' (lit. 'hair hedgehog.INS'), whereas the term 'instrumental of comparison' is reserved for verbal collocations such as *nestis' streloj* 'to rush like an arrow' (lit. 'to rush arrow.INS'), Vinogradov's analysis thus highlights the ability of the instrumental case to express both

manner or mode of being and comparison, even though he associates the comparative function exclusively with verbal collocations.

In his diachronic study on the functions of the instrumental case in eighteenth-century, Michajlov (2012) notes that as early as 1853 Buslaev, in his *Historical Grammar of the Russian Language* (1959, 471-2), introduced the term 'instrumental of resemblance' (*tvoritel'nyj upodoblenija*), treating it as a subtype of the 'instrumental of manner of action' (*tvoritel'nyj obraza dejstvija*) and emphasizing the ancient origin of this use. Michajlov (2012, 172) further observes that Šachmatov (1925, 338) explicitly pointed out the close connection between the instrumental of comparison and the instrumental of manner, arguing that their common function is to "specify the character of an action". However, Šachmatov's criteria for distinguishing between the two meanings remain unclear. For instance, Puškin's example illustrating the instrumental of manner – *bulavki doždëm sypalis' okolo nej* (lit. 'pins were scattering around her like rain') – is functionally and semantically almost identical to Krylov's example illustrating the instrumental of comparison – *rekoj s bednjažki l'ëtsja pot* (sweat flows from the poor girl like a river).

In his own analysis, Michajlov (2012, 172), following Mrazek (1964, 67), classifies as instances of the instrumental of comparison all cases in which the instrumental characterizes the manner of an action by indicating a person, animal, or object for which that manner, quality, or intensity is especially typical. However, as in earlier works, the comparative function is discussed only in relation to verbal collocations.

More recent studies, such as Rakhilina and Tribushinina 2010, distinguish two instrumental sub-constructions: the shape instrumental (e.g. *stojat' ovalom* 'be arranged in the oval shape') and the quasi-comparative instrumental (e.g. *upast' kamnem* 'drop like a stone'). The former construction simply describes an entity in terms of its shape, whereas the latter involves a comparison between the trajector (the comparee) and the landmark (the standard of comparison).

Janda et al. (2020, 110) refer to comparative function of these constructions under the broader label Instrumental of Paragon, which denotes "a comparison in which two things are claimed to be similar". Building on this framework, Cotta Ramusino (2022, 245) focuses on a specific sub-type of this construction, in which the noun in the nominative is reduplicated in the instrumental case. This instrumental configuration has an intensifying function, as it predicates that N_1.NOM represents a prototypical instance of N_1.INS (e.g. *derevuška derevuškoj* 'smallish hamlet').

In short, both labels – instrumental of manner and instrumental of comparison (or paragon) – are justified. These constructions are indeed grounded in a manner-based analogy between N_1 and N_2. For

example, in *volosy ëžikom* 'crew cut' (lit. 'hair hedgedog.INS'), the upright position of the hair is compared to the spines of a hedgehog standing on its back, while in *grud' kolesom* 'chest pushed forward / puffed out' (lit. 'chest wheel.INS'), the rounded, protruding shape of the chest recalls the curvature of a wheel.

4.1 Types of N_2s in the Instrumental Binominal Construction

As regards the types of nouns that appear in the instrumental case within the binominal construction, these primarily denote concrete referents such as artefacts, objects, natural forms, or elements of the landscape. Examples include *lampa dugoj* 'arc lamp' (lit. 'lamp arch.INS'), *pyl' stolbom* 'a pillar of dust' (lit. 'dust pillar.INS'), *dožd' stenoj* 'sheets of rain' (lit. 'rain wall.INS'), and *pivo rekoj* 'beer in abundance' (lit. 'beer river.INS').

In most cases, the instrumental noun occurs in fixed or semi-fixed collocations encoding stable, conventionalized comparisons. Examples such as *nos kručkom* 'a hooked nose' (lit. 'nose hook.INS'), *guby bantikom* 'pouting lips' (lit. 'lips bow.INS'), and *nos kartoškoj* 'a potato-shaped nose' (lit. 'nose potato.INS') illustrate the high degree of lexicalization typical of this pattern.

However, certain instrumental nouns display greater combinatorial flexibility and can co-occur with different N_1 bases. For instance, *rekoj* ('river.INS') combines with *slëzy* (tears) in *slëzy rekoj* (lit. 'tears river.INS'), where the actional feature STREAMING / FLOWING is projected from the source domain (RIVER) onto the target domain (TEARS). The comparison is facilitated by the shared perceptual feature of LIQUIDITY, which makes the mapping semantically coherent. In this context, *rekoj* functions as a hyperbolic intensifier – that is, as a maximizer meaning 'a great quantity of tears, resembling a river'.

In *razgovor rekoj* 'a conversation flowing like a river', by contrast, the same feature of CONTINUOUS FLOW is mapped onto the event noun *razgovor* 'conversation', attributing to it the qualitative and actional meanings LONG, UNINTERRUPTED, and FLUID. Here, the semantic effect lies in the intensification of the event's duration and manner-related properties. The comparison involves a higher degree of abstraction, as it relates entities that do not share directly perceptible physical traits.

This example demonstrates that the same instrumental noun can establish various types of conceptual relationships with the governing noun, projecting features that range from concrete, perceptually grounded properties to more abstract qualitative ones. The processes of metaphorical mapping and metonymical extension can be better understood if we consider that N_2 is not directly governed by N_1, but rather by an underlying verbal predicate that

licenses an instrumental expressing a similitude based on shape, arrangement or manner of acting (for a detailed discussion of the verbal component of the construction see §4.2).

Consider the following example:

(3) a. *v Moskve – krasota, tusovki,* ***den'gi rekoj tekut***. (RuTenTen20, vtabakerke.ru)
and in Moscow – beauty, parties, and money flows like a river.
b. *My govorim stichijno: den'gi, kak voda,* ***den'gi rekoj***, ***more deneg***. (RuTenTen20, litprom.ru)
We speak metaphorically: money like water, money in a river, a sea of money.

In (3a), the verb tekut 'flow' makes the comparative relationship between N_1 and N_2 explicit: *rekoj* 'like a river' specifies the manner of the process denoted by *tekut* 'flow', reinforcing the iconic parallel between the natural flow of water and the metaphorical flow of money.

In (3b), by contrast, the absence of a verb signals a process of ellipsis and lexicalization: the relationship between *den'gi* and *rekoj* has become direct, and the expression functions as a lexical unit meaning 'abundance' or 'profusion', without requiring an explicit predicate. The omitted verb, however, can be easily inferred from the co-text, which includes the reference to *voda* 'water' and the genitive binominal *more deneg* 'a sea of money'.

This alternation between syntactically integrated and elliptical patterns suggests a gradient of lexicalization within the instrumental binominal construction. At one end of the continuum, we find fully productive, verb-dependent uses, in which the instrumental realizes a similitude based on manner (e.g., *pivo* / *razgovor* [*tečët*] *rekoj* 'beer / conversation [flows] like a river'). At the other, we find highly lexicalized idioms whose meanings are stored as holistic lexical units, with the verbal component semantically bleached (*volosy ëžikom* 'crew cut', lit. 'hair hedgedog.INS').

From a cognitive perspective, this gradient reflects the dynamic interaction between schematic constructional meaning and lexical entrenchment: as certain instrumental collocations become conventionalized, their original comparative and manner features gradually merge into the integrated meaning of the entire expression.

More generally, this shift from verbal predication to nominal collocation points to a metaphor-to-metonymy drift: the original comparison between a river and the flow of money (a metaphorical mapping) evolves into an expression in which *reka* merely indexes a high degree of quantity or continuity (metonymic intensification). Comparable processes can be observed in other binominals featuring instrumental nouns denoting natural elements, such as *pyl' stolbom* 'a pillar of dust' (lit. 'dust pillar.INS') or *dožd' stenoj* 'a sheet of rain' (lit. 'rain wall.INS'). In these expressions, the instrumental encapsulates the spatial or dynamic configuration of the natural phenomenon and

functions as a maximizer, that is, a qualitative marker of intensity, abundance, or characteristic manner.

4.2 Types of Vs Co-occurring with the Instrumental Binominal Construction

Building on the preceding discussion of N_2 semantics, we now turn to the verbal dimension of the construction, examining how different types of verbs shape the interpretation of the binominal pattern. In certain binominal constructions the instrumental N_2 is syntactically and semantically licensed by a verb, which is often omitted from the surface structure. These constructions can be schematized as [N_1 ($V_{[MOTION/POSITION]}$) N_2.INS], where N_1 denotes the object of comparison and N_2 the term of comparison. At the same time, N_2 modifies the verb, expressing the manner of action or existence of N_1.

The first group consists of verbs of motion, such as *nestis*' *vichrem* 'to rush like a whirlwind', *proletet*' *molniej* 'to flash like lightning', *rasprostranjat*'*sja lesnym požarom* 'to spread like a forest fire'. The second group consists of stative or positional verbs, such as *ležat*' *brevnom* 'to lie like a log' and *stojat*' *goroj* 'to stand up for' (lit. 'to stand like a mountain'). This extended version of the binominal construction can be described as a semi-schematic idiom, in which V and N_2 are lexically specified, while N_1 represents the variable element.

When V is a verb of motion, the construction expresses a comparison based on N_2's way of acting, formalized as SEM = <N_1 acts as N_2>. When V denotes the position or spatial configuration of N_1, the construction expresses a comparison based on N_2's shape, arrangement, or posture, formalized as SEM = <N_1 resembles N_2>.

Examples illustrate these patterns clearly.

In (4), the implicit motion verb (e.g., 'to gush; to flow') is recoverable from the specification of the source (*iz golovy* 'from my head'), while N_2 (*fontan* 'fountain') introduces a dynamic comparison based on FORCEFUL EMISSION.

(4) *Ona prišla v soznanie pervaja, stala golosit': "A čto ž on nadelal!". U menja* ***krov' fontanom*** *iz golovy. Menja srazu na nosilki i otpravili v voennyj gospital' v Berline.*
(Komsomol'skaja pravda, 29.01.2014)
She was the first to regain consciousness and began to wail: "What has he done!" Blood [was gushing] like a fountain from my head. They immediately put me on a stretcher and sent me to a military hospital in Berlin.

In (5), the motion verb *katit'sja* lit. 'to roll' combines with the instrumental N_2s *lesnym požarom* 'like a wildfire' and *vodnoj cunami* 'like a tsunami' to convey the manner of N_1's reaction. The

construction evokes a scene of UNCONTROLLED, DESTRUCTIVE EXPANSION, drawing on an iconic comparison with two perceptually salient natural phenomena.

(5) *Ich tol'ko podtalkivaj legon'ko, i* ***oni sami budut katit'sja lesnym požarom il' vodnoj cunami*** *po zemle, uničtožaja vsech, kto vinoven ili prosto podvernulsja.* (ruTenTen17, lib.ru)
Just give them a gentle push, and they [people consumed by suffering] will start spreading on their own like a forest fire or a tsunami across the land, destroying everyone who is guilty or simply happened to be in the way.

In the following example, the positional verb *ležat'* 'to lie' establishes a stative framework**,** while the instrumental *brevnom* 'like a log' specifies it through a prototypical comparison conveying the idea of complete STILLNESS and RIGIDITY, grounded in the analogy between a motionless human body and a log. Comparable expressions include *ležat' kamnem* 'to lie like a stone' and *ležat' trupom* 'to lie like a corpse'. In all of these, N_2 encodes a position-based similitude, while the verb – whether overt or implicit – provides the stative grounding that guides the mapping of N_2's visual features of shape or arrangement onto N_1.

(6) *Starucha, rastjanuvšis' na lavke, ležala slovno mërtvaja. On podumal, čto ona umerla, i stal eë trjasti, no* ***ona ležala brevnom*** *i ne ševelilas'.* (ruTenTen17, igrokopilka.ru)
The old woman, stretched out on the bench, was lying as if dead. He thought she had died and began shaking her, but she was lying like a log, not moving at all.

In (7), the motion verb *idti* 'to go' combines with the instrumental *prachom* 'like dust' to form an idiomatic expression denoting COMPLETE LOSS OR DESTRUCTION. Here, the instrumental evokes the end state of a destructive process, with the image of DUST symbolizing the qualitative outcome of the action: the efforts are entirely wasted. In this case, the original concrete imagery has become conventionalized, yielding what Lakoff, Johnson 1980 term a 'dead metaphor', which conveys an abstract evaluative meaning.

(7) *Odin nevernyj rez – i* ***vse zatračennye do ètogo usilija idut prachom****.* (ruTenTen17, studiogid.ru)
One wrong cut – and all the effort made so far turns to dust.

Finally, in (8), the instrumentals *gorkami* 'in heaps', *lesom* 'like a forest', and *rekoj* 'like a river' act as hyperbolic intensifiers, mapping respectively features of ABUNDANCE, INTENSITY, and CONTINUITY on N_1s. The dynamic verbs *nasypan* '[hashish] piled up' and *tečët* '[vodka] flows', together with the stative verb *stoit* '[craziness] stands', provide

the framework of action or state, while the instrumentals encode a shape- or arrangement-based comparison for N_1s.

(8) *gašiš* ***gorkami nasypan****, iz tabletok dorožki složeny, dur'* ***lesom stoit****, vodka* ***rekoj tečët*** (RNC, M. Gigolašvili, Čertovo koleso, 2007)
hashish is piled up in heaps, trails of pills are laid out, the craziness stands like a forest, and vodka is flowing like a river

Motion- and position-based instrumental constructions thus emphasize the manner of movement or the mode of existence of N_1. Expressions such as *stojat' stolbom* 'to stand like a pillar' or *polzti zmeëj* 'to crawl like a snake' encode shape, arrangement, or manner of motion through a stable comparison with a prototypical N_2. The mapping of inherently relevant features is guided by embodied experience, which proves central for perceptually salient natural phenomena.

More broadly, the extended instrumental construction exemplifies verb – noun co-selection, in which N_2's semantics presuppose and constrain the verb – even when unexpressed – while the verb, in turn, activates a stable comparison.

Lexical meaning is therefore constructionally mediated: clause interpretation depends on networks of form–meaning pairings rather than on isolated words. In Russian, the instrumental noun often evokes an implicit motion or position verb whose meaning is recoverable from context; at the same time, the verb reinforces the comparative reading of the instrumental, grounding the analogy in the manner of motion or mode of existence.

In sum, constructions of the type [N_1 (V[MOTION/POSITION]) N_2.INS] reveal a structured interaction between syntax, semantics, and pragmatics, whereby the verb's meaning is systematically linked to the ontological and image-schematic features of N_2. Whether static or dynamic, these patterns employ a comparative mechanism that maps N_2's physical or kinetic attributes onto N_1, showing how even elliptical constructions can support inferential interpretation through conventionalized form–meaning associations.

4.3 Distribution and Competition between Genitive and Instrumental Binominal Constructions

As noted above, the genitive and instrumental binominal constructions may involve the same lexical items, which function as N_1 in the genitive pattern [N_1 N_2.GEN] but as N_2 in the instrumental pattern [N_1 N_2.INS].

These "mirror" configurations differ not only syntactically but also semantically and functionally. The instrumental construction overtly

encodes analogy, i.e. resemblance between entities belonging to different categories, while in the genitive pattern analogy is conveyed metaphorically, through implicit comparison.

The [N_1 N_2.INS] type (e.g., *pivo rekoj* 'beer [flowing] like a river', *dožd' stenoj* 'rain [standing / falling] in sheets', lit. 'like a wall', *žar volnami* 'heat [spreading] in waves') combines this analogical function with a predicative one, implying an unexpressed verb of motion or position: [N_1 ($V_{[MOTION/POSITION]}$) N_2.INS]. This predicate is recoverable from context (see §§4.1-4.2). In this configuration, N_2 anchors the semantics of the predicate, establishing an analogy based on manner, shape, or spatial configuration.

In other words, the instrumental construction performs a dual role: it is comparative with respect to N_1, and adverbial with respect to the unexpressed predicate, whose semantics both motivate and constrain the selection of N_2.

By contrast, the [N_1 N_2.GEN] construction (e.g. *reka piva* 'a river of beer', *more alkogolja* 'a sea of alcohol', *volna stracha* 'a wave of fear') is purely binominal. It contains no implicit predicate and consists of a left-headed NP modified by a specifying genitive that denotes the substance, content, or conceptual domain of the head.

While in *pivo rekoj* 'beer [flows] like a river' the river functions as a term of comparison for the flowing quantity of beer, in *reka piva* 'a river of beer' it acts instead as a metaphorical classifier of arrangement (Latos, Benigni 2025; Benigni, Latos 2024; Benigni, Latos 2023), conveying the notion of an hyperbolic quantity of beer. In both constructions, the reference to RIVER acquires a quantifying function, serving as a maximizer, but the former does so through explicit comparison, the latter through metaphorical mapping of quantitative and actional properties from the classifying N_1 onto the classified N_2.

The difference in syntactic structure between the two constructions is reflected in the distinct semantic prominence of their constituents. In the instrumental construction, *pivo* 'beer' is both the syntactic and semantic head of the binominal, while *rekoj* 'river.INS' functions as its modifier. In the genitive construction, by contrast, *reka* 'river' acts as the syntactic head, whereas the role of semantic head is more evenly distributed between the two components.

When both constructions are possible, they give rise to mirror-like semantic mappings along the axes of shape, arrangement, and quantity. Pairs such as *pivo rekoj* 'beer [flowing] like a river' / *reka piva* 'a river of beer', *dožd' stenoj* 'rain [falling/standing] like a wall' / *stena doždja* 'a wall of rain', and *žar volnami* 'heat [spreading] in waves' / *volny žara* 'waves of heat' share imagery based on the same nature-related noun, which projects actional and, by extension, quantitative features onto the other constituent. However, the choice of construction entails a perspective shift: the instrumental

construction presupposes an external observer who consciously establishes a comparison based on N_2's manner of motion or spatial configuration. The genitive construction, by contrast, presents the event or situation as classified and quantified, with the comparison already integrated into its conceptualization.

Cognitively, the two constructions instantiate opposite figure–ground alignments within the same conceptual schema, while differing in their degree of lexicalization. Quantitative patterns in corpora illustrate this contrast. For instance, in RuTenTen20, the instrumental binominal *pivo rekoj* 'beer (flowing) like a river' is slightly more frequent (132 occurrences) than the genitive binominal *reka/reki piva* 'a river/rivers of beer' (103 occurrences). In (9), however, it co-occurs with a genitive binominal featuring a metaphorical quantifier, MOUNTAIN (*gory čipsov i fistašek* 'mountains of chips and pistachios'):

(9) *piva rekoj s gorami čipsov i fistašek na družeskich večerinkach.*
beer in rivers, with mountains of chips and pistachios at friendly parties.

This contrast emerges clearly in (10a-b). Both evoke the same visual schema, but the former depicts a dynamic, unfolding event, while the latter highlights the resulting configuration.

(10) a. ***volosy volnami upali** na pleči, vyzvav voschišenie zritelej.* (kartaslov.ru)
her hair fell in waves over her shoulders, eliciting the spectators' admiration.
b. *Podružka sidela za tualetnym stolikom i rasčesyvala pered zerkalom **zolotye volny volos***. (kartaslov.ru)
Her little friend was sitting at the dressing table, combing the golden waves of her hair in front of the mirror.

The alternation *volosy volnami* vs. *volny volos* corresponds to a shift from a process-oriented to an entity-oriented construal.

Finally, the constructions are not always interchangeable. In *reka ognja* 'a river of fire', *more ljudej* 'a sea of people', *stena stracha* 'a wall of fear', the corresponding instrumental forms **ogon' rekoj*, **ljudi morem*, **strach stenoj* are semantically infelicitous, due to insufficient perceptual or dynamic overlap. Explicit analogy is only possible where manner or shape-based comparison is cognitively plausible.

In summary, the [N_1 N_2.INS] construction tends toward a process-oriented construal with an implicit predicate, while [N_1 N_2.GEN] favors an entity-oriented construal based on metaphorical analogy. Overlap occurs only when manner, form, and quantitative profiling align. The diagram in Figure 1 is based on attested occurrences extracted from the RuTenTen20 corpus and is intended to identify metaphorical nouns that occur in both constructions. However, this

representation does not reflect the actual frequency of the competing patterns, that is, it does not indicate whether the genitive or the instrumental construction is more frequent overall. In the diagram, the instrumental construction foregrounds manner (and secondarily quantity), whereas the genitive directly encodes quantity; nouns attested in both patterns indicate the overlap between quantifying and qualifying readings.

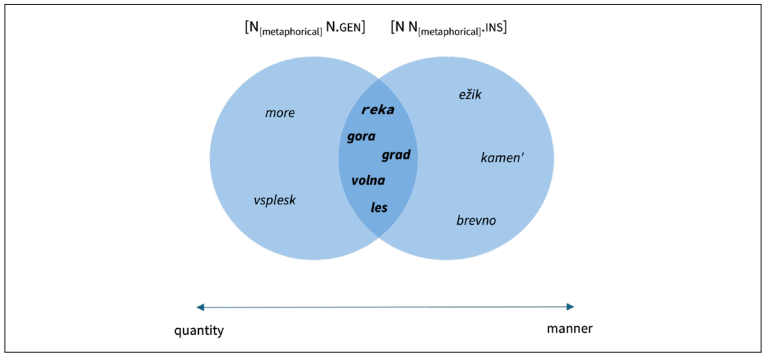

Figure 1 [$N_{[metaphorical]}$ N.GEN] vs. [N $N_{[metaphorical]}$.INS]

5 Conclusive Remarks

This study investigated Russian binominal constructions, focusing on the contrasts and points of convergence between the instrumental pattern [N_1 N_2.INS] (e.g., *pivo rekoj*, lit. 'beer [flowing] like a river') and the genitive pattern [N_1 N_2.GEN] (e.g., *reka piva*, lit. 'a river of beer'). These two patterns often form "mirror" configurations using the same lexical items but maintain distinct semantic functions.

The instrumental construction overtly encodes a comparative relation of manner-based similitude, wherein the instrumental constituent N_2 profiles the manner or mode of existence attributed to N_1. This construction is implicitly predicative and process-oriented, typically relying on an unexpressed verb of motion or position. Accordingly, the instrumental noun performs a dual role: it acts as a comparative expression relative to N_1 and functions adverbially relative to the implicit predicate. Through grammaticalization, the metaphorical nouns in this construction evolve into comparative adverbials of manner. This pattern also reveals a lexicalization gradient, ranging from fully productive, verb-dependent uses to highly conventionalized idioms where the comparison may shift, via metaphor-to-metonymy drift, to index merely a high degree of quantity or continuity.

In contrast, the genitive binominal construction is purely nominal and relies on implicit, metaphorical comparison. Here, the initial noun, N_1, functions as a metaphorical classifier, projecting semantic features – such as shape, arrangement, or actional traits – onto the second noun, N_2. The semantic evolution of metaphorical nouns in this pattern is characterized by a tendency to develop into subjective, hyperbolic quantifiers (intensifiers or minimizers). This structure favors an entity-oriented construal.

While the final functional interpretation of these two constructions often converges, particularly in conveying the notion of abundance, they are not fully interchangeable. Their primary distinction lies in perspective: the instrumental construction presupposes an external observer establishing an explicit comparison based on N_2's manner of motion or spatial configuration, whereas the genitive construction presents the event or situation as already conceptually classified and quantified. Full overlap is observed only when manner, form, and quantitative profiling align.

Finally, the study highlighted parallels between the Russian instrumental binominal construction and the Italian *a*-phrase construction, and between the Russian genitive binominal and the Italian *di*-phrase construction, demonstrating how similar conceptual patterns – metaphorical classification versus manner-based comparison – are realized through structurally distinct yet convergent strategies across languages. This comparative analysis further substantiates the claim, central to construction-based and usage-based frameworks, that lexical meaning is not inherent but constructionally mediated, emerging from dynamic networks of form–meaning pairings.

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e-ISSN 2785-3187

Balcania et Slavia
Vol. 5 – Num. 2 – December 2025

Binominal Constructions and Categorization: An Experiment on Categorial Membership in Italian and Russian

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Abstract Recent research has shown that binominal constructions such as [N1 *of* N2] and [N1 N2GEN] can function as classifiers in languages without dedicated classifier systems. In these constructions, N1 plays a classifier-like role, while N2 is the classified noun. Although much work has focused on the types of N2s allowed, semantic groupings are rarely defined, and when they are, they often reflect the researcher's interpretation rather than shared cognitive patterns. To investigate this, we conducted a categorization experiment with L1 speakers of Italian and Russian to test the validity of a 21-category classification identified based on corpus data. Participants were asked to classify lexical items into proposed categories or suggest new ones, with each category including both prototypical and peripheral members. Results were analyzed through quantitative methods and qualitative observations.

Keywords Binominal constructions. Categorization. Cross-Linguistic experiment. Quantitative analysis

Index 1 Introduction. – 2 Methodology. – 3 Results and Discussion. – 4 Conclusion.

Edizioni Ca'Foscari

Peer review

Submitted 2025-10-09
Accepted 2025-12-07
Published 2026-03-31

Citation Lacroce, A.; Bernasconi, B. (2025). "Binominal Constructions and Categorization: An Experiment on Categorial Membership in Italian and Russian". *Balcania et Slavia*, 5(2), 29-46.

DOI 10.30687/BES/2785-3187/2025/01/002

1 Introduction

When dealing with nominal classification, languages can be divided into two main types. Classifier languages (e.g., Chinese, Thai) obligatorily mark nominal classification through a closed set of grammaticalized forms called 'classifiers' (Tai, Wang 1990; Aikhenvald 2003). Non-classifier languages (e.g., English, Italian, Russian) lack such devices but may resort to alternative strategies for cases where classification is felt necessary (e.g., Russian numerals, Sussex 1976).[1]

Since the 1970s, linguists have identified binominal constructions of the type 'N1 *(of)* N2' as a possible systematic strategy for nominal categorization in many languages (Allan 1977; Cinque 2006; Cotta Ramusino 2016; Xu 2017; Benigni 2022; Benigni, Latos 2023, 2024). In these patterns, N1 plays a role comparable to that of a classifier, while N2 is the categorized noun. Two structural types are recurrent: (i) constructions where N2 is introduced by a preposition (e.g., N1 *of* N2) as in *three bales of hay*, and (ii) constructions where N2 appears in the genitive case, as in Ru. *tjuk-Ø sen-a*$_{\text{GEN}}$ 'a bale of hay'.

The co-occurrence of specific types of nouns in the two slots of the construction depends on their semantic relation. For instance, collective N1s preferably co-occur with groups of animate entities; arrangement N1s with inanimate sets are organized into a specific shape; measure words with measurable entities, such as liquids, mass-like items, or surfaces. Most studies within this line of research examine the lexical types of N2 admitted by a given classifier-like noun to identify regularities in their selection (Tai, Wang 1990; McEnery, Xiao 2007; Verveckken 2015). Less frequently, however, researchers have worked on the identification of a cross-linguistic list of semantic categories to group the various N2s (Benigni 2022; Benigni, Latos 2023, 2024; Lacroce 2023). Since such categories are researcher-defined, they risk reflecting interpretive bias rather than actual cognitive processes of categorization. Moreover, as stated by Clark:

> semantic categories do not map to each other across languages in any direct fashion. […] The boundaries for lexico-semantic categories are likewise seldom clear-cut as one moves from one language to another. (Clark 2017, 407)

1 The two authors equally contributed to the conceptualization, development, and overall realization of this article. For Italian academic purposes only, Alessia Lacroce was responsible for Sections 1, 3.2, and 3.3, while Beatrice Bernasconi was responsible for Sections 2.2, 3.1, and 4. Both authors share equal responsibility for Section 2.1.

For some lexical items, categorization membership is relatively straightforward and intuitively shared among speakers. For others, however, categorization proves more complex, since their semantic features may overlap with two or more possible classes. This phenomenon reflects the inherently fuzzy nature of linguistic categories (Mervis, Rosch 1981; Taylor 2003), which lack clear-cut boundaries and include less prototypical entities at their edges. Such fuzziness is particularly relevant in the study of binominal constructions, where peripheral members challenge the stability of semantic groupings and reveal points of divergence in speaker judgments.

In Lacroce 2023, a corpus-based analysis of binominal constructions in Italian was carried out to demonstrate the classifier-like function of such patterns. The analysis yielded a data-driven list of operational semantic categories to describe the items that can fill the N2 slot of the Italian construction N1 *di* N2 'N1 of N2'. However, this classification may still be biased by the type of data considered, the researcher's perspective, and their personal mental representation of items. Therefore, this paper aims to verify the validity of such a categorization by presenting the results of an experiment conducted with L1 speakers of Italian and Russian. The study will address the following research questions:

- RQ1: Do L1 speakers of Italian and Russian consistently agree in assigning items to a finite set of categories?
- RQ2: What is the informants' agreement rate in categorizing a central vs. a peripheral member of a class?
- RQ3: Which principles underlie the process of class inclusion of lexical items in the two languages?

More broadly, our findings contribute to understanding how non-classifier languages encode categorization. Italian and Russian represent two interesting testing grounds: both are non-classifier languages, yet they differ significantly in morphological type and in the morphosyntactic realization of N1-N2 relations.

The remainder of this article is structured as follows. Section 2 provides details on the methodology and the experimental design. Section 3 summarizes and discusses the results of the experiment. Finally, Section 4 draws some conclusions.

2 Methodology

2.1 The Experiment

In order to design the categorization experiment, we first analyzed the collocational profile of three Italian and Russian classifier-like nouns to identify the stimuli among a list of authentically occurring N2s. For Italian, we focused on *mucchio* 'heap', *mazzo* 'bunch', *pila* 'pile'. The three nouns are among the most productive items and are very common in the Italian language. Moreover, none of them has fully grammaticalized into a quantifier (as is the case of *un sacco di* 'a lot of'). For Russian, we selected their semantically comparable counterparts (namely, *kuča* 'heap', *buket* 'bunch', *kopna* 'pile').

Relying on data from the *COrpus di Riferimento dell'Italiano Scritto* (CORIS) for Italian, and the main corpus (*osnovnoj*) of the *Nacional'nyj Korpus Russkogo Jazyka* (NKRJa) for Russian, we extracted the hundred most frequent types for each construction (i.e., *mucchio di* N, *mazzo di* N, pila di N, *buket* N_{GEN}, *kuča* N_{GEN}, *kopna* N_{GEN}), obtaining a dataset of 300 collocates per language.

Then, we grouped the attested N2 collocates into higher-level categories based on their semantic features. At this stage, we relied on the adjacent linguistic co-text to collocate ambiguous items. Drawing on the classification proposed by Lacroce (2023) within the corpus-based analysis of binominal constructions in Italian, a list of 21 semantic categories was employed to classify each term. The choice of semantic categories was data-driven and aimed at ensuring comprehensive coverage of the attested items, while avoiding an overly fine-grained classification that would have resulted in a longer and more fragmented list. For this reason, the categories cover a wide range of domains, from animate to inanimate entities, from more concrete to more abstract ones: 1. Animals, 2. Body parts, 3. Buildings and places, 4. Bundles and waves, 5. Celestial bodies, 6. Clothing and linen, 7. Containers, 8. Flowers, herbs, and plants, 9. Food, 10. Fruits, vegetables, and legumes, 11. Generic, 12. Human activities, 13. Human beings, 14. Liquids, 15. Minerals and rocks, 16. Money, 17. Paper and related materials, 18. Powders, 19. Tools, 20. Waste, 21. Wood.

The list of annotated N2s from the corpora was used as a source for the experiment's stimuli. For each of the 21 categories, two lexical items were selected for a total of 42 stimuli per language. To capture the typical properties of internal category structure, we

chose[2] one central member, i.e., a prototypical exemplar that clearly instantiates the category (e.g., It. *ragazzi* 'boys' for Human beings) and one peripheral member, namely, a less prototypical item that possibly shares features with more than one category (e.g., It. *cuscino* 'pillow' may be classified both within Tools and Clothing and linen). This design allows us to investigate both the stability of prototypical membership and the fuzziness of category boundaries. In selecting the stimuli, we attempted to maintain comparability between the Italian and Russian versions of the test; hence, when possible, we selected semantically similar or equivalent items (for literature in support of pairing conceptually similar items across languages, cf. Haspelmath 2010; Baker 2011). Table 1 shows the full list of items provided for both languages. Twenty items across ten categories are cross-linguistically equivalent and are highlighted in grey.

Table 1 List of stimuli included in the two versions (Italian and Russian) of the experiment

Categories	Italian		Russian	
	Central members	**Peripheral members**	**Central members**	**Peripheral members**
Animals	*vacche* 'cows'	*pulci* 'fleas'	*voly* 'oxes'	*bakterii* 'bacteria'
Body parts	*capelli* 'hair'	*pelli* 'skins'	*volosy* 'hair'	*kosti* 'bones'
Buildings and places	*case* 'houses'	*stazioni* 'stations'	*doma* 'houses'	*ruiny* 'ruins'
Beams and waves	*raggi* 'rays'	*scosse* 'shakes'	*svet* 'light'	*ul'trazvuki* 'ultrasounds'
Celestial bodies	*stelle* 'stars'	*satelliti* 'satellites'	*solnce* 'sun'	*asteroidy* 'asteroids'
Clothing and linen	*abiti* 'clothes'	*cuscini* 'pillows'	*bel'ë* 'linen'	*poduški* 'pillows'
Containers	*scatole* 'boxes'	*pneumatici* 'tires'[1]	*meški* 'bags'	*komnaty* 'rooms'
Flowers, herbs, and plants	*violette* 'violets'	*paglia* 'hay'	*gladiolusy* 'gladioli'	*pšenica* 'wheat'
Food	*lasagna* 'lasagna'	*crema di sesamo* 'sesame cream'	*xleb* 'bread'	*kukuruza* 'corn'
Fruits, vegetables, and legumes	*meloni* 'melons'	*rucola* 'arugula'	*jabloki* 'apples'	*gorox* 'peas'
Generic	*roba* 'stuff'	*doni* 'gifts'	*veščі* 'stuff'	*kačestva* 'qualities'
Human activities	*viaggi* 'travels'	*domande* 'questions'	*rabota* 'work'	*voprosy* 'questions'

2 As one anonymous reviewer pointed out, our a priori selection of certain items may represent a prototypical instance of the researcher's own interpretive bias(es) possibly influencing the results and outcomes of the research. While we acknowledge this, we aimed to select items that could be considered central or peripheral members as objectively as possible, to provide a clear starting point. In any case, the experiment results offered a valuable testing ground for potential biases.

Human beings	*ragazzi* 'boys'	*clientele* 'clienteles'	*rebjata* 'boys'	*angely* 'angels'
Liquids	*acqua* 'water'	*olio* 'oil'	*vino* 'wine'	*kraski* 'paint'
Minerals and rocks	*sassi* 'rocks'	*ghiaia* 'gravel'	*kamni* 'rocks'	*glina* 'clay'
Money	*banconote* 'banknotes'	*debiti* 'debts'	*den'gi* 'money'	*dolgi* 'debts'
Paper and related materials	*giornali* 'newspapers'	*poesie* 'poems'	*gazety* 'newspapers'	*dokumenty* 'documents'
Powders	*farina* 'flour'	*sale* 'salt'	*pepel* 'ash'	*pesok* 'sand'
Tools	*chiavi* 'keys'	*biciclette* 'bicycles'	*zontiki* 'umbrellas'	*mašiny* 'cars'
Waste	*spazzatura* 'garbage'	*cadaveri* 'corpses'	*navoz* 'manure'	*trupy* 'corpses'
Wood	*legna* 'wood'	*tavole* 'boards'	*brëvna* 'logs'	*ščepki* 'splinters'

1 We recognize that seeing tires as 'containers for air' may be very counterintuitive. However, this choice was driven by the question whether shape similarity to standard containers played a role when deciding category membership for this term. If we look only at the objective, and binary properties of containers (for instance, an object with an empty space inside), then a tire can indeed be included within the category. However, we included it precisely to test whether an interpretation that is logically acceptable can nevertheless be functionally and cognitively unmotivated, and how such an item is identified.

The experiment consisted of two questionnaires, one per language, administered entirely in the respective target language (category labels are reported here in English for clarity and readability). Each questionnaire began with instructions and a short section to collect sociodemographic information (age, gender, nationality, education, experience in linguistics, and first language). Since participation was restricted to individuals over 18 years of age who were L1 speakers of Italian or Russian, this information was essential for verifying eligibility.

Stimuli were presented individually in random order, each accompanied by a list of categories from which participants were asked to select one. If none of the options were deemed appropriate, participants could choose an 'Other' option and propose a new label. To minimize ordering effects and ensure independent judgments, participants were not allowed to return to previous questions.

The Italian questionnaire[3] was created and distributed via LimeSurvey[4] in April 2022. Participants were recruited during university activities (lectures, student meetings, etc.), through personal contacts and social networks. The Russian version was designed using Google Forms,[5] with participants recruited via

3 The Italian questionnaire is available at this link: `http://www.servizididatticiscuolalfl.it/Ling_UniRoma3/index.php/151745?lang=it`.

4 `www.limesurvey.org`.

5 The Russian questionnaire is available at this link: `https://forms.gle/WDxGWzG47ENaX8yw5`.

Prolific;[6] responses were collected in August 2024. In total, we obtained 70 valid responses for Italian and 67 for Russian. For analysis, we retained 67 responses per language to ensure balanced datasets.[7]

2.2 Statistical Methods

We addressed our research questions with three complementary statistical analyses. First, we examined the overall agreement among Italian and Russian participants in assigning items to categories (RQ1) via an inter-rater reliability test, which assesses the extent to which participants consistently assigned a given lexical item to the same category, and whether this agreement exceeded chance level. We used Fleiss' Kappa (Fleiss 1971), computed separately for Italian and Russian, with categories treated as nominal, via the R package *irr* (*kappam.fleiss*). The κ value ranges from 0 (chance agreement) to 1 (perfect agreement), with negative values indicating less-than-chance agreement. We interpret κ following Landis and Koch (1977): 0.00-0.20 slight agreement; 0.21-0.40 fair agreement; 0.41-0.60 moderate agreement; 0.61-0.80 substantial agreement; 0.81-1.00 almost perfect agreement.

To test whether central vs. peripheral category membership predicts expected assignment (RQ2), we fitted a mixed-effects binominal logistic regression using the *glmer* function of the R package *lme4*. The dependent variable was 'match' (1 = expected category; 0 = otherwise; 'Other' is considered as 0) while the predictors included 'centrality' (central vs. peripheral) as a fixed effect and random intercepts for 'participant ID' and 'item'. Separate models were fitted for each language and compared. This test evaluates the probability that a given noun was assigned to the expected category above chance, while accounting for individual variability among participants and items and contrasting central and peripheral members.

To have a more detailed overview of which single items were assigned to their expected category above chance and which, on the contrary, were assigned to different ones, we ran exact binominal tests per item (separately by language), applying a False Discovery Rate (FDR) correction.

Lastly, for non-matching responses, we identified the most frequent choices to determine how informants tended to categorize

6 www.prolific.com.

7 The questionnaire results are available at the following link: https://doi.org/10.17605/OSF.IO/3AQ9W.

these items instead. Through a qualitative description of these cases, we address the issue of which principles guide speakers in assigning category membership to less prototypical items (RQ3).

3 Results and Discussion

3.1 Testing the Role of Item Centrality: Fleiss' Kappa and Mixed-Effects Logistic Regression

The first research question we wanted to address was to what extent Italian and Russian speakers share the same categories both within and between the two groups, and whether they agreed in assigning the items to the intended category. The inter-rater reliability test was run for the purpose and shows that, for both languages, there is a moderate overall agreement among the informants ($0.41 < \kappa < 0.60$). However, Italian participants performed a bit better than Russian ones: $\kappa_{IT} = 0.609$ (z-score = 806; p-value < 0.001); $\kappa_{RU} = 0.572$ (z-score = 761; p-value < 0.001).

Considering the κ value for each category, in the Italian experiment, thirteen categories showed substantial agreement ($\kappa > 0.60$), four of which reached almost perfect agreement ($\kappa > 0.80$): Animals, Buildings and places, Minerals and rocks, and Celestial bodies. As for Russian, ten categories displayed substantial agreement ($\kappa > 0.60$), three of which exceeded $\kappa > 0.80$, namely, Wood, Buildings and places, and Minerals and rocks. For the latter two, high agreement is consistent with Italian participants' rates.

Within the Italian data, only two categories fall into the range of slight agreement ($\kappa < 0.20$), namely, Generic and Powders. The next lowest agreement occurred for Tools ($\kappa = 0.415$) and Human activities ($\kappa = 0.442$). In the Russian data, the same four categories yielded the lowest agreement, with Generic showing the weakest result ($\kappa = 0.181$), followed by Tools ($\kappa = 0.295$), Human activities ($\kappa = 0.306$), and Powders ($\kappa = 0.357$). Thus, speakers of both languages exhibit strong consensus for some categories while showing limited consensus for others. Interestingly, the patterns of low agreement are consistent between the two languages. Overall, a cognitively plausible pattern emerges; categories with the highest agreement tend to be specific, narrow, and concrete, whereas those with lower agreement are generally broader, less specific, and more abstract.

We then complemented Fleiss' Kappa with a mixed-effects logistic regression for each language to examine how agreement varies based on item centrality.

The mixed-effects logistic regression on the Italian data revealed a robust effect of 'centrality' ($\beta = 2.58$, SE = 0.61, $z = 4.20$, $p < 0.001$).

The odds of assigning an item to its expected category were thirteen times higher for central items than for peripheral ones. The intercept was not significant (β = –0.10, SE = 0.43, p = 0.82), indicating that peripheral items did not differ from chance level once variability was taken into account. Random effects indicated that variance was substantially larger across items (σ^2 = 3.66) than across participants (σ^2 = 0.34), suggesting that item difficulty accounted for most of the heterogeneity in classification accuracy.

The same model run on Russian data showed likewise a significant effect of centrality (β = 1.68, SE = 0.48, z = 3.49, p < 0.001) with central items over five times more likely to be correctly assigned than peripheral items (odds ratio = 5.4). As in Italian data, the intercept was not significant (β = 0.01, SE = 0.34, p = 0.97), implying that peripheral items did not differ from chance level once random variation was accounted for. Random effects showed considerably greater variance across items (σ^2 = 2.29) than across participants (σ^2 = 0.14). This pattern indicates that variability was driven primarily by item differences in both languages.

So, to answer RQ2, the centrality of an item with respect to a category is a significant predictor for categorization in both languages. Central items were significantly more likely to be assigned to the expected categories than peripheral ones (thirteen times more likely in the Italian data and five times in the Russian data), which provides experimental evidence of the fuzziness of categories. Such a tendency is visible in Figure 1, which plots the probability of an expected answer (y-axis), as predicted by the logistic regression model, based on the centrality of the item (x-axis, peripheral vs. central).

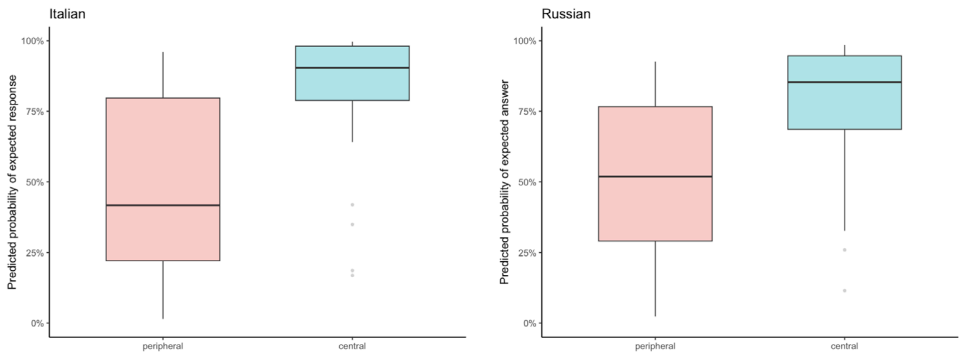

Figure 1 Plots of model-based item probabilities by centrality in Italian (left) and Russian (right) data

In the plots, each box represents the distribution of item-level predicted probabilities for peripheral (red) and central (green) nouns. The clear separation between the two boxes in both languages visually conveys the strong effect of centrality: central items have uniformly high predicted accuracy, clustering at the upper end of the scale, while peripheral items show wide variability with medians close to chance level and several items falling below it.

3.2 A More Detailed View of Participants' Responses: Accuracy Measures and Binominal Test

The results of the logistic regression model were further explored by verifying, through a binominal test, whether the response accuracy for each item is above chance. Figures 2 and 3 display the distribution of response accuracy for central and peripheral items in the two languages (Italian on the left, Russian on the right). The colored bars in the plots represent 95% confidence intervals: narrower bars mean more consistent responses, while wider bars relate to more uncertainty in the estimates. These figures show in more detail what is 'inside' the boxes in Figure 1.

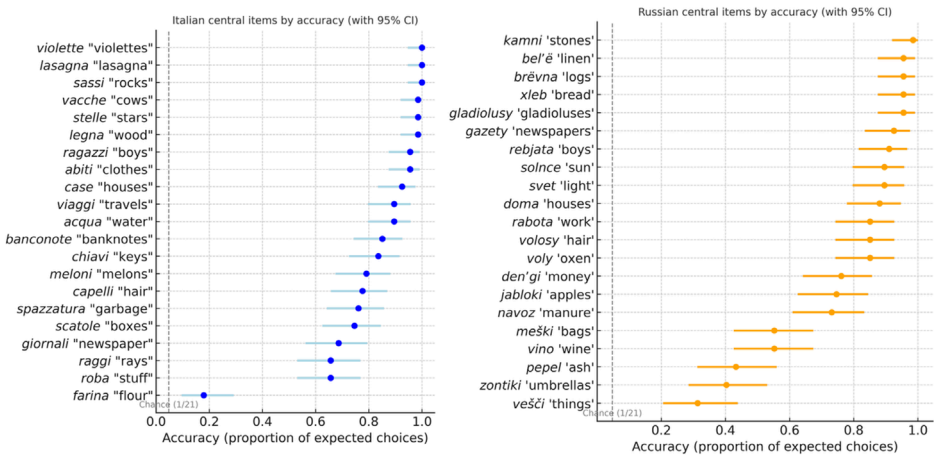

Figure 2 Response accuracy of Italian and Russian central items

In Figure 2, most Italian central items (20/21) show an accuracy above 0.6. Only *farina* 'flour' was assigned to the expected category (Powders) with difficulty. As for Russian, fifteen items were successfully assigned to the expected categories (accuracy > 0.6), whereas six – namely, *meški* 'bags' for Containers, *vino* 'wine' for

Liquids, *pepel* 'ash' for Powders, *zontiki* 'umbrellas' for Tools, and *veščі* 'things, stuff' for Generic – showed more inconsistencies. In both languages, most of the central items can be considered as robust category prototypes, with the Italian dataset performing slightly better than the Russian one. However, some items (one in Italian and six in Russian) that were originally identified as central members were not perceived as such. For instance, Ru. *pepel* 'ash' was mostly categorized (31 responses) as Waste; similarly, It. *farina* 'flour' was very easily categorized (50 responses) as Food.[8] This suggests that these items may be more peripheral within their expected categories and, instead, behave as central items of others.

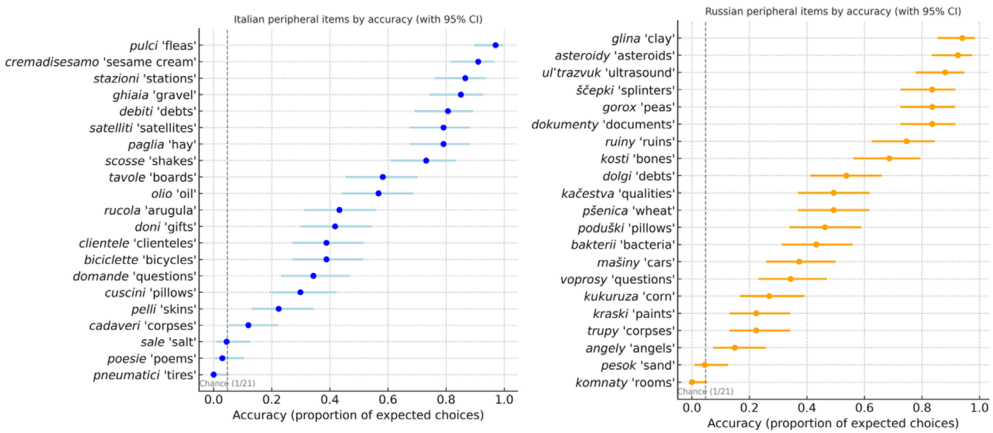

Figure 3 Response accuracy of Italian (on the left) and Russian (on the right) peripheral items

In Figure 3, the scattered distribution of accuracy values attests to the greater variability of peripheral items. In both Italian and Russian, 13 out of 21 items register a rather low accuracy (< 0.6), meaning that participants assigned them to a wider range of categories, thus confirming their peripheral status. However, 8 out of 21 items per language were consistently classified in the expected category (items with accuracy > 0.6). For example, It. *pulci* 'fleas' – although referring to insects – was almost unanimously categorized as Animals, and only 2 participants assigned it to a new category. There could be a double reason for this answer: a) a lack of knowledge that fleas

8 As an anonymous reviewer suggested, this finding supports a dynamic theory of lexical meaning (Pustejovsky 1995). The reclassification of the Italian and Russian items may reflect the greater cognitive salience of certain *qualia* roles in specific contexts. For example, the fact that flour was readily classified as Food shows that its telic role (namely, its purpose) is especially salient.

are insects, which induced speakers to classify them as Animals on the grounds that fleas typically infest mammals and animals, and are living beings; b) the respondent was too 'lazy' to propose a new category and opted for the closest possible one. In the same way, Ru. *glina* 'clay' was successfully assigned to Minerals and rocks by the majority of participants, though it could have also activated other categorizations and been assigned to Liquid or Containers (1 response for the latter), which would probably be the case if the noun were framed under a specific context. These results again question the *a priori*-defined status of these items as peripheral within their expected categories.

3.3 What Principles Drive Categorization?

Let us now look at all original peripheral items with accuracy lower than 0.6 to see how they were categorized. These items can be divided into three groups, both in Italian and Russian, based on the statistical significance of their accuracy as calculated by a binominal. In the first group, reported in Table 2 (Italian items in green and Russian ones in orange), accuracy is near zero and not statistically significant ('Above chance' column = FALSE), indicating that no one or almost no one chose the expected category, while most selected a new dominant one.

Table 2 List of Italian (green) and Russian (orange) near-zero accuracy items

	Item	Expected category	Accuracy	Dominant unexpected category	Dominant unexpected category count	Above chance (FDR)
Italian	*pneumatici* 'tires'	Containers	0	Tools	38	FALSE
	poesie 'poems'	Paper and related materials	0.029	Human activities	40	FALSE
	sale 'salt'	Powders	0.044	Minerals and rocks	33	FALSE
Russian	*komnaty* 'rooms'	Containers	0	Buildings and places	65	FALSE
	pesok 'sand'	Powders	0.044	Minerals and rocks	58	FALSE

The classification of these items allows us to reflect on the principles that drove their inclusion into the new categories. In principle, It. pneumatici 'tires' and Ru. *komnaty* 'rooms' may share some physical features with Containers, i.e., having a space enclosed by rigid walls, with an opening and closing point; and functional similarity (wheels as containers of air, rooms as containers of people). Nevertheless, the

experimental data show that these similarities to Containers were overridden by more salient, functional, or experiential attributes. The categorization of *pneumatici* as Tools (56.7% of answers) is probably driven by their relationship with cars: 23,8% of informants suggested their own category for *pneumatici*, defining them as "part of a vehicle".[9] Similarly, the inclusion of Ru. *komnaty* in Buildings and places reflects the identity of rooms as spatial parts of a larger structure.

This demonstrates that, when multiple attributes are available, the basic-level categorization is determined by the most salient and frequent feature in real-world human interaction, in line with the cognitive economy principle of basic categorization (Rosch 1978). The relationship between a member and its category is usually a taxonomical one ("X is a Y", e.g, *salt is a mineral*), but such a relation is established following some specific principles. For *pneumatici* and *komnaty*, two might apply, namely, 'purpose or function' and 'meronymy' (i.e., part-whole relationship) principles. In addition, the items It. *sale* 'salt' and Ru. *pesok* 'sand' were classified as Minerals and rocks by virtue of the people's knowledge that both belong to that domain of substances, overriding the physical resemblance to entities with atomic particles that could justify their membership in Powders. In such cases, we could say that people rely on an 'encyclopedic' principle according to which items are categorized based on intrinsic properties, such as constitution, material, origin, or source. Finally, It. *poesie* 'poems' is classified not as an object (like paper) but as a more abstract Human activity (59.7%). This example shows that for some items, categorial membership is based on an abstract feature more than a concrete one, hence on what we could define as a 'concrete vs. abstract' principle.

The second group, reported in Table 3, includes items with accuracy above zero that is statistically significant but still very low.

9 Hence, referring back to the question raised in footnote 3, although a tire could in principle be construed as a 'container for air' or a pillow as a 'container for feathers', which indeed reflects their essential nature, these potential properties are simply ignored and do not contribute to determining their proper category membership. The classification, therefore, takes place according to both cognitive and logical parameters, not solely on the basis of fixed physical characteristics.

Table 3 List of Italian and Russian items with statistically significant accuracy above zero

	Item	Expected category	Accuracy	Dominant unexpected category	Dominant unexpected category count	Above chance (FDR)
Italian	cadaveri 'corpses'	Waste	0.119	Human beings	42	TRUE
	pelli 'skins'	Body parts	0.223	Animals	29	TRUE
	cuscini 'pillows'	Clothing and linen	0.298	Tools	20	TRUE
	domande 'questions'	Human activities	0.343	Generic	19	TRUE
Russian	*angely* 'angels'	Human beings	0.149	OTHER	17	TRUE
	kraski 'paints'	Liquids	0.223	Tools	23	TRUE
	trupy 'corpses'	Waste	0.223	Human beings	33	TRUE
	kukuruza 'corn'	Food	0.268	Fruits, vegetables, and legumes	39	TRUE
	voprosy 'questions'	Human activities	0.343	Generic	29	TRUE

Here, the expected category is recognized as a good fit but competes with one or more preferred ones, ranking second or lower. The categorization of Italian and Russian items in this group reveals speakers' preference for functional or encyclopedic source-based principles over meronymy. As an example, here are the frequency tables for It. *pelli* 'skins' and Ru. *trupy* 'corpses'.

Table 4 Frequency table of answers for It. pelli and Ru. trupy

Item	Category	Raw fq.	Item	Category	Raw fq.
It. *pelli* 'skins'	Animals	29	Ru. *trupy* 'corpses'	Human beings	33
	Body parts	15		Waste	15
	Clothing and linen	10		Animals	5
	Generic	7		OTHER	5
	OTHER	3		Human activities	3
	Tools	1		Generic	3
	Human beings	1		Body parts	3
	Waste	1			

For both items, the expected category (Body parts and Waste) is the second-highest rated. For It. *pelli* 'skins', the dominant choice is Animals (29 responses), along with the 12 responses for Clothing and linen, suggesting that the plural form of *pelli* activates a commercial context, prioritizing the item's origin and use over its anatomical

status. This preference for a functional principle is echoed in the reclassification of It. *cuscini* 'pillows' and Ru. *kraski* 'paints' as Tools.

As for 'corpses' (It. *cadaveri*, Ru. *trupy*), the speakers' dominant choice is Human beings (It. 42 vs Ru. 33 rates) rather than Waste. In this case, too, a functional principle is at stake. Corpses are less likely to be viewed as waste because the link to human identity maintains its importance even after death. A similar cultural value emerges with Russian *angely* 'angels', where the relevance of the link to the religious sphere forces the speaker's choice toward the 'Other' option.

Lastly, in the case of It. *domande* and Ru. *voprosy* 'questions', speakers of both languages chose Generic over Human activities. This gives a hint of how ambiguity is handled in both languages: speakers appear to use Generic as an 'escape' category to resort to when unsure about their answer. In Italian, this is evident in the categorization of *cadaveri* where Generic ranked second (9 responses), followed by the expected Waste category (8 responses).

Finally, the third group includes items with higher accuracy but fewer dominant unexpected categories, as reported in Table 5.

Table 5 List of Italian and Russian peripheral items with higher accuracy

	Item	Expected category	Accuracy	Dominant unexpected category	Dominant unexpected category count	Above chance (FDR)
Italian	*biciclette* 'bicycles'	Tools	0.388	OTHER	19	TRUE
	clientele 'clienteles'	Human beings	0.388	Human activities	28	TRUE
	doni 'gifts'	Generic	0.417	Human activities	35	TRUE
	rucola 'arugula'	Fruit, vegetables, legumes	0.432	Food	24	TRUE
	olio 'oil'	Liquids	0.567	Food	28	TRUE
	tavole 'boards'	Wood	0.582	Generic	13	TRUE
Russian	*mašiny* 'cars'	Tools	0.373	Human activites	16	TRUE
	bakterii 'bacteria'	Animals	0.432	OTHER	14	TRUE
	poduški 'pillows'	Clothing and linen	0.462	Generic	12	TRUE
	kačestva 'qualities'	Generic	0.492	Human beings	12	TRUE
	pšenica 'wheat'	Flowers, herbs, and plants	0.492	Food	16	TRUE
	dolgi 'debts'	Money	0.537	Human activites	20	TRUE

For *tavole*, the expected Wood category (41.1%) follows the encyclopedic principle (source/material). However, this choice competes with Generic (20.8%) – the option we identified as an index of uncertainty – and Tools (19.4%), which reflects a choice guided by the functional principle. A similar pattern appears with food items such as It. *olio* 'oil' and *rucola* 'arugula', where the expected source-based category (Liquids and Fruit, vegetables, and legumes, respectively) competes with the functional property of edibility (Food). Finally, for vehicles (It. *biciclette* 'bicycles' and Ru. *mašiny* 'cars'), the expected Tools category competes with participants' suggested options, related to function or motion: Russian choices were split between Human activities (23.8%), justified by the action of driving, and a newly proposed category Means of transportation (28.3%). Italian speakers proposed the Means of transportation option, too, confirming a cross-linguistic preference for a functional domain over a more generic classification.

Finally, it is worth noticing that this group includes more complex abstract items, such as It. *clientele* 'clienteles' and *doni* 'gifts', or Ru. *dolgi* 'debts' and *kačestva* 'qualities'. Here, a double competition arises: first, between the concrete, expected category and an abstract, function-based one (e.g., *clientele* 'clienteles' and *dolgi* 'debts', where the concrete source-related category of Human beings and Money, respectively, is paralleled by the abstract, function-based class Human activities); second, between the generic, expected class and a specific one, as for *doni* 'gifts' and *kačestva* 'qualities' classified as both Generic (expected category) and Human beings or Human activities.

To answer RQ3, our experiment allowed for the identification of a set of principles that drive speakers' categorization: (i) a functional principle grouping items by purpose; (ii) a meronomy principle identifying the item as a part of a given whole; (iii) an encyclopedic principle that relies on shared world knowledge about the intrinsic properties of the item to define it; and (iv) an abstraction principle favoring abstract and general over concrete categorization. However, the qualitative nature of this interpretation implies the need for additional experimental evidence to support and validate these proposed principles and check for a possible hierarchy among them. Although no clear-cut tendencies emerged from the present results, future research could explicitly test this hypothesis by examining whether certain properties (e.g., *qualia* or similar ontological properties) emerge as more salient than others under controlled conditions.

4 Conclusion

In this paper, we aimed to verify the validity of a semantic classification conceived for the analysis of binominal constructions as classifier-like strategies in non-classifier languages. To do so, we ran a categorization experiment with 67 speakers of Italian and Russian, providing them with a list of items to categorize within 21 pre-defined categories. By examining the experiment results, we have demonstrated that the proposed categories were successfully recognized by speakers, as they generally found them apt to classify the given items. Through quantitative methods, we have demonstrated that: (i) participants are sufficiently consistent in classifying items in both languages, with a slightly better performance by L1 Italian speakers (RQ1); (ii) there is a statistically significant difference in the categorization of central vs. peripheral members of the proposed categories: despite some exceptions, central items were overall more easily categorized within the expected category than peripheral items in both languages (RQ2). Lastly, by looking at participants' responses in a more qualitative way, we were able to identify a set of principles that seem to guide categorial membership, namely, the principle of *function*, the principle of *meronymy* (or part-whole relationship), the *encyclopedic knowledge* principle, and the *concrete vs. abstract* principle (RQ3). Future research should include the collection of further evidence for such principles and the submission of a wider set of items on a larger informant base.

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e-ISSN 2785-3187

Balcania et Slavia
Vol. 5 – Num. 2 – December 2025

Watercourse Metaphors in Polish and Russian
The Case of the Metaphorical Classifiers *rzeka*, *potok*, *strumień*, *struga* and *reka*, *potok*, *ručej*, *struja*

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Abstract This paper examines binominal constructions in Polish and Russian of the type [N1 + N2.GEN], in which N1 belongs to the semantic domain of natural watercourses. Adopting a corpus-based approach, the study aims to identify the collocational preferences and semantic specializations of the selected N1s. Particular attention is given to the salient features metaphorically mapped from the aquatic source domain of N1 onto the target domain of N2, and to the motivations behind the choice of a given classifier in context. The study shows that, while the classifier *river* is used similarly in both languages, other classifiers behave differently in Polish and Russian.

Keywords Classifiers. Metaphorical mapping. Polish. Russian. Watercourse metaphors.

Edizioni Ca'Foscari

Peer review

Submitted 2025-10-13
Accepted 2025-12-17
Published 2026-03-31

Open access

Citation Latos, A.; Pinelli, E. (2025). "Watercourse Metaphors in Polish and Russian". *Balcania et Slavia*, 5(2), 47-66.

DOI 10.30687/BES/2785-3187/2025/01/003

1 Introduction

This study focuses on a specific subset of binominal constructions of the type [N1 + N2.GEN] in Polish and Russian, where N1 belongs to the semantic domain of natural watercourses.[1] In particular, the N1s under analysis are *rzeka* 'river', *potok* 'torrent', *strumień* 'stream', *struga* 'streamlet' in Polish, and *reka* 'river', *potok* 'stream', *ručej* 'rivulet', *struja* 'jet' in Russian. In both languages, these watercourse lexemes tend to become specialized as metaphorical classifiers "which do not fulfill a referential function based on their lexical meaning, but are used to characterize the entity denoted by the second constituent (N2) in terms of its salient cognitive features" (Latos, Benigni 2025, 102). For instance, in the expressions *rzeka ludzi* 'river of people' in Polish and *potok ljudej* 'stream of people' in Russian, the classifiers *river* and *stream* establish a complex semantic relationship by mapping onto the animate N2 *people* salient characteristics such as being numerous and in constant, progressive motion.

The N1s selected for analysis and comparison denote, in their literal sense, natural watercourses, but each carries distinct semantic and conceptual nuances that reflect differences in the size, speed, volume, or intensity of water flow. The Polish noun *potok*, for example, refers to a torrent or a swiftly flowing stream, typically evoking connotations of force, dynamism, or a sudden and intense outpouring. In contrast, *strumień* designates a narrow, shallow flow of water, quieter and more contained in character, often associated with continuity, steadiness, and directionality rather than power. A similar semantic differentiation and specialization is observed in Russian. *Potok* denotes a stream or torrent and is frequently used to describe intense flows, while *ručej* refers to a small rivulet, a narrow and typically gentle flow of water, and tends to be associated with liquids that appear in the form of droplets. Our working hypothesis is that these semantic differences are essential for understanding how each aquatic classifier functions metaphorically within binominal constructions.

Building on previous work (Benigni, Latos 2023; 2024; Latos, Benigni 2025), the present investigation aims to identify the salient features that are mapped from the aquatic source domain (SD) of N1 onto the target domain (TD) of N2 (metaphorical mapping; cf. Kövecses 2010; 2020; Lakoff, Johnson 1980). Specifically, the study has a twofold objective. First, through a corpus-based analysis, it seeks to identify the collocational preferences and semantic specializations of the selected aquatic classifiers in Polish and Russian. Second, it

1 The article is the result of close collaboration between the two authors. For academic purposes only, Agnieszka Latos is responsible for Sections 1 and 2, and Erica Pinelli for Sections 3 and 4.

examines cases of overlapping and competing usage, in which different classifiers co-occur with the same N2, revealing nuanced distinctions in metaphorical construal (e.g., Pl. *rzeka*, *potok*, *strumień, struga krwi*, 'a river/torrent/stream/trickle of blood'; Ru. *reka*, *potok*, *ručej*, *struja krovi* 'a river/stream/rivulet/jet of blood'). Of particular interest are the motivations behind the selection of a specific classifier in context and the cognitive features that underlie such choices.

The study is grounded in data extracted via Sketch Engine from large-scale web corpora, i.e. PlTenTen19 and RuTenTen17, qualitatively complemented by examples from the Polish National Corpus (NKJP) and the Russian National Corpus (NKRJa). The methodology combines quantitative analysis (frequency and distribution of N1-N2 pairings) with qualitative insights (contextual features, metaphorical entailments), drawing on frameworks such as collocational and collostructional analysis.[2]

By adopting a contrastive perspective, this study contributes to the understanding of metaphorical classifiers across languages and highlights both convergences and divergences in the semantic structuring of aquatic binominal constructions. It also sheds light on the broader phenomenon of metaphorical categorization in language, where physical experiences, such as the flow of water, serve as cognitive templates for abstract conceptualization.

2 Analysis in Polish

2.1 Polish N1s in Dictionaries

The analysis and comparison of the four Polish classifiers – *rzeka* 'river', *potok* 'torrent', *strumień* 'stream', and *struga* 'streamlet' – which are used to structure conceptual mappings between aquatic source domains (N1s) and target domains (N2s), take as their point of departure the dictionary entries provided in the *Wielki Słownik Języka Polskiego* (WSJP),[3] the most recent usage-based online reference work for contemporary Polish vocabulary.

As indicated in the dictionary definitions numbered 1 to 3 for each lexeme **[tab. 1]**, these aquatic expressions denote, in their literal sense, various types of naturally flowing water (Meaning 1: WATER), and are metaphorically extended to describe large quantities or profusions

2 See, for instance, Sinclair 1991; Stefanowitsch, Gries 2003; Gries, Stefanowitsch 2010.

3 https://wsjp.pl/.

e-ISSN 2785-3187

of different types of liquids (Meaning 2: LIQUIDS), as well as various non-liquid entities (Meaning 3: QUANTITY).

Table 1 Definitions of the dictionary WSJP (translation mine)

Rzeka	***Potok***	***Strumień***	***Struga***
1. Water flowing from its sources toward its mouth along a bed shaped by the flow itself. 2. A large quantity of some liquid continuously flowing out from somewhere. 3. A large amount of sth, especially something moving slowly and steadily that appears continuously at a given moment.	1. A fast current of water flowing through a narrow channel. 2. A large volume of rapidly flowing liquid. 3. A large number of phenomena occurring continuously.	1. (mountainous) Water flowing through a narrow, shallow channel. 2. A large amount of flowing/pouring liquid (ex. alcohol). 3. A large quantity of sth directed toward someone or sth for a specific purpose (ex. money).	1. A narrow stream of rapidly flowing liquid in a narrow jet or stream. 2. A small river. 3. (literary) A visible or tangible narrow stream of some volatile substance.

On the basis of the comparison of dictionary definitions **[tab. 1]** and the collocational profiles and usage examples in the WSJP dictionary,[4] *rzeka* 'river' is the most general term, denoting a natural watercourse, but it also metaphorically emphasizes quantity or volume, continuity, and slowness (*wolno, nieprzerwanie przesuwający się* 'slowly, continuously moving'). *Potok* 'torrent', typically associated with mountainous terrain (*potoki w górach* 'mountain torrents') and fast, turbulent flows (e.g. *oszalały* / *szalejący* 'raging', *rwący* 'rushing', *wartki* 'swift'), highlights continuity but also speed and force. *Strumień* 'stream' presents a more moderate and swift flow, typically found in mountain areas (Meaning 1: *strumień górski* 'mountain stream'), and is commonly used in structured or purposeful contexts (*kierować/ skierować* 'to direct'). Finally, *struga* 'streamlet' refers to a narrower and rapid flow (*bystra* 'swift', *wąska* 'narrow'), whether it is a small river (Meaning 2) or a thin stream of blood (Meaning 1) or smoke with its literary usage (Meaning 3). It is worth noting that, unlike the previously described lexemes, the dictionary lists the classifier meaning as the primary meaning of *struga* (Meaning 1), rather than the meaning referring to a natural watercourse (Meaning 2).

4 The collocational profiles and usage examples available in the dictionary WSJP are extensive and cannot be fully quoted due to space limitations.

2.2 Corpora Data Analysis

The following section provides an analysis of the Polish corpus data. The data were retrieved from the PlTenTen19 (Polish Web Corpus 2019), a large-scale corpus comprising approximately 4.2 billion words. The query pattern employed was [lemma="N1"] [tag="N2gen"], with a focus on identifying the most frequent second elements (N2s) in the genitive case. To ensure cross-linguistic comparability, a minimum frequency threshold of 0.005 occurrences per million words was applied. Additional data were drawn from the National Corpus of Polish (NKJP), which served to supplement and validate the findings from the web corpus.

2.2.1 *Rzeka*

As shown in Table 2, the Polish lexeme *rzeka* 'river' collocates with both concrete N2s, such as liquids (*krew* 'blood', *łza* 'tear'), people (*człowiek*), and money (*pieniądze*) as well as abstract N2s like *życie* 'life', *tajemica* 'secret', *czas* 'time', *wiara* 'faith' or *miłość* 'love'. In many of these constructions, *rzeka* evokes processes that lack agency and are perceived as uncontrollable or overwhelming as in (1).

(1) *Jesteśmy zalewani **rzeką informacji**.* (uwe.edu.pl)
'We are being flooded by **a river of information**.'

Table 2 Results of corpus search [rzeka+N2.GEN]

N2	Frequency	Freq. per million	% of concordance
krew 'blood'	313	0.06	0.46366
życie 'life'	303	0.05809	0.44884
woda 'water'	252	0.04831	0.37329
tajemnica 'secret'	234	0.04486	0.34663
człowiek 'person'	188	0.03604	0.27849
czas 'time'	166	0.03182	0.2459
pieniądz 'money'	143	0.02741	0.21183
wiara 'faith'	120	0.023	0.17776
lawa 'lava'	106	0.02032	0.15702
marzenie 'dream'	97	0.0186	0.14369
zapomnienie 'oblivion'	95	0.01821	0.14073
łza 'tear'	95	0.01821	0.14073
dzieciństwo 'childhood'	90	0.01725	0.13332
myśl 'thought'	78	0.01495	0.11554
muzyka 'music'	77	0.01476	0.11406
miłość 'love'	65	0.01246	0.09629

N2	Frequency	Freq. per million	% of concordance
ogień 'fire'	64	0.01227	0.0948
kłamstwo 'lie'	60	0.0115	0.08888
słowo 'word'	59	0.01131	0.0874

The metaphorical uses of *rzeka* in Polish reveal a dual pattern (see also Benigni, Latos 2023, 139): as a metaphorical classifier and as part of a conceptual metaphor related to time, emotion, or existence. In the first pattern, N1 r*zeka* is the syntactic head of the binominal which functions as a metaphorical classifier mapping features such as progressiveness, continuity, and large quantity, while N2 serves as the semantic head of the construction, (see ex. (2)).

(2) *Niemcy płacą najwięcej do UE, a Polska bierze tylko* ***rzekę pieniędzy***. (trojmiasto.pl)
'Germany pays the most into the EU, and Poland only takes **a river of money**.'

In the second pattern, *rzeka* is not only the syntactic head but also the semantic head of the construction, while N2 often refers to abstract concepts, particularly those related to time, existence, or inner experience such as *życie* 'life', *czas* 'time', or *młodość* 'youth', as exemplified in (3) by the LIFE IS A RIVER metaphor. Such structural metaphors emphasize continuity, progressiveness, and slowness, rather than quantity.

(3) *Nakłania ona do płynięcia pod prąd nurtem* ***rzeki życia***. (NKJP)
'It encourages swimming against the current of **the river of life**.'

This usage is particularly common in event denomination or titles (e.g. music festival *Rzeka Muzyki* 'River of Music'), proper names (e.g. name of the mythological river Lethe *Rzeka Zapomnienia* 'River of Forgetfulness') or biblical references such as *rzeka życia* 'river of life'.

Context plays a crucial role in determining whether *rzeka* functions primarily as a metaphorical classifier or as a symbolic representation of a continuous process. In (4), *rzeka miłości* 'a river of love' is a realization of the conceptual metaphor LOVE IS A RIVER, while in (5) *rzeka* 'river' acts as a classifier mapping the traits of hyperbolic quantity and interminability onto the N2 *miłość* 'love'.

(4) *Dokąd niesie nas ta wielka rzeka,* […], ***rzeka miłości****?* (NKJP)
'Where is this great river carrying us, **the river of love** […]?'

(5) ***Rzeka Miłości****, Morze Radości, Ocean Szczęścia!* (empik.com)
'**River of love**, sea of joy, ocean of happiness!'

2.2.2 *Potok*

The classifier *potok* 'torrent' is used both with concrete N2s such as people, vehicles, liquids (*łza* 'tear', *krew* 'blood', *deszcz* 'rain') and with abstract N2s such as *słowo* 'word', *ruch* 'traffic', *myśl* 'thought', *informacja* 'information', *mowa* 'speech', *życie* 'life' **[tab. 3]**. The mapping often involves dynamic features, such as speed or suddenness, as in (6):

(6) *Pacjent wyrzuca z siebie **potok słów**.* (portal.abczdrowie.pl)
'The patient spits out **a torrent of words**.'

Table 3 Results of corpus search [potok+N2. GEN]

N2	Frequency	Freq. per million	% of concordance
słowo 'word'	1256	0.24078	11.06121
podróżny 'traveller'	444	0.08512	3.91017
łza 'tear'	392	0.07515	3.45222
ruch 'traffic'	284	0.05444	2.5011
pasażer 'passenger'	221	0.04237	1.94628
woda 'water'	207	0.03968	1.82299
krew 'blood'	186	0.03566	1.63804
lawa 'lava'	155	0.02971	1.36504
myśl 'thought'	136	0.02607	1.19771
informacja 'information'	128	0.02454	1.12726
pojazd 'vehicle'	102	0.01955	0.89828
deszcz 'rain'	90	0.01725	0.7926
człowiek 'person'	85	0.01629	0.74857
samochód 'car'	75	0.01438	0.6605
światło 'light'	61	0.01169	0.53721
mowa 'speech'	52	0.00997	0.45795
życie 'life'	49	0.00939	0.43153

As with *rzeka*, we can distinguish two main patterns of metaphorization for *potok*: one as a metaphorical classifier, and the other as a conceptual metaphor. The first pattern, illustrated in (7), is very frequent and applies to a wide variety of N2s.

(7) *Ze słuchawki popłynął **potok słów*** […]. (NKJP)
'**A stream of words** flowed from the receiver […].'

In examples (6) and (7), the metaphorical mapping includes features of temporal arrangement (TEMPORAL SUCCESSION and CONTINUITY), enriched with values of dynamism, as well as those of large quantity ('a lot of'). However, the classifier *potok* is often used to indicate a CONTINUOUS

FLOW or a SPATIO-TEMPORAL ARRANGEMENT without any quantitative value. For instance: *potok + ruchu, mowy, myśli, światła* 'flow of traffic, speech, thought, light' as in (8) and (9):

(8) *Szczegółowe badanie **potoków podróżnych**.* (nik.gov.pl)
'A detailed study of **passenger flows**.'

(9) *Zdolność do kwalifikowania wyróżnionych z **potoku mowy** głosek* […]. (cdzn.pl)
'The ability to identify the distinctive sounds from **the speech stream** […].'

In some uses, *potok* is also associated with agency or controllability**,** as in (10).

(10) *Zgorzelec generuje **potok podróżnych** do Wrocławia.* (infokolej.pl)
'Zgorzelec generates **a flow of travelers** to Wrocław.'

The use of *potok* as a conceptual metaphor is rather rare. In (11), *potok życia* 'torrent of life' is not just a metaphorical container, but a complex conceptual metaphor representing life as a rushing torrent one can immerse oneself in and be carried along by:

(11) Pokaże, jak […]; zanurzyć się w całości w rwącym **potoku życia**. (NKJP)
'He will show you how […], to fully immerse yourself in the rushing **torrent of life**.'

2.2.3 *Strumień*

The classifier *strumień* 'stream' is used with concrete N2s such as liquids (*woda* 'water', *mocz* 'urine', *krew* 'blood'), volatile and transmissible substances like waves (*powietrze* 'air', *światło* 'light', *ciepło* 'heat', *energia* 'energy', *para* 'steam'), waste (*odpad*), money (*pieniądze*), and with a limited number of abstract N2s such as *dana* 'data', *wideo* 'video', and *informacja* 'information' **[tab. 4]**. Collocations with *strumień* tend to become lexicalized as fixed terms, i.e. *strumień świadomości* 'stream of consciousness' or *strumień objętości* 'volumetric flow/volume flow rate'.

Table 4 Results of corpus search [strumień+N2.GEN]

N2	Frequency	Freq. per million	% of concordance
woda 'water'	7061	1.35361	19.6128
powietrze 'air'	4149	0.79537	11.52436
światło 'light'	2058	0.39452	5.71635
świadomość 'consciousness'	1185	0.22717	3.29148
dana 'data'	1164	0.22314	3.23315
odpad 'waste'	985	0.18883	2.73596
pieniądz 'money'	858	0.16448	2.3832
ciepło 'heat'	767	0.14704	2.13044
energia 'energy'	676	0.12959	1.87767
mocz 'urine'	663	0.1271	1.84156
gaz 'gas'	503	0.09643	1.39714
krew 'blood'	443	0.08492	1.23049
para 'steam'	369	0.07074	1.02494
objętość 'volume'	345	0.06614	0.95828
wideo 'video'	310	0.05943	0.86106
informacja 'information'	304	0.05828	0.8444

The primary function of *strumień* is that of a classifier of spatio-temporal arrangement**,** meaning 'stream, jet, flow'. The quantification 'a lot of' is typically absent (12) or secondary to the form of arrangement (13).

(12) *Zewnętrzna część włosa nie jest narażona na bezpośredni* ***strumień*** *gorącego* ***powietrza***. (megamedia.pl)
'The outer part of the hair is not exposed to a direct **stream** of hot **air**.'

(13) *Do kieszeni inwestorów wkrótce popłynie* ***strumień pieniędzy***. (federacja-anarchistyczna.pl)
'**A stream of money** will soon flow into investors' pockets.'

The classifier is used in contexts that express the directionality of movement 'from' and 'towards/into/to', as illustrated in (13) and (14-15).

(14) *Po co komu kreski na mapie, jeśli nie płynie z tego* ***strumień złota***. (NKJP)
'What's the use of lines on a map if no **stream of gold** flows **from** it?'

(15) *Ku świętemu źródłu, sunie wciąż* ***strumień pielgrzymów***. (sbc.org.pl)
'**Toward** the holy spring, **a stream of pilgrims** is still moving.'

2.2.4 *Struga*

As shown in Table 5, the classifier *struga* 'streamlet' collocates exclusively with concrete N2s such as liquid and semi-liquid substances (*deszcz* 'rain', *krew* 'blood', *pot* 'sweat', *ciecz* 'liquid', *łza* 'tear') or volatile and transmissible ones such as *powietrze* 'air', *światło* 'light', *gaz* 'gas'.

Table 5 Results of corpus search [struga+N2. GEN]

N2	Frequency	Freq. per million	% of concordance
deszcz 'rain'	2860	0.54827	56.94942
woda 'water'	549	0.10524	10.9319
powietrze 'air'	320	0.06134	6.37196
krew 'blood'	181	0.0347	3.60414
światło 'light'	97	0.0186	1.9315
pot 'sweat'	48	0.0092	0.95579
gaz 'gas'	42	0.00805	0.83632
ciecz 'liquid'	40	0.00767	0.7965
łza 'tear'	34	0.00652	0.67702

Struga functions as a classifier of spatial arrangement meaning 'streamlet, trickle, small stream', as illustrated in (16)-(17), and is associated with the rapidity and narrow scale of flow. As a metaphorical classifier, *struga* typically refers to very small flows of N2. However, the plural form *strugi* may, in certain contexts, convey hyperbolic quantification, as in (16), where its use enhances the depiction of heavy, torrential rain.

(16) *Zimny poniedziałkowy poranek skąpany w **strugach deszczu**.* (e-wesele.pl)
'A cold Monday morning soaked in **streams of rain**.'

(17) *Po jej nogach ściekały **strugi krwi** z ran.* (scribd.com)
'**Streams of blood** were trickling down her legs from the wounds.'

As previously observed in Benigni and Latos (2024), watercourse classifiers may compete with one another by collocating with the same N2 ("overlapping cases"). All classifiers in our dataset are found to recurrently collocate with the N2 *krew* 'blood' **[tab. 6]**.

Table 6 Results of corpus search [N1+ krwi 'of blood']

N1+ N2 *krwi*	Frequency	Freq. per million	% of concordance
rzeka krwi 'river of blood'	313	0.06	0.46366
potok krwi 'torrent of blood'	186	0.03566	1.63804
strumień krwi 'stream of blood'	443	0.08492	1.23049
struga krwi 'trickle of blood'	181	0.0347	3.60414

Analyzing their use with this N2 further highlights and confirms the distinctions previously identified. The classifier *rzeka* occurs with the N2 *blood* in both literal and metonymic contexts, particularly in reference to wars, armed conflicts, and violence (see also Latos, Benigni 2025, 106-7). However, metonymic uses, emphasizing the continuity and vastness of the denoted phenomenon, predominate. Similarly, the classifier *potok* appears in both literal and metonymic senses, the latter typically associated with contexts of conflict or assaults. Both uses are frequent and commonly characterized by suddenness and intensity. While the classifier *strumień* may also occur in metonymic contexts, its predominant use refers to the literal flow of blood. Finally, the classifier *struga* is used exclusively in a literal sense, denoting a trickle of blood.

3 Analysis of Russian Data

3.1 Russian N1s in Dictionaries

As for Polish data, the analysis of Russian N1s starts from their dictionary definitions **[tab. 7]**. In particular we refer to the *Bol'šoj Akademičeskij Slovar' Russkogo Jazyka* (BAS, Gerd 2004-24), the most important and still ongoing academic lexicographic project for contemporary Russian.

Table 7 Entries of the dictionary BAS (translation mine)

Reka	*Potok*	*Ručej*	*Struja*
A permanent natural stream of water with a natural flow along the channel it has developed from the source down to the mouth, fed by surface and underground runoff from its basin. A huge amount, a moving mass of something.	The rapidly flowing mass of water of a river or stream. A rapidly flowing mass of something. A multitude or a mass of something or someone that moves in one direction.	A small stream of water formed by snowmelt or rainfall runoff or by groundwater discharge to the surface. Any liquid flowing profusely.	A narrow stream of water or any liquid. A continuous stream or narrow band of light, smoke, smell, etc.

As we can see in Table 7, *reka* generally refers to a natural watercourse but is also used to refer to a large amount or a mass of something (not necessarily liquid). *Potok* is characterized by its rapid and tumultuous nature, but it also refers to a multitude that moves in one direction. *Ručej* refers to a small watercourse, but it can also be used to define any kind of liquid that flows profusely. Differently from other N1s considered for the present analysis, *struja* does not refer to a natural watercourse in contemporary Russian. However, we included *struja* in the analysis of metaphorical classifiers because it is etymologically linked to the Indo-European root **sreu̯* 'flow', the same of Polish *strumień* and *struga*.[5] The feature that seems to characterize *struja* is its narrowness but, differently from *ručej*, *struja* refers to a narrow flow not only of liquids, but also of air or light.

3.2 Watercourse Metaphorical Classifiers in Russian

In this section we provide the analysis of Russian data retrieved from the RuTenTen17 (Russian Web Corpus 2017) that contains approximately 14 billion words. The query pattern employed to retrieve data was [lemma="N1"][tag="N2gen"]. As for Polish data, only the most frequent N2s are shown in the following tables and a minimum frequency threshold of 0.005 occurrences per million words was applied. Additional data were drawn from the Russian National Corpus (RNKJa), in particular for exemplification.

5 It is also worth noting that, similarly to Russian *struja*, Polish *struga* mainly refers to a stream or a jet of liquid or volatile substance **[tab. 1]**. Although in contemporary Polish *struga* can still refer to a natural watercourse, the definitions given in the WSJP dictionary seem to confirm that it is following the same process of grammaticalization as Russian *struja*.

3.2.1 *Reka*

The N1 *reka* can occur with different kinds of N2, in particular liquids (*krov'* 'blood' and *sleza* 'tear'), abstract concepts (*žizn'* 'life' and *istorija* 'history') and, less frequently, concrete entities (*čelovek* 'person') **[tab. 8]**.

Table 8 Results of corpus search [reka+N2.GEN)]

N2	Frequency	Freq. per million	% of concordance
krov' 'blood'	2147	0.19097	0.90372
vremja 'time'	1959	0.17425	0.82459
žizn' 'life'	1810	0.16099	0.76187
voda 'water'	655	0.05826	0.2757
sleza 'tear'	214	0.02357	0.11154
lava 'lava'	192	0.01708	0.08082
pamjat' 'memory'	179	0.01592	0.07534
ljubov' 'love'	165	0.01468	0.06945
čelovek 'person'	146	0.01299	0.06145
istorija 'history'	104	0.00925	0.04378

When *reka* occurs with concrete N2s, both liquids and concrete entities, it functions as a classifier of quantity and spatio-temporal arrangement and refers to a big amount of N2s that flows continuously and that can be barely contained or controlled as in (18) and (19).

(18) *Iz glaz polilis' **reki slëz** i iz gorla vyrvalsja krik.* (girlsgames-club.ru)
'**Rivers of tears** poured from his eyes and a scream burst from his throat.'

(19) ***Reka ljudej** medlenno unosila ego, no on vse že uvidel menja* […]. [Ė. Volodarskij. *Dnevnik samoubijcy* (1997)] (NKRJa)
'**A river of people** was slowly carrying him away, but nevertheless he saw me […].'

Similarly to Polish *rzeka,* Russian *reka* can also function as the syntactic and semantic head of a construction in which a conceptual metaphor is involved. This happens with abstract N2s, as in (20), where *reka žizni* 'river of life' is a linguistic manifestation of the LIFE IS A RIVER conceptual metaphor (cf. Benigni, Latos 2024, 145).

(20) (20) *Za odin god **reka žizni** možet unesti tak daleko. Kto znaet, gde my vse okažemsja čerez god?* (colta.ru)
'In one year, **the river of life** can carry you so far. Who knows where we'll all end up in a year?'

3.2.2 *Potok*

In Table 9, the N2s that occur with *potok* are listed.

Table 9 Results of corpus search [potok+N2.GEN]

N2	Frequency	Freq. per million	% of concordance
vozduch 'air'	28600	2.54386	8.73579
voda 'water'	19573	1.74094	5.97851
ėnergija 'energy'	13759	1.22381	4.20265
informacija 'information'	13643	1.21349	4.16721
dannye 'data'	10067	0.89542	3.07494
turist 'turist'	7673	0.68248	2.3437
židkost' 'liquid'	5576	0.49596	1.70317
soznanie 'consciousness'	5500	0.4892	1.67996
gaz 'gas'	5404	0.48067	1.65064
mašina 'car'	5348	0.47568	1.63353
čelovek 'person'	5148	0.45789	1.57244

If we compare Table 8 and Table 9, we can notice that, in comparison to *reka*, *potok* occurs in binominal constructions with a significantly higher frequency. In fact, as already stated in Benigni and Latos (2024, 146-7), while *reka* is only partially interested by this phenomenon, the Russian noun *potok* is mainly used as a metaphorical classifier. Moreover, *potok* can occur with a wider variety of N2s: liquids (*voda* 'water', *židkost'* 'liquid', ex. 21), gas or other volatile substances (*vozduch* 'air', *ėnergija* 'energy', *gaz* 'gas'), abstract elements (*informacija* 'information', *dannye* 'data' and *slovo* 'word',[6] ex. 22), but also concrete entities (*turist* 'tourist', *mašina* 'car' and *čelovek* 'person').

(21) *Pod zapornoj armaturoj ponimajutsja special'nye ustrojstva, kotorye montirujutsja na truboprovod v celjach obespečit' upravlenie* ***potokom židkosti****.* (tehprom.ru)
'Shut-off valves are special devices that are mounted on a pipeline in order to control **the stream of liquid**.'

(22) *Voz'mem, k primeru,* ***potok slov****, obrušennyj na soznanie rossijan v poslednie dni v svjazi s teraktami* […].(zinoviev.ru)
'Let us take, for example, **the stream of words** that has been unleashed on the consciousness of Russians in recent days in connection with terrorist attacks […].'

6 Due to space limitations, Table 9 includes only the N2s with the highest frequency of occurrence in our corpus. The N2 *slovo* 'word', which is not listed in the table, occurs 1240 times in combination with *potok*.

Russian *potok* often refers to a continuous and rapid flow of N2. It is mainly used as a classifier of spatio-temporal arrangement (ex. 21), but in some specific contexts a quantitative reading can also appear (ex. 22). Differently from *reka*, *potok* mainly occurs in cases in which the large flow of N2s can be managed, controlled or, at least, directed (cf. Rachilina, Su-Chën 2009, 26-7; Benigni, Latos 2024, 147). Several elements that convey the idea of control can be often found in the context, such as *upravlenie* 'control' in (21) and *nužno organizovat'* 'must be organized' in (22). Moreover, *potok* also occurs in collocations that have become lexicalized fixed terms, such as *potok soznanija* 'stream of consciousness' (ex. 23).

(23) *Tut u nego v golove opjat' čto-to ščelknulo i* ***potok soznanija*** *nakryl našego geroja s golovoj.* [A. Kuper. *Istopnik*, "Dal'nij Vostok", 2019] (NKRJa)
'Then something clicked in his head again and the **stream of consciousness** covered our hero with his head.'

3.2.3 *Ručej*

The way *ručej* functions in binominal constructions is interesting and, as for other N1s, is due to the semantics of the word itself.

Table 10 Results of corpus search [ručej +N2.GEN]

N2	Frequency	Freq. per million	% of concordance
sleza 'tear'	168	0.01494	2.12242
krov' 'blood'	105	0.00934	1.98977
voda 'water'	96	0.00854	1.81922
pot 'sweat'	65	0.00578	1.23176

As we can see in Table 10, *ručej* only occurs with N2s that refer to liquids that tend to appear as droplets, such as tears (*sleza*), blood (*krov'*) or sweat (*pot*). This shows that *ručej* functions as a classifier of spatial arrangement: the liquid takes the shape of small "stripes" formed by little drops, as in (24).

(24) *Pod tolstoj rezinoj kostjuma s menja tekli* ***ruč'i pota****, slovno ja stoju pod nebol'šim dušem.* (zhurnal.lib.ru)
'**Rivulets of sweat** were flowing under the thick rubber of my suit, as if I were standing in a small shower.'

It is interesting to notice that in this construction *ručej* mainly appears in the plural form. In certain contexts, the plural form of *ručej* also acquires a quantitative interpretation. For example, in

(25), *ruč'i slëz* 'rivulets of tears' conveys the idea that the quantity of droplets (tears) arranged in little stripes is considerable.

(25) *Prosti menja, njanečka dorogaja! – kričal Volodja, prolivaja iz glaz* ***ruč'i slëz***. [D. Lipskerov. *Poslednij son razuma* (1999)] (NKRJa)
'Forgive me, dear nanny! Volodja shouted, shedding **rivulets of tears** from his eyes.'

3.2.4 *Struja*

Let us now look at the binominal construction with the N1 *struja*. As we can see in Table 11, among the collocates of *struja* we only find liquids (*voda* 'water', *sperma* 'sperm', *moča* 'urine') and volatile substances (*vozduch* 'air', *gaz* 'gas', *par* 'steam' and *dym* 'smoke').

Table 11 Results of corpus search [struja+N2.GEN]

N2	Frequency	Freq. per million	% of concordance
voda 'water'	18553	1.65022	40.99114
vozduch 'air'	4659	0.4144	10.29363
sperma 'sperm'	2504	0.22272	5.53236
moča 'urine'	1407	0.12515	3.10864
gaz 'gas'	1126	0.10015	2.48779
židkost' 'liquid'	889	0.07907	1.96416
dožd' 'rain'	880	0.07827	1.94428
par 'steam'	863	0.07676	1.90672
dym' 'smoke'	738	0.06564	1.63054
krov' 'blood'	518	0.04607	1.14447

Struja can only be used as a classifier of spatial arrangement that refers to a narrow stream of liquid or volatile substance that might also be released with high intensity. Elements that focus on the intensity of *struja* can be easily found in context: in (26) the jet hits the skin (*udar o kožu*), and in (27) the jet is even able to arrange thick hair (*ukladyvat' tolstye volosy*).

(26) *Sinjaki – vpolne obyčnoe posledstvie ot udara* ***strui vody*** *o kožu.* (azbukadiet.ru)
'Bruises are an absolutely common consequence of hitting the skin with a **jet of water**.'

(27) *Zdorovye tolstye volosy možno ukladyvat' očen' gorjačej* ***struej vozducha*** […]. (strizhka-volos.ru)
'Healthy thick hair can be styled with a very hot **jet of air**.'

As for Polish N1s, all the Russian N1s under investigation collocate with the N2 *krov'* 'blood' **[tab. 12]**. The analysis of contexts shows that the selection of N1 reflects the differences identified so far.

Table 12 Results of corpus search [N1+ krovi 'of blood']

N1+ N2 *krwi*	Frequency	Freq. per million	% of concordance
reka krovi 'river of blood'	2147	0.19097	0.90372
potok krovi 'stream of blood'	4062	0.3613	1.24073
ručej krovi 'rivulet of blood'	105	0.00934	1.98977
struja krovi 'jet of blood'	518	0.04607	1.14447

Reka mainly occurs when *blood* is used metonymically and conveys the idea of continuous and massive violence. Although less frequently, *reka* can also be used when *blood* is understood literally. The classifier *potok* is used when blood is meant both literally and metonymically and the intense flow is oriented or regulated. The classifier *ručej* may occur in metonymic contexts, but its predominant use refers to the literal flow of blood, while *struja* is used exclusively in a literal sense, denoting a jet of blood.

4 Comparison of Polish and Russian Data and Conclusions

The data presented in Sections 2 and 3 show that Polish *rzeka* and Russian *reka* behave similarly, functioning as metaphorical classifiers of both quantity and spatio-temporal arrangement. In both languages, *rzeka* and *reka* also serve as syntactic and semantic heads in constructions where abstract and complex concepts, such as history (Ru. *reka istorii*) or life (Pl. *rzeka życia*), are metaphorically conceptualized.

While *rzeka* and *reka* function in similar ways and emerge as more generic and versatile aquatic classifiers, the same does not hold true for the other classifiers examined in the study. In both Polish and Russian, *potok* tends to grammaticalize as a metaphorical classifier of quantity and spatio-temporal arrangement. Polish and Russian *potok* occur with a wide variety of N2s and emphasize a sudden and rapid flow of N2. In both languages, *potok* can be used to express a controllable flow. However, while Russian *potok* is mainly used in contexts where the flow can be oriented, in Polish, such cases typically require the metaphorical classifier of spatio-temporal arrangement *strumień*. Additionally, Polish *potok* also occurs, though rarely, in constructions as part of a conceptual metaphor N2 IS A TORRENT.

The Polish N1 *strumień* can also refer to a jet, which in Russian is expressed by *struja*. Both Polish *struga* and Russian *struja* function as metaphorical classifiers of spatial arrangement in reference to narrow flows. However, some uses of Polish *struga* are instead covered by the Russian N1 *ručej*, which occurs only with liquids and, in particular, with drops, and serves as a metaphorical classifier of spatial arrangement and, in its plural form, of quantity.

A pictorial representation of the semantic overlapping of Polish and Russian watercourse metaphorical classifiers is given in Figure 1.

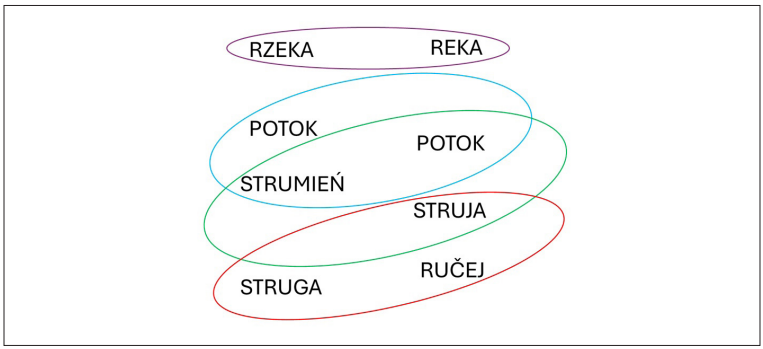

Figure 1 How meaning and use of N1s overlap in Polish and Russian

The features of each N1 as a watercourse are reflected in their use as metaphorical classifiers and are mapped onto the domain of N2. This becomes particularly evident when investigating cases of overlap, i.e. instances in which all N1s occur with the same N2. The analysis of overlapping cases with the N2 *krew/krov'* 'blood' has shown that in both languages, *rzeka*/*reka* and *potok* mainly occur in contexts in which *blood* is used metonymically to refer to continuous and extensive violence, while Polish *strumień* and *struga* and Russian *ručej* and *struja* mainly refer to literal flows of blood.

In conclusion, the results of this usage-based analysis offer a more detailed characterization of the aquatic nominal elements under examination and their functioning as metaphorical classifiers within binominal constructions, an aspect not documented in existing dictionaries or in the relevant research literature.

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e-ISSN 2785-3187

Balcania et Slavia
Vol. 5 – Num. 2 – December 2025

Overt, Omitted and Cliticized Structural Arguments in Preschool Speakers of Serbian Dialectal Varieties

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Abstract The paper explores two hypotheses: that the acquisition of clitics in Serbo-Croatian includes a stage in which children generalize pro as the uninflected clitic pronoun for both subjects and direct objects, before acquiring the inflection for the object clitic, and that the acquisition of object clitics in the standard variety is facilitated by a higher degree of grammaticalization of these clitics, and consequently also a higher frequency. Results of an investigation with picture-based narratives are reported and discussed, in which the predictions of these two hypotheses are quantitatively tested and confirmed.

Keywords Structural arguments. Clitics. Omission. Repetition. Language development. Bilingualism. Geographic variation.

Edizioni Ca'Foscari

Peer review

Submitted 2025-12-30
Accepted 2026-01-31
Published 2026-03-31

Check for updates

Open access

Citation Arsenijević, B. (2025). "Overt, Omitted and Cliticized Structural Arguments in Preschool Speakers of Serbian Dialectal Varieties". *Balcania et Slavia*, 5(2), 67-84.

DOI 10.30687/BES/2785-3187/2025/01/004

1 Introduction

The present study investigates L1 acquisition of the expression of direct objects in Serbo-Croatian (SC). The central question concerns the acquisition of object clitics in SC. As object clitics express discourse old referents, the focus is also on the two most frequent alternative strategies in the expression of direct objects: null objects and anaphoric lexical nominal expressions. The two central topics are: the differences between the status of discourse old direct objects in preschoolers' and adults' grammars and the effects of bilingualism between two dialects on the process of acquisition.

The paper is organized as follows. In the rest of this section, I discuss the relevance of the research, present the use of the three strategies of expression of direct objects in the adult grammar of SC, the dimension of geographic variation, some background information about the acquisition of clitics and null arguments, and formulate the hypotheses and predictions. Section 2 presents the empirical research: the design and materials, the demographic and geographic information about the participants, the procedure, the results and their discussion. Section 3 concludes the paper.

1.1 Relevance of the Research

This study directly contributes to the research on language acquisition, and indirectly also to the theory of grammar.

In language acquisition, null constituents (e.g. Zhu, Gavarró 2019) and clitics (Varlokosta et al. 2016) have been observed to show specific tendencies characterizing various phases in the language development. The current study contributes to the understanding of the relation of these two types of defective linguistic elements in the process of acquisition.

By investigating the effects of bilingual acquisition at the level of microvariation, i.e. between two dialects sharing a significant part of both grammar and the lexicon, the study provides further evidence for the delay due to bilingual acquisition (e.g. Schulz 2013), but also for the facilitating effect of the dominant language on the acquisition of an aspect of grammar in the non-dominant language, when this aspect has a higher degree of grammaticalization in the former (e.g., Müller 1998).

Finally, by establishing a link between the *pro* (the zero pronoun, traditionally referred to as the dropped pronoun, e.g. Rizzi 1986) and the overt object clitic (e.g. Spencer, Luis 2012), the study supports the theoretical analysis of *pro* as the uninflected realization of the clitic, i.e. of the overt clitics as inflected instances of *pro* (thus identifying the defective stem of *pro* with a zero realization, see e.g. Cardinaletti, Starke 1999).

1.2 Clitic and Null Arguments in SC

Both clitic and null arguments are conditioned by the old information status of their referents. Consider the minimal pairs from SC in (1), where (1a) is a context in which the subject in the answer conveys new information, and therefore cannot be omitted, while in (1b) its referent is old in the discourse and more saliently expressed by a null subject.

(1) a. A: Ko je zvao, Petar ili Jelena?
who AUX called Petar or Jelena
'Who called, Petar or Jelena?'
B: On/Petar je zvao.
he/P AUX called
B': *Zvao je.
called AUX
'He called.'

b. A: Koga je Petar zvao?
who AUX Petar called
'Who did Petar call?'
B: ??Jelenu je zvao on/Petar.
Jelena AUX called he/P
B': Jelenu je zvao.
Jelena AUX called
'He called Jelena.'

The same contrast, when the object position is the target, illustrates the inadequacy of clitics when conveying new information (2a) and their appropriateness with old information referents (2b).

(2) a. A: Koga si zvao Petra ili Jelenu
who AUX.2SG called Petar or Jelena
'Whom did you call, Petar or Jelena?'
B': Zvao sam Petra/njega
called AUX.1SG P/him
B'': *Zvao sam ga
called AUX.1SG him.CL
'I called him.'

b.	A:	Ko	je	zvao	Petra
		who	AUX	called	Petar
		'Who called Petar?'			
	B:	??Jelena	je	zvala	njega/Petra
		Jelena	AUX.SG	called	him/P
	B':	Jelena	ga	je	zvala
		Jelena	him.CL	AUX.SG	called
		'Jelena called him.'			

Considering that SC has no subject clitics, the two pairs of examples indicate that in SC, the grammatical and pragmatic status of the null subject at least partially parallels that of clitic objects. Considering that the nominative ending in SC is zero, and that clitics have the shape of the final morpheme in full pronouns (including the theme vowel when the ending is just a consonant), as illustrated in Table 1, this opens up the analytic possibility that *pro* is the stem of the clitic.

Table 1 Comparison of pronouns, their case endings and clitics in SC (only masculine)

Case	Full pronoun	Clitic	Clitic in children
NOM	*on-Ø-Ø*	pro-*Ø*	pro-*Ø*
GEN/ACC	*nj-e-ga*	pro-*ga*	pro-*Ø*
DAT	*nj-e-mu*	pro-*mu*	pro-*mu*
NOM	*on-i-Ø*	pro-*Ø*	pro-*Ø*
GEN/ACC	*nj-i-h*	pro-*i-h*	pro-*i-h*
DAT	*nj-i-ma*	pro-*i-m*	pro-*i-m*

Object omission attested in children's language in the contexts where adults use clitics can then be explained as the generalization of the uninflected clitic for both structural arguments, as in the third column in Table 1. Children may find support for this analysis in the abundant syncretism between nominative and accusative in several classes of declinable words (inanimates of class 1 and all class 2 and class 4 nouns in the singular, class 2, 3 and 4 nouns in the plural, the adjectives agreeing with these forms, some demonstrative and *wh*-pronouns, see (3) for illustration). The maturing aspect is then in establishing that clitic pronouns do show inflection in the accusative case.

(3)	a.	krov	b.	zvono	c.	kap	d.	čaše
		roof.NOM/ACC		bell.NOM/ACC		drop.NOM/ACC		glasses.NOM/ACC
		'roof'		'bell'		'drop'		'glasses'

e.	zvona	f.	kapi	g.	to	h.	belo
	bells.NOM/ACC		drops.NOM/ACC		that.NOM/ACC		white.N.SG.NOM/ACC
	'bells'		'drops'		'that'		'white'

While object omission is inappropriate in some of the contexts which favor the clitic, it is not generally banned in SC. Objects in SC can be null, but under different grammatical and pragmatic licensing than repeated and clitic objects. SC null objects for instance occur in contexts where a constituent other than the object or the verb is under narrow focus. This is why in (4a), where the predicate bears narrow focus, the null object expression is strongly degraded. In (4b), the verb realizes the *verum* focus, as opposed to narrow focus, and the null object is acceptable. This example also shows that the null object is a different type of item than clitics, since it can be used in contexts where the heterogeneous structure of the intended referent blocks the use of any pronoun, including clitics.[1] Repeated objects (B" replies in both examples) are pragmatically degraded whenever another mode of expression is acceptable.

(4) a. A: Hoće Petar popraviti Mariji ogrlicu?
WILL Petar fix Marija necklace
'Will Petar fix Marija's necklace?'
B: Ne, baciće je
no throw.FUT it.CL
B': ?Ne, baciće
no throw.FUT
B": ?Ne, baciće ogrlicu
no throw.FUT necklace
'No, he will throw it away.'

b. A: Jel Petar poslao Mariji ogrlicu knjigu i šest jabuka?
AUX.Q Petar sent Marija necklace book and six apples
'Did Petar send Marija the necklace, the book and six apples?'
B: ??Poslao ih je / *Poslao je njih
sent them.CL AUX sent AUX them
B': Poslao je
sent AUX
B": ?Poslao je ogrlicu knjigu i šest jabuka
sent AUX necklace book and six apples
'Yes, he did.'

1 For elaboration on the syntactic and semantic nature of null objects, see Huang 1984.

There are also other strategies of expression of discourse-old direct objects, such as strong pronouns, newly introduced descriptions (usually a different, synonymous or hypernymous noun, but sometimes also a noun referring to a different set that the referent is member of). As these other strategies are relatively rare, especially in children's narratives, they are not discussed here.

1.3 Acquisition of Clitics and Null Arguments

Research on the acquisition of pronouns, clitics and null elements in the object position delivers somewhat conflicting results. Works like Marinis (2000), Baauw et al. (1999, 2011) and Varlokosta (2000) provide evidence that the acquisition of clitic pronouns is completed later than the acquisition of full pronouns in a range of languages. Varlokosta et al. (2016), in a cross-linguistic investigation, establish that already at the age of five, children properly identify the contexts of use of pronouns and select the proper forms. They too observe some departures from the adult use, in particular in choosing between strong pronouns, weak pronouns and clitics. While in adults, these choices are based on a spectrum of pragmatic considerations, children tend to go for the weakest form available – a clitic in clitic languages and a weak pronoun in others. This sets aside the weakest form of expression: null elements. Varlokosta et al. observe that null objects are not attested in significant quantities at any stage of acquisition in those languages in which in adult language, null objects are ungrammatical or strongly restricted.

Other works, like Jakubowicz et al. (1996), Schmitz et al. (2004), Wexler et al. (2003; 2004), Pérez-Leroux (2018), and Anđelković (2012) for SC, identify a higher use of null objects in children's language in positions in which they are not attested in the adult language. This is in line with Varlokosta et al.'s generalization that children prefer the simplest form, as long as the availability of the form in the language is taken as a separate constraint which can be violated. It is hence expected that before acquiring the system with both null and clitic arguments, the child passes through stages in which null realization is generalized, or at least less restricted (Anđelković 2012 for SC).

Varlokosta et al. open the question why in certain languages children do, and in others do not produce more null objects than adults, i.e., why in some languages they bottom the hierarchy of strength of pronouns at the level of clitics and in others at the level of the zero pronoun. The present paper contributes to answering these questions.

1.4 Dialectal Variation and Language Acquisition in SC

There are three large SC dialect groups in Serbia: Neoshtokavian, Oldshtokavian and Torlakian. All three varieties are shtokavian and ekavian, they share most parameters of grammar, but also display some significant differences. Neoshtokavian dialects are the base for the standard SC. They are characterized by preserving the full 7-membered case system, and having developed a hybrid lexical prosody involving both tone and stress, as the most prominent distinctive properties. Children from this dialect zone have an approximately monolingual acquisition. The other two dialect groups depart from the standard, resulting in a bilingual acquisition for their speakers. Oldshtokavian dialects present the state which departs the least from the older varieties of SC. It is slightly affected by the Balkan Sprachbund processes, e.g. in having slightly simplified their case system and lost the infinitive, but shares the pronominal system for the most part with the standard (apart from some strictly lexical differences). Torlakian dialects are most strongly affected by the Balkan Sprachbund tendencies: they have a highly simplified case system (only two forms) – but some varieties have developed a definite article, lexical prosody which only involves stress and, in some domains, distributes it in a templatic way, and a more analytic morphology than the other two groups. Importantly, Torlakian dialects differ from the other two groups in involving clitic doubling (Tomić 1996) – a configuration whereby an argument is realized twice: once by a full pronoun or a full-fledged nominal expression, and once by a clitic, as illustrated in (5).

(5) a. Dečak ga je uzeo
boy it.CL AUX taken
'The boy took it.'

b. Dečak je uzeo zmaja
boy AUX taken kite
'The boy took the kite.'

c. Dečak je njega uzeo
boy AUX it taken
'The boy took it.'

Pronominal clitics hence have a higher degree of grammaticalization in these dialects, and are also more frequent. Torlakian children are therefore expected to acquire pronominal clitics earlier and use them more frequently than their peers from other dialect groups. To experimentally investigate whether a higher degree of grammaticalization and a higher frequency of clitics in the dominant local variety facilitates the acquisition also in the non-dominant

standard variety, two control groups are needed: one in which the children acquire only one variety (as the base-line), and one in which they acquire two with similar pronominal systems, crucially – neither of which has clitic doubling (in order to eliminate bilingual acquisition alone as the facilitating factor, i.e. as the bilingual base-line).

This is exactly what is provided by the described dialectal situation. Neither Neo- nor Oldshtokavian have clitic doubling, but otherwise the pronominal systems of the three varieties are the same. Oldshtokavian children have a bilingual and Neoshtokavian children have monolingual acquisition. Therefore, Neoshtokavian qualifies as the overall base-line and Oldshtokavian as the bilingual base-line.

1.5 Hypotheses and Predictions

The hypotheses investigated are formulated in (6).

(6) H1: In bilinguals, a higher degree of grammaticalization of a property in the dominant grammar facilitates the acquisition of the same property in the non-dominant language (e.g. Müller 1998, and a lot of subsequent research).
H2: Clitics are inflected *pro*'s, i.e. *pro* is an uninflected clitic.

I target specifically the predictions of the hypotheses above formulated in (7), respectively.

(7) P2: Children in the Torlakian dialect zone will have the highest rate of use of clitics and the lowest rate of omission in the object position compared to both control groups: children acquiring a single variety and children acquiring two dialects with the same status of clitics.
P3: Children with a higher share of *pro* in the subject position will also produce more null and /or more clitic objects.

An experiment was designed and conducted to test these predictions.

2 Elicited Production Study

The goal of the experiment was to obtain natural linguistic data, while imposing sufficient restrictions to guarantee comparability. I used data that were obtained in an independent investigation of preschoolers' language, which turned out to neatly fit the requirements. The adult data are gathered by myself.

2.1 Design and Materials

The experiment conducted consisted in asking the participant to tell a story based on four ordered pictures. These were then annotated for all the relevant variables. Children from all Serbian dialect zones were included.

a. Independent and Dependent Variables Adopted

The following independent variables were included:

- the dialect group, a categorical variable; levels: Neoshtokavian, Oldshtokavian, Torlakian.

The dependent variables included in the research were all scalar, standing for the percentages of:

- the quantity of objects realized by clitics.
- the quantity of objects realized by repeated nominal expressions.
- the quantity of objects realized as null.
- the quantity of subjects realized as null.

The last dependent variable has the role of a predictor variable, as we are interested in the extent to which the quantities of the omitted objects and those expressed by clitics are predicted by the quantity of omitted subjects.

b. The Stimulus and Its Properties

Only one stimulus, presented in (8), was used in the experiment: a set of four ordered grayscale pictures representing mutually connected events, thus giving ground for a simple and easily constructed story.

(8) The stimulus used in the experiment

Expressions relevant for the target hypotheses were transitive verb phrases, such that their (intended) direct object has already been

introduced in the discourse. This is illustrated in (9) where the three available options are illustrated: the direct object can be expressed by a clitic as in (9b), the best fitting option in the adult grammar; it can be omitted as in (9c), strongly grammatically degraded in the adult grammar for the given context (see section 1.2); or it can be repeated as in (9d), an option which is grammatical, but stylistically marked.

(9) a. Zmaj se zaglavio u drvetu
kite REFL stuck in tree
'The kite got stuck in the tree.'
b. Dečak ga je izvukao
boy it.CL AUX pulled_out
c. Dečak je izvukao
boy AUX pulled_out
d. Dečak je izvukao zmaja
boy AUX pulled_out kite
'The boy pulled it out.'

H1 predicts less of pattern (9b) and more of those in (9c, d) in children compared to adults.

Also relevant, as a non-manipulated predictor variable, is the quantity of omitted and repeated subjects, illustrated in (10), where the null subject in (10b) is neutral in the adult language, while (10c) is strongly stylistically marked.

(10) a. Devojčica je razgovarala sa dečakom
girl AUX talked with boy
'The girl was talking to the boy.'
b. Puštala je zmaja
flown AUX kite
c. Devojčica je puštala zmaja
girl AUX flown kite
'The girl was flying the kite.'

According to H3, the quantity of null subjects should predict the quantity of null and clitic objects, and the quantity of repeated subjects the quantity of repeated direct objects.

2.2 Participants

The experiment included 371 participants, all preschool children (233 girls, 138 boys, mean age 77.33 months, st. dev. 6.91), native

speakers of SC. Among them, 253 were from the Neoshtokavian, 39 from the Torlakian and 79 from the Oldshtokavian zone. The number of children per dialect reflects the distribution of the general population of Serbia.

2.3 Procedure

The procedure consisted in presenting the participant with the pictures, and then asking them to observe them and narrate what is happening on them. The experimenter wrote down the entire narrative, including pauses and pause-filler sounds, errors, corrections and gestures. All 25 experimenters, to whom I am grateful for the great work, are speech therapists with experience in similar tasks. Together with detailed instructions, this guaranteed uniform procedure. The notes were analyzed and annotated for the dependent variables by the author.

Annotation did not include information about acceptability in the adult language, as it was difficult both to reconstruct the intended information structure (i.e. intonation) and to establish a uniform scale. While the obtained measure is still indicative of the number of unacceptable uses too, especially when compared with the quantities in the adult language, the annotation of unacceptable cases would more likely give statistically significant effects, and is a task to be tackled in future research.

2.4 Results

a. Predictions of H1 concern the comparison between the dialects. The relevant quantities are the quantities of objects expressed by the respective strategy: omission, repetition or clitics. The absolute number of objects expressed through one strategy correlates with the number of sentences produced by the participant (i.e. with fluency), which further may correlate with the degree of language development. To avoid this possible confound, I factored the number of produced objects in each strategy by the maximal number of possible objects selected by the verbs which were used in the narrative (i.e. with the number of verbs selecting nominal expressions as direct objects). The compared values are the shares of each strategy in the aggregate number of objects per narrative (the remaining share in each dialect are discourse nw direct objects).[2] Indeed, Torlakian children have a

2 I also performed calculations on the absolute numbers, and they yield equivalent results.

higher rate of clitics and a lower rate of omission than both base-line groups, as shown in Table 1 and in Figure 1.

Table 2 Quantities of clitic, omitted and repeated objects in the three dialect groups

Object type	Oldshtokavian	Neoshtokavian	Torlakian
Clitic objects	21.49%	28.47%	35.7%
Omitted objects	14.47%	17.79%	8.68%
Repeated objects	33.62%	22.34%	25.64%

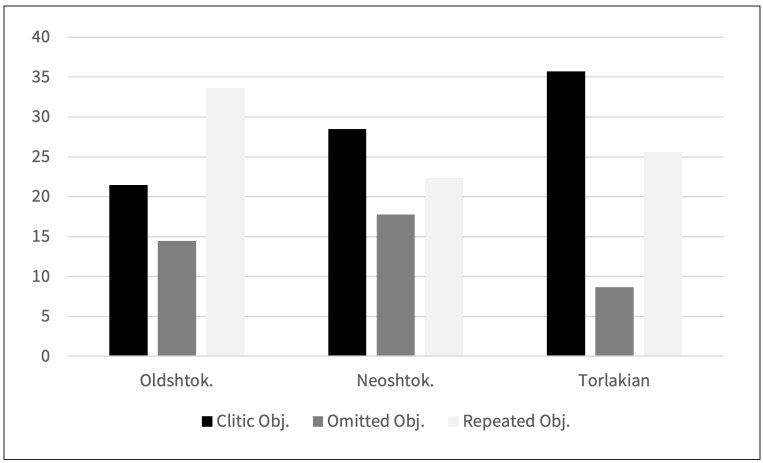

Figure 1 Quantities of clitic, omitted and repeated objects in the three dialect groups

To test the effect of the availability of clitic doubling in the dialect, I fitted a linear mixed effects model. I coded the two relevant properties of dialects, bilingual acquisition and the availability of clitic doubling in terms of zero for monolingual acquisition and for lack of clitic doubling, respectively, and one for bilingual acquisition and for the availability of clitic doubling, respectively. I used the function *lmer* from the R's package *lme4* (Bates et al. 2015), with the numerical value of the day of the experiment as the random factor. The functions used and the results obtained are given in (11), showing a positive effect of the availability of clitic doubling and a negative effect of bilingual acquisition on the quantity of produced clitics, as well as a positive effect of bilingual acquisition on the quantity of repeated subjects, and no significant effect in the remaining combinations.

(11) a. lmer(RatioCliticObj ~ Biling + Doubling + (1|DayExp), data = Arg)
Biling: β = -0.07, SE = 0.04, z(361) = -1.989, p = 0.0475
Doubling: β = 0.14, SE = 0.05, z(361) = 2.698, p = 0.0073

b. lmer(RatioRepeatObj ~ Biling + Doubling + (1|DayExp), data = Arg)
Biling: β = 0.11, SE = 0.03, z(361) = 3.456, p = 0.0006
Doubling: β = -0.07, SE = 0.05, z(361) = 1.628, p = 0.1044
c. lmer(RatioOmitObj ~ Biling + Doubling + (1|DayExp), data = Arg)
Biling: β = -0.03, SE = 0.03, z(361) = -1.005, p = 0.316
Doubling: β = -0.06, SE = 0.05, z(361) = 1.170, p = 0.243

Pairwise comparisons using single factor ANOVA provided in (12) gives a closer insight in the strength of the individual contrasts. Out of the four relevant contrasts, three (underlined) reach significance – both contrasts in the production of clitics and the contrast with the Neoshtokavian dialects in the omission. Children from the Torlakian zone produced fewer omissions than those from the Oldshtokavian zone, but this difference is not significant.

(12) a. Clitics, Torlakian vs. Neoshtokavian: F(1, 286) = 4.52, p = 0.0345
b. Clitics, Torlakian vs. Oldshtokavian: F(1, 115) = 7.55, p = 0.007
c. Omission, Torlakian vs. Neoshtokavian: F(1, 286) = 4.51, p = 0.0344
d. Omission, Torlakian vs. Oldshtokavian: F(1, 115) = 1.72, p = 0.1918

The strongest contrast, and the main source of the overall effects of dialect groups is the contrast in the rate of production of clitics between Torlakian and Neoshtokavian children.

I have further analyzed each of the strategies for the numbers of participants who never use it for discourse-old referents, as well as for the number of participants who exclusively use this strategy (i.e. who never use any of the remaining two strategies in focus, or any of the strategies that were not analyzed, such as full pronouns or new, different descriptions of old referents). The results are presented in Table 3 and Figure 2, i.e. in Table 4 and Figure 3, respectively.

Table 3 Percentages of participants who never use one strategy by the dialect group

Participants	Oldshtokavian	Neoshtokavian	Torlakian
Never using clitics	53.16%	37.85%	28.21%
Never omitting objects	65.82%	61.35%	76.92%
Never repeating objects	30.26%	48%	33.33%

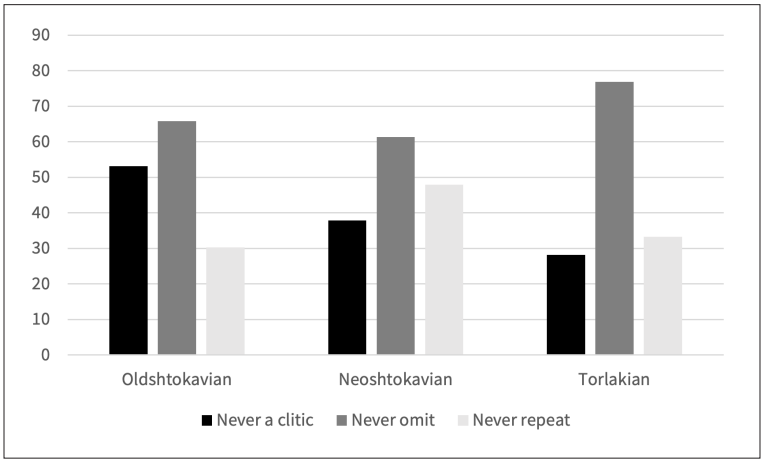

Figure 2 Percentages of participants who never use one strategy by the dialect group

Table 4 Percentages of participants who only use one strategy per dialect group

Participants	Oldshtokavian	Neoshtokavian	Torlakian
Only using clitics	53.16%	37.85%	28.21%
Only omitting objects	65.82%	61.35%	76.92%
Only repeating objects	30.26%	48%	33.33%

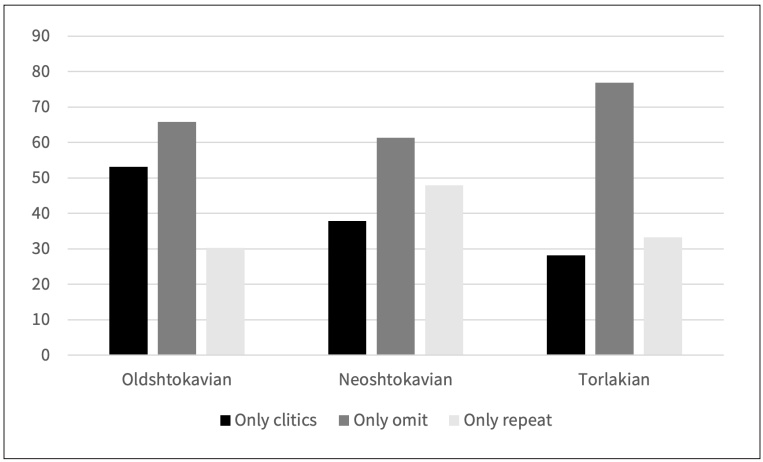

Figure 3 Percentages of participants who only use one strategy per dialect group

These distributions follow the same tendencies as the overall rates of use in Figure 1 above. As the quantities of participants are smaller, fewer of the contrasts reach significance. I therefore do not report the results of the statistical teste, but only include the raw data for illustration.

b. Predictions of H2, that the quantity of omitted subjects predicts the quantity of omitted and clitic objects, was tested by fitting a linear mixed effects model to the shares of omitted subjects as the predicted variable and the shares of omitted and clitic objects as predictors, analogously to (11b) above. The numerical value of the day of the interview was again used as the random variable (using the function *lmer* from the package *lme4* in R, as in (13)). The function and the results are given in (13).

(13) lmer(RatioOmitSubj ~ RatioOmitObj + RatioClitObj + (1|DayExp), data = Arg)
RatioOmitObj: $\beta = 0.19$, SE = 0.05, $z(361) = 3.811$, $p = 0.0002$
RatioClitObj: $\beta = 0.29$, SE = 0.05, $z(361) = 6.204$, $p << 0.0001$

Both clitic objects and their omission are confirmed as good predictors of null subjects – if a preschooler speaking SC has a higher rate of either omitted or clitic objects, they will likely also have a higher rate of omitted subjects.

To further test the correlation between the strategies of expression of objects and subjects, I fitted a model for the repetition as the strategy of expression of objects and subjects. The function and the results are given in (14).

(14) lmer(RatioRepeatSubj ~ RatioRepeatObj + (1|DayExp), data = Arg)
RatioRepeatObj: $\beta = 0.19$, SE = 0.06, $z(361) = 3.361$, $p = 0.0009$

2.5 Discussion

a. Predictions of H1. The results partly confirm the hypothesis. The factor of bilingual acquisition effects a lower, and the factor of clitic doubling a higher rate of production of object clitics, as confirmed in (11), but no effect of these factors on omission can be confirmed with significant probabilities in the overall picture. Pairwise contrasts lead to the same conclusions, as confirmed in (12a, b), while additionally showing that the factor of clitic doubling in combination with the factor of bilingual acquisition also effects a lower rate of omission, but alone does not reach significance in this contrast, as shown by (12c, d).

The exact same tendencies are also observed when the quantities of participants are considered who never use a particular strategy

of object expression, as well as for those who only use one of the strategies.

Reasons for the weaker effects in omission probably have to do with the fact that omission is not always in competition with clitics, as there are contexts in which it is the best strategy for the expression of direct objects (recall the discussion of 4b)). Moreover, the factor of dialects codes dialect zones, but children in a dialect zone are not all necessarily dominant speakers of the respective dialect. Due to migration and parent's education policies, children in the zones of dialects different from the standard often speak the standard in the family, and even in the Neoshtokavian zone, due to migration, some families speak a dialect from another group. Furthermore, some of the towns where the data have been gathered are in the border zones, where another dialect group is represented to a higher or lower extent. The imperfect match between dialect zones and the actual dialects of the participants are a probable general weakening aspect for all the measured contrasts.

b. Predictions of H3. The results of the experiment confirm that the participants display general preferences for particular strategies of expression of discourse-old structural arguments, applying to both objects and subjects. Ignoring other, less frequent strategies, the mapping is two to three, i.e. omission and repetition as strategies for the expression of subjects map to clitics, omission and repetition as strategies for the expression of objects. Children who have a preference for repetition in the expression of discourse-old objects also prefer repetition when realizing discourse-old subjects. Both children who prefer omission and those who prefer clitics for the expression of direct object prefer omission as the strategy of expression of discourse-old subjects. This is compatible with the view that children represent object omission as a *pro*, i.e. as an uninflected clitic syncretic between the nominative and the accusative case. Maturation of grammar in this domain involves dispensing with this syncretism (i.e. realizing the ending in object clitics, thus making them overt) and representing object omission in the way that licensed its realization in the narrow set of contexts it is limited to – plausibly as a variable (Huang 1984).

3 Conclusion

On the material of children's picture-based storytelling, I tested two hypotheses about children's expression of direct objects in SC: that children who produce object omission instead of object clitics misanalyse object omission as the *pro*, assuming nominative-accusative syncretism, and that the availability of clitic doubling in the dominant variety facilitates the acquisition of clitics in the

standard variety too, in children undergoing bilingual acquisition between the standard and a dialect. The former hypothesis was tested via its prediction that both children who prefer to omit discourse-old direct object and those who prefer to realize them as clitics will also prefer to omit discourse-old subjects, and that children who repeat discourse-old objects will also prefer to repeat discourse-old subjects. The latter was tested via its prediction that children acquiring the standard variety bilingually with a Torlakian dialect, where clitics are more grammaticalized and more frequent, will also use them in the standard, more than both children acquiring the standard alone, and those acquiring it bilingually with a dialect without clitic doubling. The results are congruent with both predictions, thus confirming both hypotheses.

Acknowledgments

I am very grateful to two anonymous reviewers for their comments and to the Publishing Company Sinapsa for allowing me to use the child language data for purposes of scientific research. This research was funded in part by the Austrian Science Fund (FWF) 10.55776/F1003.

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e-ISSN 2785-3187

Balcania et Slavia
Vol. 5 – Num. 2 – December 2025

Costruzione russa *tak i ne* + *V*: prospettive di analisi e soluzioni traduttive

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Abstract This study examines the Russian construction *tak i ne* + *V* using a qualitative and corpus-based approach. The aim is to identify its main meanings, understand the grammatical and lexical constraints that influence its interpretation, and explore how it is translated into Italian. The results show that *tak i ne* expresses complex semantic and pragmatic values, such as counter-expectation, cunctative, frustrative, or the speaker's emotional attitude, which cannot be fully captured by a single Italian expression. Instead, translation often requires a combination of several elements.

Keywords Counter-expectation. Cunctative. Frustrative. Italian. Russian.

Edizioni Ca'Foscari

Peer review

Submitted 2025-10-17
Accepted 2025-12-11
Published 2026-03-31

Open access

Citation Lazareva, V. (2025). "Costruzione russa *tak i ne* + *V*: prospettive di analisi e soluzioni traduttive". *Balcania et Slavia*, 5(2), 85-100.

DOI 10.30687/BES/2785-3187/2025/01/005

1 Introduzione

Il presente lavoro è dedicato alla costruzione[1] russa formata dalla componente lessicale fissa *tak i*, risultante da elementi sintatticamente slegati, l'avverbio *tak* 'così' e la particella *i* 'e', seguita dalla negazione *ne* 'non' e uno slot a scelta libera, saturato dal verbo o da una forma verbale (participio, gerundio): *Pisat' on tak i ne naučilsja* $_{\text{PST.PFV}}$ 'Non ha mai imparato a scrivere'; *Pisat' on tak i ne umeet* $_{\text{PRS.IPFV}}$ 'Tuttora non sa scrivere'; *Pisat' on tak i ne naučitsja* $_{\text{FUT.PFV}}$ 'Non imparerà mai a scrivere'; *Roman tak i ne byl napisan* $_{\text{PTCP.PFV}}$ 'Il romanzo non fu mai scritto'; *On ušel, tak i ne poproščavšis'* $_{\text{GER.PFV}}$ 'Andò via senza salutare'.[2]

La scelta della forma verbale non è soggetta a rigide restrizioni lessico-grammaticali. Tuttavia, l'interazione tra i diversi fattori grammaticali e lessicali all'interno della costruzione *tak i ne V* incide sul suo valore, determinando alcune differenze di significato.

In questa sede ci siamo posti tre obiettivi principali: 1) individuare i significati associabili a *tak i ne*;[3] 2) mettere in luce i vincoli interpretativi legati alla costruzione in esame, evidenziando eventuali correlazioni tra forma e significato; 3) osservare e individuare le equivalenze traduttive italiane per una codifica dei significati veicolati dalla costruzione russa.

Per indagare sulle opzioni di codifica in italiano dei significati espressi da *tak i ne*, operazione particolarmente utile alla luce della mancata o inadeguata trattazione della locuzione russa nei dizionari bilingui, abbiamo adottato un approccio analitico *corpus-based*. L'analisi è stata condotta sulla base dei dati restituiti dal subcorpus parallelo del Corpus nazionale della lingua russa (*Nacional'nyj Korpus Russkogo Jazyka*, NKRJa) indagato in entrambe le direzioni (dal russo all'italiano e dall'italiano al russo). E, dato il numero contenuto delle occorrenze estratte dal NKRJa (66 in totale), abbiamo integrato questi dati con i dati selezionati in modo randomico da un Corpus parallelo di sottotitoli (*Open Parallel Corpus*, Opus2018), consultabile sulla piattaforma *SketchEngine*. Il subcorpus parallelo di NKRJa presenta i testi letterari e le traduzioni più affinate con una varietà di soluzioni decisamente più elevata rispetto al Opus2018. Quest'ultimo, composto da sottotitoli cinematografici e televisivi,

1 Per costruzione qui intendiamo l'unità linguisitica, ovvero un «learned pairings of form with semantic or discourse function, including morphemes or words, idioms, partially lexically filled and fully general phrasal patterns» (Goldberg 2006, 5).

2 Gli esempi che non riportano indicazione della fonte specifica sono stati costruiti ad hoc dall'autore. Anche le traduzioni degli esempi e delle citazioni, se non diversamente indicato, sono a cura dell'autore di questo contributo.

3 Da questo punto in avanti, per ragioni di brevità e scorrevolezza espositiva, useremo la dicitura *tak i ne*, intendendo con questa *la costruzione tak i ne V*.

e-ISSN 2785-3187

riflette un registro prevalentemente informale e strutture tipiche del parlato, mostrando una tendenza a soluzioni più economiche e ripetitive.[4] Ai fini di questo lavoro, orientato sull'analisi qualitativa e non quantitativa dei dati, sono state analizzate 300 occorrenze totali.

2 *Tak i ne* nelle grammatiche e dizionari

Nei dizionari e nelle grammatiche le occorrenze che ci interessano compaiono tra gli esempi d'uso della locuzione *tak i*, riportata sotto la voce dell'avverbio *tak*. Lo status di *tak i* è incerto e oscilla tra locuzione fissa (Evgen'eva 1981-84), locuzione avverbiale (Kuznecov 2000) e particella (Švedova 1980). Le occorrenze di *tak i* con la negazione vengono riportate nei dizionari per illustrare un significato specifico, definito come risultativo: «Tak i – […] 3) si usa all'inizio delle frasi che esprimono il risultato, l'esito di determinate azioni. *Tak ona i ne uznala, kuda on uezžaet* A.N. Tolstoj, Aelita. *Lejtenant dolgo zvonil po telefonu na bazu, no tak i ne dozvonilsja*. Borzenko, Povinujas' zakonam Otečestva)» (Evgen'eva 1981-84).

L'interpretazione più sottile, successivamente ripresa nella grammatica accademica (Švedova 1980), la dobbiamo all'intuizione di N.Ju. Švedova (1960) che attribuisce a *tak i* lo status di particella e inscrive i suoi usi tra le costruzioni (*postroenija*) tipiche del parlato. In riferimento agli esempi con la locuzione *tak i* seguita dalla negazione si specifica: «il valore predicativo, espresso dalla costruzione con *tak i* è caratterizzato come risultato o conclusione naturale […] di uno stato di cose che ha avuto una certa durata nel passato e si è concluso naturalmente 'da sé'» (*tak i ne otdal dolg*) (Švedova 1960, 126). Dalla definizione proposta emergono chiaramente alcuni elementi, come il valore temporale della costruzione, ovvero il suo orientamento restrospettivo, la componente aspettuale, ovvero la durativtà di uno stato di cose pregresso nonché la sua 'conclusione naturale' (da sé), che richiedono ulteriore approfondimento e verranno ripresi nel corso della nostra analisi.

Il significato risultativo, attribuito da Švedova e dai vocabolari alla locuzione *tak i*, per essere realizzato, richiede obbligatoriamente la presenza della negazione. Tuttavia, questo fatto non è stato messo a fuoco ad eccezione dell'unica, a nostra conoscenza, fonte lessicografica, il *Novyj ob''jasnitel'nyj slovar' sinonimov russkogo*

4 Il corpus parallelo dei sottotitoli è un corpus multilingue che raccoglie le traduzioni allineate in diverse lingue, a partire da testi originali, principalmente in inglese. Questa caratteristica comporta la necessità di una selezione attenta dei dati, pur consentendo l'osservazione di tendenze generali nella corrispondenza traduttiva. Per questa ragione, non vengono riportati i dati statistici e di frequenza relativi a questo corpus. Per convenzione, gli esempi tratti da Opus2018 sono presentati a partire dal testo russo.

jazyka (Nuovo dizionario esplicativo dei sinonimi della lingua russa), dove troviamo l'articolo di Irina Levontina dedicato alla locuzione *tak i ne* e i suoi quasi sinonimi *nikogda* 'mai' e *ni razu* 'nemmeno una volta'. *Tak i ne* viene annoverato dall'autrice tra i quantificatori temporali sulla base di un significato comune, così formulato: «in nessun istante per tutta la durata di un intervallo di tempo di riferimento» (Levontina 2003, 673).

3 *Tak i ne* negli studi linguistici

3.1 *Tak i ne* come avverbio fasale

In una prospettiva temporale, e più precisamente in relazione alla segmentazione fasale della situazione *tak i ne* viene menzionato negli studi di V. Plungian (1999, 315-16). Nel suo quadro teorico Plungian parte dal presupposto che un predicato fasale si riferisce a due momenti, il punto di riferimento (t_0) e il momento precedente (t_i), e che la situazione in questione si verifica (+) o non si verifica (–) in questi momenti. Di conseguenza si ottengono quattro, e non tre tradizionalmente proposte, combinazioni fasali logicamente possibili, riassunte nella Tabella 1:

Tabella 1 Combinazioni fasali (Plungian 1999, 315)

valore fasale	**t_i**	**t_0**
inchoative (begin)	–	+
terminative (stop / not continue)	+	–
continuative (continue / not stop)	+	+
cunctative (not begin)	_	_

Secondo quanto afferma Plungian, la locuzione russa *tak i ne* consente di esprimere in modo piuttosto preciso il significato di *cunctative*. Dunque, *tak i ne* introduce uno stato di cose che non si realizza in alcuna fase della situazione di riferimento: *On tak i ne otvetil na moë pis'mo* 'Non ha mai risposto alla mia lettera'. In questa ottica, *tak i ne* si ascrive agli avverbi fasali, cf. la definizione di van der Auwera «adverbials that express that a state does or does not continue or that it has or has not come into existence» (Auwera 1998, 25). Inoltre, osservando la tendenza tipologica alla congiuntura del significato fasale e di quello controaspettativo, Plungian nota, che il valore controaspettativo emerge in quei marcatori fasali che segnalano la conservazione di uno stato di cose, sia in senso positivo (valore continuativo), sia in quello negativo (valore cunctativo). Tale

e-ISSN 2785-3187

associazione è motivata dalla necessità di evidenziare l'assenza di un cambiamento atteso (Plungian 1999, 318). In altre parole, possiamo attribuire alla costruzione con *tak i ne* un significato invariante di *assenza di cambiamento in uno stato di cose esistente*.

3.2 *Tak i ne* in una prospettiva idiomatica

Sul valore controaspettativo, legato agli usi di *tak i ne*, ma in un'altra prospettiva di analisi, ci portano gli studi di Mel'čuk (2001). Affermando la natura avverbiale della locuzione *tak i*, Mel'čuk propone di considerarla nell'insieme con la variabile attanziale tra i frasemi non composizionali, e più precisamente – idiomi.[5] Individuando tre idiomi omonimi, corrispondenti alla formula *tak i X*, l'analisi di Mel'čuk conferma il significato di intensificazione, già registrato dai vocabolari per *tak i* (*Sneg tak i valit* 'Sta nevicando proprio forte') e ne puntualizza altri due: di continuità (*Sneg tak s utra i idët uže tretij čas* 'Sono tre ore che sta nevicando') e di controaspettativa (*On tak i ne pobyval v Irane* 'Non è mai stato in Iran'). Secondo questo approccio, dunque, il valore controaspettativo non è considerato come inferenza pragmatica, ma viene attribuito a tutta la costruzione in una prospettiva idiomatica. Gli esempi con la negazione vengono proposti solamente per il terzo idioma. Notiamo che il significato controaspettativo, secondo l'analisi di Mel'čuk, non è veicolato alla presenza della negazione, che viene inclusa nella formula interpretativa «nonostante si aspetti non-X(V), X(V)», ma non nella struttura sintattica superficiale (Tak i X) (Mel'čuk 2001, 74). Tuttavia, a nostro avviso, negli esempi senza negazione proposti dall'autore, la lettura controaspettativa è il risultato di interazione di diversi fattori. Ad esempio, in (1), la controaspettativa è codificata tramite la preposizione concessiva *nesmotrja na* 'nonostante', senza la quale la frase richiederebbe comunque elementi contestuali supplementari per essere interpretata come tale. La (2), pur non presentando negazione a livello superficiale, contiene una negazione implicita nel verbo *ostat'sja* 'rimanere come prima, non cambiare' e nell'aggettivo *fiktivnyj* 'fittizio, non vero, non autentico'. Inoltre, la negazione è rafforzata dalla presenza del *No* 'ma' avversativo, chiamato anche «*no nenormal'nogo sledovanija*» (*no* della conseguenza anomala) (Sannikov 1989, 161), che rafforza il contrasto coordinando due frasi, dove la seconda nega l'aspettativa creata sulla base della prima (vedi anche es. (14)).

5 Per una tipologia di frasemi e la definizione dell'idioma nel quadro teorico proposto da Mel'čuk vedi Mel'čuk 2012.

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(1) On **tak**, nesmotrja na bolezn', **i poselilsja** tam odin.
Nonostante la malattia, [tak i] **rimase a vivere** lì da solo.

(2) No ich sojuz **tak i ostalsja** fiktivnym.
Ma la loro unione [tak i] **rimase** non ufficializzata.

Siamo portati a pensare che il valore controaspettativo sia correlato alla presenza della negazione; ciò nonostante, esso può manifestarsi anche nei contesti non esplicitamente negativi, sebbene in modo più marcato risulti condizionato dal contesto e dalla semantica degli altri elementi della frase.

4 Tra forma e significato: questioni interpretative

Le proprietà semantiche del verbo possono avere determinate conseguenze per il significato della costruzione. Per individuare eventuali vincoli interpretativi, è necessario prendere in considerazione le sue caratteristiche azionali e aspettuali.

Per quanto riguarda la classe azionale ci serviremo della nozione di *categoria tassonomica*, introdotta da E.V. Padučeva (2004) che, nella concezione dell'autrice, rientra tra i parametri della semantica lessicale. La categoria tassonomica tiene in considerazione due fattori principali: la classe azionale e il grado di agentività, ovvero il controllo sull'azione o l'intenzionalità del soggetto. In base a questi fattori Padučeva individua 10 categorie verbali (azione, attività, processo, stato, evento, tendenza, proprietà, correlazione, anticipazione, predisposizione), tra le quali solo le due classi – di azione e di attività – sono agentive (Padučeva 2004, 31-3).

L'analisi sulla frequenza dei verbi associati alla costruzione nel corpus principale (*osnovnoj corpus*) del NKRJa (si vedano le prime 10 posizioni nella Tabella 2) ha evidenziato una netta prevalenza dei verbi di azione che, oltre all'agentività, hanno tra i suoi tratti semantici anche la telicità. Più nello specifico si tratta dei verbi con *l'accento sul risultato* e *i conativi prototipici* (nella terminologia di Padučeva). Il verbo *byt'* 'essere' si posiziona in alto nei ranghi della frequenza per il suo uso ausiliare con i participi con valore del perfetto (es. *soglašenie tak i ne bylo podpisano* 'l'accordo non fu mai firmato').

Tabella 2 I verbi più frequenti nella costruzione *tak i ne V*, secondo i dati del corpus principale del NKRJa

Posizione	Verbo	Occorrenze assolute	Frequenza relativa (%) (Totale occorrenze: 21089)
1	smoč' 'potere, riuscire'	1.201	5,69
2	udat'sja 'riuscire, andare a buon fine'	1.070	5,07
3	ponjat' 'capire, comprendere'	940	4,46
4	byt' 'essere'	741	3,51
5	najti 'trovare'	673	3,19
6	uznat' 'venire a sapere, conoscere'	602	2,85
7	moč' 'potere'	410	1,94
8	uspet' 'riuscire in tempo, fare in tempo'	385	1,83
9	doždat'sja 'aspettare fino a, riuscire ad attendere'	371	1,76
10	uvidet' 'vedere, riuscire a vedere'	346	1,64

Già a partire dalle prime dieci posizioni si osserva una marcata differenza di frequenza. Da un lato, i verbi con rango più elevato, caratterizzati dal più alto grado di ricorrenza, contribuiscono alla formazione di locuzioni che possono essere considerate fisse. Dall'altro lato, il 65% dei verbi attestati nella costruzione (1.366 su 2.094 posizioni totali) registra una frequenza di appena 1-2 occorrenze, indicando un'elevata produttività della costruzione stessa.

La tipologia dei verbi dei ranghi superiori suggerisce che i contesti prototipici per *tak i ne* sono quelli di marcata agentività che può manifestarsi anche attraverso i tentativi o gli sforzi vani del soggetto: *On tak i ne smog priechat'* 'Non è riuscito a venire'; *Ja tak i ne doždalsja ego* 'L'ho aspettato invano'.

Sono rappresentative in questo senso le proposizioni bi-clausali, costruite sulla base del contrasto aspettuale dei verbi risultativi: *Ego iskali i iskali, no tak i ne našli* 'Lo cercarono a lungo, ma non riuscirono a trovarlo'. *Tak i ne* contribuisce all'equilibrio semantico tra le due fasi dell'evento sulla scala dell'intensità, segnalando una

marcata tensione tra ciò che era atteso e lo stato effettivo delle cose, con conseguente delusione per l'esito insoddisfacente. Nelle costruzioni bi-clausali *tak i ne* è facoltativo, ma nell'unità predicativa indipendente rivela, attraverso l'inferenza, la duratività o l'intensità della fase conativa, es. *Ego tak i ne našli* 'Non riuscirono a trovarlo [nonostante i tentativi]'.[6] Nei contesti descritti la mancanza di corrispondenza con quanto atteso diventa particolarmente rilevante.

Proponiamo intanto di distinguere tra il significato di *risultato insoddisfacente* o *frustrativo* (cf. *frustrated completion* in Kuteva 2019, 873) e quello *cunctativo*. La lettura cunctativa non implica una fase conativa: ciò che viene segnalato è, piuttosto, l'assenza di un evento atteso, secondo le aspettative del soggetto stesso o del parlante. Questa distinzione semantica emerge chiaramente in traduzione e va tenuta in considerazione (cf. (3)-(4)).

(3) My **tak i ne ugovorili** ego priechat'.
Non siamo riusciti a convincerlo a venire.

(4) On **tak i ne pozvonil**.
Alla fine, non ha chiamato.

La variazione interpretativa può verificarsi anche con una medesima base verbale, dato che la categoria tassonomica è una categoria dinamica, correlata alla struttura attanziale e al contesto, che consente di disambiguare gli usi diversi dello stesso verbo. Ad esempio, in (5a) il verbo *vspomnit'* 'ricordarsi' funziona come verbo d'azione e determina la lettura frustrativa della frase, mentre in (5b) lo stesso verbo descrive, piuttosto, il permanere del soggetto in uno stato non controllato di dimenticanza e produce la lettura cunctativa. Pertanto, la (5a) ammette un'estensione con una proposizione concessiva che introduce il tentativo (*chotja pytalsja* 'nonostante avesse tentato'), mentre la (5b) non è correlata a un contesto conativo.

(5a) On **tak i ne vspomnil** eë imja [chotja pytalsja].
Non è riuscito a ricordare il suo nome [nonostante avesse tentato].

(5b) On **tak i ne vspomnil** o nej [*chotja pytalsja].
Non si è ricordato di lei [*nonostante avesse tentato] / **Si era completamente dimenticato** di lei.

Come abbiamo già notato, la costruzione non presenta limitazioni nella scelta della forma verbale. Tuttavia, i dati del corpus principale

6 Osservazione sull'intensità dell'aspettativa indotta da *tak i ne* troviamo anche in Levontina 2003, 675.

e-ISSN 2785-3187

del NKRJa dimostrano una chiara preferenza per l'aspetto perfettivo e per il tempo passato. L'uso estremamente limitato del presente e del futuro è coerente con le proprietà anaforiche di *tak i ne* che richiede un punto di vista retrospettivo. Riportiamo nella Tabella 3 i dati sulla frequenza delle forme verbali occorrenti con *tak i ne*.

Tabella 3 Frequenza delle forme verbali nella costruzione *tak i ne V*, secondo i dati del corpus principale del NKRJa

Forma verbale	Occorrenze
Aspetto	
tak i ne V_{PFV}	**17931**
tak i ne V_{IPFV}	2428
Tempo	
tak i ne V_{PST}	**18923**
tak i ne V_{PRS}	1084
tak i ne V_{FUT}	821

Dalla seguente affermazione di Givón, secondo cui «negative assertions are used in language contexts where the corresponding affirmative has been mentioned, deemed likely, or where the speaker assumes that the hearer – erroneously – holds to the belief of that affirmative» (Givón 1978, 87), possiamo dedurre che il valore controaspettativo è un effetto pragmatico comune delle frasi negative, dato che mediante un'affermazione negativa il parlante registra una deviazione dalla norma, dal previsto. Tuttavia, la negazione può produrre effetti differenti a seconda dell'aspetto del verbo negato.

Come precisato da Padučeva (1996), nel caso dei verbi imperfettivi con valore *generico-fattuale* (*obščefaktičeskoe značenie*), la portata della negazione si estende all'intera azione e non produce l'effetto controaspettativo. La negazione dei verbi di aspetto perfettivo, invece, agisce unicamente sulla componente assertiva dell'enunciato, ovvero sul valore risultativo, senza negare l'azione in sé e le sue fasi preparatorie, come intenzionalità, aspettativa o doverosità. Il conseguente contrasto tra la presupposizione positiva e la mancata realizzazione dell'evento genera inferenze controaspettative del tipo "X avrebbe dovuto compiere l'azione Y, ma…", "X aveva intenzione di compiere l'azione Y, ma…", "Era previsto, che X compisse l'azione Y, ma…" (Padučeva 1996, 54-6). Partendo da questo presupposto, confrontiamo es. ((6)-(8)):

(6) On **tak i ne napisal** $_{PFV}$ roman.
[Alla fine], **non ha più scritto** un romanzo.

e-ISSN 2785-3187

(7) Rebënku dva goda, a on **tak i ne chodit**$_{IPFV}$.
Il bambino ha due anni, ma **non cammina ancora**.

(8) On **tak i ne pisal**$_{IPFV}$ mne bol'še.
Non mi **ha** più **scritto**.

Il focus comunicativo nelle ((6)-(8)) è differente, come dimostrano anche le traduzioni italiane. Nella (6) l'accento è posto sulla fase finale dell'evento, sulla sua mancata realizzazione e, sottolineiamo, in un quadro temporale ormai chiuso. Come è stato ribadito in (Plungian 2011, 420; Levontina 2003, 676) *tak i ne* ha carattere ineluttabile, introducendo la situazione che non essendosi verificata in un determinato momento probabilmente non potrà più verificarsi. In questo caso, la negazione è correlata all'asserzione positiva presupposta e non rientra nel contenuto tematico della frase.

La frase (7), con un verbo che realizza il significato generico-fattuale, non verte tanto sull'azione mancata, ma afferma piuttosto che un certo stato di cose *negativo* (*ne chodit* 'non cammina') non ha avuto una transizione in *positivo* e permane tuttora, pur non essendo precluso un cambiamento in futuro. In questo caso la costruzione ha il significato che possiamo definire *perdurativo*. Il contesto può inoltre attivare un'interpretazione risultativa del verbo imperfettivo, conferendo alla frase un significato cunctativo, come in (8). L'effetto controaspettativo sembra dipendere più dal contesto o dalla semantica lessicale del verbo. Nella (7) tale effetto scaturisce dall'affermazione sull'età del bambino, che entra in contrasto con la sua incapacità di camminare; nella (8), invece, è chiaramente implicato dal verbo.

Alla luce di quanto detto sopra, occorre fare una precisazione. Secondo Padučeva, i verbi perfettivi con la negazione producono l'effetto controaspettativo solamente in presenza di un soggetto animato; con soggetti inanimati, in quanto inattivi, questo effetto non si manifesta (Padučeva 1996, 56). In effetti, come abbiamo visto, i verbi più frequenti nella costruzione appartengono a categorie agentive. Tuttavia, la costruzione *tak i ne* V_{PFT} può attivare un valore controaspettativo anche nelle frasi con il soggetto inanimato. In questi casi il contrasto si basa sulla presupposizione di un corso naturale o previsto degli eventi, il quale viene alterato (cf. es. 2, 9, 18). In un'ottica costruzionista, si può ipotizzare che ciò avvenga in virtù del cosiddetto *principio di forzatura* (*coercion*), per cui la costruzione stessa porta un carico semantico specifico, al quale si adattano i verbi che la saturano (Michaelis 2004, 25). Da questo punto di vista l'approccio di Mel'čuk allo studio della costruzione in oggetto in chiave idiomatica acquisterebbe ulteriore conferma.

Riassumendo quanto detto finora, possiamo concludere che la costruzione *tak i ne* con i verbi di aspetto perfettivo può assumere due significati: frustrativo o cunctativo, entrambi associati al valore

controaspettativo, caratterizzato da un certo grado di intensità, e a quello di giudizio (rammarico, dispiacere, rimprovero). Ancora, la costruzione con i verbi di aspetto imperfettivo può esprimere due significati: cunctativo e perdurativo. L'effetto pragmatico controaspettativo per i verbi imperfettivi è correlato alle sue caratteristiche semantiche, ma può essere favorito anche dal contesto.

Per la discussione dei dati sulle scelte traduttive prenderemo in considerazione la costruzione *tak i ne* V_{PFT}, in quanto il modello più produttivo e di conseguenza anche meglio rappresentato nei corpora paralleli (59 occorrenze su 66 totali nel NKRJa).

5 Soluzioni traduttive

Secondo i dati dei corpora paralleli, nella ricerca di equivalenza traduttiva la strategia più comune consiste nell'accrescimento dell'intensità con cui un certo stato di cose viene negato. La negazione così intensificata enfatizza il contrasto e il valore controaspettativo.

In italiano al ruolo di intensificatori della negazione assolvono prevalentemente gli avverbi con funzione di *quantificatori negativi*, chiamati anche elementi a polarità negativa (*nessuno*, *niente*, *nulla*, *mai*) (Manzotti 1991, 64). Tra quelli menzionati, il quantificatore negativo più frequente che ricorre come equivalente di *tak i ne* in entrambe le direzioni di traduzione, sia nel NKRJa che in Opus2018, è *mai*.[7]

Secondo la definizione di Serianni, «*Mai* si adopera per indicare un evento che non si svolge in nessun tempo» (Serianni 2003, 347). Tuttavia, *mai* a differenza di *tak i ne* russo si riferisce a intervalli temporali diffusi e indeterminati, non attiva necessariamente la presupposizione di una aspettativa e, di conseguenza, l'effetto controaspettativo. Affinché *mai* possa funzionare da traducente di *tak i ne* occorre che il verbo semanticamente contempli il tratto *cambiamento di stato*, come in ((9)-(10)). Alla rappresentazione più discreta dell'evento, con una fase finale più marcata, può contribuire anche il contesto. Notiamo che nella traduzione russa dell'esempio (9) *tak i ne* aggiunge una sfumatura più drammatica rispetto al testo originale, come se il matrimonio fosse un coronamento atteso.

(9) […] aveva avuto una figlia illegittima frutto di una lunga convivenza che **non sfociò mai** in matrimonio.

7 Sono 17 (34%) (su un totale di 50) le equivalenze tra *mai* e *tak i ne* V_{PFV} registrate nel corpus parallelo del NKRJa e 44 (44%) equivalenze registrate su un campione di 100 occorrenze nell'OPUS2018.

[…] rodila vne braka doč', plod mnogoletnego sožitel'stva, kotoroe **tak i ne uvenčalos**' brakom. (M. Zalambani. L' istituzione del matrimonio in Tolstoj (K. Landa), NKRJa)

(10) Net, ona **tak i ne očnulas'**.
Non si è mai risvegliata (Opus2018)

L'avverbio *mai* può combinarsi con il verbo implicativo *riuscire*, come in (11), in particolare per gli usi che in questo lavoro sono stati definiti *frustrativi*. È frequente anche l'uso isolato del verbo *riuscire*, come in (12); ma anche del modale *potere* con lo stesso significato (13).

(11) […] **non erano mai riuscite a insegnarle a comportarsi** da gatta vegetariana eë **tak i ne udalos' vospitat'** vegetariankoj (B. Pitzorno. La casa sull'albero (T. Stamova), NKRJa)

(12) Suti ètogo poslanija ja **tak i ne ujasnil**.
Non riuscii a coglierne la sostanza (S. Dovlatov. La filiale New York (L. Salmon), NKRJa)

(13) **Tak** emu **i ne udalos' usnut'**.
[…]; **non poteva dormire**. (A. Čechov. Racconti (F. Malcovati), NKRJa)

Nei corpora sono registrati anche gli avverbi *ancora*, *alla fine*, *tuttora* che si possono combinare con quelli di quantità, ad es. *non ancora del tutto*.

L'avverbio fasale *ancora*, contrariamente alle aspettative e a dispetto del carattere ineluttabile attribuito a *tak i ne*, appare tra i suoi traducenti più comuni. A differenza di *mai*, *ancora* non preclude in futuro uno sviluppo diverso dello stato di cose riferito. In particolare, è molto frequente in Opus2018 e rivela il funzionamento discorsivo di *tak i ne*, sul quale però non ci soffermiamo in questa sede. La scelta di *ancora* come traducente di *tak i ne* è correlata ai contesti dialogici e alla valutazione soggettiva, solitamente negativa della situazione di riferimento da parte del parlante, che contempla la possibilità di una transizione verso lo stato di cose positivo. Questa transizione, tuttavia, potrebbe anche non verificarsi mai. A conferma di quanto detto citiamo anche la definizione di Serianni per *ancora*: «*Ancora* esprime la continuità di un'azione <…>. È tipico il suo uso nelle frasi interrogative, specialmente negative, per manifestare il proprio stupore o la propria insofferenza nei confronti del prolungarsi di un'azione» (Serianni 2003, 346).

Secondo i nostri dati, *ancora* ricorre spesso in scambi dialogici che esplicitano la base circostanziale per il contrasto. Gli esempi ((14), (15)) mostrano contesti molto simili, che definiscono in termini di quantificazione temporale o iterativa la fase anteriore, delimitata

e-ISSN 2785-3187

a destra da *ancora*, evidenziando il prolungarsi di uno stato di non-realizzazione. Notiamo, inoltre, la presenza in russo delle marche esplicite di contrasto – congiunzioni *a* 'e, invece' e *no* 'ma'.

(14) A distanza di ventidue anni **non ho ancora capito** come faceva a sopportarci.
Prošlo dvadcat' dva goda s tech por, no ja **tak i ne ponjal**, kak ona rešilas' pozvolit' sebe takoe. (N. Amanniti. Io non ho paura (V. Nikolaev), NKRJa)

(15) On chodit mimo tebja každyj den', a ty s nim **tak i ne poznakomilas'**?
Cammina dietro di te ogni giorno, ed **ancora non** gli **hai parlato**? (OPUS 2018)

Gli avverbi *tuttora* e *alla fine* dimostrano l'alto grado di equivalenza con *tak i ne*, ma registrano nei corpora usi isolati:

(16) **On tak i ne pererezal** sebe gorla.
La gola, **alla fine**, non se l'era tagliata. (V. Zazubrin. La scheggia (S. Vitale), NKRJa)

(17) Časami ja mog zavjazyvat' šnurki na botinkach; ja **tak i ne naučilsja** ich pravil'no zavjazyvat'.
Potevo stare ore ad allacciarmi le stringhe delle scarpe; e comunque **non ho imparato tuttora** ad allacciarmele bene. (V. Erofeev. Il buon Stalin (L. Montagnini), NKRJa)

Un altro gruppo di traducenti è rappresentato dai modificatori di negazione aggiunta (*nemmeno, neppure, neanche*) che nel caso specifico realizzano la loro funzione particolare, quella di negare un predicato atteso (Manzotti 1991, 286).

(18) Kofe **tak i ne svarilsja**, a obryzgal vsech i ušel.
Il caffè, infatti, **non arrivò neanche a bollire**, che schizzò tutti e andò di fuori (L. Tolstoj. Anna Karenina (p. 1-4) (M.B. Luporini), NKRJa)

(19) V izgolov'je posteli ležala Biblija na čužom jazyke. Ja eë **tak i ne raskryl**.
Al capezzale del letto una Bibbia in lingua straniera. Tant'è che **neppure l'avevo aperta** (S. Dovlatov. La filiale New York (L. Salmon), NKRJa)

Soffermiamoci infine sull'equivalenza che si instaura tra la costruzione russa *tak i ne* seguita da gerundio e la subordinazione negativa italiana introdotta dal connettivo *senza* seguito dal verbo all'infinito. La costruzione con *senza*, l'unica negazione possibile per il gerundio italiano di maniera (Lonzi 1991, 571-92), rivela un'ampia equivalenza con *tak i ne* a livello semantico e pragmatico. Introducendo la mancata realizzazione di una circostanza usualmente concomitante, la costruzione con *senza* attiva i valori controaspettativo e concessivo (Manzotti 2002, 63; Mauri 2021) e può esprimere anche il significato frustrativo (Ivanova, Lazareva 2023, 206, 207).

(20) Vy uechali **tak i ne oplativ** sčet.
Se n'è andato **senza pagare** (Opus2018).

(21) I **tak i ne vyzvav** eë na otkrovennoe ob''jasnenie, on uechal na vybory.
E così, **senza averla spinta** a una spiegazione sincera, partì per le elezioni. (L. Tolstoj. Anna Karenina (p. 5-8) (M.B. Luporini), NKRJa)

6 Conclusione

Dall'analisi delle soluzioni traduttive italiane della costruzione *tak i ne* V_{PFT} è emerso un quadro piuttosto complesso. La varietà delle soluzioni proposte riflette la densità semantica della costruzione russa, la cui resa in italiano non trova una piena equivalenza.

Tak i ne V_{PFT} con significato *cunctativo* può essere tradotto in italiano per mezzo di costruzioni negative accompagnate da avverbi come *mai*, *ancora*, *tuttora*, *alla fine*, *nemmeno*, *neppure*, *neanche*; ma anche tramite la costruzione *senza* V_{INF}. Il significato *frustrativo*, invece, viene solitamente espresso dalla combinazione della negazione con gli avverbi menzionati e con i verbi *riuscire* o *potere*. Sembrerebbe che nessuno di questi traducenti combini in modo sincretico tutte le proprietà semantiche di *tak i ne* e possa allo stesso tempo assolvere alla funzione di intensificatore della negazione, produrre l'effetto controaspettativo ed esprimere l'atteggiamento del parlante (es. dispiacere, rammarico) nel contesto di non-risultatività. Questo comporta la necessità di integrare più elementi; come, ad esempio, l'associazione frequente del verbo *riuscire* con l'intensificatore *mai* o *alla fine* o anche le combinazioni come *non ancora del tutto, alla fine non* […] *mai*. La maggiore difficolta nella codifica in italiano sembra risiedere nella proprietà di *tak i ne* di proiettare l'aspettativa sulla scala di intensità.

Questo studio preliminare apre diverse prospettive di ricerca. In particolare, merita un approfondimento il rapporto tra *tak i ne* e gli avverbi fasali italiani. Altrettanto rilevante risulta l'analisi delle funzioni discorsive di *tak i ne* nei contesti dialogici e in una prospettiva testuale più ampia. Tali sviluppi potrebbero contribuire non solo a una descrizione più articolata della costruzione russa, ma anche a una sua rappresentazione più accurata in ottica lessicografica e traduttiva.

Lista delle abbreviazioni

PFV = perfettivo
IPFV = imperfettivo
PST = passato
PRS = presente
FUT = futuro
INF = infinito
PTCP = participio
GER = gerundio

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