

**Semantic factors in case loss:
the Serbian-Bulgarian dialectal continuum**

Masha Kyuseva¹, Alexander Krasovitsky^{1,2}, Matthew Baerman¹, Greville G. Corbett¹
(Surrey Morphology Group, University of Surrey¹; University of Oxford²)

The South Slavic dialect continuum formed by Serbian and Bulgarian provides a fine environment to investigate case loss. Different points on this continuum show varying degrees of case loss: standard Serbian represents a conservative variety with six cases, and standard Bulgarian represents an innovative variety with no nominal case inflection. The continuum between these two extremes shows a transition from larger to smaller case systems. We focus on three functions: instrument, transport, and trajectory, which were originally conveyed by the non-prepositional instrumental, and model what happens to them when the case form is lost. We demonstrate how they lose their original unity and are distributed over different constructions.

1. Introduction

Over time there has been a dramatic loss of rich case systems across languages of Europe. Historical texts reveal the general picture of how this process occurred, yet many questions remain unanswered. In particular, what happens to the case functions when a case is lost? Clearly, the language does not lose the ability to express these functions altogether. Rather, it changes the format of their expression by using different means. What means are they? And is one alternative way of expression used to mark all the functions of the lost case? Or is the unity of functions that was supported by a common inflectional form dismantled?

Answering these questions is hard. One needs to establish a set of functions of a case and then trace how the expression of these functions changes over time while the case form disappears. An obvious method would be to use historical texts, but these do not offer the full set of data that we would need. We therefore opt to examine the loss of case in progress with real speakers, something which can be seen in the South Slavic dialect continuum formed by Serbian and Bulgarian. While Standard Serbian represents a conservative variety with six cases, Standard Bulgarian represents an innovative variety where nouns do not inflect for case at all. The dialect continuum between these two extremes shows the transition from larger to smaller case systems (Belić 1905, Sobolev 1991b, Stojkov 1975, 1981). These changes over

space reflect changes over time, providing us with proxies for different historical stages that can be studied directly.

The paper is organised as follows. Section §2 gives background information on the Serbian-Bulgarian dialect continuum; section §3 describes the data used in the study and focuses on one particular case value, the instrumental. This case value can express different functions, and these functions can in turn be expressed in different ways in the dialect continuum, as we discuss in section §4. Finally, section §5 brings the states of affairs found in different dialects onto the diachronic plane and discusses the fate of individual functions previously united within one case value.

2. Serbian-Bulgarian dialectal continuum

Serbian and Bulgarian both belong to the South Slavic language branch of the Slavic family, and are geographically contiguous. Yet their case systems are strikingly different, as shown by the examples in (1).

- (1) a. *Ovo je Kipar* SERBIAN
 this be.PRS.3SG Cyprus.NOM
 Tova e Kipâr BULGARIAN
 this be.PRS.3SG Cyprus
 ‘This is Cyprus’
- b. *Stanovništvo-o Kipr-a* SERBIAN
 population-NOM Cyprus-GEN
 Naselenieto na Kipâr BULGARIAN
 population on Cyprus
 ‘The population of Cyprus’
- c. *Upravlja-j-u Kipro-om* SERBIAN
 govern-PRS.3PL Cyprus-INS
 Te upravljava-t Kipâr BULGARIAN
 they govern-PRS.3PL Cyprus
 ‘They govern Cyprus’

These examples show the noun ‘Cyprus’ in different syntactic contexts, i.e., as a nominal predicate (1a), as an adnominal possessor (2a), and as a verbal complement (3c). While in

Serbian these contexts require different case forms of the word ‘Cyprus’, in Bulgarian these roles are expressed by the same word form *Kipâr*. According to the traditional accounts, Serbian has a six-case system (not counting the vocative), while in Bulgarian only the vocative is morphologically marked (Andrejčin et al. 1983, Ivić 1985, Tomić 2006). Bulgarian lost its case system inherited from Common Slavic, somewhere between the eleventh and the sixteenth centuries (Mirčev 1963; Pârvev 1975; Wahlström 2015). The reasons for this development are debated, with various language-internal, typological, sociolinguistic, and contact-induced factors being proposed (see Sobolev 1991a for a concise review).

The loss of cases is also seen in adjacent dialects of Serbia. For example, the Timok-Lužnica dialect, which is spoken in Eastern Serbia (marked in pink in Figure 1) has a two-case system with the direct and the general oblique case values. The Prizren-South Morava dialect, which extends along the river South Morava to Southern Kosovo (marked in grey), uses a system with three cases: nominative, accusative, and dative (Belić 1905, Ivić 1985).

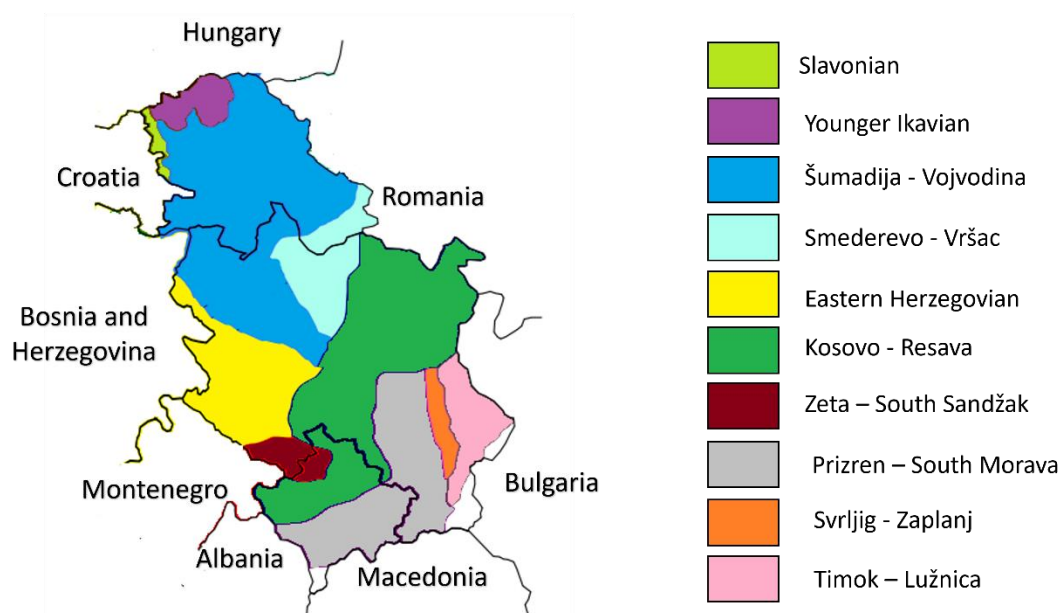


Figure 1. Dialects of Serbia (based on Ivić 1985)

The dialects of Central Serbia also show signs of case loss. For example, in the Kosovo-Resava dialect (marked in green), the genitive (2), instrumental (3), and locative (4) cases are regularly replaced by the accusative, which creates an alternation between a three-case and a six-case system.

- (2) a. *Naprav-iš od test-a kao grozd, kao list*
 make-PRS.2SG from dough-GEN.SG as grape.ACC.SG as leaf.ACC.SG
 ‘[In order to decorate a cake] you make [something] like grapes and like a leaf out of the dough’ (B-GR01)¹
- b. *I onda nakit-i ga sas nešto od test-o*
 and then decorate-IMP.2SG 3SG.M with something from dough-ACC.SG
 ‘And then decorate it [the cake] with something made of the dough’ (K-PR03)
- (3) a. *Sa krav-ema, sa konj-ima vrš-imo žit-o*
 with cow-INS.PL with horse-INS.PL thresh-PRS.2PL grain-ACC.SG
 ‘We thresh grain with cows, with horses’ (K-PR03)
- b. *Posle id-eš sa krav-e*
 later go-PRS.2SG with cow-ACC.PL (K-PR03)
 ‘Then you go with the cows’
- (4) a. *Kaž-e, u t-em krevet-u, ded-a,*
 say-PRS.3SG in that-LOC.SG.M bed-LOC.SG grandfather-NOM.SG
im-a miš
 have-PRS.3SG mouse-NOM.SG
 ‘She says: Grandpa, there is a mouse in that bed.’ (B-BR01)
- b. *Ja ne vol-im na krevet se odmor-im*
 I NEG love-PRS.1SG on bed.ACC.SG REFL rest-PRS.1SG
 ‘I do not like to rest on the bed’ (B-BR01)

In Zeta-South Sandžak (marked in burgundy), there is an alternation between a five-case and a six-case system (with and without the locative). We see, therefore, that there is no sharp border between the rich case system of Serbian and the case-less system of Bulgarian. Rather, a transitional zone exists with case systems that show various degrees of case loss. This gives us an unprecedented opportunity. We can compare data from locations exhibiting different stages of case loss and use this comparison to create a historical model of how this process came about. In particular, we can trace what happens to the case functions when the case value gradually disappears.

¹ This formula indicates the location of the example in our corpus. The letter before the dash indicates one of three subcorpora (discussed in detail in §3.1): the Torlak selection (T), the Kosovo archive (K), and the data from interviews in Brus (B). Two letters after the dash denote the village (Figure 3), and the number stands for the transcript number from this village.

3. Data

3.1 Object of study

This study focuses on one case, which was present in Common Slavic and which is still in use in standard Serbian, namely the instrumental. This case occupies a special place in this dialectal continuum. As we know from Old Church Slavonic, the oldest attested South Slavic language, the instrumental case at the earliest stages of South Slavic had a well-defined set of meanings (Sobolev 2009). From the formal point of view, this is the case with the least amount of syncretism. Table 1 demonstrates this with nouns from the three main inflectional classes.

	IC1: prostor ‘space’		IC2: kuća ‘house’		IC3: polje ‘field’	
nominative	prostor	prostor-i	kuć-a	kuć-e	polj-e	polj-a
accusative	prostor	prostor-e	kuć-u	kuć-e	polj-e	polj-a
genitive	prostor-a	prostor-a	kuć-e	kuć-a	polj-a	polj-a
dative	prostor-u	prostor-ima	kuć-i	kuć-ama	polj-u	polj-ima
locative	prostor-u	prostor-ima	kuć-i	kuć-ama	polj-u	polj-ima
instrumental	prostor-om	prostor-ima	kuć-om	kuć-ama	polj-em	polj-ima

Table 1. Nominal paradigms in Serbian

Despite the strong connection between the form and the function and a quite prominent position in the paradigm, the instrumental is historically unstable. As can be seen in the stability hierarchy proposed by Sobolev (2009) for South Slavic (Figure 2), it is among the two cases that tend to disappear first.



Figure 2. Case stability hierarchy in South Slavic (adapted from Sobolev 2009). The hierarchy is to be read from left to right as from more stable to less stable cases.

This is surprising, considering that quite often researchers see syncretism as a driving factor of the case loss (Barðdal & Kulikov 2009). This paradox makes the instrumental an intriguing object of investigation; as we shall see, this case offers us an interesting, if not unique, path of disappearance.

3.2 Sources

Our data come from transcripts of interviews with speakers of different dialects located on the Serbian-Bulgarian dialectal continuum. We have these from three sources:

- a. The Archive of the Institute for Balkans Studies (Belgrade, Serbia) holds a collection of interview recordings collected by the members of the Institute over the years. The subset of the Archive used in this study was collected in the project “Research of Slavic Vernaculars in Kosovo and Metohija” (2002 – 2003) led by the Institute for the Serbian language of SASA and financed by UNESCO. The recordings provided by the Institute were then transcribed and automatically annotated by lemma, part of speech, morphological, and syntactic categories using the pipeline Classla². The resulting corpus contains 172905 tokens of transcripts representing 19 hours and 42 minutes of recordings. The interviews were conducted with speakers of Zeta-South Sandžak and Kosovo-Resava dialects.
- b. The Spoken Torlak dialect corpus (Vuković 2020) comprises transcripts of interviews with speakers of the Timok-Lužnica dialect in Southeast Serbia. These interviews were collected between 2015 and 2017. The corpus has lemmatisation and morphosyntactic annotation that was done automatically. It is the first digital publication of texts in the dialect, which has been listed as an endangered language by UNESCO (Salminen 2010). This dialect has a reduced case system with only nominative and accusative being expressed regularly. Therefore, it provides crucial data on what happens to the functions of the instrumental case when it is no longer in use. A selection of texts from the corpus (83737 tokens) was compiled for this study.
- c. Finally, our own data come from fieldwork conducted for the project “Declining case: inflectional loss in progress” (funded by the Leverhulme Trust) in the municipality of Brus, Central Serbia, in June 2022. The interviews were recorded with speakers of the Kosovo-Resava dialect. These materials contributed additional 49527 tokens (6 hours and 42 minutes of recording) to the corpus.

These data were collected in a uniform fashion that conforms with the Serbian dialectological tradition and considers the sociolinguistic landscape of the area. Dialects of Central and South-Eastern Serbia are under constant pressure from the high-prestige standardized variety of Serbian. They are associated with a stereotypical image of low culture and education. As a consequence, speakers, especially younger generations, tend to adopt the use of standard forms in their everyday communication. This factor sets certain limitations on

² <https://pypi.org/project/classla/>

the choice of potential speakers. Non-standard varieties of Serbian are best preserved by elderly people who have not travelled or received a formal education, and who have been engaged throughout their lives in traditional activities, such as cattle breeding or agriculture. We concentrated on these speakers for the interviews. The topics of the interviews included but were not limited to history, tradition, culture, crafts, cuisine, everyday life, and biographical stories. The result is a collection of texts with similar themes that enables inter-speaker comparison.

The total corpus compiled from these sources contains over 330,000 tokens, 41 hours and 17 minutes of recordings. It encompasses 14 villages spread over the Central and South-Eastern parts of Serbia. Figure 3 shows the locations of the villages, which are colour-coded according to the dialect they represent. The Zeta-South Sandžak dialect is marked in purple, the Kosovo-Resava dialect is marked in pink, and the Timok-Lužnica dialect is marked in green. These dialects show different stages of case loss. By looking at the fate of case functions in these dialects, we can project geographical differences onto a historical scale.

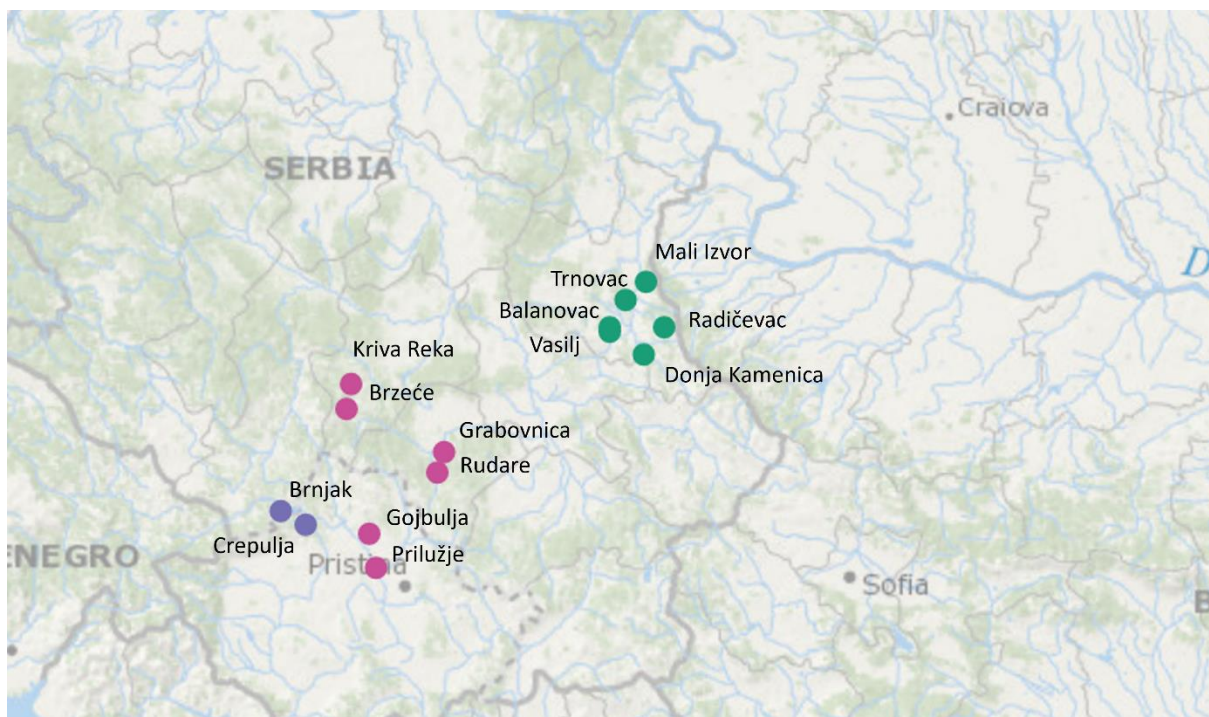


Figure 3. Locations of the interviews³

³ Made with Lingtypology package in R (Moroz 2017).

4. Meanings of instrumental

The South Slavic instrumental is a peripheral case in the sense that it is not used for coding verb arguments, and is a semantic case in that it encodes semantic, rather than grammatical, relations. In standard Serbian, it frequently occurs both with and without a preposition (5).

- (5) a. *Maha-l-a* *je* *maramic-om* *u* *znak* *pozdrav-a*
wave-PTCP-SG.F be.3SG handkerchief-INS.SG in sign.ACC.SG greeting-GEN.SG
‘She waived with a handkerchief as a greeting’ (Ivić 2005: 244)

- b. *Završi-o* *je* *s* *ispit-ima*
finish-PTCP.SG.M be.3SG with exam-INS.PL
‘He is done with his exams’ (Ivić 2005: 245)

The scope of this paper is limited to uses of the instrumental without prepositions. Ivić (Ivić 1954) distinguishes eight meanings of the non-prepositional instrumental:

1. instrument (‘to cut with a knife’, ‘to reap with a sickle’);
2. agent in passive constructions (‘the village was surrounded by soldiers’);
3. cause (‘it went to waste due to my mistake’);
4. bearer of state (‘to conduct the orchestra’);
5. trajectory (‘to go by the street’);
6. time (‘to work on Mondays’);
7. manner (‘he spoke in a quiet voice’)
8. predicative instrumental (‘as a child he loved to ski’).

Not all these meanings of the instrumental occur with equal frequency. For example, the agent in a passive construction and the bearer of state can be realized only with a closed list of verbs and are more characteristic of administrative speech. The meaning of cause is much more often realized with the prepositional construction “*od* + genitive”, and the meaning of manner – with an adverb. Finally, some functions, such as the predicative instrumental, do not appear frequently in the dialectal speech.

For our study, we chose three meanings of the non-prepositional instrumental, which are well represented in the Central and South-Eastern dialects of Serbian and which frequently come up in free interviews with the speakers, i.e., instrument, transport (which Ivić sees as a type of instrument), and trajectory. We analyzed how each of these meanings is expressed in the 14 villages under consideration, and projected the geographical differences we encountered onto the historical scale. We will argue that when a non-prepositional instrumental is lost, the unity of its functions is lost as well. They are not expressed by one alternative means of

4.1 Instrument

(6) a.	<i>Žnje-l-i</i>	<i>smo</i>	<i>pšenice-u</i>	<i>srp-om</i>	
	reap-PTCP-PL.M	be.PRS.1PL	wheat-ACC.SG	sickle-INS.SG	
	‘We reaped wheat with a sickle’				(K-GB02)
b.	<i>Sa</i>	<i>srp-om</i>	<i>da</i>	<i>žnje-am</i>	
	with	sickle-INS.SG	that	reap-PRS.1SG	
	‘So that I reap with a sickle’				(K-BR02)
c.	<i>Da</i>	<i>požnje-em</i>	<i>ja</i>	<i>sa</i>	<i>srp-e</i>
	that	reap.PRS-1SG	I	with	sickle-ACC.PL
	‘So that I would reap with sickles’				(K-RD03)

The preposition *sa* ‘with’ followed by a noun phrase in the instrumental is not used to express the instrument in standard Serbian. However, the construction as such exists, expressing a wide range of comitative meanings, such as companion (7a), cooperation (7b), or combination (7c).

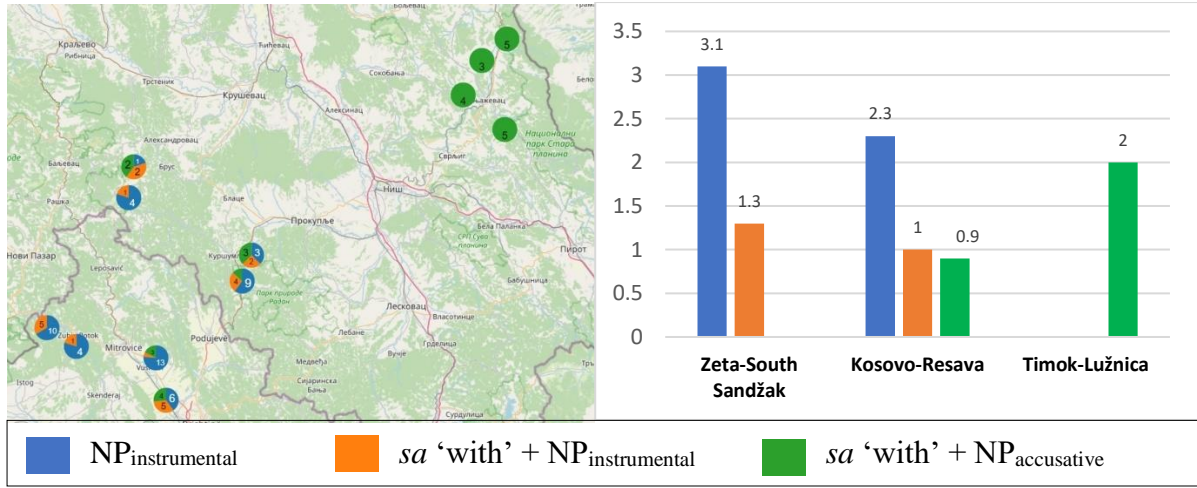
- (7) a. *Dozvoljava-l-a* *joj* *je* *da* *id-e*
allow-PTCP-SG.F her be.3SG that go-PRS.3SG
sa *drugaric-ama*
with girl.friend-INS.PL
‘She let her go with her girl friends’ (SrpKor 2013)⁴
- b. *da* *klinik-u* *grad-i* *sa* *grup-om* *biznismen-a*
that hospital-ACC.SG build-PRS.3SG with group-INS.SG businessman-GEN.PL
‘So that he builds a hospital with a group of businessmen’ (SrpKor 2013)
- c. *posebno* *je* *ukusan* *kapučin-o* *sa* *mlek-om*
especially be.PRS.3SG tasty.NOM.SG.M cappuccino-NOM.SG with milk-INS.SG
‘Cappuccino with milk is especially delicious’ (SrpKor 2013)

In South-Eastern dialects, this construction is extended to cover the meaning of the instrument. From the semantic point of view, this extension is natural and reflects the semantic affinity between the two types of meanings (in both cases, a participant complementary to the patient is introduced). This construction is similarly polysemous in multiple European languages (Lakoff & Johnson 1980, Schlesinger 1995, Seiler 1974, Stolz 1996, 2001).

The construction ‘*sa* + accusative’, exemplified in (7c), has a different status. It is not present in standard Serbian at all. The same construction, however, is attested in the North-West Bulgarian dialect, which has a much poorer morphological environment with just two cases. The accusative here can be interpreted as acquiring the status of a general oblique case. Sobolev (1991b) hypothesizes a historical chain “instrumental → *sa* + instrumental → *sa* + accusative”, according to which the spread of the accusative to these contexts happened in two steps. First, the instrument, originally marked by the non-prepositional instrumental, changes its expression to the prepositional phrase “*sa* + instrumental”. In the second step, the instrumental in this prepositional phrase is replaced by the accusative. This hypothesis predicts that we will not find a variety in the South Slavic dialectal continuum where the instrument can be expressed by a non-prepositional instrumental and with the construction “*sa* + accusative”, but not with the construction “*sa* + instrumental”.

The geographical distribution of the three constructions in our data is in line with this hypothesis. Figure 4 shows frequencies with which different ways to express the instrument occur in each village (4a, raw numbers) and in each dialect (4b, frequency per 10000 words).

⁴ Corpus of contemporary Serbian <http://www.korpus.matf.bg.ac.rs/korpus/login.php>



(a)

(b)

Figure 4. Distribution of the different ways of expressing the instrument in dialects of Central and South-Eastern Serbia

If we use these data to model the historical change from the initial to final stages of the case loss, then we can see how in the beginning stage (represented by the Zeta-South Sandžak dialect) the non-prepositional instrumental is the dominant strategy of expressing the instrument, which is only challenged by the construction “*sa* + instrumental”. In the more advanced stage (Kosovo-Resava dialect), the construction with the accusative appears. And in the pre-final stage (Timok-Lužnica) this construction becomes the only possible means of expressing this meaning.

4.2 Transport

The meaning of transport (‘to go by car’, ‘to take a bus’, ‘to come on a horse’) offers a different picture. As with the instrument, it can be expressed by the original non-prepositional instrumental and the comitative construction (preposition *sa* ‘with’ followed by either the instrumental or the accusative).

- (8) a. *Ipak sv-i kol-ima bi iš-l-i*
 still all-NOM.PL.M car-INS.PL would go-PTCP-PL.M
 ‘And yet everyone would go by car’ (K-PR03)
- b. *Da dođe narod sa kol-ima*
 that come-PRS.3SG people-NOM.SG with car-INS.PL
 ‘So that people come by car’ (B-BR01)

c. *I s traktor-i kad id-eš teško prođ-eš*
 and with tractor-ACC.PL when go-PRS.2SG hard pass-PRS.2SG

‘And [even] when you go on a tractor, it is hard to pass’ (T-TR008)

Additionally, this meaning can be expressed with locative prepositions *na* ‘on’ or *u* ‘in’.

(9) a. *Na konj-a dolazi-l-i ljud-i iz daleka*
 on horse-ACC.SG come-PTCP-PL.M people-NOM.PL from far

‘People used to come on horse from afar’ (K-RD01)

b. *Iš-o je pop u kol-a*
 go-PTCP.SG.M be.PRS.3SG priest.NOM.SG in car-ACC.PL

‘A priest used to come in a car’ (T-TR007)

These two prepositions have different distributions which are semantically motivated. The preposition *u* ‘in’ is used with objects like a car or a truck. These objects are conceptualized as a container, and the trajector (i.e., driver or rider) is located inside this container. The preposition *na* ‘on’ refers to objects like a horse, a bicycle, or a tractor. These objects are conceptualized as a surface, and the trajector is located on this surface. Table 2 shows the distributions of these prepositions among the lexemes that occurred in this function more than one time.

Lemma	NPINS	‘with’ + NP	‘on’ + NP	in + NP
<i>auto / kola</i> ‘car’	13	18		8
<i>bicikl</i> ‘bicycle’	1	2	2	
<i>voz</i> ‘train’	7			
<i>kamion</i> ‘truck’		3		2
<i>autobus</i> ‘bus’		1	1	1
<i>tractor</i> ‘tractor’		7	2	
<i>konj</i> ‘horse’		16	10	
<i>vol</i> ‘ox’		8		

Table 2. Lexical distribution of nouns denoting transport in different constructions

The use of locative prepositions for the meaning of transport is not a specific feature of Serbian. It has been reported in a variety of typologically diverse languages, such as English, German, Japanese, Korean, and Yucatec Maya, among others (Lehmann & Shin 2005). Importantly for us, in standard Serbian, the locative constructions co-exist in this function with the non-prepositional instrumental as synonyms. This means that they constitute a fundamentally different source of alternative constructions to the non-prepositional instrumental in comparison to the comitative phrase. If the latter was adapted in order to express

The map displays the Sandžak region, highlighting three river basins: Zeta-South Sandžak, Kosovo-Resava, and Timok-Lužnica. Various locations are marked with colored circles containing numbers, representing the frequency of different NP markers. The bar chart on the right summarizes the total frequency of each marker across these basins.

NP Marker	Zeta-South Sandžak	Kosovo-Resava	Timok-Lužnica
NP _{instrumental} (Blue)	0.7	1.0	0.1
sa 'with' + NP _{instrumental} (Orange)	0.7	0.5	0.0
sa 'with' + NP _{accusative} (Green)	0.0	0.3	1.8
na 'on' + NP (Red)	0.7	0.5	0.2
u 'in' + NP (Purple)	0.2	0.2	0.6

As can be seen in Figure 5, the locative constructions are used in all the dialects, and they act together with the comitative construction in replacing the non-prepositional instrumental.

The instrumental of trajectory is widely used in standard Serbian when the trajector moves along a long narrow path ('to go down a street', 'to go down a path') or across a space with undefined borders ('to go through the woods', 'to go through the field'). The use of this construction in the dialects of Central and South-Eastern Serbia is more restricted than in standard Serbian and is in competition with alternative constructions using a preposition. The non-prepositional instrumental, which is still used in Zeta-South Sandžak and in Kosovo-Resava, is limited to the movement along a long narrow path (10).

- 13

As competing strategies, a range of phrases with locative prepositions are used, containing such prepositions as *niz* ‘along’, *kroz* ‘through’, *preko* ‘across’, and *po* ‘by’, among others (11).

- (11) a. *I on pobeg-o niz ulic-u*
 and he.NOM ran-PTCP.SG.M along street-ACC.SG
 ‘And he ran along the street’ (K-RD03)
- b. *Ćim prođ-u kroz sel-o...*
 once pass-PRS.3PL through village-ACC.SG
 ‘Once they pass through the village...’ (K-GB01)
- c. *Id-u pozadi pa preko polj-e*
 go-PRS.3PL in.back and over field-ACC.SG
 ‘They are going in the back and over the field’ (T-TR020)
- d. *Po planin-u su iš-l-i*
 by mountain-ACC.SG be.PRS.3PL go-PTCP-PL.M
 ‘They were walking on the mountain’ (T-VS016)

The distribution of these prepositions can be at least partly explained by the geometrical properties of space and the direction of the movement. Thus, the preposition *niz* ‘along’ only expresses movement along a long narrow path. Movement through a space with undefined borders (a forest, a field, a lake) is expressed with the prepositions *preko* ‘over’ and *kroz* ‘through’. These prepositions can additionally denote crossing a long narrow path by a trajector (‘over the street’, ‘over the river’). Finally, the preposition *po* ‘by’ has the widest distribution and can denote movement in any kind of space. The schematic representation of these geometrical properties is given in Figure 6.

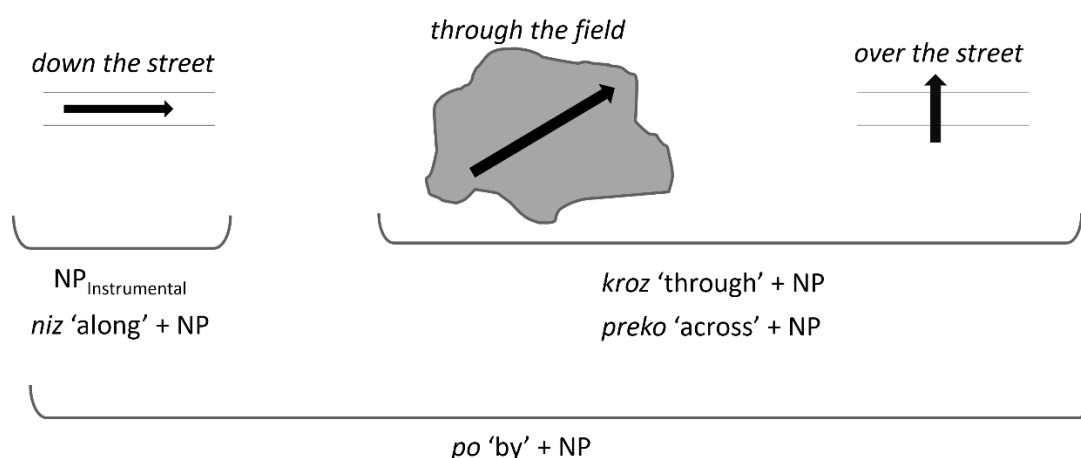


Figure 6. Different ways to express trajectory in the dialects of Central and South-Eastern Serbia

Similarly to the constructions with the prepositions *na* ‘on’ and *u* ‘in’, which are used to express transport, these locative prepositions were synonymous with the non-prepositional

instrumental, and took over when the instrumental disappeared. But in contrast to the function of transport, these constructions constitute the only alternative strategy. Neither the comitative construction nor any other already existing construction extended its usages to the meaning in question. Figure 7 shows how the locative prepositions gradually extend their frequency, replacing the instrumental. The original means of expression is still used in Zeta-South Sandžak and Kosovo-Resava, but only the locative prepositions are possible in the East.

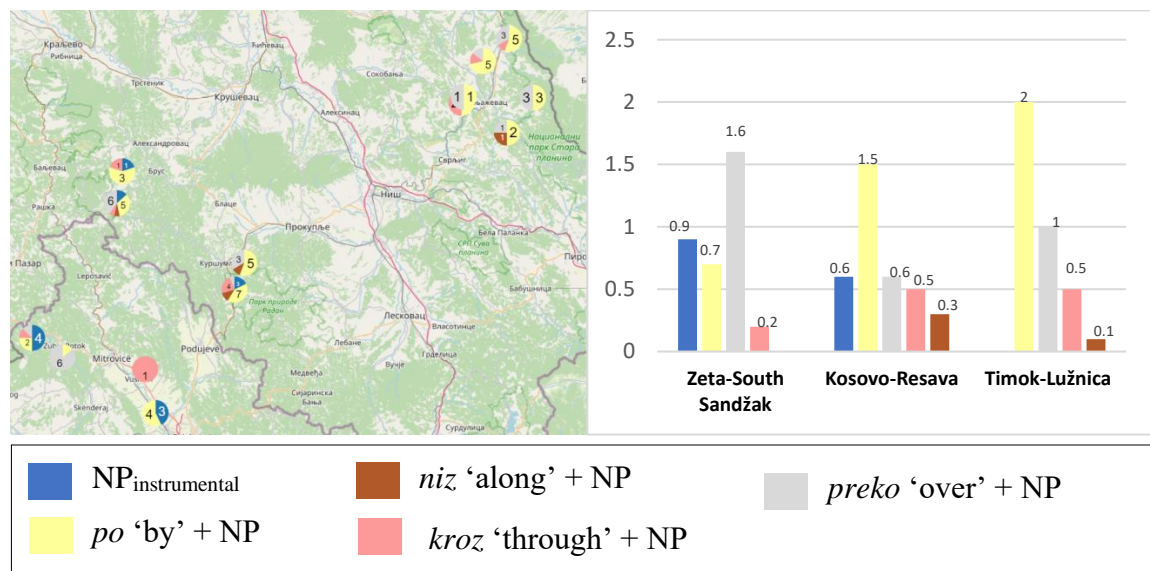


Figure 7. Distribution of the different ways to express the trajectory in dialects of Central and South-Eastern Serbia

5. Conclusion

The data presented in Section 4 show how functions of the non-prepositional instrumental in South Slavic are redistributed between other constructions as a result of the case loss. The three functions analysed in the paper are instrument, transport, and trajectory. Figure 8 summarises alternative means of expression for each of these functions.

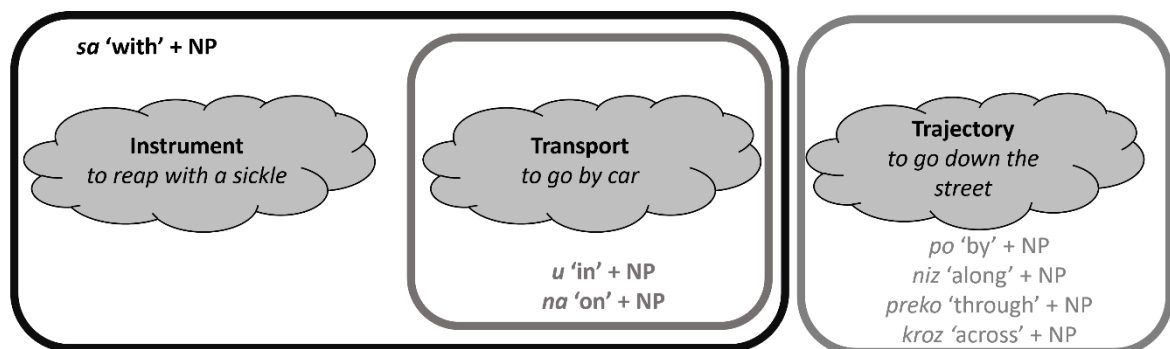


Figure 8. Three functions of the non-prepositional instrumental: alternative means of expression

Two out of three functions can be expressed by the comitative construction *sa* ‘with’ + NP. Transport can additionally be marked by the locative prepositions *u* ‘in’ and *na* ‘on’. Finally, trajectory has its own set of locative constructions. What does this tell us about the nature of case? One way to interpret these results is to argue that the connection between these functions was not strong in the first place. Rather, they behaved like a contingent cluster of functions that fell apart when the most important feature that kept them together was lost. This would go against the idea that case has a unified meaning (as in Jakobson 1936).

But does the loss of function unity entail the loss of polysemy altogether? In other words, do we observe the move from the relationship ‘one form – many functions’ to the relationship ‘one form – one function’? The schematic representation in Figure 8 certainly gives this idea. We can see how, originally, one construction gives way to different constructions, each covering one meaning (with the exception of the comitative phrase, but one might assume that this is not the final stage of the form-meaning reconfiguration). This representation, however, is misleading, since the constructions shown in the scheme are not limited to the functions in question. On the contrary, each of these markers has its own set of meanings outside of the domain of the instrumental. These include the comitative meanings, meanings of place and time, distributive meanings, and so on. This means that during the process of case loss, constructions remain polysemous but the combinations of meanings they encode change. In other words, we see the move from the relationship ‘one form – many functions’ to the same relationship ‘one form – many functions’, but in different configurations.

Our data also tell us that novel means of expression come from two sources. It is either a construction that has its own set of functions, but that adapted its usages to cover an additional function (as with the comitative construction), or constructions that were used synonymously with the non-prepositional instrumental all along (locative prepositions). The natural question is why do we have these two sources and what motivates the choice of an alternative strategy in each concrete situation? With regard to our data, the question would be: why is an existing construction adapted for instrument, why are synonymous constructions used for trajectory, and why are both strategies resorted to for transport? Our tentative explanation is the following. It seems that there is a general preference to use prepositional phrases instead of the non-prepositional instrumental. If a prepositional construction expressing a given function already exists in the language (as in the case of the trajectory), then it is the most natural candidate for replacement. If there is no suitable alternative (as in the case of the instrument), then the speakers find a semantically close construction and extend its contexts. The use of both strategies by the transport function might potentially reflect its intermediate status among the

functions of the instrumental. Transport can be conceptualized as a tool that enables the action denoted by the verb. In this sense, it is semantically close to the instrument. Unsurprisingly, many researchers treat transport as a type of instrument, see (Miloradović 2003, Narrog & Ito 2007, Sobolev 2009). This intermediate status might be reflected in the use of alternative constructions. Sometimes transport is treated as a separate meaning and is expressed by locative prepositions *u* 'in' and *na* 'on', and sometimes it is treated as an instrument and is expressed by the comitative construction.

References:

- Andrejčin, L., Asenova, P., Georgieva, E., Ivanova, K., Nicolova, R., Pašov, P., Pärvev, X., Rusinov, R., Stankov, V., Stojanov, S. & Čolakova, K. 1983. *Gramatika na sǎvremennija bǎlgarski knižoven ezik. Tom II. Morfologija [Grammar of modern Bulgarian literary language, vol. II: Morphology]*. Sofia: BAN.
- Barðdal, J. & Kulikov, L. 2009. Case in decline. In A. Malchukov & A. Spencer (eds.), *The Oxford handbook of case*, 470-479. New York: Oxford University Press.
- Belić, A. 1905. *Dijalekti istočne i južne Srbije [Dialects of Eastern and Southern Serbia]*. Belgrade: Državna Štamparija Kraljevine Srbije.
- Ivić, M. 1954. *Značenja srpskohrvatskog instrumental a i njihov razvoj [Meanings of the Serbo-Croatian instrumental and their development]*. Belgrade: Izdavačko Preduzeće.
- Ivić, M. (ed.). 2005. *Sintaksa savremenoga srpskog jezika: Prosta rečenica [Syntax of the modern Serbian language: A simple sentence]*. Belgrade: Matica srpska.
- Ivić, P. 1985. *Dijalektologija srpskohrvatskog jezika: Uvod i štokavsko narečje [Serbo-Croatian dialectology: Introduction to Shtokavian dialects]*. Belgrade: Matica srpska.
- Jakobson, R. 1936. Beitrag zur allgemeinen Kasuslehre: Gesamtbedeutungen der russischen Kasus. *Travaux du Cercle Linguistique de Prague* 6. 240-88.
- Lakoff, G. & Johnson, M. 1980. *Metaphors we live by*. Chicago: University of Chicago Press.
- Lehmann, C. & Shin, Y.-M. 2005. The functional domain of concomitance: A typological study of instrumental and comitative relations. In C. Lehmann (ed.), *Typological studies in participation*, vol. 7, 9-104. Berlin: Mouton de Gruyter.
- Miloradović, S. 2003. *Upotreba padežnih oblika u govoru Paraćinskog Pomoravlja: Balkanistički i etnomigracioni aspekt [The use of case forms in the speech of Paraćinsko Pomoravlje: Balkanistic and ethnomigrational aspect]*. Belgrade: Etnografski Institut SANU

- Mirčev, K. 1963. *Istoričeska gramatika na bâlgarskija ezik [Historical grammar of Bulgarian]*. Sofia: Nauka i izkustvo.
- Moroz, G. 2017. Lingtypology: easy mapping for linguistic typology.
<https://CRAN.R-project.org/package=lingtypology> (19 December, 2022)
- Narrog, H. 2009. Varieties of instrumental. In A. Malchukov & A. Spencer (eds.), *The Oxford handbook of case*, 593-601. New York: Oxford University Press.
- Narrog, H. & Ito, S. 2007. Reconstructing semantic maps - The comitative-instrumental area. *Sprachtypologie und Universalienforschung* 60. 273-292.
- Pârvev, X. 1975. *Očerk po istorija na bâlgarskata gramatika [Essay on history of Bulgarian grammar]*. Sofia: Nauka i izkustvo.
- Salminen, T. 2010. Europe and Caucasus. In C. Moseley, *Atlas of the world's languages in danger*, 32-42. Paris: UNESCO Publishing.
- Schlesinger, I. M. 1995. *Cognitive space and linguistic case: semantic and syntactic categories in English*. Cambridge: Cambridge University Press.
- Seiler, H. 1974. The principle of concomitance: instrumental, comitative, and collective. *Foundations of Language* 12(2). 215-247.
- Sobolev, A. 1991a. K istoriji utraty balkanskogo sklonenija [On loss of inflection in Balkan Slavic]. *Zbornik Matice Srpske za Filologiju i Lingvistiku* XXXIV/2. 7-41.
- Sobolev, A. 1991b. Kategorija padezha na periferii balkanoslavyanskogo areala [Category of case on the periphery of the Balkan Slavic area]. *Zbornik Matice Srpske za Filologiju i Lingvistiku* XXXIV/1. 93-139.
- Sobolev, A. 2009. From synthetic to analytic case: variation in South Slavic dialects. In A. Malchukov & A. Spencer (eds.), *The Oxford handbook of case*, 716-730. New York: Oxford University Press.
- Stojkov, S. (ed.). 1975. *Bâlgarski dialekten atlas. T. III. Juzozapadna Bâlgaria. Čast 1. Karti. Čast 2. Statii, komentari, pokazalci [Bulgarian Dialectological Atlas. Volume III. South-West Bulgaria. Part 1. Maps. Part 2. Articles, Commentaries, Indices]*. Sofia: Bâlgarskata akademija na naukite.
- Stojkov, S. 1981. *Bâlgarski dialekten atlas. T. IV. Severozapadna Bâlgaria. Čast 1. Karti. Čast 2. Statii, komentari, pokazalci [Bulgarian Dialectological Atlas. Volume IV. North-West Bulgaria. Part 1. Maps. Part 2. Articles, Commentaries, Indices]*. Sofia: Bâlgarskata akademija na naukite.

- Stolz, T. 1996. Some instruments are really good companions - Some are not. On syncretism and the typology of comitatives and instrumentals. *Theoretical Linguistics* 23(1/2). 113-200.
- Stolz, T. 2001. To be with X is to have X: comitatives, instrumentals, locative, and predicative possession. *Linguistics* 39(2). 321-350.
- Tomić, O. M. 2006. *Balkan sprachbund morpho-syntactic features*. Dordrecht: Springer.
- Vuković, T. 2020. *Spoken Torlak dialect corpus 1.0 (transcription), Slovenian language resource repository CLARIN.SI*. ISSN 2820-4042, <http://hdl.handle.net/11356/1281>.
- Wahlström, M. 2015. *The loss of case inflection in Bulgarian and Macedonian*. Helsinki: University of Helsinki dissertation.