

## Diachronic paths to uninflectedness in South Slavic<sup>1</sup>

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### 1. Introduction

The loss of inflectional case marking is an ongoing process in the dialect continuum that stretches across Serbian and Bulgarian linguistic territory. This has led to substantial variation in the dialect case systems of the region. We observe the first signs of this historical change in systems with rich case distinctions, where case marking is obligatory on all classes of nominals, as in the western part of the continuum. Further east, we find dramatically reduced case paradigms, with just a few distinct case forms, attested with only part of the lexicon, while the rest of the lexicon has lost the ability to inflect for case. At the same time, in these dialects we find competing rules of case marking, which appear to reflect different historical periods in the breakdown of the case system. The result is either competition between more or less distinct inflection (towards the west, in Serbian dialects), or competition between inflection and uninflectedness (towards the east, in Bulgarian dialects). We investigate factors which underlie this competition and show how they vary at different stages of this case decline. This provides us with an insight into the historical mechanisms underlying case loss, and to the conditions that may foster this change.

While our analysis has confirmed the relevance of the factors previously proposed to explain variable case marking synchronically and diachronically (e. g. Moravcsik 1978; Bossong 1991; König 2008; Dalrymple & Nikolaeva 2011; Cristofaro 2013; Kurumada, & Jaeger 2015; Witzlack-Makarevich & Seržant 2018; Seržant & Witzlack-Makarevich 2018), the data obtained from Serbian and Bulgarian dialects shed new light on these factors and show that they do not in fact operate in the way that has previously been suggested.

First, extensive typological data show explicit case marking is used in environments where it is essential to avoid ambiguity (e.g. between subjects and objects) and is omitted where syntactic roles are transparent (Comrie 1977). For example, it has been shown that the omission of morphological case marking goes hand-in-hand with the use of adpositions, which to a certain extent duplicate the information conveyed by case inflection. This has been shown to play a role in diachronic processes affecting case systems: the information redundancy of case inflection in adpositional constructions may make these constructions more prone to the loss of morphological case than those without adpositions, where case inflection provides critical information about syntactic roles (Hewson & Bubenik 2006). In the dialects of East Serbia, while the use of adpositions (prepositions) correlates with a decline in case distinctions, the dialects display a pattern which is the opposite of what is predicted by the above principle: the original case marking is better preserved precisely when governed by a preposition, and more prone to loss elsewhere.

Second, pragmatic requirements, in particular discourse salience, have been proved to be another important factor in variable case marking cross-linguistically. To mention just two examples, McGregor (2018) and Montaut (2018) present somewhat similar situations in unrelated languages (Southern African Khoisan and Dravidian respectively) where the rise of object case marking led to pragmatically motivated choices between overt case marking (accusative) and zero marking: prominent objects receive overt case marking while backgrounded objects do not. In Bulgarian border-

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region dialects, where just two cases have been preserved (nominative and accusative), explicit case marking on non-subject nouns (accusative) is also conditioned by pragmatic factors. However, it is not associated with pragmatic salience, but rather the opposite: explicit (accusative) marking on non-subjects is more frequent in pragmatically less prominent parts of an utterance (e.g. containing background information). Pragmatic prominence instead tends to trigger nominative marking on non-subject nouns, which makes them morphologically indistinguishable from subjects.

We present two case studies that show how different factors shape the transition from a larger to a smaller case system, and further to uninflectedness. After the essential background information in Section 2, we consider the role of structural factors, which are dominant in Serbian dialects (Section 3), and analyse the impact of pragmatic conditions, which are dominant in Bulgarian dialects under study (Section 4). We suggest that this shift in prominence is due to the diachronic stage each variety has reached: structural factors are prominent at earlier stages of case decline and pragmatic factors at an advanced stage.

## 2. Background

South Slavic varieties inherited from Proto-Slavic a case system with six morphological cases (plus the vocative whose status as case is debatable<sup>2</sup>) and six major inflection classes (Mirčev 1958: 147-160, Slavova 2017: 127-178, Popović 1955: 115). The further history of case largely correlates with the division of the South Slavic territory into eastern and western zones. In the western zone (contemporary Serbian, Croatian, Bosnian, Montenegrin, Slovenian) the original Proto-Slavic case system has been largely preserved. In the eastern zone (contemporary Bulgarian and Macedonian), most varieties have seen the reduction and loss of nominal case marking and the rise of analytical constructions (e.g. prepositional constructions), as can be seen by contrasting the data from standard Bulgarian and standard Serbian in Table 1<sup>3</sup>.

Standard Serbian: inflected forms	Standard Bulgarian: prepositional phrases with an uninflected form	Translation
ovo je <b>Kipar</b> (nominative)	tova e <b>Kipâr</b>	'This is Cyprus'
idu na <b>Kipar</b> (accusative)	otivat <b>na Kipâr</b>	'They go to Cyprus'
pomažu <b>Kipru</b> (dative)	pomagat <b>na Kipâr</b>	'They help Cyprus'
stanovništvo <b>Kipra</b> (genitive)	naselenieto <b>na Kipâr</b>	'The population of Cyprus'
žive na <b>Kipru</b> (locative)	živejat <b>na Kipâr</b>	'They live in Cyprus'
upravljaju <b>Kiprom</b> (instrumental)	upravljavat <b>Kipâr</b>	'They govern Cyprus'

<sup>2</sup> Vocative forms continue to be widely used in contemporary Serbian and Bulgarian, but do not express grammatical relationships (Blake 2004: 8) and do not interact with the types of configurations we have investigated.

<sup>3</sup> Bulgarian and Macedonian demonstrate an asymmetry between nominal and pronominal systems with respect to case marking. Nouns and adjectives do not inflect for case (in standard varieties and in a significant number of dialects). Personal pronouns distinguish full and clitic forms (the choice being syntactically determined). Full personal pronouns retain a two-case distinction, nominative vs. accusative, the latter being used in all non-subject syntactic roles: *tja* (3SG.F.NOM) *običa* ('she loves') vs. *običam neja* (3SG.F.ACC) ('I love her') vs. *kazax na neja* (3SG.F.ACC) ('I told her', literally 'to her'). Clitic personal pronouns are used in non-subject roles and distinguish between accusative and dative: *običam ja* (3SG.F.ACC) vs. *kazax ì* (3SG.F.DAT) ('I told her').

Table 1. Nominal inflection in Serbian and corresponding forms in Bulgarian

In between these two types there is a substantial transitional zone. A characteristic feature of these dialects is the competition between these two strategies, as seen both in Serbian (1) and Bulgarian dialects (2)<sup>4</sup>.

1. *Zove ga otac telefon-om / na telefon*  
 call[PRS.3SG] 3SG.M.ACC father[NOM] phone-INS.SG on phone[ACC](=NOM)  
 ‘The father calls him by phone’ (Miloradović 2002: 183; 202)
2. *Petr-a / Petâr go njama*  
 Peter-SG.ACC / Peter[SG.NOM] 3SG.M.ACC EXIST.NEG  
 ‘Peter is absent’ (Stojkov 1981:163)

The dialects in this transitional area correspond to different postulated chronological stages of the decline of the Proto-Slavic case system. A group of dialects in the west of the transitional area preserve all six original Proto-Slavic cases (plus vocative), but speakers regularly replace three of them with the accusative form, which serves as a general oblique case (Table 2, Transitional system 1). Thus, the original six-case system competes in these dialects with an innovative three-case system, consisting of nominative, dative, and accusative only (Miloradović 2003; Simić 1972). The further east one goes, the greater are the reductions. The dative case is the next to be replaced (Transitional system 2). Here, the more conservative three-case system competes with a two-case system, consisting of nominative and accusative (Belić 1905, Ivić 1956). Finally, in the east of the transitional area, the accusative itself starts to yield to a single uninflected form (Transitional System 3). Here, the two-case system coexists with a system without case (Stojkov 1975, 1981). Thus, three structural dialect types can be distinguished within the transitional area, according to the size of the case paradigm: six-, three- and two-case systems, as summarised in Table 2.

Serbian	Transitional system 1	Transitional system 2	Transitional system 3	Bulgarian
Nominative	Nominative	Nominative	Nominative	Nominative (no case marking)
Dative	Dative	Accusative	Accusative	
Accusative	Accusative	Dative		
Genitive	Genitive		Accusative	
Locative	Locative			
Instrumental	Instrumental			

Table 2. Case systems in the Serbian-Bulgarian dialect continuum<sup>5</sup>

<sup>4</sup> For interlinear glosses, we follow the conventions of the Leipzig Glossing Rules

(<https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>) with the following additions: AOR – aorist, EXIST – existential, IMPF – imperfect.

<sup>5</sup> In distinguishing between the largely syncretic dative and locative cases in Serbian, we follow the Slavic tradition of case description (Piper, Klajn 2013, Miloradović 2003). The non-syncretic locative endings were used at least until the end of the 15th century (Belić 1999), while the loss of case started sometime before the 12th century (Belić 1905). It thus that when the process of the case loss started, the dative and locative were still morphologically distinct cases. An additional argument in favour of differentiating between the two cases comes from the fact that it facilitates the description of the process of the case loss. The original locative case is frequently replaced by the general oblique in the whole transitional area, including the western region where it is the only case to be replaced. The original dative case, on the contrary, is preserved in most Serbian dialects with the exception of the eastern zone where the only remaining cases are nominative and accusative (Sobolev 1991).

The chronology that this transition reflects has been reconstructed primarily on the basis of liturgical texts produced within various regional written traditions in the South Slavic territory from the 10th century onwards (Tsonev 1984; Duridanov 1956, 1958; Rusek 1964; Češko 1970; Belić 1905) and, for later periods, on the basis of clerical and household documents (Bernštejn 1948).

It is believed that the decay of the case system originated in the South Slavic eastern zone (Bulgarian and Macedonian) around the 10th century (Duridanov 1958: 25). By the end of the 14th century morphological case marking on nominals was completely lost in at least in some of the dialects spoken in the eastern zone (Bulgarian border-region dialects) (Češko 1970: 11). Even earlier, by the end of the 13th century, case loss was at an advanced stage in a number of Macedonian dialects (Rusek 1964). In Serbian, the process of case decline started sometime before the 12th century and affected the South-East dialects (Belić 1905). It did not, however, lead to the complete loss of case distinctions: rather it resulted in different types of reduced systems.

Historical evidence points to the following processes involved in this change: the spread of prepositional constructions replacing bare noun phrases; the redistribution of functions between indirect cases and displacement of less productive indirect cases; the spread of accusative forms in the function of an oblique case generalising across original indirect cases<sup>6</sup>; and the spread of uninflected forms replacing this oblique case.

### 3. Constructional variation: the loss of the genitive in Serbian dialects

The loss of case in European languages has been reported to go hand in hand with the increased use of prepositions (Blake 2004; Hewson & Bubenik 2006; Kulikov 2006). Blake (2004:178) illustrates this with an Old English version of Luke 15:15 (3a) and Wyclif's fourteenth-century translation (3b) (glossing and translation are as in Blake 2004):

3a. *He folgode an-um burg-sitt-end-um menn thaes rices*  
 he followed one-DAT town-dwell-ing-DAT man.DAT that.GEN land.GEN

3b. *He clevede [=attached himself] to oon of the citizens of that contré*  
 'He hired himself out to one of the citizens of that country.'

In (3a), the directional ('to the citizen') and the possessive ('of this country') relationships are expressed via inflection, while in (3b), they are expressed by prepositional constructions. The relationship between the two processes, however, is not clear. Did the spread of prepositional constructions cause case to disappear as it became semantically redundant (as claimed in Hjelmlev 1935; Hewson & Bubenik 2006)? Or was it, by contrast, a repair strategy necessary after the loss of explicit case marking, as proposed, for example, in Skautrup (1944)?

The variation found in Serbian dialects allows us to investigate the interplay of inflectional case marking and prepositional constructions using synchronic data. We focus here on the genitive, which is in the process of being replaced by the accusative. Specifically, we ask: do prepositional constructions particularly favour this replacement? This is what an informativeness principle would predict: since the preposition provides semantic context, genitive case marking is redundant and the more general accusative case can be used without any loss of information (cf. Comrie 1977; 1989). Our data, however, show the opposite tendency: prepositional constructions favour the *retention* of

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<sup>6</sup> The chronology of the displacement of individual indirect cases varies. The most stable, as dialectological data of the Serbian language show (Belić 1905, Miloradović 2003) is the dative case. The historical data from Bulgarian also testify to this: the dative forms of nouns were found in Bulgarian texts of the 17th, 18th and even 19th centuries, while the genitive, instrumental and local cases had already fallen out of use in Bulgarian dialects in the 13th-14th centuries (Mirčev 1958: 255-260; Češko 1970: 301-310).

the genitive, while its replacement by the accusative is more advanced in non-prepositional contexts. That means that in Serbian dialects, some principle other than informativeness is at play. At this point in our investigations we are unable to identify what this could be, so our goal here is to provide evidence which might spur further research.

In Section 3.1, we introduce the data used in this case study. Section 3.2 outlines the use of the genitive forms in Serbian and discusses the results of previous research on the variation between genitive and accusative in South-East Serbian dialects. Sections 3.3 and 3.4 present the patterns of variation found in our data; Section 3.5 discusses the theoretical implications of our findings.

### 3.1. Data

The data for this study come from sociolinguistic interviews with speakers of Serbian dialects located in or near Kosovo. These come from two sources: the archive of the Institute for Balkan Studies and our own fieldwork. The archive provided a subset of recordings 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. Our data come from fieldwork in the municipality of Brus, Central Serbia, conducted by Maria Kyuseva within the project “Declining case: inflectional loss in progress” in 2022.

These data were collected in a uniform fashion that conforms to the Serbian dialectological tradition. The participants were native speakers of local dialects, aged between 70 and 81 years, who had been long-term residents of the region and had engaged in traditional activities throughout their lives, such as cattle breeding or agriculture. This sampling ensured the minimal interference of the high-prestige standardised variety of Serbian. The topics of the interviews included history, tradition, culture, crafts, cuisine, everyday life, and biographical stories.

The total corpus compiled from these two sources contains over 274,800 tokens, 30 hours and 36 minutes of recordings. Overall, twenty-three speakers from eleven villages were recorded. Figure 1 shows the locations of the villages, which are colour-coded according to dialect. The Zeta-South Sandžak dialect is marked in green, the Kosovo-Resava dialect is marked in pink, and the Prizren-South Morava dialect is marked in purple.



Figure 1. Locations of the interviews in Serbia

● Zeta-South Sandžak      ● Kosovo-Resava      ● Prizren-Timok



- 5a. *udic-a*      *za*      *pecanj-e*      *rib-a*  
 rod-NOM.SG    for    catching-ACC.SG    fish-GEN.PL  
 ‘Fishing rod’
- 5b. *ima-m*                      *pet*      *različit-ih*                      *igar-a*  
 have-PRS.1SG                      five    different-GEN.PL                      game-GEN.PL  
 ‘I have five different games’
- 5c. *nije*                      *je-o*                                      *čokolad-u*      /    *\*čokolad-e*  
 AUX.NEG.3SG    eat-PTCP.M.SG                                      chocolate-ACC.SG / \*chocolate-GEN.SG  
 ‘He didn’t eat the chocolate’
- 5d. *dvorišt-e*                      *pun-o*                                      *s*      *igračk-e*      /    *\*pun-o*                      *igračak-a*  
 yard-NOM.SG                      full-N.NOM.SG                                      with    toy-ACC.PL / \*full-N.NOM.SG    toy-GEN.PL  
 ‘The yard is full of toys’

In our study, we bring these individual observations together by comparing the use of the genitive case forms in different constructions across the three South-East Serbian dialects: Zeta-South Sandžak, Kosovo-Resava, and Prizren-South Morava.

### 3.3. Constructions with the genitive in South-East Serbian

We focus on three constructions with the genitive case: prepositional constructions, constructions with a quantifier, and adnominal constructions. In South-East Serbian dialects, these constructions allow both the original genitive and the innovative accusative forms:

6. Prepositional construction:

- 6a. *napravljen-i*                      *od*                                      *drv-a*  
 made-M.NOM.PL                      from                                      wood-GEN.SG  
 ‘[They are] made from wood’
- 6b. *ima*                      *i*      *od*      *drv-o*  
 EXIST.PRS                      and    from    wood-ACC.SG  
 ‘There is [some of it] from wood as well’

7. Construction with a quantifier:

- 7a. *malo*                      *trav-e*                      *gi*      *stavi-m*  
 a.little                      grass-GEN.SG                      3PL.DAT    put-PRS.1SG  
 ‘I put a bit of grass for them’
- 7b. *i*      *ondak*                      *turi*                      *malo*                      *trav-u*  
 and    then                      put[IMP]                      a.little                      grass-ACC.SG  
 ‘And then put a little bit of grass’

8. Adnominal construction:

- 8a. *tamo*                      *odnese-š*                      *čaš-u*                      *vin-a*  
 there                      take.away-PRS.2SG                      cup-ACC.SG                      wine-GEN.SG  
 ‘You take there a cup of wine’
- 8b. *i*      *uzme-š*                      *čaš-u*                      *vin-o*  
 and    take-PRS.2SG                      cup-ACC.SG                      wine-ACC.SG  
 ‘And you take a cup of wine’

The overall number of examples in the dataset is 960. The prepositional construction is represented by 676 examples, the adnominal construction – by 169 examples, and the construction with a quantifier – by 115 examples. The ratio represents the occurrence of these constructions in spontaneous speech. For the prepositional construction, we include only phrases with the preposition *od* ‘from, of’, which is the most frequent preposition that governs the genitive. Constructions with a quantifier include the following quantifiers: *mnogo* ‘a lot’, *malo* ‘a little’, *lek* ‘very little’, *pomalo* ‘a little bit’, *puno* ‘much’, *više* ‘more’, and *manje* ‘less’. Finally, adnominal constructions include a variety of governing nouns, the most frequent meanings in the sample are: “quantity” (a cup of tea, a bowl of rice), and “part-whole” (top of the table, edge of the village). True possession (a son of my brother), otherwise typical for the construction, is rare in our examples. It is usually expressed in the dialects by alternative means of expression, such as possessive adjectives and constructions with the dative case. The bar chart (Figure 2) shows the variation between the original genitive and the innovative accusative in the three dialects.

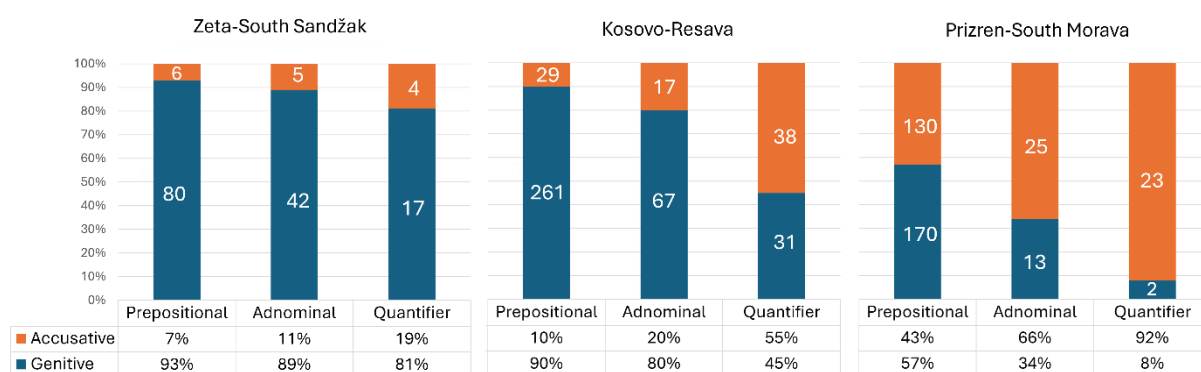


Figure 2. Competing strategies of case marking in South-East Serbian dialects

As the figure illustrates, in Zeta-South Sandžak (the leftmost section of the bar chart), the most conservative dialect in the sample, the genitive prevails in all three constructions. It appears in 90% or more of the examples in the prepositional and adnominal constructions and is used somewhat less in the construction with a quantifier. As the ANOVA<sup>7</sup> test shows, there is no significant effect of the construction on the case in this dialect, with  $p=0.2429$  and  $F = 1.4284$ . The difference between the three constructions is more prominent in the Kosovo-Resava dialect, which has a more advanced stage of case decline. Here, the genitive still dominates with 90% of occurrences in the prepositional construction, it concedes slightly in the adnominal construction, and its use falls dramatically in the construction with a quantifier, where it is no longer a dominant strategy. The ANOVA test shows a significant effect of the construction on the case in this dialect with  $p=3.3092e-18$  and  $F=44.1388$ . Finally, the most innovative Prizren-South Morava dialect (the rightmost section of the bar chart) shows yet another picture. Here, the use of accusative is the dominant strategy in both the adnominal construction (65% of examples) and the construction with a quantifier (92% of examples), and the only construction where the genitive appears in a slight majority of examples (56%) is the prepositional construction. Again, ANOVA shows a significant effect of the construction with  $p=1.1018e-06$  and  $F=14.2548$ . (The null hypothesis for each of three dialects assumed no effect of the construction on case selection.)

These data show that the use of the genitive versus the accusative in the Serbian dialects under study is at least partly conditioned by the type of construction. The exact conditions depend on the dialect, The exact conditions depend on the dialect, or if we accept the diachronic interpretation of the data, on the stage of case decline. The general tendency is the following: constructions with a quantifier

<sup>7</sup> The ANOVA analysis of the corpus data here and below was carried out by Dr Alexander Stewart (University of St Andrews, UK).



are the most susceptible to the penetration of the innovative accusative, adnominal constructions come second, and prepositional constructions preserve the original genitive the longest. This effect is clear when we look at the distribution of cases in individual dialects, but it can also be seen if we trace the linguistic behaviour of the constructions across dialects. The use of the genitive case consistently declines in each construction as we move across the transitional zone from west to east. For each construction, we find a significant effect of the dialect: with  $p=2.1082e-25$  and  $F=61.8976$  (prepositional construction),  $p=9.1127e-10$  and  $F=23.6043$  (adnominal construction), and  $p=1.1889e-06$  and  $F=15.4478$  (construction with a quantifier).

### 3.4. Morphologically conditioned variation in Serbian dialects

Another factor that conditions variation between the original genitive and innovative accusative case is the inflection class. This plays a role in the whole dialectal continuum, but in our data it is especially pronounced in the Prizren-South Morava dialect.

In standard Serbian, nouns cluster into four inflection classes (Table 3). The paradigms exhibit a high degree of syncretism (see the comment in footnote 5 concerning dative – locative syncretic forms).

	Inflection class I: prostor 'space' masculine		Inflection class II: kuća 'house' feminine (some masculine)		Inflection class III: stvar 'thing' feminine		Inflection class IV: polje 'field' neuter	
	SG	PL	SG	PL	SG	PL	SG	PL
NOM	prostor	prostor-i	kuć-a	kuć-e	stvar	stvar-i	polj-e	polj-a
ACC	prostor	prostor-e	kuć-u	kuć-e	stvar	stvar-i	polj-e	polj-a
GEN	prostor-a	prostor-ā	kuć-e	kuć-ā	stvar-i	stvar-ī	polj-a	polj-ā
DAT	prostor-u	prostor-ima	kuć-i	kuć-ama	stvar-i	stvar-ima	polj-u	polj-ima
LOC	prostor-u	prostor-ima	kuć-i	kuć-ama	stvar-i	stvar-ima	polj-u	polj-ima
INS	prostor-om	prostor-ima	kuć-om	kuć-ama	stvar-ju	stvar-ima	polj-em	polj-ima

Table 3. Inflection classes in Serbian.

In South-East Serbian dialects, there is a tendency for nouns of inflection class III to adopt the forms (and the gender) of inflection class I. For this reason, we do not have enough examples to be able to draw reliable generalizations about this class, and we exclude it from further analysis. The bar chart below shows the variation between the genitive and the accusative for the remaining three inflection classes in the Prizren-South Morava dialect:

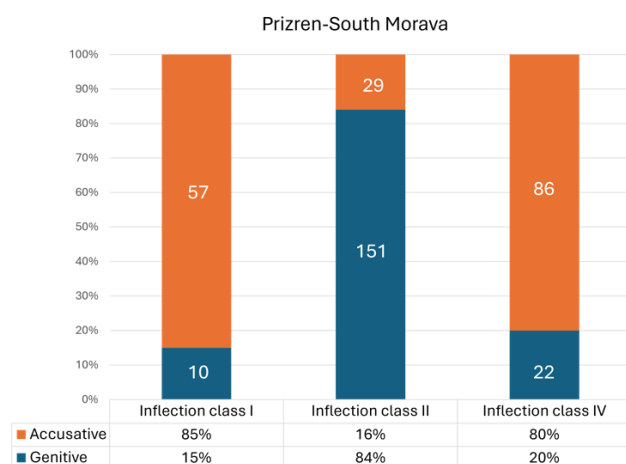


Figure 4. Prizren-South Morava dialect: original genitive vs. innovative accusative in different inflection classes

The choice of case is clearly conditioned by inflection class: class II favours the genitive form, while class I and class IV favour the accusative form. This pattern can be illustrated with examples of the same meaning of the genitive (material) being expressed differently depending on the inflection class:

9a. se        ispred-e        **od**                **vun-e**  
       REFL    spin-PRS.3SG    from                wool(II)-GEN.SG  
       ‘It is spun from wool’

9b. pravi-I-i        **od**        **drv-o**  
       make-PTCP-M.PL from    wood(IV)-ACC.SG  
       ‘They used to make it from wood’

In (9a), the noun belongs to class II (*vuna* ‘wool’) and takes the genitive; in (9b) the noun belongs to class IV (*drvo* ‘wood’) and takes the accusative. This tendency to preserve the original case form in class II is even more pronounced in Bulgarian border-region dialects, where case marking is only possible with class II nouns (see Section 4).

### 3.5. Discussion: structural factors in case decline

These data illustrate both syntactic and morphological conditions on variation between the genitive and accusative. In terms of syntax, certain constructions favour the use of the accusative over the genitive, in particular prepositional phrases. In terms of morphology, certain inflection classes are more likely to adopt the innovative accusative, in particular class II.

The tendency of prepositional phrases to preserve the original case marking contradicts commonly held assumptions about the role played by prepositions in case loss (Blake 2004; Hewson & Bubenik 2006). Since genitive case marking in these prepositional constructions is semantically redundant, it could be omitted without incurring any ambiguity. One might assume then that prepositional constructions would be the first to lose the genitive. The fact that our data show the opposite means that the preservation of the genitive is not driven by the need to disambiguate. We propose here a possible alternative motivation.

Following Norde (2002), we distinguish two types of less-effort strategies for grammatical change: a speaker-oriented and a hearer-oriented strategy. These can be thought of as two opposing forces that shape any language change. The speaker “wants” to make less effort in encoding the message, and the hearer “wants” to make less effort in decoding the message. The informativeness principle aligns with a hearer-oriented strategy. In this instance, the genitive should first be replaced in prepositional constructions, as it is not needed for the hearer to be able to correctly interpret the message, while it has a function in other constructions. A speaker-oriented strategy would be one that favours ease of production. The genitive case after the preposition *od* ‘from’ is syntactically determined: *od* governs the genitive, creating a high degree of predictability: every time the preposition *od* ‘from’ is used, it can be expected to be followed by the genitive. In adnominal constructions and constructions with a quantifier, there is no such syntactic determination, in the sense that the nouns, such as ‘cup’ or ‘edge’, do not obligatorily govern a noun phrase, and quantifiers can similarly be used on their own. In this way, the syntactic information supports the case morphology and contributes to the preservation of the original case forms. Crucially, there is no gain for the hearer in preserving the case forms in prepositional constructions while omitting them in non-prepositional constructions. Rather, it is in the speaker’s interest to keep an inflected form in a context that always requires it.

With these results in mind, we turn to the contrasting patterns of Bulgarian border-region dialects.

#### 4. Competing case marking in Bulgarian border-region dialects: pragmatic factors

In Bulgarian border-region dialects, case marking is lost in all inflection classes of nouns except class II. In this class, singular nouns retain two case forms, nominative and accusative; plural forms are not inflected for case. The nominative marks nouns in the subject position and the accusative marks nouns in non-subject positions. Nouns in classes I, III and IV have retained only one (historically nominative) morphological form for each number value (singular and plural) which is used both in the subject and any non-subject position. This is illustrated in examples (10), (11), (12) and (13) from our corpus (data represent various locations in the municipalities of Belogradchik and Trân).

Inflection class I, masculine. Caseless (historically nominative)

- |      |                                                                                                                                                                                                         |                       |                            |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------|
| 10a. | <i>Dojde</i> <b>doktor.</b><br>Come[PST.3SG] doctor[SG]<br>'A doctor came.'                                                                                                                             | subject<br>NP         | Filipovtsi,<br>Trân        |
| 10b. | <i>Izvika-me</i> <b>doktor.</b><br>call-PRS.1PL doctor[SG]<br>'We call a doctor.'                                                                                                                       | non-<br>subject<br>NP | Filipovtsi,<br>Trân        |
| 10c. | <i>Tija</i> <i>babičk-i</i> <i>kak da otiva-t</i><br>this [NOM.PL.F] elderly.woman-NOM.PL how COMP go-PRS.3PL<br><b>na doktor?</b><br>to doctor[SG]<br>'How would these elderly women get to a doctor?' | non-<br>subject<br>PP | Gorni Lom,<br>Belogradchik |

Inflection class II, feminine and masculine. Nominative and accusative

- |      |                                                                                                                            |                       |                                |
|------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------|
| 11a. | <b>Vod-a</b> <i>gi</i> <i>e</i> <i>kara-l-a.</i><br>water-NOM.SG 3PL.DAT be.3SG transport-PTCP-SG.F<br>'Water moved them.' | subject<br>NP         | Goren Chiflik,<br>Belogradchik |
| 11b. | <i>Sipe-mo</i> <b>vod-u.</b><br>pour-PRS.1PL water-ACC.SG<br>'We pour water.'                                              | non-<br>subject<br>NP | Repljana,<br>Belogradchik      |
| 11c. | <i>Ide</i> <i>i</i> <b>za vod-u.</b><br>Go[PRS.3SG] and for water-ACC.SG<br>'And s/he is going to get water.'              | non-<br>subject<br>PP | Gorni Lom,<br>Belogradchik     |

Inflection class III, feminine. Caseless (historically nominative)

- |      |                                                                                                                                                                            |                       |                         |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|
| 12a. | ... <b>sol</b> <i>se</i> <i>posolva.</i><br>...salt[SG] REFL salt[PRS.3SG]<br>'...salt is being added.'                                                                    | subject<br>NP         | Salash,<br>Belogradchik |
| 12b. | <i>Nasipe-m</i> <b>sol</b> <i>i</i> <i>ga*</i> <i>pritisne-š.</i><br>pour.in-PRS.1PL salt[SG] and 3SG.ACC press.down-PRS.2SG<br>'I pour in salt and one would press down.' | non-<br>subject<br>NP | Filipovtsi,<br>Trân     |
| 12c. | <i>Posolva-š</i> <i>sâs</i> <b>sol.</b><br>salt-PRS.2SG with salt[SG].<br>'You add salt / one adds salt.'                                                                  | non-<br>subject<br>PP | Salash,<br>Belogradchik |

\*Dialectal form corresponding to *go* in Standard Bulgarian.

Inflection class IV, neuter and masculine. Caseless (historically nominative)

13a.	<i>...mlek-o se podsirva.</i> ...milk-SG REFL ferment[PRS.3SG] '... milk is fermented.'	subject NP	Chuprene, Belogradchik
13b.	<i>Ako ima-š mlek-o.</i> if have-PRS.2SG milk-SG 'If you have milk.'	non- subject NP	Ezdimirtsi, Trân
13c.	<i>Dve kofičk-i ot mlek-o.</i> two pot-PL of milk-SG 'Two pots of milk.'	non- subject PP	Ezdimirtsi, Trân

The clear-cut distribution of the nominative and accusative across subject and non-subject positions within inflection class II as presented in (11), however, does not always hold in the border-region dialects. These dialects show a tendency to generalise the nominative for inflection class II nouns across non-subject positions (similar to Standard Bulgarian where this process has been completed in all historical inflection classes, Mirčev 1958: 146-147). This results in competing choices for case marking on non-subject NPs and PPs as illustrated in (14) and (15) by examples from the corpus:

14a.	<i>Vod-u gi dava-mo.</i> water-ACC.SG 3PL.DAT give-PRS.1PL 'We give them water.'	non-subject NP (accusative)	Repljana, Belogradchik
14b.	<i>Vod-a smo kara-l-i.</i> water-NOM.SG be[PRS.1PL] carry-PTCP-PL 'We used to carry/haul water.'	non-subject NP (nominative)	Ezdimirtsi, Trân
15a.	<i>Ne može bez vod-u da peče-š.</i> NEG possible without water-ACC.SG COMP roast-PRS.2SG 'One can't roast [meat] without water.'	non-subject PP (accusative)	Filipovtsi, Trân
15b.	<i>Da ne ostane bez vod-a.</i> COMP NEG remain[PRS.3SG] without water-NOM.SG 'So that s/he won't be left without water.'	non-subject PP (nominative)	Salash, Belogradchik

From a diachronic perspective, the situation in Bulgarian border-region dialects reflects one of the final stages in the transition to uninflectedness: only one of four historical inflection classes retains case distinctions, and in only one part of the paradigm (singular). This is different from what we see at the other end of the dialect continuum, the three groups of Serbian dialects in Section 3, which illustrate the initial stages in the decomposition of the Proto-Slavic case system. This raises the question as to whether the factors that condition the loss of case distinctions remain stable over time, or whether they change from one stage of the process to the next. In what follows we address this question by looking into the synchronic competition between accusative as a specific non-subject case and nominative as a single form for all syntactic functions, and identify what might trigger speakers' choices where both alternatives are available (as in inflection class II nouns).

#### 4.1. Data

The study is based on annotated transcripts of sociolinguistic interviews recorded in West Bulgaria (the dialects of Belogradchik and Trân, part of the border-region dialects). The fieldwork was conducted within the project “Declining case: inflectional loss in progress” by Vladimir Zhobov (University of Sofia, project consultant for Bulgarian) and Alexander Krasovitsky in 2021 and 2022. Additional recordings provided by Vladimir Zhobov stem from his previous fieldwork in North-West Bulgaria.

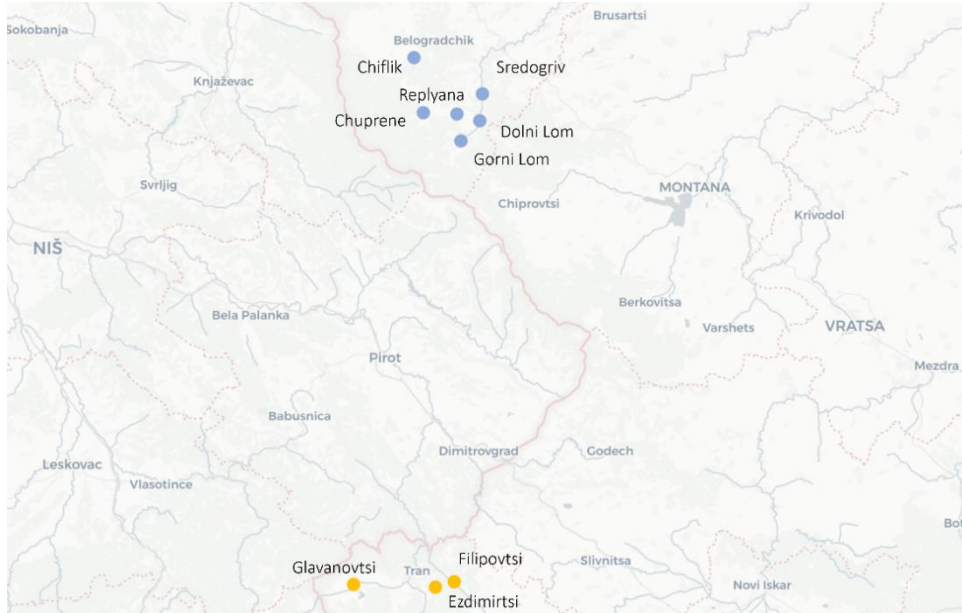


Figure 5. Locations of the interviews in Bulgaria. Border-region dialects

● Belogradchik sub-group ● Trân sub-group

Forty-six residents born between 1926 and 1950 were recorded (one interview per language consultant; the interviews range in length from forty minutes to two hours). Thirteen of the recorded consultants retain two cases, nominative and accusative, in inflection class II. These thirteen interviews make up a corpus of approximately 168,000 words containing 2292 phrases with inflection class II nouns in non-subject positions. All thirteen interviews demonstrate a competition of accusative and nominative in non-subject positions, however, the probabilities vary considerably between speakers (Figure 6).

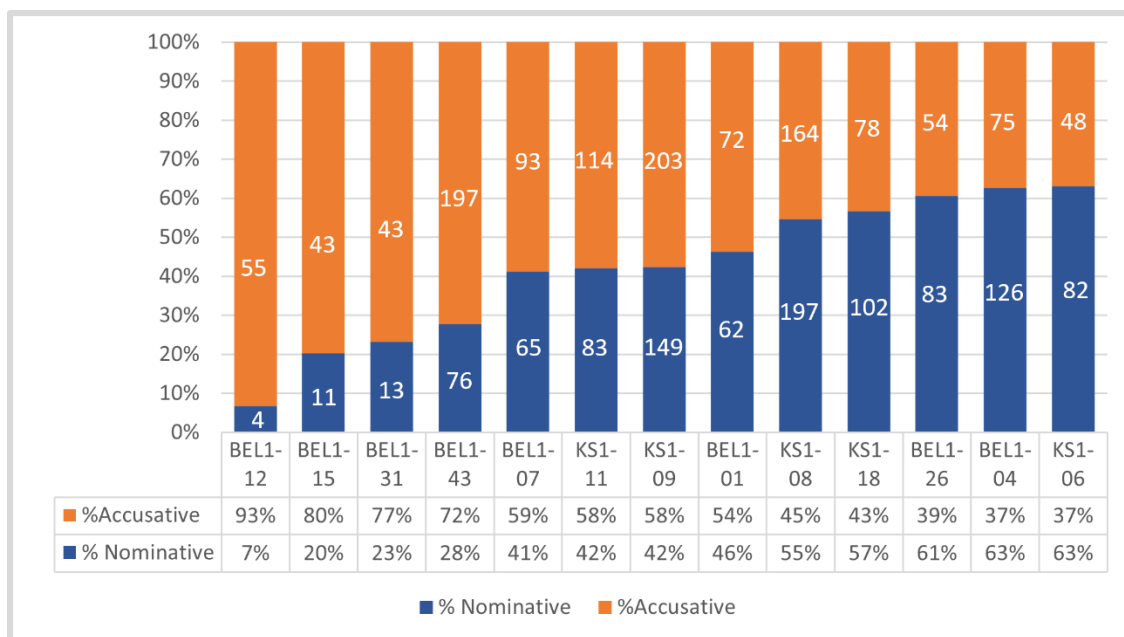


Figure 6. Relative frequency of nominative and accusative forms in inflection class II nouns in non-subject positions (by speaker). Corpus size: around 168, 000 tokens. 13 sociolinguistic interviews, 2292 occurrences of inflection class II nouns in non-subject positions. Codes below the columns identify individual speakers.

#### 4.2. Hypothesis: information structure conditions case selection

Immediate observations made during the sociolinguistic interviews and further elicitation work led us to the following hypothesis. Variation between the nominative and accusative on non-subjects is conditioned by information structure and pragmatic salience: nouns associated with new and pragmatically important information tend to lose specific non-subject case marking and attract nominative; nouns associated with background information and pragmatically less salient parts of an utterance tend to retain specific non-subject marking and show stronger preference for the accusative.

In what follows, we briefly consider the role of pragmatic factors in case selection within a general linguistic context (Section 4.3) and then proceed to the analysis of our data (Section 4.4) and a discussion (Section 4.5). We argue that pragmatic conditions play a crucial role in speakers' choices between the two competing cases which mark non-subjects and in the decline of the accusative as distinct morphological marking for non-subjects. At the same time, we will show that the relationship between case and information structure in Bulgarian border-region dialects differs significantly from that observed cross-linguistically, and offer an explanation for this.

#### 4.3. Information structure as a condition on case marking

Information structure is claimed as a cause for variable case marking cross-linguistically (e.g. Aikhenvald 2010, Iemmolo 2010, Valle 2011; Dalrymple & Nikolaeva 2011). First, a large body of typological research links differential object marking (DOM) to disambiguation: typical objects which cannot be confused for subjects are less likely to receive specific grammatical marking than atypical ones, where such marking is essential for disambiguation (Silverstein 1976, Comrie 1977 *inter alia*). With respect to information structure, this would mean that topical objects need to be marked to avoid ambiguity with subjects, while objects occupying their typical slot as part of the pragmatic focus may remain unmarked. In some languages specific non-subject markers are used with highly topical objects dislocated from their default position (Iemmolo 2010, Aikhenvald 2003). Second, the degree of pragmatic prominence is another factor which may affect case marking: it has been shown for a

number of DOM languages that more prominent objects with a higher pragmatic status are more likely to be marked for case than pragmatically less salient objects (Aissen 2003, Malchukov 2008).

It is useful to assess the South Slavic situation against this broad cross-linguistic picture. The data from Bulgarian border-region dialects provide no evidence for case marking being used as a tool in contexts where atypical objects (e.g. topicalised and dislocated to non-default positions or used with omitted governors) may be confused with subjects (see the analysis of the relationship between word order, pragmatic structure and case marking in Section 4.4). At the same time, the situation in the border-region dialects is different, in broad terms, to a situation in some of the DOM languages (such as those considered in Aissen 2003 and Malchukov 2008) where pragmatically more salient nouns attract case marking while less pragmatically salient nouns do not. In the Bulgarian dialects in question, case marking on non-subject NPs is conditioned, to a significant extent, on whether they are associated with background or new information in an utterance, or with the topic–focus distinction. However, a significant peculiar feature of these dialects is that specific non-subject case marking (accusative) is more frequent on nouns which are backgrounded. Nominative forms (which may be used in subject and non-subject position, as examples in (14) and (15) demonstrate) are more frequent in the pragmatically salient part of an utterance. We will consider this in greater detail in the next section. It should be noted that in qualifying parts of an utterance as topic or focus we follow the tradition of defining topic as existing, background knowledge, or ‘common ground’, and focus as part of an utterance which brings in new information and thus modifies ‘common ground’ (Hoop & Swart 2000; Krifka 2007). Since originally our data collection was not intended to test the impact of information structure on case marking, and such analysis was applied later, we used broad definitions based on this opposition, and excluded from the analysis utterances where a non-ambiguous definition of information structure was not possible. Under this view, three types of utterances required special decisions: utterances with contrastive topic as in (16), those with repeated focus, as in (17) and those with contrastive focus, as in (18).

16. Interviewer: - *Kak platiš na toj kojto gledal ovci celoto leto?*

‘How do you pay someone who looked after sheep the whole summer?’

Consultant:	<i>Ne</i>	<i>ima-l-o</i>	<i>takâv. U naš-a-ta</i>	<i>bačij-a</i>
	NEG	EXIST-PTCP-SG.N	such. at our-NOM.SG-DEF.NOM.SG	village.sheep-NOM.SG
	<i>ne</i>	<i>ima-l-o</i>	<i>ovčar-e.</i>	
	NEG	EXIST-PTCP-SG.N	shepherd-PL	

**(contrastive topic)**

‘There was no such person. For our village sheep, there were no shepherds.’

17. A *bab-a* *mi ode-še... pase-še* *krav-a...*  
and grandmother-NOM.SG 1SG.DAT go-IMP.F.3SG graze-IMP.F.3SG COW-NOM.SG

*Ja nekajotko pät otiš-l-a säs nju\*,*  
1SG.NOM several time go-PTCP-SG.F with 3SG.ACC.F

*ama poveče ona si e pas-l-a* *krav-u.*  
but more 3SG.NOM.F PART AUX.PRS.3SG graze-PTCP-SG.F COW-ACC.SG

**(repeated focus)**

‘And my grandmother used to go... grazed the cow. I went with her a few times but mostly she grazed the cow.’

\*Dialectal form used in the border-region and some other dialects corresponding with the Standard Bulgarian *neja* ‘she [ACC]’ (cf. Todorov 2002: 82).

18. Interviewer: - *A kâde go slagate kopâra?*

'Where (i. e. in which dishes) do you add dill?'

Consultant: *U tarator tura-m mnogo. Daže i u salat-a si tura-m.*  
In tarator[SG] put-1SG much even and in salad-NOM.SG PART put-1SG  
(contrastive focus)

'I put a lot of dill in tarator. I add it even in the salad.'

Following the approach taken in this study, we grouped together utterances where non-subject nouns appear in the repeated focus, as in (17), and in the topic on the one hand, and those where non-subject nouns are part of the contrastive topic, as in (16), and of the focus. The rationale behind both decisions is based on information novelty. In the former case, information in the repeated focus is already brought into the discourse and cannot be defined as changing the 'common ground'. In the latter case, contrastive topic turns out to be very close to focus, in that the contrast itself contributes to existing knowledge and thus modifies the 'common ground'. The similarity of focus and contrastive topic has been demonstrated in a number of studies within Alternative Semantics, where both concepts are understood as parts of an utterance which provide new information by singling out existing alternatives (Rooth 1992: 75-77; Büring 2016: 64-68). A small number of examples were annotated as contrastive focus, as in (18). Contrastive focus is not different from focus in that it, like focus, provides new information and modifies the 'common ground', under some specific conditions such as polarity of unexpectedness (e. g. Zimmermann 2008: 348; Goodhue 2022: 117-126). For this reason, in the analysis presented in (4.4) we did not distinguish between the two types of focus. However, a possible effect of contrastive focus will be discussed separately in the account presented in (4.5).

We will consider the effect of information structure on non-subject case marking with respect to two other factors: word order and phrase type (NP vs. PP).

Previous research has suggested that the diachronic loss of case marking is accompanied by compensatory freezing of word order as a means of distinguishing grammatical roles (Blake 2004). Among other things, this implies that if an object noun occurs outside of its expected position, it will be more likely to preserve its original case marking. This straightforward complementarity between fixed word order and case marking does not necessarily hold (cf. Allen 2006 for Old English and Detges 2009 for Old French); in fact, the opposite correlation may occur. Data from Japanese show that word order alternations may loosen grammatical relationships within a sentence so that dislocated objects may be less(!) likely to receive expected case marking than their counterparts in neutral positions within a basic constituent structure (cf. Japanese scrambling of accusative-marked objects to a position where only the nominative may be assigned, Kasai 2018).

The effect of phrase type (noun phrases vs. prepositional phrases) on case selection and decline of one of the competing cases is surveyed in Section 2. Here we will only reiterate the observation made above that the correlation between the use of prepositions and the tendency to maintain an original case form has been proved to be strong for the dialect types under study. Therefore, we found it important to disentangle different conditions on case marking in order to assess their effect individually without interference from other conditions. To do so, we will analyse the effect of topic-focus distinction separately for different types of word order and different phrase types (NP and PP).

#### **4.4. The effect of topic and focus on case marking in Bulgarian border-region dialects**

To investigate the effect of information structure on competing choices in case marking, a sub-corpus of approximately 90,000 words (six sociolinguistic interviews) was annotated with respect to



information structure. The percentage of nominative on non-subjects in the six included interviews is as follows: 7% (BEL1-12), 20% (BEL1-15), 23% (BEL1-31), 42% (KS1-09), 55% (KS1-08), 57% (KS1-18). A dataset of 956 utterances containing inflection class II nouns in non-subject positions and allowing unambiguous assignment of the five values (topic, contrastive topic, focus, contrastive focus, repeated focus) was extracted. The data were combined for (i) topic and repeated focus, and for (ii) focus, contrastive focus and contrastive topic, as discussed in Section 4.3. The analysis presented in this section is based on these two subsets.

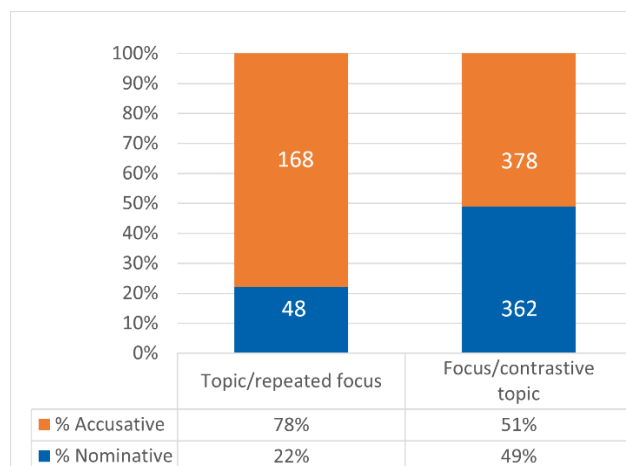


Figure 7. Nominative and accusative on non-subject nouns

As Figure 7 demonstrates, there is a significant difference in the frequency of the nominative and accusative across the two subsets. The accusative dominates in topic (19a) or repeated focus position (19b): 79% accusative forms. Frequency of the accusative falls significantly in focus (19c) and contrastive topic positions (19d): 49%. In other words, non-subject nouns are more likely to take the accusative in pragmatically less salient positions; pragmatically more salient parts of a sentence show a stronger preference for the nominative on non-subjects.

19a. *I slam-a-ta otzad. i otvârlj-u slam-u-tu*  
 and straw-NOM.SG-DEF.NOM.SG behind and toss-PRS.3PL straw-ACC.SG-DEF.ACC.SG  
*nastranu.*  
 aside (topic)

‘And the straw is behind. And they toss the straw aside.’

19b. *Čorapete ot dvojk-a si plete-mo.*  
 socks from double.thread-NOM.SG PART weave-PRS.1PL  
 (focus)

*I ot dvojk-u i ot trojk-u sam ple-l-a.*  
 and from double.thread-ACC.SG and from triple.thread-ACC.SG be.PRS.1SG] weave-PTCP-SG.F  
 (repeated focus)

‘We weave socks with double threads. I have weaved both with double and triple threads.’

19c. *Ako nema rek-a nosi-mo vod-a.*  
 if EXIST.NEG river-NOM.SG carry-PRS.1PL water-NOM.SG  
 (focus)

‘If there is no river, we carry water.’

19d. Interviewer: *S rāka li pravete?*

‘Do you do it manually (“with a hand”)?’

Consultant: *S rāk-u, a s kvo?*  
with hand-ACC.SG and with what

**S lev-a-ta tegli-š otgore,**  
with left-NOM.F.SG-DEF.NOM.SG F pull-PRS.2SG from.above  
**s desn-a-ta vārti-š vreten-o-to**  
with right-NOM.F.SG-DEF.NOM.SG.F rotate-PRS.2SG spindle-SG-DEF.SG.N  
**(contrastive topic)**

‘Manually, how else? With your left hand you pull it from above, with your right hand you rotate the spindle.’

We assessed the effect of information structure on case marking in connection with two potentially relevant factors, phrase type (presence or absence of a preposition) and word order. As shown above, phrase type proved to have an effect on case marking in the Serbian dialects at an earlier stage of case decline (Section 3). Word order, although not independent of information structure, may still vary within the same topic–focus structure, therefore this factor was also disentangled from the other two factors under study. In Bulgarian, direct and indirect objects under basic default word order occur postverbally. Non-default ordering (e.g. preverbal objects) is motivated by a variety of conditions, which may or may not be related to information structure (Georgieva 1974; Georgieva 1983; Dyer 1992). Thus, topicalised objects are normally fronted, but this is not a universal rule, and under appropriate contextual conditions topicalised objects may occur postverbally (20a).

20a. Consultant 1: *Kāde utiva-š?*

Where go-PRS.2SG?

Consultant 2: *Po robot-a, majk-o.*  
for work-NOM.SG mother-VOC

Consultant 1: *Ah, mrazj-a az tazi robot-a!*  
ah hate-PRS.1SG 1SG.NOM this[NOM.SG.F] work-NOM.SG

‘C1: Where are you going? C2: On business, mother. C1: Oh I hate this business!’

On the other hand, as expected in SVO languages, objects in focus normally occur post-verbally, but strong logical stress may result in emphatic word order, under which an object occurs in preverbal position (20b).

20b. **Cjal-a-ta planin-a vdišva-m**  
whole- NOM.SG.F-DEF.NOM.SG.F mountain- NOM.SG inhale-PRS.1SG  
‘I inhale all this mountain range’ (adapted from Georgieva 1983: 284).

In addition to postverbal and preverbal ordering, we found a significant number of elliptic constructions, for example, objects with a missing governing verb, or interruptions where a governor and a governee stand far apart from each other in different syntagms. To see whether the absence of an overt governor has an effect on case marking, such phrases (tagged as ‘isolated’) were considered separately.

Therefore, in order to disentangle the contribution of potentially conditioning factors, we assessed the effect of information structure separately for six different combinations of word order and phrase type:

21a. NP, postverbal

*Ne smo slaga-l-i vod-u*  
NEG AUX.PRS.1PL put-PTCP-PL water-ACC.SG  
'We added no water.'

21b. NP, preverbal

*Krav-a smo ima-l-i*  
COW-NOM.SG AUX.PRS.1PL have-PTCP-PL  
'We had a cow.'

21c. NP, isolated

*Ne sâm ima-l-a bab-u,*  
NEG AUX.1SG have-PTCP-SG.F grandmother-ACC.SG  
  
*samo majk-a*  
only mother-NOM.SG  
'I didn't have a grandmother, just a mother.'

21d. PP, postverbal

*I ojde-mo večerom na večerj-u*  
and go-PRS.1PL in.the.evening to evening.meal-ACC.SG  
'And in the evening we will go to have evening meal.'

21e. PP, preverbal

*Na bašt-a mi pomaga-x.*  
to father-NOM.SG 1SG.DAT help-AOR.1SG  
'I helped my father.'

21f. PP, isolated

Interviewer: – *Ima li češma?*  
'Is there a tap?'

Consultant: – *Otzad češm-a-ta. Na kuxničk-u.*  
in.the.rear tap-NOM.SG-DEF.NOM.SG in kitchen-ACC.SG  
'The tap is in the rear. In the kitchen.'

Relative frequencies of the two alternative cases, nominative and accusative, on non-subject nouns with respect to the six combinations of conditions are presented in Figure 8 (for NPs) and Figure 9 (for PPs).

POSTVERBAL NP

PREVERBAL NP

ISOLATED NP

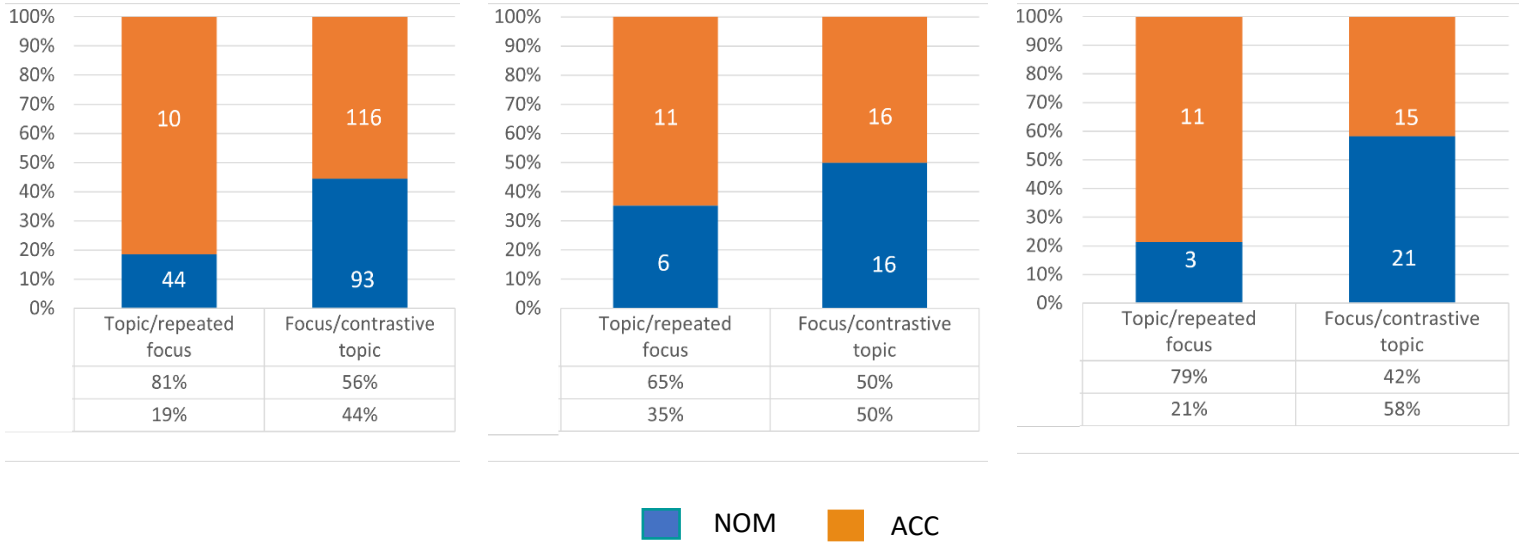


Figure 8. Preverbal, postverbal and isolated NPs in topic and focus positions

POSTVERBAL PP

PREVERBAL PP

ISOLATED PP

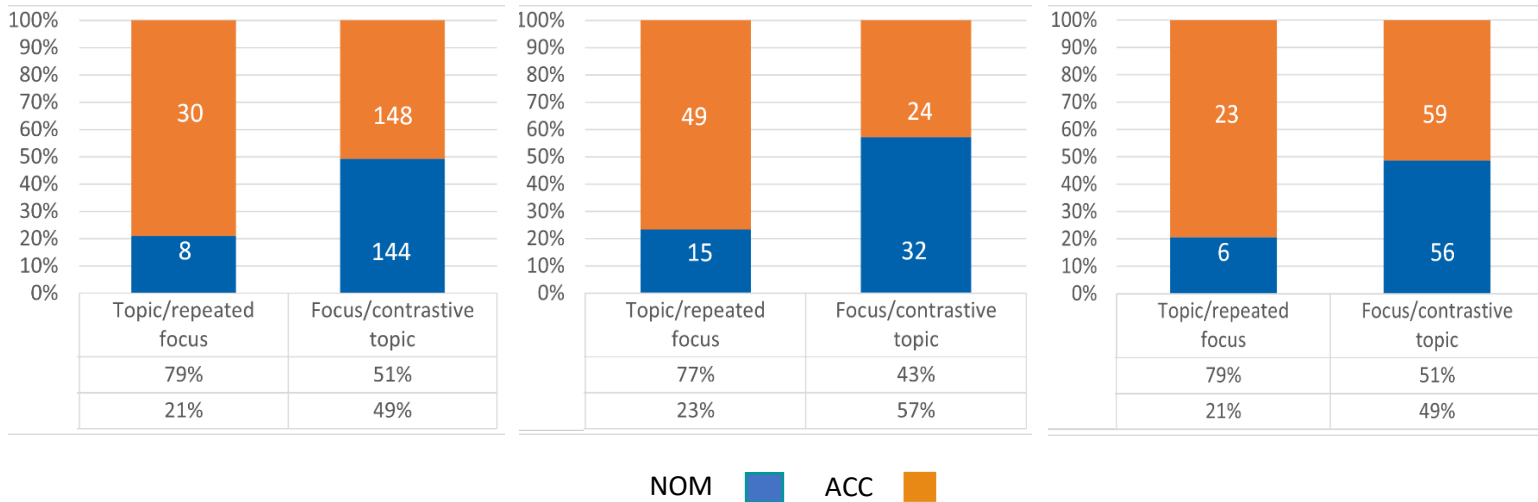


Figure 9. Preverbal, postverbal and isolated PPs in topic and focus positions

A key outcome of this analysis is the uniform pattern which we found across all six data subsets (factor combinations): while pragmatically more important parts of an utterance (focus or contrastive topic) demonstrate a strong tendency to generalize the nominative on non-subject nouns, the accusative as a distinct non-subject case is better preserved in pragmatically less salient positions (topic and repeated focus). In the light of the findings reported above for Serbian dialects, it is particularly striking that structural conditions, that is, the absence or presence of a preposition, seem to have no impact on speakers' choices, and neither enhance the use of a distinct non-subject case form (accusative), nor contribute to its loss and the generalisation of an undifferentiated morphological form (nominative). In other words, non-subject NPs and PPs in terms of their case marking show similar sensitivity to information structure. With respect to word order, a strong effect of information

structure is found for all three linear structures: postverbal, preverbal and isolated positions. In all three data subsets, the accusative is better retained in topic and repeated focus position, and is less frequent in focus and contrastive topic position where it is replaced by the nominative.

The statistical significance of the results presented in Figure 8 and Figure 9 was assessed by ANOVA analysis. The effect of each of the three factors, phrase type, information structure and word order, was considered as a sole factor, and in connection with the other two factors (the null hypothesis assumed that there was no effect of either of these factors on case selection). The outcome of this analysis is presented in Table 4.

<b>Phrase type (NP vs. PP)</b>	<b>Word order</b>	<b>Information structure</b>
<p>NO EFFECT</p> <p><math>p = 0.35</math> in connection with WO and IS</p> <p><math>p = 0.29</math> taken separately</p>	<p>WEAK EFFECT (?)</p> <p><math>p = 0.18</math> in connection with WO and phrase type</p> <p><math>p &lt; 0.001</math> taken separately</p>	<p>STRONG EFFECT</p> <p><math>p &lt; 0.001</math> under any condition(s) or taken separately</p>

Table 4. The effect of phrase type, word order and information structure on case marking in Bulgarian border-region dialects

The results of the statistical analysis presented in Table 4 confirm the observation that phrase type (NP or PP), whether taken separately or in connection with word order and information structure, has no effect on case marking on non-subjects ( $p=0.29$  and  $0.35$  accordingly). On the other hand, we see a strong effect of information structure, either considered on its own (as in Figure 7), or in connection with phrase type and word order, for sub-sets presented in Figures 8 and 9 ( $p < 0.001$  either taken separately or in connection with other conditions). We cannot, however, arrive at such an unequivocal conclusion on the role of word order. Within each of the six sub-sets presented in Figures 8 and 9, word order does not reach clear statistical significance ( $p=0.18$ ). Taken as a sole factor without considering other factors (structure of the phrase and its affiliation with different pragmatic roles) postverbal positions seem to enhance the use of the accusative, and pre-verbal positions favour the nominative ( $p < 0.001$ ). However, it should be noted that the latter outcome may reflect a natural bias in the data. Non-subject postverbal focus NPs are more frequent than preverbal ones. Given that focus tends to attract nominative marking according to our data, this may significantly bias the analysis of the role of word order as a sole factor in case marking. Therefore, we think it important that word order, when taken as a factor in combination with information structure, fails to reach unambiguous statistically significant values. Firm conclusions, however, could only be reached from data normalised with respect to different types of word order and different pragmatic roles, which would require a larger corpus than we currently have.

#### **4.5. Discussion: pragmatic factors in case decline**

The reported findings leave little doubt that information structure has a crucial effect on variation in case marking in Bulgarian border-region dialects. What might this synchronic variation tell us about the diachrony of case decline? We hypothesise that the historical competition of case marking here is motivated by pragmatic salience. What we observe, however, is not a tight coupling between a pragmatic role and grammatical form, but rather a tendency for caseless forms (historically the

nominative) to be generalised first across the pragmatically most salient positions, and only then to spread further to other parts of the utterance. Key evidence supporting this view comes from the comparison of different parts of the subcorpus that have been annotated for information structure. As indicated in Section 4.4 and illustrated by Figure 6, preferences for case marking on non-subject nouns in this subcorpus vary enormously across speakers, ranging from a total of 7% to 57% of nominative forms. We divided the subcorpus into two parts depending on the by-speaker frequency of nominative forms. The first part includes the three most conservative speakers (from 7% to 23% of nominative forms in non-subject positions). The second part includes interviews recorded from more innovative speakers with an overall frequency of nominative forms between 42% and 57% (T-test confirms the significance of the difference between the two groups with respect to case variation:  $p < 0.0001$ ,  $t = 8.4$ ).

The analysis presented below shows which parts of the information structure are most susceptible to the loss of case distinctions at a very early stage of this process, to identify the role of pragmatic factors. We looked at the data from the three most conservative speakers in order to identify conditions which make these speakers deviate from their dominant pattern, accusative marking of non-subjects. We assessed the impact of each pragmatic condition for which our data are annotated. Unlike the findings from the whole subcorpus analysed in the previous section (six interviews), our results here show that in the three most conservative individual dialects, the accusative is strongly associated not only with the background or repeated information (topic and repeated focus), but also with new information (focus). If, however, we look separately at the pragmatically most salient NPs and PPs, contrastive topic and contrastive focus, we find that these pragmatic conditions favour the nominative (Table 5, illustrated by examples in (22)):

	ACCUSATIVE	NOMINATIVE	% NOMINATIVE
Topic	17	0	0%
Repeated focus	13	4	24%
Focus	104	18	15%
Contrastive topic	0	3	100%
Contrastive focus	0	2	100%
<b>Total</b>	<b>134</b>	<b>27</b>	<b>17%</b>

Table 5. Distribution of nominative and accusative forms with non-subject nouns for the three most conservative individual dialects. Raw numbers and % of nominative

22a. Interviewer: - *Kak platiš na toj kojto gledal ovci celoto leto?*

How do you pay someone who looked after sheep the whole summer?

Consultant: *Ne ima-l-o takâv. U naš-a-ta bačij-a*  
 NEG EXIST-PTCP-SG.N such. at our-NOM.SG.F-DEF.NOM.SG.F village.sheep-NOM.SG

*ne ima-l-o ovčar-e.*  
 NEG EXIST-PTCP-SG.N shepherd-PL

(contrastive topic)

‘There was no such person. For our village sheep, there were no shepherds.’

22b. Interviewer: [- *Da mu platiš posle?*

Do you pay him afterwards?

Consultant: - *Ne, da ne mu platiš.*  
 - No, you do not pay him.]

*Odi-l-i smo na zared-a.*  
 go-PTCP-PL aux.PRS.1PL on work.for.smb-NOM.SG

**(contrastive focus)**

‘We went to work for him (in exchange for his favour).’

Under non-contrastive focus we can expect the accusative (14 c):

22c. *i posle ide-mo za nevest-u-tu.*

and after go-PRS.1PL for bride-ACC.SG-DEF.ACC.SG

**(non-contrastive focus, listing consecutive actions)**

‘And then we go to pick up the bride.’

The data from the three most innovative dialects reveal the spread of nominative from the most salient pragmatic conditions, such as contrastive topic and contrastive focus, to the parts of the utterance containing new information in general (as demonstrated in Table 6).

	ACCUSATIVE	NOMINATIVE	% NOMINATIVE
Topic	70	33	32%
Repeated focus	69	10	13%
Focus	272	326	55%
Contrastive topic	1	4	80%
Contrastive focus	1	9	90%
<b>Total</b>	<b>413</b>	<b>382</b>	<b>48%</b>

Table 6. Distribution of nominative and accusative forms with non-subject nouns for the three most innovative individual dialects. Raw numbers and % of nominative

The data for a subset of the most conservative speakers in the corpus, however small, may be taken as an indication of a diachronic tendency when compared to the whole corpus. While accusative dominates in the speech of the three conservative speakers overall, the pragmatically most salient parts of an utterance favour the nominative on non-subject nouns. This process has further developed with more innovative speakers with whom nominative has spread further into the focus position, where it dominates, and into topic position, though here it is still in the minority.

The fact that pragmatics play a crucial role in speakers’ choices in Bulgarian border-region dialects may be due to both language-internal and external factors. As we noted earlier in Section 4, inflection class II nouns are the only domain where case distinctions are still preserved, while nouns of all other classes (and adjectival forms which agree with them) are uninflected. This contributes to the marginalisation of case and restricts accusative to less salient positions. This process is supported by external factors, namely exposure to language varieties without case distinctions on a daily basis (younger speakers, TV, written language). This can marginalise accusative forms, restricting them to less highlighted parts of an utterance.

## 5. Conclusion

The ongoing loss of case in Serbian and Bulgarian dialects results in the competition between two forms, one of them more specific and one of them more general. How exactly this competition is manifested depends on the particular case system it occurs in. In more conservative varieties that retain in principle a six-case system (Serbian), competition is between a more specific case (e.g. the genitive) and a general oblique (accusative). In more innovative varieties (Bulgarian), where case loss is more advanced, the competition is between the general oblique form (accusative) and an uninflected stem. A particularly interesting result of our study has been to uncover key factors underlying these systems of competing case marking. Broadly construed, they match what has been observed cross-linguistically, but the principles that govern them are different. Elsewhere, prior work has shown that in case systems which allow for more explicit and less explicit marking for a given syntactic role, more explicit case marking has two major functions: (i) indicating the syntactic role of nominals in contexts where this is not otherwise obvious, and (ii) highlighting nominals that are semantically or pragmatically prominent. In the Serbian and Bulgarian dialects investigated here, the factors conditioning the competition of cases appear to be the exact opposite.

First, contexts where the syntactic role of a nominal is unambiguously signalled, as in prepositional phrases, in fact provide a more favourable environment for the preservation of the original case forms. We have illustrated this with the data from the Serbian dialects, where the original genitive case forms alternate with the innovative accusative forms. We analysed three construction types: prepositional constructions, adnominal constructions, and constructions with a quantifier. In all the dialects of the sample, prepositional constructions preserved the original case forms better than the other two. The three constructions vary with respect to the strength of connection between their elements. While the use of a noun (such as 'cup' or 'top') or a quantifier does not necessarily entail the subsequent use of a noun, a preposition obligatorily governs a noun phrase, marked with the genitive in our case. Thus, the established association of a form with its apparent context turns out to be a key factor which determines speakers' choices and the contributes to the preservation of the original case forms.

Second, higher pragmatic salience, rather than triggering case distinctions, as has been widely observed cross-linguistically, in fact leads to the opposite result in the Bulgarian border-region dialects. These dialects retain at most two cases, nominative and accusative. The accusative is normally used for non-subjects, but this is not always so: they may also take the nominative, making them morphologically indistinguishable from subjects and thus effectively uninflected. This variation is conditioned by information structure: a subject (nominative) vs. non-subject (accusative) distinction is better maintained where background (given) information is being presented, while pragmatically salient parts of an utterance show a strong tendency to eliminate this distinction. Additional factors that play a role in limiting the use of the accusative are the fact that only one class of nouns is affected (inflection class II), and the overall marginalisation of case distinctions on nouns in the context of the prestige standard language, which lacks nominal case.

The fine-grained analysis of the competing patterns of case marking provided here contributes to our understanding of factors that condition the loss of inflectional case. In particular, different factors appear to be activated at different stages of the change. A synchronic cross-dialect analysis therefore allows us to uncover the intricate detail of this historical process.

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