

UDK
Tanja Milićev
Maša Bešlin
University of Novi Sad
Faculty of Philosophy

INSTRUMENTAL CASE: WHY IT IS ABSENT FROM THE CLITIC SYSTEM IN SERBIAN/CROATIAN

Abstract: In this paper we argue that instrumental case in Serbian/Croatian is absent from the clitic system because all instrumentals, whether prepositional or bare/noun phrase, are always prepositional phrases. Instrumental clitics are then impossible just like any other clitic complements of prepositions. Based on the phenomenon of last-resort preposition insertion when the instrumental is blocked by a genitive assigning quantifier, we propose that the default instrumental preposition is *sa* ‘with’. Consequently, this preposition can be realized as overt, last-resort or null. Additional evidence that *sa* ‘with’ is present in all instrumentals comes from the interpretation which seems to underlie most (if not all) instrumental uses. Namely, we try to show that what all instrumentals have in common is the relation of central coincidence (Hale 1986). The ways this relation is established in terms of accompaniment and (locational) control are factors governing the realization of the preposition as obligatorily overt, last-resort or obligatorily null.

Key words: instrumental, case, clitics, central coincidence, null P

1. Introduction

The aim of this paper is twofold. First, we address the question of why there are no instrumental clitics in Serbian/Croatian (SC). Second, we argue for a uniform structure of all instances of instrumental case in SC. This uniform structure is responsible for the lack of instrumental clitics, and it has significant consequences for other instrumental-related properties which we will discuss. The absence of instrumental clitics is rather puzzling, considering that SC allows instrumental arguments. As one of the core properties of clitics is that they must undergo movement, it is this requirement that is somehow incompatible with the properties of instrumental case. In Section 3, we present two possible ways to account for this hostile relation.

Instrumental case in SC also exhibits peculiar behavior. It can be assigned/checked by a preposition (P), or it can be ‘bare’ (realized as NP). Traditionally, the presence of the P *sa* ‘with’ is connected to the

comitative/associative/accompaniment uses of instrumental, whereas ‘bare’ instrumental is the form which is found with arguments, instrument adjuncts and predicates. However, under certain circumstances, when whatever mechanism is assumed for case assignment/checking of ‘bare’ instrumentals fails, the P *sa* ‘with’ has to be introduced, as last-resort (cf. Franks 1995; Bošković 2003).

- (1) a. Petar upravlja **fabrikama**
 Petar runs factories.INST
 ‘Peter runs the factories’
- b. Petar upravlja **sa** pet fabrika
 Peter runs with five factories
 ‘Peter runs five factories’

This issue is discussed in more detail in Section 3.3. What is interesting, though, is that this last-resort strategy is not found with other inherent cases, such as the dative. We take this to strongly suggest that ‘bare’ instrumental case, which commonly treated as an inherent case, is assigned/checked in a different way.

What we will argue for in this paper is that instrumental is always introduced by P, either overt or null. The P responsible for instrumental case is *sa* ‘with’. It also provides the interpretation which we will assume to be present in all instrumentals – that of central coincidence. This is in line with the approaches that attribute this P lexical rather than functional input.

This proposal, which immediately offers a solution for the lack of instrumental clitics, has consequences for the theory of inherent case, as well as the mechanisms of case assignment/checking by Ps, be they overt, last resort or null.

2. The clitic system of SC: what’s there and what’s missing

In SC, clitics, as the most deficient pronominal forms, can be auxiliary and pronominal. The pronominal clitic paradigm is given in (2).

(2)

	SINGULAR					PLURAL		
	1 st	2 nd	3 rd			1 st	2 nd	3 rd
			m	f	n			
GEN	me	te	ga	je	ga	nas	vas	ih
DAT	mi	ti	mu	joj	mu	nam	vam	im
ACC	me	te	ga	je/ju	ga	nas	vas	ih

Regarding case forms, in addition to the syncretism between genitive and accusative, one can immediately note the lack of nominative, locative and instrumental clitics.¹

2.1 Lack of nominative and locative

The absence of the nominative case clitic seems to be straightforward if we assume, following Cardinaletti & Starke 1999, that the null pronoun *pro* is a clitic form of the strong nominative pronoun (3). Cardinaletti and Starke quite convincingly show that many of the properties of *pro* match the syntactic, semantic and pragmatic properties of overt clitic forms.

- (3) a. **Ona** je lepo pevala
 she AUX nicely sung
 ‘She sang nicely’
- b. \emptyset Lepo je pevala
 pro nicely AUX sung
 ‘She sang nicely’

Even though locative case has largely become indistinguishable from dative (‘with an obligatory P’), the fact that for some speakers, with certain nouns, there is a consistent accentual difference between the dative and locative forms means that standard grammars still treat them as two separate cases. Crucially for our discussion here, locative is always identified (or realized) in the presence of an overt P. The absence of locative clitics can therefore be accounted for in terms of a general ban on clitics as complements of Ps or *P-Clitic (Abels 2003).

- (4) a. *u **joj**
 in her.CL.LOC
- b. *iz **je**
 from her.CL.GEN
- c. *kroz **ju**
 through her.CL.ACC
- d. *prema **joj**
 towards her.CL.DAT

¹ The lack of vocative does not seem to be particularly interesting as it can be related to the lack of nominative clitics

2.2 Lack of instrumental

Unlike locative, instrumental does not require the presence of an overt P. As shown in (5), non-prepositional instrumentals can be found as arguments (5a), adjuncts (5b-d), or (Small Clause) predicates (5e).

- (5) a. Petar komanduje **vojskom**
Peter commands army.INST
'Peter commands an/the army'
- b. Petar je trčao **šumom**
Peter AUX run forest.INST
'Peter ran in/through a/the forest'
- c. Petar je isekao hleb **nožem**
Peter AUX cut bread knife.INST
'Peter cut the bread with a knife'
- d. **Subotom** je ovde uvek gužva
Saturday.INST is here always crowded
'Saturdays, it is always crowded here'
- e. Petar je proglasio Mariju **pobednikom**
Peter AUX declared Mary winner.INST
'Petar declared Mary a winner'

Clitics are not possible in any of these contexts. Even if we assume that adjuncts are somehow intolerant to this type of proform (predicates even more so) – at the same time ignoring the fact that some pronominal clitics (e.g. ethical datives) can assume adjunct-like functions – we are still left with the problem of why instrumental arguments, which do not have a problem with pronominalization (6a) never show up in the clitic form (**jom*, (6b)).

- (6) a. Petar **njom(e)** dobro komanduje
Peter her.INST well commands
'Peter commands it well'
- b. *Petar **jom** dobro komanduje
Peter her.INST.CL well commands
'Peter commands it well'

What bans instrumental clitics must be some property of the instrumental case itself. This property, then, must clash with some crucial property of clitics.

3. Theoretical accounts: clitics and case

In this section we will present two possible ways to account for the incompatibility of clitics and instrumental case. One is to accommodate instrumental case with other incompatible ‘environments’ for clitics in general. The other is to look within the properties of instrumental case itself that might exclude clitic pronouns.

3.1 Clitics and Anti-Locality

In addition to their famous second-position effect, clitics in SC show another interesting property: they cannot serve as complements of Ps (7).

- (7) a. Marko trči **prema njoj**
 Marko runs towards her
 ‘Marko is running towards her’
- b. *Marko trči **prema joj**
 Marko runs towards her.CL
- c. *Marko **joj_i** trči **prema t_i**
 Marko her.CL runs toward

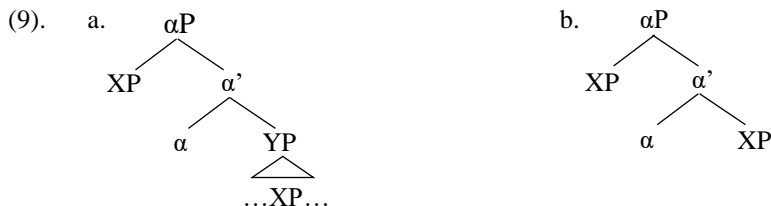
Abels (2001, 2003) suggests that the ungrammaticality of (7b-c) follows from the special requirement that clitics in SC move to the second position, as well as from the fact that SC disallows P-stranding. Nevertheless, moving the entire PP to initial position still yields an ungrammatical result.

- (8) ***Prema joj** trče
 towards her.CL run.3P
 ‘They are running towards her’

Notice that this cannot be explained by the P-stranding ban nor the second position requirement. The reason for the ungrammaticality of (8), then, must lie in the internal structure of the PP or the pronominal clitic.

An important property of pronominal clitics is that, unlike all other NPs and DPs, they have no internal structure, i.e. they are bare heads. If

they are heads, and moreover the immediate complement of P, then any movement of the clitic would be the movement of the entire complement of P.



Suppose, following Bošković 2013, that PPs in SC are phases. In order to escape the domain of the PP, its complement must first move to the PP edge. However, Grohmann (2003) argues that movement must not be too local. In our case, moving the immediate complement of the P to its specifier position does not bring the complement any closer to the phase-head than before movement (9b). Therefore, moving the clitic leads to an anti-locality violation and is consistently ruled out.

In our proposal, we will attempt to extend this analysis to all instances of instrumental case. Namely, we will assume that *all* instrumentals are PPs, and that the ban on instrumental clitics is, in fact, the ban on clitics as complements of Ps.

3.2 The Peeling theory of case

Within the nanosyntactic framework (Starke 2005), it has been argued that NPs are base generated in a θ -position with a number of case layers on top of them, resulting in a KP*. K-selectors (Vs and Ps) then attract KP*s of the appropriate size, and each instance of movement strands (at least) one of the KP*'s case shells. Caha (2009) proposes that the Case sequence is the one in (10), where instrumental (and comitative) are the most complex cases.

- (10) nominative – accusative – genitive – dative – instrumental – comitative

Under movement, cases on the right change to any case on their left, but not the other way around. Crucially, Caha argues that Peeling is not specific to case theory; it is a general theory of movement.

As pointed out earlier, clitics in SC are special in that they need to undergo movement. Furthermore, instrumental and comitative meanings in SC are both morphologically expressed by the instrumental, making it the most complex case in terms of layers present. From these two factors, it

follows that it is impossible for SC to have an instrumental clitic, as the relevant case layer is peeled off during movement.

The Peeling theory of case also seems to be able to quite successfully account for the lack of instrumental clitics. There is, however, one argument that goes in favor of the Anti-Locality approach. It is based on the so-called *sa* ‘with’ insertion as last-resort, which will be presented in the following section.

3.3 Last-resort P-insertion with instrumentals

It has been pointed out in the literature (Franks 2005, Bošković 2006) that if the complement of a verb such as *upravljati* ‘run’, which takes an instrumental argument, is a QP containing a higher numeral, last-resort *sa* ‘with’ insertion must take place in order to prevent the derivation from crashing (11).

- (11) a. *Petar je upravljao **pet fabrika**
 Peter AUX run five factories.**GEN**
- b. *Petar je upravljao **pet fabrikama**
 Peter AUX run five factories.**INST**
- c. Petar je upravljao **sa pet fabrika**
 Peter AUX run with five factories.**GEN**
 ‘Peter ran five factories’

Bošković (2006) argues that verbs such as *upravljati* ‘run’ are inherently marked for instrumental case. Consequently, they behave differently from verbs that assign structural accusative.

- (12) a. Marko je kupio kuću
 Marko AUX bought house.**ACC**
 ‘Marko bought a house.’
- b. Marko je kupio pet kuća
 Marko AUX bought five houses.**GEN**
 ‘Marko bought five houses’

While structural accusative need not be assigned if the complement of the verb is assigned case by another element (in this instance the numeral *pet* ‘five’), verbs marked for instrumental must assign case to their complement, since inherent case-marking is associated with θ -role marking. If the verb failed to case-mark its complement, it would also fail to θ -mark

it, which would lead to ungrammaticality due to a violation of the theta-criterion (Chomsky 1981). Given that higher numerals in SC cannot be case-marked, Bošković states that last-resort *sa* 'with' insertion takes place in order for the verb to check its instrumental case against it.

This allows Bošković to argue for case checking rather than case assignment, but we still seem to miss some important insight into the nature of instrumental case itself. With respect to this, two issues remain problematic with this analysis. The first has to do with the precise nature of the theta-role assigned by these instrumental verbs. Namely, it is unclear how the theta-role of the complements of these verbs is any different than the theme theta-role assigned by the more common accusative-assigning verbs. Some ideas regarding what might underlie instrumental interpretation of arguments will be presented in Sections 4 & 5. Still, the differences between (13a) and (13b) are difficult to accommodate within the familiar system of theta roles.

- (13) a. Petar Veliki je ovladao **Estonijom**
 Peter Great AUX subjugated Estonia
 'Peter the Great subjugated Estonia'
- b. Petar Veliki je savladao **Estoniju**
 Peter Great AUX conquered Estonia
 'Peter the Great conquered Estonia'

Bošković's analysis runs into further problems if one attempts to generalize it beyond instrumental complements. Namely, instrumental adjuncts exhibit the same type of behavior in terms of last-resort *sa* insertion as instrumental complements: while adjuncts with the meaning of instrument occur without Ps, they, too, call for last-resort *sa* insertion when introduced by a higher numeral (14).

- (14) a. Pokosili su travnjak **kosilicom**
 mowed.3P AUX lawn lawn-mower.INST
 'They mowed the lawn with a lawn mower'
- b. Pokosili su travnjak ***(sa)** pet kosilica
 mowed.3P AUX lawn with five lawn-mowers.GEN
 'They mowed the lawn with five lawn mowers'

Since instrument adjuncts are optional and there is no reason to assume that the verb itself is 'specified' for instrumental in these instances,

it remains unclear under Bošković's analysis what motivates last-resort *sa* insertion with non-complements.²

Turning back now to the Peeling theory of case, we note that the last-resort *sa* insertion also poses a problem for this analysis. According to Caha (Caha 2009), for a language to express a particular case with a suffix only, the NP needs to move above all the features that a particular case is composed of. If this is borne out, the case in question is morphologically expressed with a suffix; conversely, if the NP moves lower than the position of a particular case, then that case will be expressed by a combination of a functional P and a case suffix. Since there are (bare) instrumental complements in SC, it follows that NP moves above instrumental.

This account then makes a prediction: a KP* which is attracted by one and the same k-selector will consistently mark its case either as a suffix or with a functional P, regardless of its internal structure. As we have shown, instrumental complements only call for the insertion of the P (*sa*) when introduced by a higher numeral, despite the fact that they are in both instances presumably selected by the same element – the verb. Since there is no case-checking under the Peeling approach, the theory cannot account for last-resort *sa* insertion with some instrumentals.

For that reason, we propose a novel way to look at the peculiar phenomena related to instrumental case in SC, which we outline in the following section.

4. Our proposal

We would like to propose that the peculiarities of instrumental in SC can be largely accounted for under the assumption that all instrumentals are in fact PPs. To this we add the following assumptions: (i) in addition to overt, 'last resort' P, there is also a null P, (ii) the null instrumental P is *sa* 'with', and (iii) instrumental P-NP establishes a relation of central coincidence.

If all instrumentals are PPs, this immediately explains why there are no instrumental clitics. A clitic can never undergo movement from the complement of P position. The choice of the P *sa* 'with' as a 'default' instrumental P is governed by the fact that this P shows up as the last-resort option when 'bare' instrumentals are impossible. Also, if all instrumentals are PPs, we do not need to treat last-resort P as an exceptional way of case assignment/checking, since the P is always there.

² Bošković puts aside the issue of instrumental adjunct, referring to Larson's (1985) analysis of bare NP adverbs, which is not without its problems.

As far as the semantics of P-INST is concerned, we basically follow the proposals that *with* is a P of central coincidence.

The notion of central coincidence was originally introduced by Hale (Hale 1986, and further elaborated in Hale & Keyser 1993, 2002, 2005), who argues that spatial relations can be of terminal and central coincidence (between Figure and Ground/Place).^{3,4}

According to Hale, central coincidence is coincidence between the center of the figure and the center of the ground/place, ‘to the extent that is physically and practically possible, given the nature of the figure and place and the specific stance or movement of the figure’ (Hale 1986: 239). It is an atelic notion, as opposed to terminal coincidence which expresses coincidence at terminal points

Rapaport (2014), in her account of the P *with* in English, argues against the proposals that *with* is a functional element. This is argued for in Svenonius 2007, based on the fact that the interpretation of the *with*-phrase largely depends on the lexical verb it combines with. However, based on cases such as (15), where *with* is the ‘main predicate’, Rapaport argues that *with* is a lexical element.

- (15) Petar je **sa kolima**
Peter is with car.INST
‘Peter is with a car’

Adopting Hale’s original proposal, Rapaport further elaborates that *with* as a P of central coincidence typically expresses a locative relation of accompaniment, whereby the subject has control over this relation. More precisely, the subject’s location affects the location of the complement of *with*, so that it usually has to be in the same location as the subject (cf. also Stolz 2001).⁵

These are the main ingredients we will resort to in our description of instrumentals in SC. We will try to show that central coincidence is indeed what instrumentals (or instrumental PPs) contribute to the proposition, and

³ Ps expressing two types of coincidence relations (i).

- (i) a. encoding terminal coincidence: to, up to, onto, into, from, out of, off of
b. encoding central coincidence: on, at, by, in, along, over, past, through, with

⁴ According to Talmy (1978, 2000) the Figure is “a moving or conceptually movable point whose paths or site is conceived as a variable”, and the Ground is “a reference-point, having a stationary setting within a reference-frame, with respect to which the figure’s path or site receives characterization” (Talmy 1978: 627).

⁵ Rapoport further argues that enduring locational relation (central coincidence) and control can be reduced to the notion of possession, and redefines the interpretation of ‘with’ as (i).

(i) *With* defines a locative central coincidence relation of physical possession. Unlike general ownership (*I have a car*), *with* expresses temporary, physical possession.

ultimately link the type of P (overt, last-resort or null) with the way the relation of central coincidence is expressed. This will not be an easy task, having in mind that instrumental in SC has a wide variety of uses, that it is associated with meanings ranging from partner to cause, and that it takes all the major syntactic roles from adjunct to argument to predicate. In other words, central coincidence will have to involve more abstract relations of accompaniment, control and affectedness.

Here it is also appropriate to note that we will ignore the fact that instrumentals in SC are also found with Ps other than *sa* ‘with’. We also do not address the question of the exact division of labor between the P and case suffix in the expression of central coincidence.

5. P-Instrumental as central coincidence

In this section we examine a set of instrumentals to show how they express the relation of central coincidence between Figure and Ground. The precise type of instrumental is largely governed by the type of P found with them (obligatorily overt *sa*, last-resort *sa*, or obligatorily null *sa*).

5.1 Comitatives vs. instruments: obligatory *sa* vs. last-resort *sa*

Whilst in English, the overt P *with* covers all accompaniment types (from partner to instrument to manner), in SC the overtness/non-overtness of the P corresponds in a way to the split of accompaniment into comitative or ‘associative’ (*socijativ*; Ivić 1954) on the one hand, and ‘instrument’ on the other. Comitatives/associatives require overt Ps, while instruments allow overt Ps only as last-resort.

Traditional descriptive accounts commonly state that what licenses non-overt P instrumentals can be related to a form of a causal chain. In highly descriptive terms, the instrumental referent is seen as ‘mediator’ in the relation between the agent/cause and the theme (cf. Brač 2017 and references there).

Hence, two factors can be seen as crucial in distinguishing associatives and instruments: (i) presence of a special causal relation and (ii) (in)animacy of the referent.

- (16) Petar je isekao tortu **sa Marijom/nožem**
 Peter AUX cut cake with Mary/knife.INST
 ‘Peter cut the cake with Mary/with a knife’

The importance of the ‘causal chain’ can be seen in (17). Even though certain instrumentals could be understood as ‘instruments’ (an element with a facilitating/enabling function), they have to show up with an overt P. As the predicates *hodati* ‘walk’ and *videti* ‘see’ express abilities rather than conscious involvement of the subject, instrumentals are not ‘proper instruments’, and need to be introduced as associatives/comitatives.

- (17) a. Petar hoda **sa štapom**
 Peter walks with stick.INST
 ‘Peter walks with a stick’ (Peter can walk with a stick)
- b. Bolje vidim **sa naočarima**
 better see.1sg with glasses.INST
 ‘I see better with glasses’

Clearly, the factors noted above are not sufficient to account for the exact licensing conditions of one or the other type of instrumental. For instance, unlike associatives, which require some kind of a process/plurality part in the predicate, instruments are insensitive to this factor. In (18a), the comitative is out with the predicate *razbiti* ‘break’, whereas it becomes acceptable with imperfective/process *razbijati* ‘be breaking’, and even more so with a plural object. Much further work is necessary to understand the complex behavior of comitatives and draw a clear line between them and instruments.

- (18) a. Petar je razbio vazu ***sa Marijom/štapom**
 Peter AUX broken.PF vase with Mary/stick.INST
 ‘Peter broke a vase with Mary/with a stick’
- b. Petar je razbijao vazu/vaze **sa Marijom/štapom**
 Peter AUX broken.IMPF vase /vases with Mary/stick.INST
 ‘Peter was breaking a vase/vases with Mary/with a stick’

Turning now to the proposal that P-instrumentals express central coincidence with both comitatives and instruments, we can state that the subject and the partner/instrument are in a locative relation of accompaniment. The subject’s location controls the location of the partner/instrument. Degrees of this control can, of course, vary, yielding the difference between partner and instrument interpretations. Therefore, it seems that the obligatory presence or absence of P correlates to some extent to the degree of control. Clearly, at this point we cannot exactly pinpoint what the decreasing degrees of control entail and how this relates to all the specific properties of both comitatives and instruments. What is important

is for us to be able to show that the realization of the instrumental P comes with subtle nuances in the general meaning of central coincidence.

5.2 Arguments of verbs of ‘control’: null *sa* & last resort *sa*

Let us now take a closer look at arguments of a specific set of predicates, which we label verbs of ‘control’ (‘command’, ‘run’, ‘direct’, ‘rule’...), as this seems to be the key component of their lexical meaning.

- (19) a. Petar upravlja fabrikom
 Peter runs factory.INST
 ‘Peter runs a factory’
- b. Petar komanduje vojskom
 Peter commands army..INST
 ‘Peter commands an army’
- c. Petar Veliki je ovladao zemljom
 Peter Great AUX subjugated country.INST
 ‘Peter the Great subjugated the country’
- d. Petar manipuliše ljudima
 Peter manipulates people.INST
 ‘Peter manipulates people’

Recall that instrumental arguments allow overt Ps only as last-resort. In non-standard and/or casual speech, however, we occasionally find overt Ps, and this often seems to be the case with pronouns.⁶

- (20) Petar loše komanduje njome/s njom / nama/s nama
 Peter badly run her.INST/with her us/with us
 ‘Peter commands it/us badly’

We also note that predicates which license instrumental arguments seem to have a more complex meaning, where the subject’s relation with the instrumental argument is not strictly in terms of (direct) causation, but rather of control. In other words, when somebody runs a factory, they do not cause it run, but rather control the process of its running. Similarly, when

⁶ Note that the form of the instrumental pronoun is not always the same with and without a P (*mnome - sa mnom* – ‘me/with me’, *njime/sa njim* ‘him/with him’, *njome/s njom* ‘her/with her’). Also, with plural pronouns, there is syncretism with dative case: *vama, nama, njima* ‘us, you, them.INST/DAT’). Whether these peculiarities in the morphological makeup play any role here, or instrumental arguments for some reason dislike ‘bare’ pronominalization, remains to be further investigated.

somebody manipulates people, they do not directly cause them to act or be in a certain way, but rather control how they behave. In a sense, the referent of the instrumental acts/is in a certain way rather independently, but this process is under control of the subject.

The relation of central coincidence, which we assume to be present in all instrumentals, can in these cases be stated as follows: the instrumental's referent is in central coincidence with the subject via its control. Needless to say, this is a very abstract interpretation, which can only be more finely stated once we gain a better insight into the special semantics of these predicates.

5.3 Locations and temporals: obligatorily null *sa*

5.3.1 Locational instrumentals

Before we tackle the interpretation of instrumental locations in terms of central coincidence, we need to point out a couple of issues regarding locational instrumentals.

First of all, not all locations are equally possible in instrumental. It has long been noted that for a location to be able to show up in instrumental, it needs to be spatially unrestricted in whatever the relevant sense of it might be. Whilst spaces such as an office or a room are not excluded from being instrumental locations of predicates such as *walk*, they are pragmatically odd or strained.

- (21) Petar hoda **šumom/ulicom/stazom/?kancelarijom/??sobom**
 Peter walks forest/street/footpath/office/room.INST
 'Peter walks through/in/along the forest/street/park/footpath/corridor'

The second important characteristic is the restriction on the verb type. Namely, with locations, a motion component is obligatory. Even when there is no overt motion verb, as in (22), motion is entailed. (22) could never mean that Peter whistled while he was standing in the street; the instrumental contributes the entailment of motion.

- (22) Petar je zviždao **ulicom**
 Peter AUX whistled street.INST
 'Peter whistled up/down/in/on the street'

The final issue we would like to present here is the question of exact spatial contribution of locational instrumentals. If the spatial semantics of these instrumentals assumes any paths (in the sense that they provide

information about a trajectory, cf. Jackendoff 1993, Talmy 1991, among many others), such paths need (at least) to be unspecified. This is particularly made clear by the lack of a corresponding P in English. Even though the locational instrumental often receives a distributive or exhaustive paraphrase (*po šumi* ‘up/down/all over forest’, *kroz šumu* ‘through forest’), these are only second-best ways of expressing the meaning of instrumental locations.

In terms of central coincidence, what locational instrumentals do is relate certain spaces (limited only by the denotation of the NP) with certain motion processes. We can therefore say that when Peter runs an instrumental forest, the forest is in a relation of central coincidence with the motion process of Peter running. In other words, Peter is with the forest at every point of running.

A more detailed investigation of manner and path of motion, as well as the role of Ps in the expression of paths and locations is needed before we can offer a more precise account of these facts.

5.3.2 Temporal instrumentals

Finally, let us briefly examine the behavior and interpretation of temporal instrumentals. Temporal instrumentals, unlike locations, do not show strong restrictions on the type of verb they combine with, as long as the predicate is atelic. As they themselves are possible as ‘movable’ notions (passing of time), and this ‘dynamic’ interpretation is secured by the instrumental case, they do not require their predicates to have a motion component. The interpretation of the temporal noun is always plural, even when this is not indicated morphologically (23a).

- (23) a. **Subotom** kupujem voće na pijaci
 Saturday.INST I-buy fruit on market
 ‘On Saturdays, I buy fruit at the market’
- b. **Danima** je stajala sama na kiši
 days.INST AUX stood alone on rain
 ‘She stood alone in the rain for days’

Also, unlike locations, temporal instrumentals can show up with the overt P *sa*. This is only possible with a limited number of temporal NPs (*vreme* ‘time’, *godine* ‘years’) (24). In such cases, the passing of time is ‘connected’ to (usually) some kind of (internal) change of state, and this connection has a causal effect. In (24a), the passing of time or years is seen as having caused the internal change of becoming smarter.

- (24) a. **S vremenom/godinama** sam postao pametniji
 with time/years.INST AUX.1sg become smarter
 ‘With time/years I’ve become smarter’
- b. ***S mesecima** sam naučila kako da radim
 with months.INST AUX.1sg learned how to do
 pravilno mrtvo dizanje
 correctly deadlift
 ‘With months, I learned how to do deadlift correctly’

Cases such as (24) are exceptional, and pattern more along the lines of other ‘causal’ *with*-PPs, as in (25), which are beyond the scope of this paper.

- (25) **S njenim dolaskom,** sve se promenilo
 with her arrival.INST everything SE.RFL changed
 ‘With her arrival, everything has changed’

For that reason, we will assume that temporal instrumentals largely pattern with locational instrumentals, with the difference of how movement along a trajectory is obtained. Crucially, they differ from other instrumentals discussed here in that they never allow their P to be overt, not even as last-resort. What also seem to be a distinguishing factor is the lack of the subject’s control over the accompaniment relation. In fact, the control relation seems to be reversed, as instrumental locations and temporals in a way spatially and temporally restrict the process the subject is involved in. It is not uncommon that the relation between Figure and Ground can change, resulting in different frames. Whether this is the case with these special instrumentals remains subject of future research. We believe, however, that the consistent ban on overt Ps here must be related to the fact that no control of the subject is present in this type of central coincidence relation. If our intuition is on the right track, then it seems possible to correlate the type of P to the type of central coincidence relation.

Even though this is a small sample of instrumental uses, we believe that the relation of central coincidence can be shown to underlie all of them. What also remains to be seen is how the P *sa* turns into a terminal coincidence P (with genitives), as well as how instrumentals show up with other central coincidence Ps (*nad* ‘above’, *pod* ‘under’, *pred* ‘in front of’, *za* ‘behind’).

6. Summary and concluding remarks

In this paper, we have argued that there are no instrumental clitics because instrumental is always a complement of P, which can be overt, last-resort or null.

P expresses accompaniment, which is a type of central coincidence relation, and it ranges from co-presence to partner. Accompaniment in its default form seems to be a dynamic notion, but it remains to be seen how factors such as motion/process, animacy/mobility/causation and the way spatio-temporal notions map to paths and locations come into interplay, yielding different interpretations and the realization of P as overt, last-resort or null.

Our proposal has some advantages over the existing accounts of instrumental case, especially regarding last-resort P-insertion. Given that P is always present in the structure of instrumentals, the difference between ‘prepositional instrumentals’ and ‘bare instrumentals’ is simply in terms of the PF realization of the P. On the other hand, we now face the question of how exactly the licensing of null Ps with instrumental fits into the familiar null element licensing strategies. We leave this issue for future research.

Finally, we have shown that the standard analysis of inherent case in terms of theta-roles might not be the right way to pursue the interpretational differences between different cases.

References

- Abels, Klaus. 2003. Successive cyclicity, anti-locality, and adposition stranding. Doctoral dissertation, University of Connecticut.
- Bošković, Željko. 2006. Case checking versus case assignment and the case of adverbial NPs. *Linguistic Inquiry* 37, 522–533.
- Bošković, Željko. 2013. Phases beyond clauses. In *Nominal Constructions in Slavic and Beyond*, L. Schürcks, A. Giannakidou, U. Etxeberria, & P. Kosta (eds.), 75–128. Berlin: Mouton de Gruyter.
- Brač, Ivana. 2017. Sintaksička i semantička analiza besprijedloškog instrumentala u hrvatskom jezku. Doctoral thesis. University of Zagreb.
- Caha, Pavel. 2009. The nanosyntax of case. Doctoral thesis. University of Tromsø.
- Cardinaletti, Anna and Michal Starke. 1999. The typology of structural deficiency: A case study of three classes of pronouns. In *Clitics in the Languages of Europe*, H. van Riemsdijk (ed.), 145–233. Berlin: Mouton de Gruyter.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrech: Foris.
- Franks, Steven. 1995. *Parameters of Slavic Morphosyntax*. Oxford: OUP.
- Grohmann, Kleanthes. 2003. *Prolific Domains: On the Anti-Locality of Movement Dependencies*. Amsterdam: John Benjamins.

- Hale, Ken. 1986. Notes on world view and semantic categories: Some Warlpiri examples. In *Features and Projections*, P. Muysken & H. van Riemsdijk (eds.), 233-254. Dordrecht, Foris.
- Hale, Ken & Keyser, Jay. 1993. On Argument structure and the lexical expression of argument relations. In *The View from Building 20*, K. Hale & S. J. Keyser (eds.), 53-109. Cambridge, Mass: MIT Press.
- Hale, Ken & Keyser, Jay, 2002. *Prolegomenon to a Theory of Argument Structure*. Cambridge, Mass: MIT Press.
- Hale, Ken & Keyser, Jay. 2005. Aspect and the syntax of argument structure. In *The Syntax of Aspect. Deriving Thematic and Aspectual Interpretation*, N. Erteschik-Shir & T. Rapoport (eds), 11-41. Oxford: Oxford University Press.
- Ivić, Milka. 1954. Значења српскохрватског инструментала и њихов развој. Beograd: Srpska akademija nauka.
- Jackendoff, Ray. 1983. *Semantics and Cognition*. Cambridge, Mass: MIT Press.
- Larson, Richard. 1985. Bare-NP adverbs. *Linguistic Inquiry* 14, 595-621.
- Rapoport, Tova. 2014. Central coincidence: the preposition *with*. *Faits de langues* 44/2, 159-173.
- Starke, Michal. 2005. Nanosyntax class lectures. Spring 2005, University of Tromsø.
- Stolz, Thomas. 2001. To be with X is to have X: Comitatives, instrumentals, locative, and predicative possession. *Linguistics* 39, 321–350.
- Svenonius, Peter. 2007. Adpositions, particles, and the arguments they introduce. In *Argument Structure*, E. Reuland, T. Bhattacharya & G. Spathas (eds.), 63-103. Amsterdam: John Benjamins.
- Talmy, Leonard. 1978. Figure and Ground in complex sentences. In: Greenberg, J., Ferguson, C. & Moravcsik H. (eds.). *Universals of Human Language*. Stanford, CA: Stanford University Press, 627-649.
- Talmy, Leonard. 1991. Path to realization: A typology of event conflation. *Berkeley Linguistics Society* 17, 480 – 519.

Tanja Milićev
Maša Bešlin

**PADEŽ INSTRUMENTALA: ZAŠTO JE INSTRUMENTAL
ISKLJUČEN IZ SISTEMA KLITIKA U SRPSKOM/HRVATSKOM
JEZIKU**

Rezime

Cilj ovog rada je pokazati da se odsustvo padeža instrumentala u sistemu (en)klitika u srpskom/hrvatskom jeziku može objasniti pretpostavkom da su svi instrumenali, bez obzira da li se javljaju sa predlogom ili bez njega, zapravo predložke fraze. Budući da nijedna od postojećih klitika ne može da se javi kao komplement predloga, nikada nije moguće realizovati klitiku u padežu instrumentala. Na osnovu činjenice da, kada je nemoguće realizovati instrumental zbog prisustva kvantifikatora koji nužno dodeljuje genitiv, obavezno dolazi do ubacivanja predloga *sa* kao krajnjeg sredstva, predlažemo da se upravo ovaj predlog javlja uz svaki instrumental. Predlog *sa* se može javiti kao fonološki realizovan, kao krajnje sredstvo, i kao nulti/fonološki nerealizovan element. Ovaj predlog je zaslužan za jedinstvenu interpretaciju svih instrumentala: odnos centralne koincidencije (Hale 1986). Realizacija predloga zavisi od načina izražavanja osnovnih pojmova koji se javljaju kao ključni odnosu centralne koincidencije.

tanja.milicev@ff.ns.ac.rs
mbeslin.ns@gmail.com