

# Identifying the timing of clitic movement in Serbo-Croatian: an argument from ellipsis

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## 1. Introduction

### 1.1 2P clitics in Serbo-Croatian

This paper focuses on the phenomenon of second-position (2P) cliticization in Serbo-Croatian (SC), where certain clitics (auxiliaries, pronouns, and a question particle, italicized in the examples throughout the paper) have to occur in the second position (to be defined below). The clitics have to appear in a particular order: switching the order of the clitics or putting them in another place in (1) would lead to the ungrammaticality.

- (1) Nedavno *mu je* neko u snu pevao jednu pesmu.  
recently him AUX someone in dream sung one song  
'Recently someone in one of his dreams sang him a song.'

It would not be an overstatement to say that all aspects of 2P cliticization are still disputable. The two biggest questions argued upon in the literature are (i) is the second position defined phonologically or syntactically and (ii) what is the timing of clitic movement to the second position. A thorough overview of different approaches and the answers they provide to these questions are given in Bošković (2001). In short, there are purely syntactic accounts, purely phonological accounts, and a mixture of the two. This paper advocates a purely phonological approach based on a new piece of evidence from the interaction between VP-ellipsis (VPE) and 2P cliticization in SC, which reveals that clitic movement to the second position happens later than VPE.

As far as the nature of the second position itself is concerned, I follow the phonological approach. As Radanović-Kocić (1996) and Bošković (2001) argue, the domain for clitic placement is an intonational phrase, not a clause. One of the arguments in favour of this approach is the delayed clitic placement, which occurs when certain elements, prosodically separated from the rest of the clause, trigger clitic placement into the third or the fourth position within their clause. As (2) from Radanović-Kocić (1996) shows, the default position

of the 2P clitics in this case would be after the subject, as in (2a). However, an appositive causes the delayed clitic placement, as in (2b), making it impossible to place the clitics after the subject, as in (2c).

- (2) a. Ja *sam ti* obećala igračku.  
 I AUX you promised toy  
 ‘I promised you a toy.’
- b. Ja, tvoja mama, obećala *sam ti* igračku.  
 I your mother promised AUX you toy  
 ‘I, your mother, promised you a toy.’
- c. \* Ja, tvoja mama, *sam ti* obećala igračku.  
 ‘I your mother AUX you promised toy.’

Radanović-Kocić (1996) and Bošković (1995, 2001) argue that the contrast in (2) can be accounted for by postulating a prosodic domain for clitic placement. Under this approach, clitic has to appear in the second position of their intonational phrase (IntP), not a clause. Appositives, along with parentheticals and fronted heavy constituents, are parsed as separate IntPs, dividing a sentence into several IntPs. The 2P clitics then appear in the 2P of their IntP, after the first prosodic word (PWd) or the first phonological phrase (PhP) as schematized in (3a). In the case of (2b), clitics are then placed after the first PWd of their IntP, as shown in (3b).

- (3) a. (IntP (PWd/PhP ...) **clitics** ...)  
 b. ... (IntP (PWd obećala) *sam ti* ...)

Since the second position is a phonological notion, it might seem plausible that clitics are placed to the second position at PF. Radanović-Kocić (1996) emphasizes that it is a phonological feature of clitics that affects their placement and proposes that the 2P clitics are created by the following operations:

- (4) Cliticization (Radanović-Kocić 1996:433)  
 Assign the feature [+clitic] to pronouns and auxiliaries in all positions except when they carry phrasal stress or when not preceded by an unstressed element.
- (5) Clitic Movement (Radanović-Kocić 1996:433)  
 Move all [+clitic] elements into the second position.

Bošković (2001), however, proposes a different explanation. He argues that clitics undergo movement in syntax but, according to him, clitics do not move to a specific second position but rather to standard positions for feature-checking. After that, the sentences that violate the 2P requirement are filtered out at PF. As an argument for the phonological nature of the 2P requirement, Bošković discusses the elliptical sentence in (6). The grammaticality of (6) proves that the 2P clitics do not have to be located in the second position in syntax: the clitic *ga* inside the ellipsis site does not violate the second position requirement due to its non-pronunciation.

- (6) Marija *ga* nije poljubila, a Ana jeste poljubila *ga*.  
 Marija him AUX.NEG kissed and Ana AUX kissed him  
 ‘Marija didn’t kiss him, but Ana did.’

In this paper, I develop a strict phonological account of 2P cliticization in SC (following Radanović-Kocić 1996) and propose an alternative explanation of why there is no violation of the 2P requirement under ellipsis (see section 3). Before introducing the account, I take a closer look at ellipsis in SC.

## 1.2 VP-ellipsis and clitics in SC

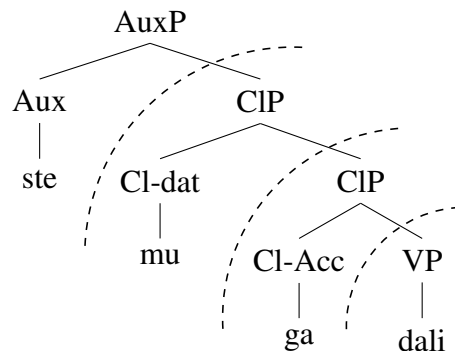
In the previous literature, there have been two proposals regarding VPE and its interaction with the 2P clitics in SC. Stjepanović (1998) uses elliptical sentences as an argument for clitics being located in separate functional projections, any of which can be targeted by ellipsis. Thus, according to her, the sentences in (7) are all grammatical and have different domains of ellipsis.

- (7) a. Mi *smo mu ga* dali, a i vi [*ste [mu [ga [dali]]]*], (takodje).  
 we AUX him it given and also you AUX him it given too
- b. Mi *smo mu ga* dali, a i vi [*ste [mu [ga [dali]]]*], (takodje).  
 we AUX him it given and also you AUX him it given too
- c. Mi *smo mu ga* dali, a i vi [*ste [mu [ga [dali]]]*], (takodje).  
 we AUX him it given and also you AUX him it given too  
 ‘We gave it to him, and you did, too.’

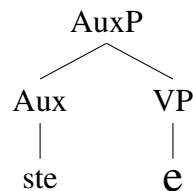
Progovac (1998), however, does not agree with Stjepanović’s judgments: for her, only (7a), in which all the pronominal clitics are elided and the auxiliary clitic survives ellipsis, is grammatical. She proposes that (7a) involves a null VP in the complement of AuxP. Therefore, pronominal clitics cannot surface in those cases because they are not present in the structure in the first place.

The two proposals are schematized in (8) and (9), respectively.

- (8) Stjepanović (1998):



- (9) Progovac (1998):



The discrepancies of judgments reported in the previous literature necessitate a study representing more data collected from native speakers. Section 2 of this paper introduces the design and the results of the survey used to collect judgments of native SC speakers, which serve as a basis for the prosodic account of 2P cliticization presented in section 3, where I also argue that neither of the analyses in (8) or (9) can be correct. Section 4 discusses the interaction between clitic placement and prosodic phrasing and section 5 accounts for some variation in the data.

## 2. Interaction of ellipsis and clitic movement: case study

### 2.1 Hypothesis

Assuming that pronominal clitics originate inside VP in standard argumental positions, there are two hypothetical options when it comes to the interaction of ellipsis and clitic movement and their relative timing: (i) VPE happens before clitics move out of the VP, in which case clitics are trapped inside ellipsis site, as in (10a), and (ii) the clitics move out of the VP prior to ellipsis and hence appear in the second position, as in (10b).

#### (10) *Hypothetical options*

Mi *ih* nismo videli, a oni *su* rekli...

we them AUX seen and they AUX said

‘We didn’t see them, but they said...’

a. da *jesu* [~~videli~~ *ih*]

that AUX seen them

‘...that they did.’

b. da *ih* *jesu* [~~videli~~]

that them AUX seen

‘...that they did.’

Based on what has been reported in the literature, two types of speakers are predicted to be represented: speakers of type A would share Stjepanović’s judgments and allow both (10a) and (10b), while speakers of type B would be consistent with Progovac and would only allow (10a). The aim of the survey described in this section is to find out if that prediction is borne out.

### 2.2 Design of the experiment

The survey consisted of sentences similar to those in (10), embedded in small dialogues. Participants were instructed to judge the answer (A) on a scale from 1 (bad) to 7 (good). An example of such a dialogue is given in (11).

*Identifying the timing of clitic movement in Serbo-Croatian*

(11) Q: Ko je šta dao Milanu za rođendan?  
 who AUX what given Milan for birthday  
 ‘Who gave what to Milan for his birthday?’

A: \*Jelena mu je dala knjigu, a Ana mu šolju.  
 Jelena him AUX given book and Ana him mug  
 ‘Jelena gave him a book and Ana a cup.’

There were six types of environments used in the survey. The table in (12) provides the English translations of examples for every of the environments.

(12) *Examples of target sentences (translated to English)*

VPE	Ana kissed him and Jelena did, too.
VPE <sub>contrastive</sub>	Ana didn't kiss him, but Jelena did.
VPE <sub>embedded</sub>	Ana didn't meet him, but Jelena said that she did.
VPE <sub>wh-mvnt</sub>	I know what her parents gave her, but I don't know what her friends did.
Gapping	Jelena gave him a book and Ana a cup.
RNR	Ana didn't but Jelena did kiss him.

The survey comprised 24 target sentences: two sentences per condition, each of which appeared in two variants, with the pronominal clitic elided or appearing in the second position. The sentences were grouped into 6 experimental lists in a pseudo-random order and separated by fillers. The order in which the lists were presented to participants varied. Every participants gave judgment to both variants of every sentence (with or without the clitic) but the two variants were never on the same experimental list and participants differed in which variant they judged first.

43 speakers of SC (of the age 17 – 57 with a median of 27 years old) participated in the survey, the majority of which (86%) were born on the territory of present-day Serbia.

### 2.3 Results

The results of the survey are presented in the table in (13), which provides medians for each condition. As can be seen from the table, the sentences with elided pronominal clitics are considered acceptable by speakers, while pronunciation of a pronominal clitics in the second position leads to the ungrammaticality or degraded judgments in most cases.

(13) *Survey results: medians*

	clitic pronounced	clitic elided
VPE	2	6
VPE <sub>contrastive</sub>	3	6
VPE <sub>embedded</sub>	2	7
VPE <sub>wh-mvnt</sub>	3	6
Gapping	1	7
RNR	5	6

A paired-samples sign test indicated that the difference between pronounced and elided clitics is statistically significant for each environment ( $p = .000$ ).

Two details about the results presented in table 13 are worth discussing. First, right node raising (RNR) is different from other conditions: while still significant, the difference between medians is much smaller in this case. It is fair to say that under RNR, pronominal clitics can be either pronounced or elided. I come back to analysing this pattern in section 3.

Second, under two conditions the medians are higher than expected if clitics cannot survive ellipsis: under the contrastive VPE ( $VPE_{contrastive}$ ) and under VPE with *wh*-movement ( $VPE_{wh-mvnt}$ ). As can be seen from table 12, these two conditions included sentences with contrastive focus. Whether or not contrastive focus influences clitic movement needs to be systematically investigated in the future.

In sum, the results suggest that most speakers share Progovac’s judgments and eliding pronominal clitics together with the verb is a strong preference for the consulted speakers. In the rest of the paper, I will consider it a bleeding effect of ellipsis on clitic movement. In other words, out of the two hypothetical options in (10), only the one with the elided pronominal clitics is grammatical, as (14) shows.

(14) Mi *ih* nismo videli, a oni *su* rekli...  
 we them AUX seen and they AUX said  
 ‘We didn’t see them, but they said...’

a. da jesu [videli *ih*]  
 that AUX seen them  
 ‘... that they did.’

b. \*da *ih* jesu [videli]  
 that them AUX seen  
 ‘... that they did.’

Therefore, clitics are not allowed to appear in the second position under VPE. The next section introduces the account of clitic movement and its interaction with ellipsis.<sup>1</sup>

### 3. Account: late clitic movement

The results of the survey presented in section 2 suggest that VPE bleeds clitic movement to the second position.

#### 3.1 Problems with previous approaches

First, let’s consider what the survey results mean for the accounts of the interaction between VPE and 2P clitics proposed by Stjepanović (1998) and Progovac (1998). Stjepanović’s account involving different elliptical sites appears to be too permissive: it allows for much more free variation than is actually found in the data. According to the results of the survey, speakers can not freely elide any of the functional projections that presumably host 2P

<sup>1</sup>Further, I focus on VPE. The discussion of gapping goes beyond the scope of this paper.

### Identifying the timing of clitic movement in Serbo-Croatian

clitics. The speakers in fact share Progovac's intuition and do not allow pronominal clitics survive VPE. However, the null VP hypothesis cannot be right either simply because extraction out of the VP is possible under ellipsis: in (15), the *wh*-phrase clearly moves from the argument position inside the VP, which would not be possible if the VP were null (see Merchant 2013).

- (15) Znam koga *je* Marija poljubila, ali ne znam koga; *je* Ana poljubila  $t_i$  ].  
know who AUX Marija kissed but not know whom AUX Ana kissed  
'I know whom Marija kissed but I don't know whom Ana did.'

Recall from (6) that Bošković (2001) notices that clitics do not violate the 2P requirement when they are elided. However, his account does not necessarily rule out a scenario in which clitics do escape ellipsis. The results of the experiment show that (16), which is the counterpart of (6) with the pronominal clitic in the second position, is ungrammatical for most speakers.

- (16) \* Marija *ga* nije poljubila, a Ana *ga* jeste poljubila.  
Marija him AUX.NEG kissed and Ana him AUX kissed  
'Marija didn't kiss him, but Ana did.'

There is no 2P violation in (16) and it is not obvious what causes the ungrammaticality under Bošković's account. I suggest that the bleeding effect of ellipsis on movement of the second position clitics can be easily explained in terms of the relative timing of VPE and 2P clitic movement. But before discussing where the bleeding effect comes from, we first need to understand the nature of the 2P clitics in SC.

### 3.2 The nature of clitics

Both pronominal and auxiliary clitics in SC have accented counterparts. Clitics and the corresponding accented forms are identical in their feature composition and only differ in their phonological properties. Table 17 illustrates this for the 3SG masculine pronoun and the 2SG pronoun.

- (17) *Clitics and accented forms of pronouns*

	+ clitic	-clitic
pronoun 3SG.MASC.ACC	ga	njega
pronoun 3SG.MASC.DAT	mu	njemu
pronoun 2SG.ACC	te	tebe
pronoun 2SG.DAT	ti	tebi

Given that there are no differences in morphosyntactic features between clitics and accented forms of pronouns, I follow Radanović-Kocić (1996) in arguing they are not distinct elements from the syntactic point of view. In other words, a pronominal or auxiliary element in syntax is not marked as [+clitic] and does not carry any information about its future prosodic status. Example (18) illustrates this point: in syntax, there is just a 3SG auxiliary and a 3SG.MASC.ACC pronoun.

(18) *Stage 1: Syntax*

... a Ana JE / JESTE poljubila GA / NJEGA .  
 and Ana AUX.3SG kissed 3SG.MASC.ACC  
 ‘... but Ana kissed him.’

The prosodic status of pronouns and auxiliaries is decided upon later in the course of derivation (at the stage of Vocabulary Insertion (VI), see section 3.3). In (18) the pronoun is marked as clitic since it occurs in a prosodic environment that allows it,<sup>2</sup> while the auxiliary has to be realized in its accented form due to being contrastive to the auxiliary in the antecedent clause, as shown in (19).

(19) *Stage 2: Vocabulary Insertion*

... a Ana jeste poljubila ga.  
 and Ana AUX.3SG kissed him  
 ‘... but Ana kissed him.’

Only after that, the pronoun, marked as a 2P clitic, moves out of the VP to the second position within its IntP, as illustrated in (20). Clitic movement is triggered by the requirement of the clitic to appear in the second position.

(20) *Stage 3: Clitic movement at PF*

... (*IntP* a Ana ga jeste poljubila ).  
 and Ana him AUX.3SG kissed  
 ‘... but Ana kissed him.’

In the above derivation, the phenomenon of 2P cliticization is entirely a phonological one: not only the second position is defined in prosodic terms, but also clitics are formed and move only at PF.

### 3.3 Non-insertion and the bleeding effect

When it comes to VPE, I follow the non-insertion approach, assuming that ellipsis blocks vocabulary insertion at PF (see Bartos (2001), Kornfeld & Saab (2004), Aelbrecht (2010)). This view allows us to understand why clitics cannot survive ellipsis in most cases and why there is no violation of the 2P requirement when the clitics are elided.

The following structures illustrate the derivation of an elliptical sentence with a pronominal element inside the ellipsis site. The structure in (21) shows the sentence in the syntax, before Spell Out: the VP is marked for ellipsis and there is no information about the clitic status of the auxiliary or the pronominal object.<sup>3</sup> The structure in (22) shows the sentence

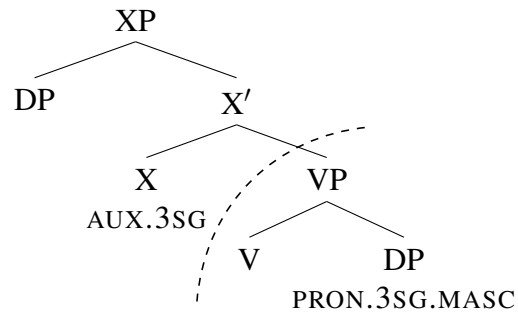
<sup>2</sup>I.e. it does not carry phrasal stress or is not preceded by an unstressed element, as discussed in Radanović-Kocić (1996).

<sup>3</sup>Note that the structures are simplified. I do not assume any particular position for the auxiliary. There are two ways of explaining why it always survives VP ellipsis. First, it is possible that it is generated higher than the ellipsis site, as illustrated in (21). Second, even if it is generated inside the ellipsis site, it moves in syntax for reasons of feature checking. The crucial difference between auxiliaries and pronominal clitics is that while the former have a reason to move high up in syntax, the latter do not.

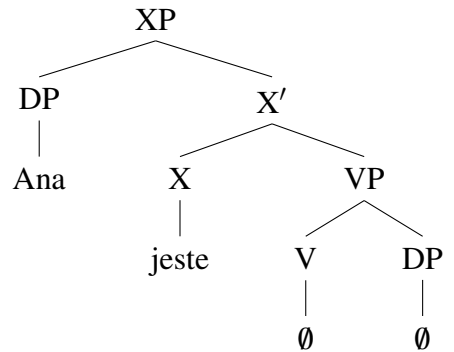
*Identifying the timing of clitic movement in Serbo-Croatian*

on PF: during VI, the auxiliary is realized as an accented form being contrastive to the auxiliary in the antecedent, while the elements inside the ellipsis site do not receive any phonological material since VPE blocks VI. Note that there is no violation of the 2P requirement not because the clitic is unpronounced but rather because the sentence contains no 2P clitics at all.

(21) *Syntax*



(22) *PF*



The difference between RNR and VPE can be explained in terms of timing. I assume that RNR is a late deletion process operating at PF (Hartmann 2000). Therefore, the relative timing of RNR and clitic movement can be flexible. Clitic movement can happen before deletion, deriving (23a), or after deletion, deriving (23b).

- (23) a. Nada *ga* nije poljubila, a Marija *ga* jeste poljubila.  
 Nada him AUX.NEG kissed but Marija him AUX kissed
- b. Nada nije poljubila *ga*, a Marija *ga* jeste poljubila.  
 Nada AUX.NEG kissed him but Marija him AUX kissed  
 ‘Nada didn’t, but Marija did kiss him.’

To sum up, I propose that SC clitics move to the second position post-syntactically, after the lexical item marked as a clitic is inserted at PF. When VI is blocked due to ellipsis, the pronominal objects inside the ellipsis site do not become 2P clitics. An important aspect of this approach is that it does not eliminate the possibility of syntactic movement of potential clitics as long as it is motivated. In other words, potential clitics are treated by syntax as any other syntactic elements.

The appeal of this approach is in placing the phenomenon of 2P cliticization completely in PF. The 2P clitics are a heterogeneous group of elements from a syntactic point of view, only united by their weak prosodic status. Hence there is no obvious reason for them to be grouped together and distinguished from other elements in syntax. Since the placement of 2P clitics is determined prosodically, it seems plausible that the mechanism placing them into the 2nd position operates at PF as well. The next section discusses the effects of prosodic phrasing on 2P clitic placement supporting the approach proposed here.

#### 4. Prosodic phrasing and clitic placement: the 1W / 1C dichotomy

One well-known fact about the 2P clitics in SC is that they can be placed either after the first constituent of a clause (24a), the so-called 1C placement, or after the first word (24b), seemingly breaking up a constituent, the 1W placement.

- (24) Bošković (2001)
- a. Taj čovjek *je* volio Milenu.  
that man AUX loved Milena
  - b. Taj *je* čovjek volio Milenu.  
that AUX man loved Milena  
'That man loved Milena.'

It is also well known that a clitic can break a constituent only when the element it cliticizes to can be shown to independently move in syntax. In SC determiners and adjectives can be separated from nouns, as demonstrated in (25) from Bošković (2001).

- (25) Tog *je* Milena voljela čovjeka.  
that AUX Milena loved man  
'Milena loved that man.'

Based on this pattern, it has been argued that in fact there is no 1W placement: the element that precedes the clitics in fact moves to a higher position as a separate constituent (Wilder & Čavar 1994, Progovac 1996, Bošković 2001). Therefore, the apparent 1W placement is in fact the 1C placement. In other words, there is no difference between (24a) and (24b) in this respect: in both cases the clitic is placed after the first constituent of its clause, as illustrated in (26).

- (26) a. [<sub>XP</sub> Taj čovjek ] *je* volio Milenu.  
that man AUX loved Milena
- b. [<sub>XP</sub> Taj ] *je* [<sub>XP</sub> čovjek ] volio Milenu.  
that AUX man loved Milena  
'That man loved Milena.'

Bošković (2001) uses this pattern of clitics placement as one of the arguments against the strictly phonological approach to 2P cliticization of Radanović-Kocić (1996). She assumes that the constituents that can be split by clitics can optionally form a phonological phrase, i.e. it can either be (<sub>phP</sub> taj čovjek) or (<sub>phP</sub> taj) (<sub>phP</sub> čovjek), which Bošković finds problematic. However, there is nothing problematic with that if we consider the syntax-prosody correspondence. Different prosodic groupings in such cases would reflect differences in syntactic structures. The faithfulness constraints of Match theory (Selkirk 2009, 2011) require syntactic constituency to be faithfully reflected in prosodic phrasing:

- (27) Match Phrase  
A phrase in syntactic constituent structure must be matched by a constituent of a corresponding prosodic type, in phonological representation, call it  $\pi$ .

## Identifying the timing of clitic movement in Serbo-Croatian

Therefore, two different syntactic structures of (26) would correspond to two different phonological phrasings of (28), with the clitic placed after the first phonological phrase.

- (28) a. (*PhP* Taj čovjek ) *je* volio Milenu.  
           that man       AUX loved Milena
- b. (*PhP* Taj ) *je* (*PhP* čovjek ) volio Milenu.  
           that AUX       man       loved Milena  
           ‘That man loved Milena.’

However, clitics do not simply follow the first PhP of their IntP. Bošković (2015) notices that 2P clitics are sensitive to the differences in types of prosodic boundaries. He argues that there is a distinction between utterance (which I call a maximal IntP) and intonational phrase (which I call a non-maximal IntP): when clitics are located at the edge of a non-maximal IntP, the 1W placement in (29a) is strongly preferred to the 1C placement in (29b). The heavy initial constituent (*u velikoj sobi*) forms a separate intonational phrase.<sup>4</sup>

- (29) a. (*IntP* ... (*IntP* da u velikoj sobi ) (*IntP* taj *je* čovjek poljubio Mariju ))  
           that in big room                   that AUX man kissed Marija
- b. ?? (*IntP* ... (*IntP* da u velikoj sobi ) (*IntP* taj čovjek *je* poljubio Mariju ))  
           that in big room                   that man AUX kissed Marija  
           ‘that in the big room, that man kissed Marija’

Summarizing the observed pattern, the following generalization can be formulated:

- (30) The 2P clitics in SC are placed in the 2<sup>nd</sup> position within their IntP, which is after the 1<sup>st</sup> PhP in case of a maximal IntP and after the 1<sup>st</sup> PWD in case of a non-maximal IntP.

### 5. Towards explaining the variation

It has to be noticed that there is a great deal of variation in the data. The table in (31) shows the standard deviation for each condition.

(31) *Survey results: standard deviation*

	clitic pronounced	clitic elided
VPE	1.70	1.90
VPE <sub>contrastive</sub>	1.87	1.57
VPE <sub>embedded</sub>	1.92	1.56
VPE <sub>wh-mvnt</sub>	2.09	1.92
Gapping	2.11	0.49
RNR	1.90	1.76

<sup>4</sup>Sufficiently phonologically heavy material (fronted heavy constituents, parentheticals, and appositives) can be parsed as a separate IntP triggering the so-called delayed clitic placement (Radanović-Kocić 1996, Bošković 2001).

A more detailed study of the variation needs to be carried out to explain it fully. In this paper, I propose an analysis that can account at least for a particular type of the variation found in the data.

An important fact is that there is a great deal of not only inter- but also intra-speaker variation. The same speaker may allow clitics to appear in the second position in elliptical sentences in some cases but not in others, even within one condition. Also it seems impossible to group speakers in any more or less tangible clusters with respect to the conditions in which they allow clitic not to be elided, there are no clear patterns. This suggests that the factor that play a role here are not dialectal but are rather of a more elusive idiolectal nature.

I propose that when clitics survive ellipsis, the corresponding arguments are scrambled out of the ellipsis site prior to ellipsis. Thus sentences with 2P clitics elided have a different syntactic structure from those with the clitics appearing in the second position.

SC has Japanese-style scrambling and, as a result, a very free word order (see Bošković 2009, Stjepanović 1999). A canonical word order for a transitive sentence is SVO, as in (32a), but it is also possible to put the object in the preverbal position (besides other options), as in (32b).

- (32) a. Ana nije poljubila Miloša.  
 Ana AUX.NEG kissed Miloš
- b. Ana Miloša nije poljubila.  
 Ana Miloš AUX.NEG kissed  
 ‘Ana didn’t kiss Miloš.’

Thus, sentences with clitics elided would have the neutral word order (33a), while sentence with clitics surviving ellipsis would have the direct object scrambled out of the ellipsis site (33b).

- (33) a. ... a Ana nije [ poljubila<sub>GA/NJEGA</sub> ].  
 and Ana AUX.NEG kissed 3SG.MASC.ACC
- b. ... a Ana<sub>GA/NJEGA<sub>i</sub></sub> nije [ poljubila<sub>t<sub>i</sub></sub> ].  
 and Ana 3SG.MASC.ACC AUX.NEG kissed  
 ‘... but Ana didn’t (kiss him).’

Note that although numerous word orders are possible for a given sentence, not all of them are felicitous in every context. Some of the factors that are relevant for determining if a certain word order is appropriate are the information structure of a sentence and its prosodic properties (Stjepanović 1999). I suggest that the variation observed in the data with respect to the survival of the 2P clitics can be explained if we assume that speakers may differ in how easy it is for them to access the reading that licenses the scrambled word order in a particular case.

Under this hypothesis, it is possible to explain why clitics tend to survive easier in contrastive environments. A contrastive auxiliary might tend to appear in the clause-final position, since the right edge of the clause is the most prosodically prominent position, and

contrastive elements are always heavily stressed. Therefore, the word order in (33b) would be easier to justify when a contrastive auxiliary is present.

## **6. Conclusion**

The account proposed in this paper places the whole phenomenon of 2P cliticization in SC into the post-syntactic component of the grammar. I argue that there are no clitics in syntax: pronouns and auxiliaries are marked as clitics (or not) only post-syntactically. A new piece of evidence for this approach comes from the interaction of clitics and ellipsis in SC: if ellipsis implies non-insertion of phonological material, pronouns and auxiliaries never become clitics when inside the ellipsis site and do not have the requirement to appear in the second position of their intonational phrase. This explains why pronominal clitics normally do not survive VPE.

Note, however, that the elements that are to become clitics are still active syntactically and are subjects to syntactic constraints: they can also move in syntax if there is an independent trigger for movement.

One of the biggest objections that Bošković raises against the purely phonological accounts of 2P cliticization is that it requires considerable reordering of elements at PF. However, PF movement it has been independently proposed as a mechanism responsible for the placement of clitics in different languages (Roberts 1997 for Pashto, Marušič 2008 for Slovenian, and Bennett et al. 2016 for Irish), which suggest that such an account might be on the right track.

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