Slovenian Clitics Have No Unique Syntactic Position*

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The aim of this paper is to show (partially following Bošković 2001) that Slovenian clitics do not have any unique syntactic position. Further, I will show that the presented data also pose a problem for Bošković's (2001) proposal for second position clitics.

1 The present situation

Slovenian clitics are second position clitics and seem for the most part comparable to the Serbo-Croatian clitics. There are some important differences between the two languages, so that the analysis for one cannot be directly used for the other.

Golden and Sheppard (2000) observe that Slovenian clitics always follow the first syntactic constituent in their clause. In this respect they behave different than the Serbo-Croatian clitics, which always follow the first prosodic word in their Intonation phrase. The difference is most clearly shown in (1). If the first syntactic constituent creates its own Intonation phrase (e.g. when the fronted DP argument has a relative clause) the Slovenian clitics appear at the edge of the next intonational phrase and behave like proclitics on the next prosodic word, as in (1a). Serbo-Croatian clitics are always enclitics and therefore follow the first prosodic word of the relevant Intonation phrase. So in the case at point, they follow the second syntactic constituent of the clause.¹

a. Deček, katerega sem srečal včeraj, me je prepoznal. Sl
 b. Dečak, kojeg sam sreo juče, prepoznao me je. SC boy that aux met yesterday recognized me aux 'The boy that I met yestarday, recognized me.'

I would like to thank the audience at FASL for comments and suggestions.

¹ Unlike Serbo-Croatian clitics, Slovenian clitics can be clause initial in some cases (Browne 2007 reports similar clitic properties in Burgenland Croatian). If clitics really are syntactic heads, these cases are not a counterexample to the syntactic description of their position. They are simply located in the first head of the clause.

Syntactically very clearly determined position of Slovenian clitics suggests a strict syntactic analysis of their placement. Golden and Sheppard (2000) propose that the Slovenian clitics adjoin to C, while the first syntactic constituent occupies the specifier of CP. In this way, Slovenia clitics are analyzed comparable to the verb second phenomenon in Scandinavian languages.

Bošković (2001) showed that Serbo-Croatian 2nd position clitics do not occupy a single syntactic position and that at least for Serbo-Croatian strict syntactic approaches fail (e.g. Progovac 1996, Franks 1998 etc.). The position of the Serbo-Croatian clitics is best described in phonological terms and thus seems to be subject to phonological requirements: clitics follow the first prosodic word of the appropriate Intonation phrase. But phonology is only responsible for the evaluation of their position. Bošković shows that none of the proposed phonological mechanisms for clitic placement (e.g. Radanović-Kocić 1996, Anderson 1995) can account for all the relevant data. Bošković suggests that clitics move in syntax, but that the phonological component later determines which copy of the moved clitic satisfies the phonological requirements on clitic placement (assuming the copy theory of movement, every moved element has a copy in the base and in the raised position). If the top-most copy of the clitic does not satisfy the relevant PF requirements. it is not pronounced and the next one is evaluated.

Unlike Serbo-Croatian clitics, which are always suffixes that are right adjacent to an Intonation phrase, Slovenian clitics are not specified as suffixes (they can be both enclitics and proclitics), but they must also be right adjacent to an Intonation phrase. Obviously something else must be said about the Slovenian clitics since these conditions favor the first position in the clause, which is not the standard position for clitics in Slovenian (but it is sometimes a possible position).

Building on Bošković (2001), I show that there is no unique syntactic position where clitics are located and that a strict syntactic approach (e.g. Golden and Sheppard 2000) cannot be used to explain clitic placement in Slovenian. In section 2, I give five arguments arguing for the lack of a unique position in syntax. In section 3, I discuss an argument against Bošković's (2001) analysis and show how his analysis makes wrong predictions. In section 4, some more properties of Slovenian clitics are discussed and a suggestion how to place clitics in phonology is given. The last section is the conclusion.

2 Fixed position of syntactic elements

In this section, we will go over five phenomena. Each time we will first establish a fixed relative ordering between two syntactic elements. We will take this fixed ordering as an indication that these elements occupy a fixed position in syntax. Clitics can appear both before and after these elements. Having different positions around an element with a fixed position means clitics do not have only one position in syntax.

- 2.1 Sentential adverb and participle (due to Bošković 1995) This argument was presented in Bošković (1995) for Serbo-Croatian. As he observes, the sentential adverb *undoubtedly* has to precede the past participle, (2). This suggests the two elements have fixed positions in the structure of the sentence.
- (2) a. Včeraj **sem ji** nedvomno pokazal rezultate poskusa. yesterday AUX her undoubtedly shown results experiment 'Undoubtedly I showed her the results of the exp. yesterday.' b.*Včeraj **sem ji** pokazal nedvomno rezultate poskusa.

Assuming the fixed relative order of the two elements to one another is the result of their unique syntactic position, we can determine where the clitics are located looking at the relative position of the two elements and the clitic cluster. As shown in (3a), clitics can follow the participle. Notice that the participle cannot be followed by the sentential adverb, as in (3b). The position of the participle in (2) and (3) seems to be the same.

- (3) a. Pokazal sem ji rezultate najnovejšega eksperimenta.
 shown AUX her results newest experiment
 "I have shown her the results of the newest experiment."
 b.*Pokazal sem ji nedvomno rezultate najnovejšega eksperimenta.
 shown AUX her undoubtedly results newest experiment
- In (2), the clitics precede both the sentential adverb and the participle, while in (3a), the clitics follow the second element—the participle. Notice that clitics can also come in between the two elements, as in (4).

(4) Nedvomno **sem ji** pokazal izsledke raziskave. undoubtedly AUX her shown results research "I have undoubtedly shown her the results of the research."

Provided that the sentential adverb and the participle are immovable always occupying the same syntactic position, the clitics must be located in three different positions. Clitics apparently do not occupy a unique position in syntax. Bošković (2001) discusses more related data arguing for the same conclusion and provides a long discussion on the validity of the argument.

2.2 Adverbs and negation.

A very similar argument can be constructed using other elements with a fixed position. Negation seems to be one such syntactic element. Negation in Slovenian (like in many other Slavic languages) is a proclitic on the verb. Its syntactic position seems to be firm relative to sentential adverbs, as shown in (5), or relative to a modal adverb like 'possibly', as shown in (6).

- (5) a. Janez definitivno ne seka drvi.

 Janez definitely NEG chops wood

 "Janez definitely doesn't chop wood."

 b.*Janez ne seka definitivno drvi.
- (6) a. Janez mogoče ne mara zelenjave.
 Janez possibly NEG likes vegetables
 "Janez possibly doesn't like vegetables."
 b.*Janez ne mara mogoče zelenjave.

With the two elements in fixed syntactic positions, we can check where clitics are placed relative to their positions. As shown in (7) and (8), the clitic cluster can appear in front of the adverb, as in (7a) and (8a), between the adverb and negation, as in (7b) and (8b), or after negation, as in (7c) and (8c).

(7)a. Janez **mi jih** definitivno ne seka v lopi Janez me them definitely NEG chops in hut "Janez definitely doesn't chop them for me in the hut."

- b. Definitivno **mi jih** ne seka v lopi definitely me them NEG chops in hut "He definitely doesn't chop them for me in the hut."
- c. Ne seka **mi jih** (*definitivno) v lopi (ampak na dvorišču). NEG chops me them definitely in hut but on backyard) "He doesn't chop them form me in the hut (but in the backyard)."
- (8) a. Janez je mogoče ne mara. Janez her possibly NEG likes "Janez possibly doesn't like her."
 - b. Mogoče je Janez ne mara possibly her Janez NEG likes "Janez possibly doesn't like her."
 - c. Ne mara je.

 NEG likes her
 "He doesn't like her."

Clitics can appear in three clearly distinct positions, which obviously means they do not occupy a unique syntactic position.² Negation is sometimes taken to involve different positions depending on its scope. One can imagine that negation in (7-8c) raises higher than in (7-8b), since high position would make the sentence ungrammatical.

We can check the relative position of negation in the two sentences with another scopal element, e.g. a quantifier in the subject position. As shown in (9), the presence of the sentential adverb has no influence on the relative scope of negation and the existential quantifier. In all three cases the existential scopes over negation.

(9) a. Definitivno **se** en poslanec ne zna vesti. ∃>neg,*neg>∃ definitely REFL a congressman not knows behave "A congressman definitely doesn't know how to behave."

² Jakub Dotlačil (personal communication) suggested a potential problem with this argument. A sentential adverb might not be allowed under negation because sentential adverbs are typically positive polarity items. This means the supposedly fixed syntactic order in (5) might be due to reasons outside of syntax and sentential adverbs could in principle still occupy a low position in the tree as long as they are not in the scope of negation

- b. En poslanec se ne zna vesti. ∃>neg,*neg>∃ a congressman REFL not knows behave "A congressman doesn't know how to behave."
- c. Ne zna **se** vesti en poslanec. ∃>neg,*neg>∃ not knows REFL behave a congressman "A congressman doesn't know how to behave."

The other interpretation with the negation having wide scope is available in (9b) if we modify it a bit, but doing the same in (9a) also results in an interpretation shift. So we can conclude that the position of negation does not change depending on the presence or absence of the sentential adverb. We can suspect negation behaves on par also in (7) and (8).

The conclusion here is therefore the same as in the previous section. The clitic cluster does not have a unique position in syntax.

2.3 Strictly ranked adverbs

Adverbs show a very rigid linear order. According to Cinque (1999, 2004), this follows from their position in the specifiers of various functional projections that follow a strict hierarchical order (cf. also Alexiadou 1997). So for example, the repetitive adverb *spet* 'again' has to precede the durative *nepretrgoma* 'non-stop', as in (10a). Whereas the reverse order with 'non-stop' in front of 'again' makes the sentence ungrammatical, as in (10b).

(10) a.Janez spet nepretrgoma meče petarde. Janez again non-stop throws firecrackers "Janez again non-stop throws firecrackers." b.*Janez nepretrgoma meče petarde spet Janez non-stop again throws firecrackers

Now that we have established two fixed positions in the clause, we can check where the clitics are relative to these two fixed positions. In (11a), the pronominal clitic *jih* 'them' precedes both adverbs, in (11b), it is located in between the two, and in (11c), it follows the second one.

(11) a. Janez **jih** spet nepretrgoma meč.

Janez them again non-stop throw

"Janez is again non-stop throwing them."

- b. Spet **jih** nepretrgoma meče. again them non-stop throw
- c. Nepretrgoma **jih** meče. Non-stop them throw

Again, the clitics appear in three different syntactic positions. On the surface this is the same position since there is always only one syntactic element in front of the clitic, but assuming the adverb *nepretrgoma* 'nonstop' always comes in the specifier of Asp_{DURATIVE}, it is not the adverb that moved to a higher position but rather the clitic that appeared in a position lower than the one in (11a,b).

Obviously, we can always reject Cinque's (1999) and Alexiadou's (1997) proposal and say that specific adverbs do not have any specific projections, and that adverbs are just adjuncts to vP, TP or AspP (depending on the scope of the adverb). But clitics do appear to be located also higher than TP in certain sentences, for example when they come in between the two *wh*-words in a multiple *wh*-movement construction, as in (12).

(12) Kdo mi je kje kaj posodil? who me AUX where what lended "Who lended what to me where?"

If clitics occupy a syntactic position, then (12) shows this position has to be C. But aspectual adverbs cannot be located that high. This means that the clitics sit in two different positions in (11c) and in (12).

2.4 Clitics inside APs

Slovenian pronominal clitics can appear inside the nominal phrase containing a deverbal adjective. Most commonly, the clitic inside the adjective phrase is the reflexive clitic, like when it is part of the lexical entry of the verb. So for example, the verb *smejati se* 'to laugh' can be transformed into the adjective *smejoč se* 'laughing'.

If the AP consists of only a deverbal adjective and the reflexive, the reflexive clitic follows the adjective, as shown in (13a,b), even if other DP internal material precedes the AP, as shown in (13c).

- (13)a. smejoč se mož b.*se smejoč mož laughing REFL man REFL laughing man "a laughing man"
 - c. Srečala je nekega smejočega **se** človeka/***se** smejočega človeka met AUX some laughing REFL man REFL laughing man "She met some laughing man."

But if the adjective is complex, for example, if it contains a complement, as in (14a), or an adverbial, as in (14b), the reflexive clitic can precede the adjective.

(14)a. za glavo se držeč fantek / ?za glavo držeč se fantek for head REFL holding boy "a boy holding his head"
b. pridno se učeča deklica / pridno učeča se deklica dilligent REFL learning girl "a girl learning dilligently"

Slovenian postnominal and predicative adjectives differ from the attributive adjectives in the position of the adjectival complement relative to the adjective. Whereas in atributive Aps, the complement has to precede the adjective, in postnominal Aps, the adjectives precede their complements (cf. Orešnik 1996, Marušič 2001).

In postnominal APs, clitics always follow the adjective, as shown in (15). This suggests that the reflexive clitic did not move to the left of the adjective because of the complement.

(15) a.fantek držeč se za glavo b.*fantek se držeč za glavo boy holding REFL for head boy REFL holding for head "a boy holding his head"

Clitics are thus located in at least two different positions, one before and one after the adjective. On the surface, clitics are located in the 2nd position inside the AP. Since the transformation relating the prenominal and postnominal AP internal order is not properly understood, we cannot be sure that the two positions are really syntactically different. We might be talking about the same position, e.g. some head F with an EPP that is satisfied by either the complement of the adjective or by the adjective

itself. But as we will see, such an analysis cannot be right. This becomes clear ones we introduce more complex APs.

If the adjective has more than two complements the clitic inside the prenominal AP has even more freedom. As shown in (16), it can precede the adjective and the adjectival modifier closer to the adjective, as in (16a), it can precede the adjective alone, as in (16b), or it can follow the adjective, as in (16c). Thus, we have already found multiple positions for the reflexive clitic.

- (16) a. ??un v omari se polglasno hihitajoč kreten that in closet REFL silently laughing idiot "that idiot laughing silently in the closet"
 - b. un v omari polglasno se hihitajoč kreten
 - c. un v omari polglasno hihitajoč se kreten

When such an AP is used postnominally, we again find a lot of freedom in the placement of the clitic. The clitic cannot be the first element of the AP, it has to follow the adjective, as in (17a) or the adjectival modifier that precedes it, as in (17c). But it can also follow the second element of the AP, as in (17b,d). The clitic can therefore appear before or after the adjective even in postnominal APs. It has to follow the first word of the AP, whaever this word might be. We therefore have more than just two positions for clitics inside the AP.

- (17) a. tist kreten, hihitajoč **se** polglasno v omari that idiot laughing REFL silently in closet "that idiot laughing silently in the closet"
 - b. ??tist kreten, hihitajoč polglasno se v omari
 - c. tist kreten, polglasno se hihitajoč v omari
 - d. tist kreten, polglasno hihitajoč se v omari

We can learn another thing from these examples. Firstly, since the clitic does not need to be in the second position, but it can be also the last element of the AP, it quite plainly cannot be adjoined to the first available synactic head of the clause (unless we propose that there is some sort of remnant movement to the highest specifier position). And secondly, since deverbal adjectives do not have the CP projection that according to Golden and Sheppard (2000) hosts the clitics, their analysis

cannot be mantained. The lack of the CP can be very easily shown with the impossibility of *wh*-movement inside the AP (Bošković 2001).

As we have seen, not only the clitics do not occupy a single position inside the AP, but they appear to have more than just one position inside the AP, where they can be located. We will now have a look at another case of optionality of clitic placement.

2.5 Clitic climbing

Slovenian clitics climb out of embedded non-finite clauses in restructuring contexts, as discussed by Golden (2003), and as is also the case in the related Slavic languages. The interesting property of Slovenian clitic climbing is that it is typically not obligatory. The clitics can occupy both their base position inside the embedded non-finite clause, (18f), or the derived second position within the matrix clause, (18a) (example (18a) is taken from Golden 2003). On top of these two positions, the clitics can occupy any intermediate position between their base and their final landing position, (18b-e).

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(18) a.On jo je hotel nehati hoteti videvati vsak dan.
       He her AUX want stop<sub>INF</sub> want<sub>INF</sub> see<sub>INF</sub>
       'He wanted to stop wanting to see her every day.'
             je jo hotel
                           nehati
                                     hoteti
                                              videvati
    b.On
                                                          vsak dan.
    c.On
                  hotel jo nehati
                                              videvati
            je
                                     hoteti
                                                          vsak dan.
    d.On
            ie
                  hotel
                           nehati io hoteti
                                              videvati
                                                          vsak dan.
                                                          vsak dan.
    e.On
                  hotel
                           nehati
                                     hoteti jo videvati
            je
    f. On
           je
                  hotel
                           nehati
                                     hoteti
                                              videvati jo vsak dan.
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The data in (18) involve a series of restructuring verbs and could in principle be explained away. The various options of (18) could be said to result from gradual restructuring. That is, it might be that in (18a), all the embedded non-final clauses undergo restructuring, while in (18b) all but the first embedded clause undergo it. In (18c), all but the top most two (the matrix verb and the first embedde verb), and so on. If this is the case, than there would always be just one position for clitics per clause, like there is in (18). But we get discover multiple clitic positions even if we use a single embedded clause with multiple adverbs. Even in such a sentence, clitics can climb only part of the way.

- (19)a. Včeraj **jo je** sklenil počasi kot polž odpeljati proti domu. Yesterday her AUX decided slowly as snail drive_{INF} towards home 'Yesterday, he decided to take her home as slowly as a snail.'
 - b. Včeraj **je** sklenil **jo** počasi kot polž odpeljati proti domu.
 - c.*Včeraj **je** sklenil počasi **jo** kot polž odpeljati proti domu.
 - d. Včeraj **je** sklenil počasi kot polž **jo** odpeljati proti domu.
 - e. Včeraj **je** sklenil počasi kot polž odpeljati **jo** proti domu.

These data clearly show there is no single position in syntax. Actually, they show there are actually as many options for the raised clitics as there are positions around syntactic constituents. Since many options are available, it seems like we are looking at a case of optional movement, but is this really the case? Clitics are actually not free to position themselves in the sentence. Each position demands a specific prosody. Clitics always follow a pause.

3. What else can we learn from the data

Accepting these arguments, we can conclude that a strict syntactic approach placing clitics in a unique syntactic position is untenable. Clitics do not occupy a single position in syntax, like for example the C head (of Golden and Sheppard 2000). They can be located in various positions in the clause.

Bošković (2001) already discussed some of the presented data and came to the same conclusion regarding Serbo-Croatian clitics. He claimed that a strict syntactic approach cannot be right, just like a strictly phonological approach cannot be. As Bošković claims, clitics respect syntactic movement constraints, which is not what we would expect for movements occurring at the PF interface.

Bošković (2001) proposes that clitics indeed move in syntax, but that when the syntactic structure is linearised, phonology steps in. According to him, clitics always move to the highest possible position in syntax. When the syntactic structure is linearised (from left to right), individual copies of the formed non-trivial chain are evaluated against the phonological constraints on clitic placement (following the copy theory of movement, each trace is just another copy of the moved element). If the copy under evaluation does not satisfy the relevant constraints, it is deleted and the next copy gets evaluated.

Given sentences like (18) and (19), where clitics can occur in between any two syntactic elements between their base and their highest landing position, their gradual movement seems confirmed. But Boškovič's proposal also makes certain unconfirmed predictions. In particular, the very data provided in (18) and (19) seem to speak against his proposal.

If the pronounce-a-copy mechanism pronounces a copy of the moved clitic as soon as a copy satisfies all the phonological requirements, then the clitic should always appear in the same position in a particular sentence. That is, if the topmost position in a given sentence satisfies the phonological requirements, then the clitics should only occur in that one unique position. As said, if a position satisfies certain phonological requirements, then the copy in that position gets pronounced and subsequently all the other copies are deleted. But that is not what we find. The top most position in examples (18) and (19) is clearly ok since that position already hosts the matrix auxiliary clitic. So then, how can a clitic be pronounced lower in the sentence, even inside the embedded clause?

Another problem with this approach comes to mind. If clitics move in syntax, they move to check features (Chomsky 1995), but there is more than one available landing site as evidenced by the various options where clitics are located. Note that these positions are not just phase edges, for which we could easily explain why clitics have to move through them.

4 Clitic movement

I will start with a simple observation that clitics reconstruct. This can be seen from the examples in (20). The raised clitic does not trigger any Principle C violation, (20b), just like the clitic in its base position within the embedded clause does not, (20a). A clitic and a proper name inside an adverbial also trigger Principle C violation, as shown in (21).

- (20) a. Peter je pri Janezu, doma sklenil predstaviti ga, Meti. Peter AUX at Janez home decided introduce him Meta 'Peter decided at Janez's house to introduce him to Meta.'
 - b. Peter ga_i je pri Janezu_i doma sklenil predstaviti Meti. Peter him AUX at Janez home decided introduce Meta

(21) *Peter mu_i je pri Janezu_i doma ukazal predstaviti se Meti.
Peter him AUX at Janez's home ordered introduce REFL Meta
"Peter ordered him at Janez's to introduce himself to Meta."

Following Sauerland & Elbourne (2002), who claim reconstruction can only be a result of PF movement, we can conclude that clitic fronting and clitic climbing is an instance of PF movement.³ The movement we are looking at also seems to obey syntactic constituents, and thus appears to be done in syntax. In Marušič (2005) I develop a mechanism for PF movement that is done in syntax. Even though that formalization of PF movement is very appealing, I will not use it here. If movement does happen in syntax, we would want to find syntactic motivation for the clitics to move. Apart from an invented feature like [+clitic] there does not seem to be any, so that this kind of movement does not appear very likely.

Clitic movement seems to be a purely prosodic operation. Its motivations are prosodic and it seems the mechanism behind the movement is also not syntactic. Prosodic accounts of clitic placement have been around for quite some time (e.g. Anderson 1995, Radanović-Kocić 1996, Roberts 1997, Billings 2002 among others). I will not follow any particular proposal at this point, but assume at least one of them could be applied to Slovenian.

The idea is that pronominal clitics head deficient DPs (Cardinaletti and Starke 1993) that lack the top DP projection, which is also a phase (Marušič 2005 and references therein). In particular, they lack the (PF) phase that would make them a *prosodic word*. These DPs are base generated in the appropriate argument positions within the VP, just like any other DPs. They undergo all the relevant case checking in much the same way as other DPs. Once the derivation reaches a spell-out the phonological features are pealed off from the syntactic structure and form a prosodic unit. The deficient DPs do not form any syntactically conditioned phonological constituent. Since they are not prosodic words, they have to attach to some bigger phonological constituent. In doing so, they are subject to phonological constraints. But since they are

³ For Sauerland & Elbourne (2002) only total reconstruction is a result of PF movement, but since I cannot test if reconstruction above is really total reconstruction, I will ignore the difference between the two.

pronounced/ spelled-out inside a phase which frames the next higher prosodic unit, clitics can only move to the 2nd position within the spelled out phase.

The prosodic units are always a reflex of the spell-out units of syntax, that is, of actual syntactic constituents. Therefore it is not surprising that the clitics cannot break syntactic constituents. Further, if clitics move within their intonation phrase to the first prosodic word, we can explain the data in (18) and (19). The raised clitic in those examples is actually in the first position of its intonation phrase. As said, right before the clitic there is a pause, an intonation break. Contrary to Serbo-Croatian clitics, Slovenian clitics are located in the first position of their intonation phrase as long as they are not sentence initial (in OT terms following Anderson 1995, that means: NONINITIAL_(CL, CLAUSE) >> EDGEMOST_(CL, L, L-PHRASE) >> NONINITIAL_(CL, L-PHRASE)). Intonation phrases are constructed bottom up, which means that as the derivation progresses, the intonation phrase can be closed sooner. So now the question is whether these intonation phrases correspond to any phase? I leave this question for future.

5 Conclusion

No true answer was given, but hopefully, I have shown some further difficulties for the syntactic accounts and provided a line of possible reasoning.

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