Positioning Slovenian clitics*

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This paper discusses the position of the Slovenian clitics. In particular it shows that Slovenian clitics have no unique syntactic position (partially following Bošković's arguments for the same claim about SerboCroatian clitics) and that some of the presented data seem incompatible with the current approach to clitic placement in Slovenian, in particular, it shows that the analysis of Golden and Sheppard (2000) and of Bošković (2001) cannot be maintained. It further offers some thoughts with respect to a possible approach to clitic placement.

1 Introduction

Slovenian clitics are second position/ Wackernagel clitics and seem for the most part comparable to Czech and Serbo-Croatian clitics. There are some important differences between Slovenain and Bosnian/Croatian/Serbian (BCS), so that the analysis for BCS cannot be directly used for Slovenian.

As observed in Golden and Sheppard (2000), Slovenian clitics always follow the first syntactic constituent in their clause. In this respect they behave different from the BCS clitics, which always follow the first prosodic word/syntactic constituent inside the same Intonation phrase. The difference is most clearly observed 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). BCS 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. Slovenian¹ b. Dečak, kojeg sam sreo juče, prepoznao **me je**. BCS boy that aux met yesterday recognized me aux "The boy that I met yestarday, recognized me."

Further, unlike BCS, Slovenian clitics always follow the first syntactic constituent, while BCS clitics can "split" the syntactic constituent, and follow only the first prosodic word, as shown in (2).

(2) a. Veliko hišo **je** kupila. Slovenian b. Veliku je kuču kupila. BCS big aux house bought "She bought a big house."

A syntactic analysis of Slovenian clitics seems very appealing. Clitics simply follow the first syntactic constituent. Golden and Sheppard (2000) propose that the Slovenian clitics adjoin to the C head, while the first syntactic constituent occupies the specifier of CP. In this way, Slovenian clitics are analyzed comparable to the verb second phenomenon in Scandinavian languages.

Unlike BCS clitics, Slovenian clitics can be clause initial, as in (3).² In these cases, clitics seem to follow a silent element in the SpecCP, which is suggested by the fact that such elements are optional in these cases. The silent element, can be a question particle, as in (3a), or a topic phrase in (3b).

(3) a. (Ali) si ga videl? Slovenian Q aux him saw "Did you see him?"

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Unless marked otherwise, the examples in this paper are in Slovenian.

Browne (2007) reports similar clitic properties in Burgenland Croatian.

b. (Petra,) ga ne poznam.

Peter him not know
"I don't know him (/Peter)."

Such an analysis easily explains the restrictions on clitic climbing out of finite clauses observed in Marušič (2008). Slovenian clitics can climb out of non-finite clauses, but can never climb out of finite clauses, this difference can be easily attributed to the presence/absence of the CP projection. But this analysis is also countered by many problems.

Bošković (2001) (building on Franks 1998) shows that BCS 2nd position clitics do not occupy a single syntactic position and that at least for BCS strict syntactic approaches fail (e.g. Progovac 1996, Franks 1998 etc.). According to Bošković, the position of the BCS 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. At the same time, it is quite obvious, that phonology is not where clitics move since none of the proposed phonological mechanisms for clitic placement (e.g. Radanović-Kocić 1996, Anderson 1995) can account for all the relevant data. Bošković (2001) suggests that clitics move in syntax, but that phonology later determines which of the multiple copies of the moved clitic will get pronounced. When PF begins to linearize the syntactic structure from left to right (and top to bottom) it will determine which copy of the clitic satisfies the phonological requirement to be an enclitic on the first prosodic word. If the first encountered copy of the clitic does not satisfy the relevant PF requirements, this copy gets deleted and the next copy is evaluated for pronunciation. If the next copy does satisfy this requirement, it is pronounced while all lower copies get deleted. If it does not satisfy the requirement, the procedure repeats, the highest copy gets deleted and the next copy is evaluated.

As mentioned, unlike BCS clitics, which are always enclitics/suffixes, Slovenian clitics can be both proclitics and enclitics and thus cannot be specified as suffixes, but just like BCS clitics, Slovenian clitics must be (right) adjacent to an Intonation phrase. Obviously, Boškovič's analysis cannot be simply transposed to Slovenian since these modified conditions (right adjacent to an IP, either suffix or prefix) would favor the first position in the clause, but the first position is not always available, it is just a possible but highly marked position. This problem will remain unanswered in this paper.

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. Section 2 brings five arguments arguing for the lack of a unique position in syntax. Section 3 discusses an argument against Bošković's (2001) analysis and shows that his analysis makes a wrong prediction. 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

Certain syntactic elements seem to have fixed syntactic position. In this section, we will go over five phenomena. In each subsection, I first establish a fixed relative ordering between two syntactic elements. This fixed ordering is taken as an indication that these elements occupy a fixed position in syntax. Clitics are then shown to appear both before and after these elements. Having different positions around an element with a fixed position means clitics do not occupy a single position in syntax.

2.1 Sentential adverb and participle (due to Bošković 1995)

A version of this argument was first presented in Bošković (1995) for BCS. As Bošković observes, the sentential adverb *undoubtedly* has to precede the past participle, (4). This suggests the two elements have fixed positions in syntax.

(4) 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 is the result of their unique syntactic position, we can determine where the clitics are located with respect to the two elements looking at the relative order of the two elements and the clitic cluster.

In (4a) the clitic cluster preceded both elements, but this is not the only position where clitics can be located. As shown in (5a), clitics can also follow the second element, which is in this case the participle. Notice that the participle in (5) cannot be followed by the sentential adverb, as shown in (5b). The position of the participle in (4) and (5) therefore seems to be the same.

(5) 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

Preceding the first of the two elements, as in (4a), and following the second of the two elements, as in (5a), are already two different positions in syntax, but they are not the only two positions clitics can take. Clitics can also come in between the two elements, as in (6).

(6) 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 and always occupy the same syntactic position, the clitics are apparently located in three different positions in (4a), (5a) and (6). This further means clitics 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 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 adverbs like 'possibly', as shown in (7). Note that *mogoče* 'possibly' is not a positive polarity item, as shown in (7c). This suggests that the strict order between 'possibly' and negation is indeed related to their fixed positions in syntax.

(7) a. Janez mogoče ne zelenjave. mara Janez possibly NEG likes vegetables "Janez possibly doesn't like vegetables." b.*Janez mogoče zelenjave. ne mara c. Ni mogoče, da Janez ne mara zelenjave NEG possible that Janez NEG likes vegetables "It is not possible, that Janez doesn't like vegetables."

With the two elements in fixed syntactic positions, we can check where clitics are placed relative to these positions. As shown in (8), the clitic cluster can appear in front of the adverb, as in (8a), between the adverb and negation, as in (8b), or following negation, as in (8c). Clitics can appear in three clearly distinct positions, which obviously means they do not occupy a single syntactic position.

(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."

Negation is sometimes taken to involve different positions depending on its scope. One can imagine that negation in (8c) raises higher than in (8b). 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 adverb 'possibly' has no influence on the relative scope of negation and the existential quantifier. In all three cases the existential scopes over negation.

- (9) a. Mogoče se en poslanec ne zna vesti. ∃>neg,*neg>∃ possibly REFL a congressman not knows behave "A congressman definitely doesn't know how to behave."
 - 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 (8).

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

2.3 Strictly ranked adverbs

As observed by Cinque (1999, 2004) and Alexiadou (1997), adverbs follow a strict universal order. Their strict order is best explained to follow from their position in the specifiers of specialized functional projections that themselves follow a strict hierarchical order. 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).

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

With the established fixed order of the two elements related to two fixed positions in the clause, we can check where the clitics get placed with respect to the two fixed positions. As can be seen in (11), clitics can appear in all three positions around the two adverbs. 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 "He is again non-stop throwing them."
- c. Nepretrgoma **jih** meče. Non-stop them throw "He is non-stop throwing them."

Again, we come to the same conclusion. Since the clitics can appear in three different syntactic positions, it cannot be that they are always located in the same syntactic position, be that the C head or some other head. On the surface the position of the clitic is the same in all three cases, since there is always only one syntactic element in front of the clitic, but assuming the adverb *nepretrgoma* 'nonstop' is always located in the specifier of Asp_{DURATIVE}, it is not the adverb that moved to a higher position in (11c) but rather the clitic that appeared in a position lower than the one in (11a) and (11b).

Even if we decide to reject Cinque's (1999) and Alexiadou's (1997) proposal and say that adverbs do not occupy a specific position determined by the universal hierarchy of functional projections, we can show that clitics cannot be always in the same position.

The other competitive analysis for adverbs says that adverbs are just adjuncts to vP, TP or AspP (depending on the scope of the adverb). Assuming adverbs are never adjuncts to CP (unless these are mood adverbs), we can easily show that clitics are not always located in the same position, since they do appear to be located also higher than TP in certain sentences. For example in multiple whquestions, clitics come in between the two wh-words, as in (12). So if the second wh-word is adjoined to TP (as is standardly assumed for Slovenian, as in Golden 1997), clitics must be adjoined to the C head, therefore higher than the typical location of aspectual adverbs. This further means that clitics sit in two different positions in (11c) and in (12).

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

2.4 Clitics inside APs

Slovenian pronominal clitics can also appear inside a noun phrase. Actually, clitics can be part of the adjectival phrase of a deverbal adjective modifying the noun. Most commonly, the clitic inside the AP is the reflexive clitic, like when the reflexive is part of the lexical entry of the verb. So for example, the verb *smejati se* 'to laugh' becomes 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), even if other DP internal material precedes the AP, as shown in (13b).

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(13)a. smejoč se mož / *se smejoč mož laughing REFL man "a laughing man"
b. Srečala je nekega smejočega se človeka/*se smejočega človeka met AUX some laughing REFL man REFL laughing man "She met some laughing man."
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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. Looking at (14) alone, we already see two different positions for the clitic. The clitic either precedes or follows the adjective, the two relative orders seem in free variation. Since there are no observable differences with respect to the adjective (e.g. in terms of its morphology etc.), it is the adjective that is most likely located in the same position in both versions of (14b), which means it must be the clitic that moves around the adjective. So since it is the clitic that moves around the adjective, it is apparently not located in a single syntactic position.

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(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"
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Slovenian postnominal and predicative adjectives differ from the attributive adjectives in the position of the adjectival complement relative to the adjective. Whereas in attributive APs, the complement has to precede the adjective, in postnominal APs, the adjective precedes their complement (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 in (14a) and (14b).

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(15) a. fantek držeč se za glavo
boy holding REFL for head
"a boy holding his head"
b.*fantek se držeč za glavo
boy REFL holding for head
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Clitics are thus located in at least two different positions, one preceding and one following the adjective. On the surface, clitics are located in the 2nd position inside the AP. The transformation relating the prenominal and postnominal AP internal order is not properly understood, so we cannot be totally 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 as becomes evident ones we introduce more complex APs.

If the AP has more than just a single adjectival complement the clitic inside the prenominal AP has even more freedom. 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). Again we have 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, 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), and it can even 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, whatever this word might be. Again we can observe multiple 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

There is another point to be made with respect to these data. Firstly, since the clitic does not need to be in the second position, as in (16c), where it follows the adjective, 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, it seems natural to assume that deverbal

adjectives do not have the CP projection that according to Golden and Sheppard (2000) hosts the clitics.³ Without the CP projection, their analysis cannot be mantained.

Again we have seen that clitics do not occupy a single position. Aditionally, there seem to be multiple positions inside the AP, where the clitics can be located.

2.5 Clitic climbing

f. On **je**

hotel

Similarly to related Slavic languages, Slovenian clitics climb out of embedded non-finite clauses in restructuring contexts, as discussed by Golden (2003). 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).

(18) a.On **jo** je hotel nehati hoteti videvati vsak dan. He her AUX want stop_{INF} want_{INF} see_{INF} 'He wanted to stop wanting to see her every day.' **je jo** hotel nehati hoteti videvati vsak dan. c.On je hotel **jo** nehati hoteti videvati vsak dan. d.On **je** hotel nehati **jo** hoteti videvati vsak dan. e.On **je** hotel nehati hoteti **jo** videvati vsak dan.

hoteti

nehati

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 (cf. Aljović 2006). 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 multiple clitic positions even if we use a single embedded clause with multiple adverbs. Even in such cases, clitics can climb only part of the way.

videvati **jo** vsak dan.

(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 that 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 not free to position themselves in the sentence. Each position demands a specific prosody, more concretely, clitics always follow a pause.

3. What else can we learn from the data

If we accept these arguments, we have to reject any strict syntactic approach that places clitics in a unique syntactic position. Clitics apparently do not occupy a single position in syntax, like for example the C head proposed by Golden and Sheppard (2000). Clitics are obviously located in various positions in the clause.

Bošković (2001) already discussed some of the presented data and came to the same conclusion regarding BCS clitics. He claimed that a strict syntactic approach cannot be right, just like a strictly

The lack of the CP can be very easily shown with the impossibility of *wh*-movement inside the AP (cf. Bošković 2001).

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 Bošković, clitics always move to the highest possible position in syntax. Since movement is just copy-merge, there is a copy of every moved clitic in every intermediate and in their starting position. 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 the first copy that satisfies all phonological requirements, then the clitic of examples (18) and (19) should always appear in the same position. 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, this is the position where they are located in (18a) and (19a). 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. Even though the top most position in examples (18) and (19) is clearly an acceptable position for clitics, given that this position already hosts the matrix auxiliary clitic, the embedded clitics don't have to be pronounced there.

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. Like any head movement, clitics move through various intermediate heads, but how is that possible. The intermediate positions are not all phase edges, for which we could easily explain why clitics have to move through them. Because of similar questions, head movement was already suggested to be a PF phenomenon.

4 Clitic movement

Let us start with a simple observation related to reconstruction. A pronoun in the matrix clause triggers principle C violation with a proper name in the adjunct, as shown in (20) and (21). In (20), the adjunct is inside the matrix clause and the offending pronoun is the subject of the matrix clause. In (21), the adjunct has low attachement, while the pronoun is the indirect object of the matrix clause.

- (20) *On_i **ji je** ukazal ukrast Petru uro, preden je Matija_i sploh vedel, da jo Peter ima. he her aux ordered steal Peter watch before aux Matija even knew that it Peter has "He ordered her to steal Peter's watch, before Matija knew Peter has a watch."
- *Janez ga_i je prepričal plačati kupnino, preden bo Peter_i dobil bicikel v roke.

 Janez him aux convinced pay money before aux Peter get bycicle in hands

 "Janez convinced him to pay the money before Peter will get the bike."

We can conclude that pronouns trigger Principle C violations with a coindexed name inside an adjunct. Subject pronoun c-commands the adjunct inside same clause, while object pronoun only c-commands the adjunct inside the embedded clause. Interestingly, the same setting that is fatal for coindexed matrix pronouns is not fatal for a clitic that raised to the matrix clause from inside an embedded non-finite clause, (22).

Janez **ga**_i **je** ukazal pretepsti, preden je sploh vedel, da je Peter_i ukradel uro. Janez him aux ordered beat before aux even knew that aux Peter steal watch "Janez ordered to beat him up, before he knew Peter stole the watch."

The same point is made in (23) and (24). The raised clitic does not trigger any Principle C violation, (23b), just like the clitic in its base position within the embedded clause does not, (23a). But a clitic of the matrix clause coindexed with a proper name inside an adverbial of the matrix clause does trigger Principle C violation, as shown in (24).

- (23) a. Peter je pri Janezu_i doma sklenil predstaviti ga_i 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
- *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."

Sauerland & Elbourne (2002) claim reconstruction can only be a result of PF movement. Given that what we observed here is a clear case of reconstruction, we can conclude that clitic fronting and clitic climbing is an instance of PF movement.⁴ The movement we are looking at also seems to obey syntactic constituents, and thus appears to happen in syntax. In Marušič (2005) I develop a mechanism for PF movement that happens 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, but apart from an unintuitive feature like [+clitic] there does not seem to be any.

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.

5. Pointing in the direction

Pronominal clitics head deficient DPs (Cardinaletti and Starke 1999) 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 are "free" in the prosodic string once the sentence is sent to the PF interface, because linearization does not order them. Linearization of the syntactic structure only operates on prosodic units and operates with pairs. Linearization are directions for precedence, given as a set of ordered pairs – but these pairs are only pairs of phonological units. If clitics are not units in phonology, they cannot participate in ordered pairs, which means that linearization cannot order them. Similarly affixes are not always linearized following syntactic structure. This is the tendency, but it does not happen always – as should be obvious because of phenomena like infixation, side-switching affixation in e.g. Afar etc. as discussed in Marušič (2003).

Since clitics 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 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

⁴ For Sauerland & Elbourne (2002) only total reconstruction is a result of PF movement. Reconstruction of clitics does seem to be an instance of total reconstruction, but this point cannot be tested with the tests used by Sauerland & Elbourne (2002).

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 in each example 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. 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? It seems they do not, at least not completely. Depending on the attachment of the adverbials, the clause boundary is either between *Metki* and *včeraj* or between *v mošeji* and *naučiti*. But since this is a non-finite clause, there shouldn't be any PF phase between the matrix and the embedded clause (Marušič 2005) so at least the position between *Metki* and *včeraj* should be unavailable.

	efl him aux ordered	l Metka	včeraj yesterday	v mošeji in mosque		na pamet. by heart
"Yester	day in the mosque,	Peter order	ed Metka to lea	rn it by heart	"	
b. ^{??} Peter	je ukazal # s	e ga Metki	včeraj	v mošeji	naučiti	na pamet.
c. Peter	je ukazal	Metki #	[se ga včeraj	v mošeji	naučiti	na pamet.]
d.*[Peter	je ukazal	Metki se	ga včeraj	v mošeji]	naučiti	na pamet.
e. Peter	je ukazal	Metki	včeraj # [se	e ga v mošeji	naučiti	na pamet.]
f.* [Peter	je ukazal	Metki	včeraj se ga	a v mošeji]	naučiti	na pamet.
g. Peter	je ukazal	Metki	včeraj	v mošeji #	se ganaučiti	na pamet.
h. Peter	je ukazal	Metki	včeraj	v mošeji	naučiti se	ga na pamet.
	vP p		iuse ndary	clause & boundary	& vP phase	

What we observe here is that intonation phrases apparently can be created after the transfer from syntax to PF. Intonation phrases can also be suppressed, as is the case of fast speech or one-word-pronounciation-of-a-phrase.

Once we are in phonology a different mechanism comes into play. Clitics have to occur as close to the beginning of the sentence (intonation phrase) but cannot be sentence initial (with some exceptions in Slovenian mentioned above). To model the phonological requirements we have more options, which are fairly similar and differ only in details. With the constraints in (26), proposed by Anderson (1995), the difference between Slovenian and BCS can be easily modeled with the rankings in (27). For another option see Billings (2002).

- (26) EDGEMOST (cl., L, I-Phrase) clitics occur at the left edge of an intonation phrase NONINITIAL (cl., I-Phrase) clitics should not be initial in the intonation phrase NONINITIAL (cl., clause) clitics should not be initial in the clause
- (27) Slovenian: NONINITIAL (cl., clause) >> EDGEMOST (cl., L, I-P) BCS: NONINITIAL (cl., I-P) >> EDGEMOST (cl., L, I-P)

6 Conclusion

This paper does not give an answer as to how Slovenian clitics are positioned. It merely points out certain difficulties with the available proposals and suggests a possible direction for future research. More work needs to be done on the syntax phonology interface to trully understand linearization, prosodic phrasing and various phonological and morphological processes that are active after spell-out to PF, where clitics seem to get the position of their pronounciation determined.

References:

Alexiadou, Artemis. 1997. Adverb Placement: A Case Study in Antisymmetric Syntax. Amsterdam:

- John Benjamins.
- Aljović, Nadira. 2006. Are there optional rules in syntax? Evidence from clitic climbing in Bosnian/Croatian/Serbian. Paper presented at FDSL 6.5 in Nova Gorica. 1-3.12.2006.
- Anderson, Stephen. 1995. Toward an Optimal Account of Second-Position Phenomena. In Dekkers, J. et al. (eds.) Optimality Theory: Phonology, Syntax, and Acquisition. Ofxord, OUP. pp. 302-333.
- Billings, Loren. 2002. Phrasal clitics. Journals of Slavic Linguistics 9.2.
- Bošković, Željko. 1995. Participle movement and second position cliticization in Serbo-Croatian. *Lingua* 96, 245-266.
- Bošković, Željko. 2001. On the nature of the syntax-phonology interface: cliticization and related phenomena. Amsterdam: Elsevier.
- Browne, Wayles. 2007. Word order in Burgenland Croatian: clitics. Handout from a talk given at the 3rd Southeast European Studies Association Conference, April 26-28, 2007, Ohio State University.
- Cardinaletti, Anna & Michal Starke. 1999. The typology of structural deciency: On the three grammatical classes. In *Clitics in the languages of Europe*, ed. Henk Van Riemsdijk, pp. 145-290. Berlin: Mouton de Gruyter.
- Chomsky, Noam. 1995. The Minimalist Program. Cambridge, Mass. MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, Cambridge, Mass.: MIT Press
- Cinque, Guglielmo. 1999. Adverbs and functional projections. Oxford: Oxford University Press.
- Cinque, Guglielmo. 2004. Issues in adverbial syntax. Lingua 114: 683-710.
- Franks, Steven. 1998. Slavic clitic are still syntactic. Penn Working Papers in Linguistics 4.2:111-126.
- Golden, Marija. 1997. Multiple wh-questions in Slovene. In W. Browne, E. Dornisch, N. Kondrashova and D. Zec (eds.) *Formal Approaches to Slavic Linguistics*: The Cornell Meeting, 1995. Ann Arbor: Michigan Slavic Publications. 240-66.
- Golden, Marija. 2003. Clitic placement and clitic climbing in Slovenian. *Sprachtypologie und Universalienforschung* 56.3, pp. 151-322. *Focus on: Slovenian from a typological perspective*, ed. by Janez Orešnik & Donald D. Reindl.
- Golden Marija and Milena Sheppard. 2000. Slovene Pronominal Clitics. Beukema & den Dikken (eds.) *The Clitic Phenomena in European Languages*. Amstrdam: John Benjamins. pp. 191-207.
- Marušič, Lanko. 2001. Pre- and postnominal adjectives in Slovenian. Ms. Stony Brook University, Stony Brook, N.Y.
- Marušič, Franc. 2003. *Aff-STEM-ix: On discontinuous morphology. Ms. Stony Brook University, Stony Brook, N.Y.
- Marušič, Franc. 2005. On non-simultaneous phases. PhD thesis, Stony Brook University, Stony Brook, N.Y.
- Marušič, Franc. 2008. CP under Control. In G. Zybatow, L. Szucsich, U. Junghanns, and R. Meyer (eds.) *Formal Description of Slavic Languages*. pp. 408-422. Frankfurt am Main: Peter Lang.
- Orešnik, Janez. 1996. Nauk novejše slovenistike o povedkovem prilastku *Razprave II. razreda-Dissertationes Classis II* 15: 255-267.
- Progovac, Ljiljana. 1996. Clitics in Serbian/Croatian: Comp as the second position. In A. Halpern and A. Zwicky (eds.), *Approaching Second*. Stanford: CSLI Publications.
- Radanović-Kocić, V. 1996. Placement of Serbo-Croatian Clitics: A prosodic approach. In A. Halpern and A. Zwicky (eds.), *Approaching second*. pp. 429-445. Stanford: CSLI Publications.
- Roberts, Taylor. 1997. The optimal second position in Pashto. Ms MIT. ROA 174-0297
- Sauerland, Uli & Paul Elbourne. 2002. Total Reconstruction, PF Movement, and Derivational Order. *Linguistics Inquiry* 33.2:283-319.