

COORDINATE STRUCTURE CONSTRAINT: A-/A'-MOVEMENT VS. CLITIC MOVEMENT*

Abstract

We discuss cases of apparent Coordinate Structure Constraint violations in Slovenian. We show that when two non-finite clauses are coordinated, clitics can front to the second position in the main clause from the first non-finite clause but not from the second, and an accusative argument can scramble to a position in the main clause from the first non-finite clause but not from the second. We argue that the apparent island violations result from post-syntactic movements and are thus not real island violations. Exhibiting typical properties of post-syntactic movements, clitic climbing and scrambling should thus be seen as PF-phenomena.

Key words

Slovenian; Coordinate Structure Constraint; clitic climbing; scrambling; island violations; non-finite complementation

1. Introduction

When two embedded non-finite clauses are coordinated, clitics can climb out only from the first but not the second clause, as shown with the accusative *jo* and dative *ji* in (1).

- (1) a. Janez je hotel [[jo spoznati] in [ji predstaviti Petra]].
Janez aux wanted her meet and her present Peter
'Janez wanted to meet her and introduce Peter to her.'
- b. Janez jo_i je hotel [[i spoznati] in [ji predstaviti Petra]].
Janez her aux wanted meet and her present Peter
- c. * Janez ji_k je hotel [[jo spoznati] in [k predstaviti Petra]].
Janez her aux wanted her meet and her present Peter
- d. * Janez ji_k jo_i je hotel [[i spoznati] in [k predstaviti Petra]].
Janez her her aux wanted meet and present Peter
- e. * Janez jo_i ji_k je hotel [[i spoznati] in [k predstaviti Petra]].

* We are grateful to an anonymous reviewer, to Steven Franks and to the audiences at SinFonJA 9 (Masaryk University in Brno) and at Humboldt University in Berlin for their comments and suggestions. We acknowledge financial support from the Slovenian Research Agency (program No. P6- 0382).

Given the Coordinate Structure Constraint (CSC) (which states that "in a coordinate structure, no conjunct may be moved nor may any element contained in a conjunct be moved out of that conjunct", Ross 1967: 89), one would expect the fronting of clitics from the two conjuncts to be blocked, but as shown by (1), only movement from the second clause is blocked. As the CSC might be violable in some languages, maybe (1) is simply due to Slovenian being one of these, but as it turns out, the CSC is a valid constraint on other types of A- and A'-movements in Slovenian. Clitic climbing and scrambling seem to be the only two instances of movement that do not respect the CSC in Slovenian. Thus, we can also hypothesize that the locus of our search for an alternative explanation for (1) should be in the nature of clitic climbing.

As we will show, the above is actually not the only property of clitic movement that suggests that clitics do not follow standard syntactic constraints. Clitic movement and scrambling will be shown to exhibit reconstruction, which can be seen as a consequence of PF movement. Putting these things together, we will suggest that the CSC is not violated in (1) as long as the CSC is a constraint on syntactic movement, not on movement in general; or in other words, that clitics can seemingly violate the CSC as they do not move in syntax proper.

We will start off with an introduction into Slovenian clitics (section 2) and clitic climbing (sec. 3), followed by a demonstration that the CSC is a valid constraint in Slovenian (sec. 4). We will then discuss the apparent CSC violations in more detail (sec. 5), show how clitic climbing and scrambling interact with binding (sec. 6), why the alternative explanation does not work (sec. 7), and offer an explanation of the observed facts (sec. 8).

2. Clitics

Slovenian pronominal and auxiliary clitics are 2nd-position clitics, as they are consistently located in the second clausal position, behind the first syntactic constituent, as shown in (2) (see Golden and Sheppard 2000, Marušič 2008 for details).

- (2) a. (***Se je**) Janez *(**se je**) včeraj (***se je**) vrnil (***se je**) domov.
 REFL AUX Janez REFL AUX yesterday REFL AUX returned REFL AUX home
 'Janez came back home yesterday.'
- b. Janezov (***mi je**) pes *(**mi je**) skoraj strgal hlače.
 Janez me AUX dog me AUX nearly tore pants
 'Janez's dog nearly tore my pants.'
- c. Avto,ki ga je Janez včeraj gledal, *(**se mi**) zdi

car that it aux Janez yesterday watch refl me seems
 (*se mi) še najlepši.
 REFL me still nicest

‘The car that Janez watched yesterday, seems to me to be the nicest.’

Note that Slovenian 2nd-position clitics are “syntactically well-behaved”, i.e., they do not share the behavior of Bosnian/Croatian/Serbian (BCS) clitics, which prefer second position calculated according to the prosody of the sentence, appearing even in the third position, after the second syntactic constituent, if the first syntactic constituent in the clause is followed by an intonation pause/break, and can also split syntactic constituents (see Franks and Progovac 1994, Čavar and Wilder 1994, Bošković 2001, Milićev & Milićević 2012, etc.).

It is thus natural to see Slovenian clitics as occupying the first available head position in the clause, i.e., the head of CP. This is the analysis proposed in Golden and Sheppard (2000) and adopted in much subsequent work on Slovenian.

However, using some of the arguments from Bošković (2001) on BCS, Marušič (2008, to appear) argues that Slovenian clitics *cannot* be strictly restricted to C, as they can in fact occur in several positions around various immobile syntactic elements. So while BCS and Slovenian 2nd-position clitics *may* move to C, this is not, for Bošković and Marušič, where they *need* to go. According to Bošković, clitics do always climb to the highest available position, but then get pronounced in the position that satisfies the prosodic restrictions on their pronunciation. Marušič does not make such a claim but suggests that they do not really move in syntax but only get repositioned at PF. We will not argue for one or the other of these alternatives here. Our goal is to offer another argument against placing clitics in C, and against syntactic movement of clitics more generally.

3. Clitic climbing

As shown in (3), Slovenian clitics climb out of infinitival clausal complements (cf. Golden and Sheppard 2000, Golden 2003, Marušič 2008b). The pronominal dative and accusative clitics *ji* and *jo* are both arguments of the embedded infinitival verb *podariti* ‘give (as a gift)’.

- (3) a. Janez je hotel [podariti Varji knjigo].
 Janez AUX want give Varja book
 ‘Janez wanted to give a book to Varja.’

- b. Janez j_i j_o je hotel [podariti i k].
 Janez her it AUX want give
 ‘Janez wanted to give it to her.’

As also seen in (3), the pronominal *ji* and *jo* form the clitic cluster together with the auxiliary clitic *je* from the main clause. Since the 3rd person singular auxiliary clitic is always located at the end of the clitic cluster, the two pronominal clitics precede it. If we use an auxiliary that is cluster initial, such as the first person singular *sem*, the raised pronominal clitics will follow it, as in (4).

- (4) Včeraj sem j_i j_o hotel [podariti i k].
 yesterday AUX her it want give
 ‘Yesterday, I wanted to give it to her.’

Embedded-clause clitics therefore front to the sentence-initial clitic cluster and form a unit with any clitics from the matrix clause. Thus, they can also cluster together with the matrix pronominal clitics, as in (5).¹

- (5) Janez mu_k ga_i je ukazal k [pojesti i].
 Janez him_{DAT} it_{ACC} AUX ordered eat
 ‘Janez ordered him to eat it.’
- (6) Janez se_i mu_k je ukazal k [umiti i].
 Janez refl_{ACC} him_{DAT} AUX ordered wash
 ‘Janez ordered him to wash himself.’

Interestingly, the pronominal clitics *ga* and *se* in (5) and (6) do not *have to* climb from the embedded clause, as shown in (7), which is just a variant/paraphrase of (6). (The prosody of (7) is slightly different from that of (6), with an extra intonation break/pause preceding the embedded clitic.)

¹ Not all combinations of the matrix and embedded clitics are possible inside the same clitic cluster. E.g. (i), where the embedded dative clitic fronts over the matrix accusative clitic, sounds impossible (cf. Orešnik 1985, Mišmaš 2016). We will not go into this any further as it seems irrelevant for the point we will be making.

(i) *Janez mu ga je prepričal pomagati.
 Janez him_{DAT} him_{ACC} AUX convinced help
 ‘Janez convinced him to help him.’

- (7) Janez mu je ukazal [se umiti].
 Janez him_{DAT} AUX ordered refl_{ACC} wash
 ‘Janez ordered him to wash himself.’

So whereas Slovenian clitics *can* front to the sentential 2nd position, they can also remain in the infinitival clause, especially when fronting is problematic for one reason or another (e.g. in (i) from fn. 1). This alone already shows that it cannot be obligatory for clitics to front to the initial C head, and it can further be used to argue that any theories of clitic placement which invariably place the clitic cluster in the initial C head are not correct. These predict that there should be just one landing position for clitics – the initial C-head (provided there is no C-head on top of the embedded infinitival clause, as has been argued extensively for non-finite clausal complements in Slovenian in general by Marušič 2008b). In what follows, we shall see that we can make an even stronger case against placing clitics in the initial C-head, and further, that clitics most likely do not front in syntax proper but rather after spell-out to PF, i.e., that clitic fronting is an instance of PF movement.

4. Coordinate Structure Constraint

While CSC is generally considered to be a robust principle, certain challenges for it have also been known, some even coming from languages closely related to Slovenian, such as BCS. In assessing the relevance of data like (1b) above, it is thus important to know the wider context of CSC violability in Slovenian.

Unlike BCS, Slovenian does not allow any type of CSC violation, neither violations of the Conjunct Constraint (extraction of a whole conjunct) nor of the Element Constraint (extraction of an internal part out of a conjunct) in Zhang’s (2009) (and consequently Grosu’s 1972) terminology. As shown in (8), it is impossible to extract a *wh*-word from coordination, regardless of where in the coordination the *wh*-word is located (as the more likely option, (8) shows only extraction from the first conjunct), and regardless of where in the clause the coordination is, be it an object, as in (8), subject, as in (9)a, or adjunct, as in (9)b.

- (8) a. *Čigave_i je Janez videl [t_i prijatelje in Varjo]?
 whose AUX Janez see friends and Varja
 b. *[Čigave prijatelje]_i je Janez videl [t_i in Varjo]?
 whose friends AUX Janez see and Varja
 Intended: ‘Whose friends and Varja did Janez see?’

- (9) a. * Čigavi_i so [t_i prijatelji in Varja] videli Janez.
 whose AUX friends and Varja see Janeza
 Intended: ‘Whose friends and Varja saw Janez?’
- b. *Čigavih_i je Janez prespal [pri t_i prijateljih in Varji].
 whose AUX Janez sleep at friends and Varja
 Intended: ‘At whose friends and Varja did Janez sleep over?’

Similarly, Slovenian does not allow simple (A-type) Left-Branch Extraction from inside a coordination, as in (10).

- (10) *Sestrin_i sta [t_i mož in Janez] hodila po cesti.
 sister's aux husband and Janez walked along street
 Intended: ‘Sister’s husband and Janez walked along the road.’

Some of these things work in BCS (Franks 2007, Stjepanović 1998 (cited in Bošković 2009), Corona 2011, Milićev and Milićević 2012). As our goal is neither to compare BCS with Slovenian nor attempt an explanation of such facts in BCS, we can leave the BCS data aside; what is relevant for us is that such things do not work in Slovenian.

Further, Slovenian does not allow *wh*-words to be extracted from conjoined non-finite clauses. This restriction will become relevant in the next section, where precisely this environment will be shown to be relatively transparent for clitic climbing and scrambling.

- (11) a. Z odpravnino je Črt hotel [obnoviti hišo in si kupiti nov avto].
 with severance-pay AUX Črt wanted renew house and REFL buy new car.
 ‘Črt wanted to renew the house and buy a new car with his severance pay.’
- b. *Kaj_i je z odpravnino Črt hotel [obnoviti t_i in si kupiti nov avto]?
 what AUX with severance-pay Črt wanted renew and REFL buy new car

The validity of the CSC in Slovenian thus seems robust. The next section will show, however, that the CSC – especially as the Element Constraint – can still appear to be violated in

Slovenian, most prominently with clitic climbing. We will suggest that this is because clitic climbing is not an instance of A-movement.²

5. An apparent violation of the CSC

Against the finding about the general validity of the CSC in Slovenian from section 4, we will now discuss data presented already in (1), repeated here as (12), in which the CSC appears to have been violated. (13) and (14) show that this fronting is not limited to a single clitic.

- (12) Janez jo_i je hotel [[i spoznati] in [ji predstaviti Petra]].
 Janez her aux wanted meet and her present Peter
 ‘Janez wanted to meet her and present Peter to her.’
- (13) Žodor ga_i je želel [[i le pozdraviti] in [hitro oditi domov]].
 Žodor him AUX wished only greet and quickly go home
 ‘Žodor wanted to just greet him and quickly go home.’
- (14) Ilija se_k mu_i je pozabil [[k i opravičiti] in [poravnati škodo]].
 Ilija refl him aux forgot apologize and pay damage
 ‘Ilija forgot to apologize to him and to pay for the damage.’

As already mentioned in section 3, clitic climbing is not obligatory. With appropriate intonation, the clitic from the first conjunct can remain in the embedded infinitival clause, so examples like (1), repeated here as (15), – although slightly degraded – are also possible.

- (15) Janez je hotel [[jo spoznati] in [ji predstaviti Petra]].
 Janez aux wanted her meet and her present Peter
 ‘Janez wanted to meet her and introduce Peter to her.’

Unlike the clitic from the first conjunct, however, the clitic from the second conjunct cannot front at all, regardless of what happens in the first conjunct, regardless of the type of clitic, and regardless of the intonation, (16)-(17).

² Note also that although Johnson (1996) claimed that at least in English, the CSC can be violated by A-movement, Lin (2002) later challenged this claim and argued that the CSC is nonetheless a valid constraint for A-movement.

- (16) *Ilija jo_i hoče Žanu kupiti darilo in povabiti t_i na večerjo.
 Ilija her wants Žan buy gift and invite on dinner
 Intended: ‘Ilija wanted to buy Žan a gift and invite her for dinner.’
- (17) *Žodor ga_k je hotel [[odleteti v Berlin] in [$_k$ obiskati]].
 Žodor him AUX wanted fly to Berlin and visit
 Intended: ‘Žodor wanted to fly to Berlin and visit him.’

The clitic in the second conjunct can be omitted only if the same clitic, or any other kind of element with the same reference, is present also in the first conjunct. So for example, as shown in (18), if the clitic from the first conjunct fronts to the second position of the sentence, the clitic from the second conjunct can also be absent.

- (18) a. Janez ga_i je moral [$_i$ pozdraviti] in [od takrat
 Janez him AUX must say-hello and from then
 naprej $_i$ obravnavati kot prijatelja].
 on treat as friend
 ‘Janez had to greet him and from then on treat him as a friend.’

On the surface this seems like a case of Across-the-Board movement (ATB), since examples like (18) work only if both clitics are featurally the same. ATB movement, i.e. simultaneous movement of two elements from both conjuncts, has an identity requirement on the two elements (cf. Williams 1978), so that the two elements need to be the same (cf. *Who did John meet and Mary see?*). Unfortunately, it is not easy to test if such an identity requirement holds in cases like (18) as well. Slovenian only has subject-oriented reflexive clitics, so checking the interpretation of the reflexive clitic gives no usable result, and given that Slovenian clitics can refer to types (rather than just objects, cf. Orešnik and Perlmutter 1973), referring to physically different objects of the same type is permissible, as in (19), but can, again, not be used for making any firm conclusion about this argument. And in (20), the two ga 's are both idiomatic, so they may not really have a referent at all.

- (19) A: So, what was the decision regarding the new book, will it be sold or handed out for free?

B: Vid jo_i je sklenil Meti prodati i, Melisi pa podariti i za novo leto.
 Vid it AUX decided Meta sell Melisa PTCL give for new year
 ‘Vid decided to sell it to Meta and to give it to Melisa for New Year’s.’

- (20) Janez se ga_i je hotel [i napiti] in [i zadeti].
 Janez refl it AUX wanted drunk and stoned
 ‘Janez wanted to get drunk and to get stoned stoned.’

However, whereas it is not easy to, say, use the identity requirement to unequivocally establish whether these are cases of ATB or not, it is clear that the absence of the argument in the second conjunct can also be derived with ellipsis (e.g. some type of argument ellipsis, though not necessarily the East-Asian Argument Ellipsis of, say, Takahashi 2014, but rather something comparable to what McShane 2005 discusses for Russian). As shown in (21)-(23), the second conjunct can lack more than just the clitic. In (21), the second conjunct lacks both the clitic and the noun inside the indirect object; in (22), the second conjunct lacks the entire indirect object; and in (23) it lacks the verb and the adverbial argument.

- (21) Žan ga_i je hotel [pokazati i svoji mami] in [predstaviti i Anini ~~mami~~].
 Žan him AUX wanted show self's mother and present Ana's
 ‘Žan wanted to show him to his mother and present him to Ana's mother.’

- (22) Vid ga_i je hotel [prodati i Idi zaradi pomanjkanja denarja] in
 Vid him AUX wanted sell Ida because lack money and
 [podariti i ~~Idi~~ zaradi dobrega srca].
 give because good hearth
 ‘Janez wanted to sell it to Ida because of a lack of money and to give it (to Ida) because of his good heart.’

- (23) Črt ga_i je hotel [v torek pripeljati i domov pijanega] in [v petek
 Črt him AUX wanted in Tuesday bring home drunk and in Friday
~~pripeljati i domov~~ treznega].
 sober
 ‘Črt wanted to bring him home drunk on Tuesday and sober on Friday.’

So, given that this ‘selective’ ellipsis of the other arguments is possible in this type of coordinations, the clitic from the second conjunct in (18) could also be missing as a result of this other process, rather than ATB movement. This is further suggested by (24), where the

first clitic does not leave the conjunct, but the second conjunct still lacks it. (24) thus cannot be a case of ATB, which suggests that (12) could most likely also be derived in this way.³ A similarly situation obtains in (25), where the first conjunct does not even have the clitic, but only the full NP indirect object. In this case, there is obviously no way of knowing what element is deleted in the second conjunct, but given that the interpretations of (25) and of its variant with the expressed clitic in the second conjunct are the same, the possibility that there is a deleted clitic inside the second conjunct cannot be that far-fetched.

- (24) ?Janez je hotel # [danes jo spoznati] in [~~j~~ jutri povabiti ven].
 Janez AUX wanted today her meet and invite tomorrow out
 ‘Janez wanted to meet her today and invite her out tomorrow.’
 Janez je hotel # [danes jo spoznati] in [jo jutri povabiti ven].
- (25) Janez je hotel [danes Mijo spoznati] in [~~j~~ jutri povabiti ven].
 Janez AUX wanted today Mija meet and invite tomorrow out
 ‘Janez wanted to meet Mija today and invite her out tomorrow.’
 Janez je hotel [danes Mijo spoznati] in [jo jutri povabiti ven].

We can conclude that clitics can indeed move out from a coordination of embedded infinitival complements, but that this fronting is restricted to the first conjunct and that ATB movement is not available for clitics.

5.1. Another case of apparent CSC violation

Clitic climbing is actually not the only case of movement that seems to violate the CSC. Scrambling seems to disobey it in exactly the same syntactic environments. And just as we saw with clitics, scrambling of the internal argument from embedded infinitival coordinations is only possible from the first conjunct but not from the second conjunct:

- (26) a. Črt je Ani_i hotel [kupiti i knjigo] in [jo povabiti na večerjo].
 Črt AUX Ana wanted buy book and he invite on dinner
 ‘Črt wanted to buy Ana a book and invite her for dinner.’
- b. Vid je knjigo_i hotel [najprej prebrati i] in jo potem podariti Idi.
 Vid AUX book wanted first read and it then give Ida

³ Dotlačil (2008) actually claims, conversely, that this type of cases in Czech are instances of ATB. The other arguments we presented in this section, however, lead us to the opposite conclusion.

‘Vid wanted to first read the book and then give it to Ida.’

- c. *Vid je Ido hotel prebrati knjigo in povabiti na večerjo.
Vid aux Ida wanted read book and invite on dinner
‘Vid wanted to read a book and invite Varja for dinner.’

Again, just as we saw above with clitics, the apparent movement of the noun phrase from the second conjunct is only possible in what seems like a case of ATB movement, (27). However, all of the arguments from the previous section which showed that the missing clitic from the second conjunct was potentially elided can also be applied to show the same for the missing noun phrase. So we conclude that (27) is also most likely an instance of selective ellipsis inside the second conjunct.

- (27) Vid je Miji_i hotel [kupiti i knjigo] in [podariti i kolo].
Vid AUX Mija wanted buy book and donate bike
‘Vid wanted to buy Mija a book and to give her a bike.’

Now, the fact that noun phrases can move out of the first conjunct might be seen as suggesting that we should reconsider our position on the CSC. However, as we will show below, there are reasons to suspect that clitic climbing and scrambling are not (typical) A-movements.

6. A-movement interacts with binding

A-movement is typically assumed to have an effect on binding. On the other hand, clitic climbing and clitic movement (in general) does not have such an effect on binding (cf. Marušič 2008a, to appear). As shown in (28), a fronted reflexive clitic does not violate Principle A. (28)a) shows this for accusative reflexive clitics moved inside the same clause, and (28)b) for accusative reflexive clitics that climbed from an embedded infinitival clause.

- (28) a. Včeraj se_i je Janez_i udaril po prstih.
yesterday REFL AUX Janez hit over fingers
‘Yesterday Janez hit his fingers.’
b. Včeraj se_i je Janez_i hotel pogledati v ogledalo.
yesterday REFL AUX Janez wanted look in mirror
‘Yesterday, Janez wanted to look at himself in the mirror.’

Similarly, clitic movement does not cause Principle C violations, as shown in (29). (29)a) gives the control example in which the possessive adjective *Janezove* "Janez's", being part of the subject, does not c-command the co-indexed object *Janez*, as it is buried deep inside the subject DP, and so no Principle C effect is detected. (29)b) gives the same sentence except that the object is replaced with the co-indexed pronominal clitic *ga* "him" which has not climbed across the subject DP. In (29)c) the clitic is fronted to the second position within the sentence even above the subject of the matrix clause. Given that *Janezove* does not c-command out of the subject DP, there is no Principle B violation in (29)b). The interesting case is (29)c), where the clitic is fronted to a position higher than the subject, as the first sentential position is occupied by the adverbial *včeraj* "yesterday". The pronominal clitic is structurally in a position from where it could c-command the co-indexed possessive adjective *Janezove* "Janez's" and thus trigger a Principle C violation, but no such violation is observed, (29)c) is acceptable with the two elements co-indexed.

- (29) a. Mama Janezove_i prijateljice je hotela končno spoznati Janeza_i.
 mother Janez's friend AUX wanted finally meet Janez
 'The mother of a friend of Janez wanted to finally meet Janez.'
- b. Mama Janezove_i prijateljice ga_i je hotela končno spoznati.
 mother Janez's friend him AUX wanted finally meet
 'The mother of a friend of Janez wanted to finally meet Janez.'
- c. Včeraj ga_i je mama Janezove_i prijateljice hotela končno spoznati.
 yesterday him AUX mother Janez's friend wanted finally meet
 'The mother of a friend of Janez wanted to finally meet Janez yesterday.'

The same absence of Principle C violation is observed also in examples of the type we have been discussing so far. As shown in (30), climbing of the pronominal clitics from the first conjunct to the second position of the sentence does not result in Principle C violation.

- (30) Včeraj ga_i je mama Janezove_i prijateljice hotela končno spoznati
 yesterday him AUX mother Janez's friend wanted finally meet
 in se mu_i tudi predstaviti.
 and refl him also introduce

‘The mother of a friend of Janez wanted to finally meet Janez and introduce herself to him yesterday.’

From what we have seen so far, clitic movement is subject to total reconstruction, which is not a property of A-movement. So even if A-movement is allowed to violate the CSC, as argued by Johnson (1996) (though cf. fn. 2 above), we cannot extend this to our cases, as they do not involve A-movement. Following Sauerland and Elbourne (2002), total reconstruction is a result of PF movement, so clitic movement must also be also a PF phenomenon.

And just like clitic climbing, scrambling also does not interact with binding. The scrambled Micka in (31)b) can be equally well coindexed with the possessive adjective *Mickini* "Micka's" in the second conjunct, as is the case in (31)a), where they are clearly inside two different conjuncts and therefore far from c-commanding each other. Similarly, there is no Principle C violation in (32), so we can conclude that scrambling is also subject to total reconstruction, where the same kind of examples that were shown to seemingly violate the CSC do not trigger a Principle C violation.

- (31) a. Janez je moral pomagati Micki_i kuhati fižol in postreči
 Janez AUX must help Micka cook beans and serve
 kosilo Mickini_i sestri.
 lunch Micka's sister
 ‘Janez had to help Micka cook beans and serve lunch to Micka's sister.’
- b. Janez je Micki_i moral pomagati kuhati fižol in
 Janez aux Micka must help cook beans and
 postreči kosilo Mickini_i sestri.
 serve lunch Micka's sister
 ‘Janez had to help Micka cook beans and serve lunch to Micka's siste.’
- (32) Janez je Micko_i hotel končno spoznati in se Micki_i tudi predstaviti.
 Janez AUX Micka wanted finally meet and refl Micka also introduce
 ‘Janez wanted to finally meet Micka and to also introduce himself to Micka.’

Therefore, both examples of fronting from embedded infinitival clauses, i.e. clitic climbing and scrambling, are subject to total reconstruction and must thus be instances of PF movement. If this is the case, we are close to being able to conclude that PF movement is

insensitive to the CSC. Before we can make this conclusion, however, we need to discard one more option.

7. Clausal coordination

Examples like (18) and (22a) could also be derived from sentential coordination, as sketched in (33), with the clitic climbing from the embedded infinitival clause inside the first conjunct, not violating the CSC at all. The repeated portion of the second sentential conjunct would get deleted, and as a result, we would have a case of apparent CSC violation. Obviously, this would not really be a CSC violation, but just regular movement inside the first conjunct.

- (33) [Jan jo je hotel i spoznati] in [(~~Janez je hotel~~) jo povabiti na večerjo].
 Jan her AUX wanted meet and her invite on dinner
 ‘Jan wanted to meet her and invite her for dinner.’

One way of showing that this is *not* a case of sentential coordination is by using adverbials which require plurality of events, e.g. *istočasno* "simultaneously". As shown in (34), such adverbials are acceptable with clitic climbing, seemingly in violation of the CSC. We can thus conclude that these examples do not involve sentential coordination but coordination of the embedded non-finite complements, and so they indeed show that clitic climbing in these cases is an instance of an apparent CSC-violating movement. In fact, that sentential coordination is not a potential source for these examples is further confirmed by the unacceptability of (35).

- (34) Jan ga je hotel istočasno prebrati in odgovoriti na mejle.
 Jan it AUX wanted simultaneously read and reply on emails
 ‘Jan wanted to simultaneously read it (=the newspaper) and answer emails.’
- (35) *Janez ga je hotel istočasno prebrati in Janez je
 Janez it aux wanted simultaneously read and Janez
 je hotel istočasno odgovoriti na mejle.
 aux wanted simultaneously reply on emails

8. Prosodic structure of the relevant examples

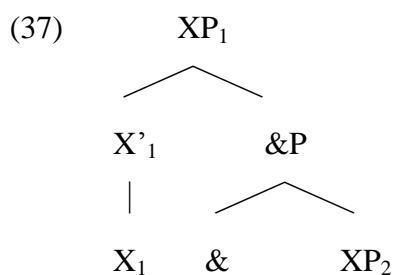
Prosodically the two conjuncts of a clausal coordination are never comparable. The first conjunct will be prosodically integrated with the part of the sentence that precedes it (and the

second conjunct with the part of the sentence that follows it) and there will be a prosodic break/pause between the two conjuncts. There does not seem to be any true difference in the prosody between a simple sentence with an embedded infinitival complement and the first part of a sentence with a coordination of two infinitival clauses, as shown in (36) (for obvious reasons, the intonation on the last word is different: in the first case it is falling, just like with any other end of sentence, and in the other example it is rising, just as is the case with any other continuation).

- (36) a. Janez je moral prebrati časopis.
 Janez AUX must read newspaper
 ‘Janez had to read through the newspaper.’
- b. Janez je moral prebrati časopis in prelistati revijo.
 Janez AUX must read newspaper and flip magazine
 ‘Janez had to read through the newspapers and flip through the magazine.’

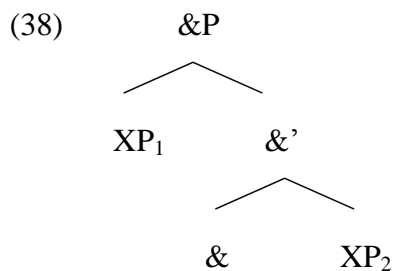
Just as there is no prosodic break/pause between the modal verb *moral* and the infinitival complement in (36)a), there is also no break/pause anywhere between the beginning of the sentence and the coordination in (36)b). There is, however, a prosodic break/pause just before the conjunction (which is itself a clitic – probably a proclitic, in which case it would act as the first clitic of the cluster).

These prosodic properties can presumably also be used to argue for a structure like (37), where the first conjunct actually heads the entire coordination (Munn 1993).



However, with such a structure, we would have no way of deriving the CSC, which – given the data from section 3 – is still a valid constraint on syntactic movement also in Slovenian. Assuming the more standard structure of coordination, such as (38), we can explain the observed prosodic structure by positing that only the head & and XP₂ are spelled out to PF at

the same time and thus form a separate prosodic constituent at PF, while XP_1 is spelled-out to PF together with the rest of the preceding clause and thus forms a prosodic constituent with it.



Although the reasoning presented in this section is clearly very tentative and sketchy, we believe that it is on the right track and can form a basis for a fuller treatment in the future.

9. Conclusion

Several theoretically significant points were made in this paper. We showed that clitics are not always located in one and the same position, given that we saw that clitics from the first conjunct climb to the beginning of the clause and clitics from the second conjunct remain inside their conjunct. The analysis which always places (Slovenian) clitics in C, the first syntactic head of the clause, cannot be maintained.

Both clitic climbing and scrambling were shown to result in what appears as violations of the CSC. In both cases, such apparently CSC-violating movement was possible only from the first conjunct, while movement from the second conjunct was impossible (cases that may look like a result of ATB movement were argued to most likely be just cases of selective ellipsis). At the same time, the CSC was shown to hold for *wh*-movement in Slovenian. Given these conflicting results, we have two options: either we discard the CSC, or we try to understand if – and if so, in what way – clitic climbing and scrambling are different from prototypical syntactic movements.

We showed that clitic climbing and scrambling are subject to total reconstruction, which is a hallmark property of PF movement. And given the prosodic structure of these types of coordination, our conclusion was that clitic climbing and scrambling are both instances of PF movement, which need not respect the Element Constraint (the subtype of the CSC that bans movement of an internal part of a conjunct).

References

- Bošković, Željko. 2001. *On the nature of the syntax-phonology interface: cliticization and related phenomena*. Amsterdam: Elsevier.
- Bošković, Ž. 2009. Unifying first and last conjunct agreement. *Natural Language and Linguistic Theory* 27: 455–496.
- Corona, Keith. 2011. *Phonological movement in Serbian*. Ms. California State University, Fresno.
- Ćavar, D. and C. Wilder. 1994. Clitic Third in Croatian. In Henk van Riemsdijk and Lars Hellan (eds.) *Clitics: Their Origin, Status and Position. Eurotype Working Papers, Theme Group 8, Vol. 6*. Also in Henk van Riemsdijk (eds.) *Eurotype volume*, Mouton de Gruyter: Berlin.
- Franks, Steven (2007). Deriving Discontinuity. In F. Marušič & R. Žaucer *Studies in Formal Slavic Linguistics*. Frankfurt am Main: Peter Lang. 103–120.
- Franks, Steven. 2016. Clitics are/become Minimal(ist). In Franc Marušič and Rok Žaucer (eds.) *Formal Studies in Slovenian Syntax. In honor of Janez Orešnik*. Amsterdam: John Benjamins. 91-127.
- Franks, Steven and Ljiljana Progovac. 1994. On the placement of Serbo-Croatian clitics. *Indiana Linguistic Studies* 7: 69-78.
- Golden, Marija. 2003. Clitic placement and clitic climbing in Slovenian. *STUF-Language Typology and Universals* 56.3: 208-233.
- Golden, Marija, and Milena Milojević Sheppard. 2000. Slovene pronominal clitics. In Frits Beukema and Marcel Den Dikken (eds.) *Clitic phenomena in European languages*. Amsterdam: John Benjamins Publishing. 191-207.
- Grosu, Alexander 1972. *The Strategic Content of Island Constraints*. PhD diss., Ohio State University.
- Johnson, Kyle. 1996. *In search of the English Middle Field*. UMass, Amherst ms.
- Lin, Vivian. 2002. *Coordination and sharing at the interfaces*. PhD dissertation. MIT, Cambridge, MA.
- Marušič, Franc. 2008a. Slovenian clitics have no unique syntactic position. In Andrei Antonenko, John Bailyn, and Christina Bethin (eds.) *Formal Approaches to Slavic Linguistics #16: The Stony Brook Meeting 2007*. Ann Arbor: Michigan Slavic Publications. pp 266-281.
- Marušič, Franc. 2008b. CP under control. In Gerhild Zybatow, Luka Szucsich, Uwe Junghanns, Roland Meyer (eds.) *Formal Description of Slavic Languages*. pp. 408-422. Frankfurt am Main: Peter Lang.

- Marušič, Franc. To appear. Positioning Slovenian clitics. *Proceedings of SLS 2* (2007).
- McShane, Marjorie. 2005. *A Theory of Ellipsis*. New York: Oxford University Press.
- Miličev, Tanja, and Nataša Miličević. 2012. Leftward movement with discontinuous appositive constructions. *Acta Linguistica Hungarica* 59.1-2: 205-220.
- Munn, Alan. 1993. *Topics in the Syntax and Semantics of Coordinate Structures*. PhD dissertation, University of Maryland.
- Perlmutter, David M., and Janez Orešnik. 1973. *Language-particular rules and explanation in syntax*. In S. R. Anderson & P. Kiparsky (eds.) *A Festschrift for Morris Halle*. New York: Holt, Rinehart and Winston.
- Sauerland, Uli & Paul Elbourne. 2002. Total Reconstruction, PF Movement, and Derivational Order. *Linguistics Inquiry* 33.2: 283-319.
- Stjepanović, Sandra. 1998. *Scrambling in Serbo-Croatian*. Manuscript, University of Connecticut.
- Takahashi, Daiko. 2014. Argument ellipsis, anti-agreement, and scrambling. *Japanese syntax in comparative perspective*. 88-116.
- Williams, Edwin. 1978. Across-the-Board Rule Application. *Linguistic Inquiry* 9.1: 31-43.
- Zhang, Niina N. 2009. *Coordination in Syntax*. Cambridge, UK: Cambridge University Press.

Franc Lanko Marušič
University of Nova Gorica
Vipavska 13, SI-5000 Nova Gorica
franc.marusic@ung.si

Rok Žaucer
University of Nova Gorica
Vipavska 13, SI-5000 Nova Gorica
rok.zaucer@ung.si