

Spelling out enclitics and giving their tone a voice: Cyclic clitic incorporation in BCS and breaking the cycle*

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Abstract

This paper examines previously unnoticed facts about prosodic interactions between enclitics and their hosts in Bosnian/Croatian/Serbian (BCS). I show that there is a three-way split between BCS enclitics in this respect: (i) enclitics that always interact with the accent of their host; (ii) enclitics that interact with the accent of their host in some contexts, but not in others; (iii) and enclitics that never interact with the accent of their host. It is shown that this rather complex pattern can be accounted for in its entirety by a condition on prosodic incorporation of enclitics that holds at the point when syntactic structure is mapped to prosodic structure, which essentially requires the clitic and the host to be in the same spell-out domain in order for the clitic to incorporate into the prosodic word of its host, a prerequisite for the clitic to interact with the accent of its host. I also discuss certain idiosyncratic phonological properties of the auxiliary clitic *je* ‘be.3sg’ and the particle *se* ‘self’ that cause reordering of enclitics in PF. It is shown that this PF movement can have an effect on whether a clitic is spelled out in the same domain as its host, which in turn affects the prosodic interaction between the two. Based on the prosodic interaction of enclitics with the accent of their host, I argue for a phase-based approach to prosodic structure building (see also Dobashi 2003; Kahnemuyipour 2004, 2009; Kratzer and Selkirk 2007; Sato 2012; Sato and Dobashi 2016; among others).

Keywords: enclitics; accent; phases; spell-out; cyclic prosodic mapping; linearization

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Introduction

In this paper, I address the question of the relationship between syntactic and prosodic structure, investigating specifically how clitics are mapped from their syntactic positions into the prosodic structure and how they interact with word-level accentual rules. One major theoretical question the paper addresses is whether syntactic structure is mapped to prosody at the end of the whole derivation or incrementally at several stages of the derivation, arguing for the latter view. The empirical focus of the paper is on enclitics in Bosnian/Croatian/Serbian (BCS), from a previously unexplored perspective.

Regarding the position of clitics in the prosodic structure, it has been argued in the previous literature that they can enter the prosodic structure in three different ways, given in (1) (Selkirk 1996), depending on language-specific rankings of constraints on the syntax-prosody correspondence, linearization, and well-formedness.

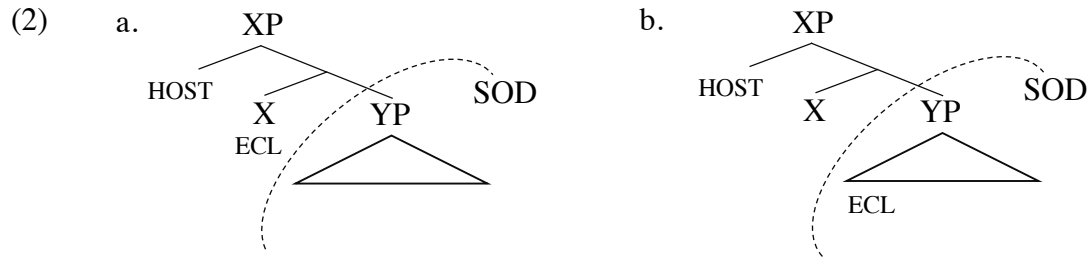
- (1) a. internal clitics: $(\sigma \sigma)_{\omega}$ -inside the (minimal) prosodic word of the host
b. affixal clitics: $((\sigma)_{\omega} \sigma)_{\omega}$ -adjoined to the prosodic word of the host
c. free clitics: $((\sigma)_{\omega} \sigma)_{\phi}$ -sister to the prosodic word of the host

With respect to the syntactic derivation, it is by now standardly assumed that it proceeds in incremental steps, namely phases, where the complement of every phase head represents a domain that is spelled out (Chomsky 2000, 2001), after which this domain becomes inaccessible for certain operations. It has also been argued that spell-out domains are relevant for building prosodic structure, i.e. that spell-out domains are mapped onto corresponding prosodic domains (Dobashi 2003; Kahnemuyipour 2004, 2009; Adger 2007; Kratzer and Selkirk 2007; Sato 2012; and Sato and Dobashi 2016, among others). Assuming that a part of the prosodic structure of an utterance is built at each spell-out domain, it is necessary to integrate at higher spell-out domains new elements introduced in these domains with what has already been mapped to the prosody at earlier

stages. This requires that certain prosodic constituents can span spell-out domains. For example, given that clauses are usually mapped as intonational phrases (ι) in the prosodic structure, and that they contain multiple spell-out domains, which correspond to smaller prosodic constituents, it must be possible to create an intonational phrase from material spelled out in separate domains. Elfner (2012) also argues for recursive phonological phrases (ϕ) in Irish that consist of a maximal phonological phrase consisting of smaller phonological phrases, which correspond to separate spell-out domains. A phonological phrase can then also be built across a spell-out domain boundary. This paper will explore limits of this kind of incremental prosodic constituent formation. Specifically, as we move down the prosodic hierarchy (Selkirk 1978), we reach the level of the prosodic word (ω). I investigate whether it is possible to create a prosodic word from elements belonging to separate spell-out domains. This question arises in the context of elements that have a requirement to encliticize to an element preceding them. Particularly, if such an element is linearized in the leftmost position in a lower spell-out domain, and it is preceded by a potential host at the higher spell-out domain, how do the two map to the prosodic structure?

To investigate these issues, I focus on BCS enclitics, which crucially comprise a heterogeneous group of items, occupying positions of different height in the syntactic structure (see e.g. Bošković 2001). Due to their different positions in the syntax, they do not always belong to the same spell-out domain, and they do not always share the same spell-out domain with their host, which makes them a perfect testing ground for investigating the questions raised above.

I will explore both contexts where an enclitic and its host are in the same spell-out domain, and those where they are not, as represented schematically in (2a & b), respectively.



I show that the configurations in (2) have an important effect on how enclitics attach to their hosts. Crucially, an enclitic can incorporate into the prosodic word of the host if it finds itself in the configuration in (2a) at the output of the syntax, but not in (2b). In other words, it is possible to map the host and the enclitic as one minimal prosodic word (prosodic word not dominating another prosodic word category in the prosodic structure (1a)) only if the two are in the same spell-out domain. This leads to the conclusion that the prosodic constituent that cannot be built across spell-out domain boundaries is the minimal prosodic word.

With BCS enclitics, this restriction on incorporation is reflected in whether or not they interact with the accentual rules applying to the domain of their host. Specifically, most BCS enclitics have a lexical High tone, which can undergo spreading to the preceding syllable only if it finds itself in a minimal prosodic word after a toneless syllable. I show that, if an enclitic and its host are in the configuration (2a) in the output of the syntax, the High tone of the enclitic can undergo spreading to the host. However, when an enclitic and its host are in the configuration (2b), the High tone cannot spread to the host, i.e. there is no interaction between the enclitic and the prosody of its host in that case. I also show that in a very restricted context an enclitic found in the configuration (2b) can undergo reordering with an element higher in the structure due to a phonological constraint. The pattern I introduce here, which has not been discussed before, thus quite strongly supports phase-based approaches to the syntax-prosody mapping (Dobashi 2003, Kahnemuyipour 2004, 2009; Kratzer and Selkirk 2007; Sato and Dobashi 2016, a.o).

The paper is organized as follows. In Section 1.1., I first give the background regarding BCS accentual rules that is necessary to understand the prosodic interaction between enclitics and their hosts in BCS. Then, I establish several new descriptive generalizations in Section 1.2., and discuss some questions they raise in Section 1.3. In Section 2., I give major background assumptions regarding the position of enclitics in the syntax, the theory of phases, and the timing of prosodic mapping adopted in this paper. In Section 3, I argue for a phase-based approach to prosodic structure building, based on the new pattern of interactions between enclitics and their hosts, also proposing a condition that restricts prosodic incorporation of clitics. Section 4. is the conclusion.

1. BCS Enclitics and accent

In this section, I introduce a new paradigm involving BCS enclitics concerning when they interact with the accent of their host. This paradigm is found in a dialect of BCS spoken in central Bosnia and Herzegovina. Given that BCS prosody is an area with very rich microvariation, the pattern introduced below is not found in the speech of all BCS speakers, which is typical of phenomena discussed in the prosodic literature on BCS. Regarding interaction of BCS clitics with the accent of their host, there is some work done on proclitics by several researchers who have worked on various BCS dialects (Moskvljević 1927-28; Ružičić 1927; Vuković 1940; Nikolić 1970; Zec and Inkelas 1991; Zec 1993, Zec 2005; Riđanović and Aljović 2009; Talić 2015a,b). However, BCS enclitics have not been discussed in this respect before. The reason for this may be that the interaction in question is not observed for enclitics in all dialects, but also that, unlike proclitics, BCS enclitics are rarely found in a prosodic configuration in which they could at least in principle interact with the accent of their host. To show why such configurations are rare, as well as to provide the background necessary to follow the new paradigm introduced below, I will first

introduce some basic facts regarding BCS accent, also explaining how accent assignment rules apply in the contexts where two items are combined into one prosodic word.

1.1. Accent assignment in BCS

BCS is a pitch-accent language where prosodic words have prominent syllables with either a falling (3a-b) or a rising (3c-d) accent on long or short vowels.¹

- | | | | |
|-----|--------------------|--------------------------|--------------|
| (3) | <i>falling</i> | <i>rising</i> | |
| a. | mà:jka
'mother' | c. má:na
'flaw' | <i>long</i> |
| b. | màčka
'cat' | d. mática
'queen bee' | <i>short</i> |

Inkelas and Zec (1988) note that while falling accents reside within a single syllable, a rising accent stretches over two syllables. In this respect, Lehiste and Ivić (1986) also point out that a short rising accent cannot be distinguished phonetically from a short falling accent without looking at the syllable following the prominent syllable. Many researchers working on BCS accent have offered different analyses to capture the distribution of falling and rising accents (Browne and McCawley 1965; Inkelas and Zec 1988; Zec 1993; Halle 1997; Werle 2009). All this literature shares two major conclusions:

- (4) a. A *falling accent* is a result of a word-initial High tone.
 b. A *rising accent* is a result of a non-word-initial High tone that undergoes spreading to the preceding syllable making it prominent (see e.g. Inkelas and Zec 1988).²

¹ Throughout the paper, a falling accent on a vowel is indicated by [`] and a rising accent by [´]. [^H] indicates that a vowel has a lexical High tone in some examples.

² Zsiga and Zec's (2013) approach to BCS pitch accents does not involve the rule of High tone spreading. They argue that both falling and rising accent are represented as a single H, while the place of stress is predictable based on the lexically determined H. The rising and falling contours result from the interaction of the lexical H, stress, and post-lexical L-tone insertion. If the lexical H is initial, this yields a falling accent. If the lexical H is non-initial, the syllable preceding it is stressed and an L tone is inserted to it post-lexically, yielding a rising accent. Since teasing apart between different theories of BCS pitch accents is beyond the scope of this paper, and assuming a post-lexical L tone insertion on a stressed syllable instead of the rule of H-tone spreading in the earlier accounts would not make a difference in capturing key observations about the interaction between enclitics and their host presented in this paper, I will put aside

Another conclusion from this literature that is crucial for our purposes is that every vocabulary item in BCS (roots, prefixes, suffixes) comes with its own idiosyncratic accentual properties, as a result of which they are either inherently linked to a High tone or not. Existing analyses differ in how they formalize these properties³. For our purposes, it will suffice to adopt (5).

(5) BCS vocabulary items either have or lack a lexical High tone.

BCS has various combinations of syllables with and without a High tone in multi-morphemic words, which we do not need to go into here (see Inkelas and Zec 1988; Zec 1993; Halle 1997, *i.a.* for different morpheme combinations and their interactions). Since I will be focusing on the interaction of enclitics with the accent of the host, where all hosts and most of enclitics are monosyllabic, let us see which accent surfaces in different combinations of monosyllabic vocabulary items with and without a lexical High tone. I will illustrate this by using roots and suffixes.

First, when a monosyllabic root with a lexical High tone is followed by a suffix without a High tone, the word has a falling initial accent (6). In this case, there is only one lexical High tone present; since it is found word-initially, it is realized as a falling accent.

(6)	Combination ($\sigma^H + \sigma$) ω	Example brà ^H t-a brother-M.GEN.SG	Accent Falling
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Similarly, when a monosyllabic root with a lexical High tone is followed by a suffix with a lexical High tone, the word also has a falling accent. Here, there are two High tones in the same prosodic

these issues here. For another alternative approach to BCS pitch accents, see (Smiljanić and Hualde 2000; Smiljanić 2013).

³ Some analyses posit an *accent mark* in the underlying representation of individual roots and affixes (Browne and McCawley 1965, 1973) or on the metrical grid (Halle 1997) that is subsequently linked to a High tone if accentual rules or algorithm pick it out as prominent.

word, but as a general rule in BCS, in combinations of multiple syllables with a lexical High tone, the leftmost High tone is always realized, and others are deleted (see e.g. Inkelas and Zec 1988).

Then, the word-initial High tone here is again realized as a falling accent.

(7)	Combination $(\sigma^H + \sigma^H)\omega$	Example lò ^H pt-a ^H ball-F.NOM.SG	Accent Falling
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With toneless roots, there are also two combinations. When such a root is followed by a suffix that has a High tone, the word gets an initial rising accent (8). This rising accent is a result of the rule of leftward High tone spreading (9), which applies in BCS every time a High tone is preceded by a syllable in the same prosodic word (Inkelas and Zec 1988). The syllable to which the High tone spreads is prominent and has a rising accent.

(8)	Combination $(\sigma + \sigma^H)\omega$	Example strá:n-a ^H side-F.NOM.SG	Accent Rising
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(9)	$(\sigma \quad \sigma^H)_\omega \rightarrow (\sigma \overset{\text{dotted line}}{\sigma^H})_\omega$	High Tone Spreading
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Finally, when a toneless monosyllabic root is combined with a toneless suffix, there is no lexical High tone to be realized; the rule of default initial High tone insertion then takes place (11). Given that this High tone is word-initial, it gets realized as a falling accent (10).

(10)	Combination $(\sigma + \sigma)\omega$	Example dà:n-a day-M.GEN.SG	Accent Falling
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(11)	$(\sigma \quad \sigma)_\omega \rightarrow (\sigma^H \quad \sigma)_\omega$	High Tone Insertion
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In sum, a suffix without a lexical High tone never interacts with the accent of the root it attaches to. Whether the monosyllabic root in such cases has a lexical High tone (6), or it gets a default High tone (10), it always gets the same accent. A suffix with a lexical High tone cannot interact

with the accent of the root that has a High tone either because the lexical accent of the root always prevails, as the leftmost High tone in the sequence (7). The only context where a suffix interacts with the accent of the root is when a suffix with a lexical High tone is attached to a root without a lexical High tone. In this case, the High tone from the suffix spreads to the root, yielding a rising accent on the root (8). Crucially, all of the examples above illustrate a context where the suffix is attached directly to the root. We have seen that, in such a context, the presence of a High tone on the suffix bleeds the default rule of initial High tone insertion that applies when no High tone is present in the accentual domain (8). However, this interaction between the High tone on the suffix and a toneless root breaks down in a slightly more complex context – when the suffix with a lexical High tone is separated from the toneless root by a derivational morpheme. Compare (8) to (12):

- (12) stràn-**k**-a^H Falling
 side-N-F.NOM.SG
 ‘political party’

In (12), the same monosyllabic toneless root and the same suffix with a High tone as in (8) are separated by a derivational suffix *-k*. Since this derivational suffix is a consonant, it does not contribute its own lexical High tone. Still, it blocks the interaction between the suffix *-a* that has a High tone, and the toneless root; High tone spreading does not take place here. Instead, the root is assigned a default initial High tone, yielding a falling initial accent. Thus, in (12), unlike in (8), the root itself constitutes an accentual domain, excluding the suffix *-a*. This can be captured under the hypothesis that prosodic words can have recursive structure invoked by Selkirk (1996), Ito and Mester (2007, 2013), Elfner (2012), *i.a.* Morphologically simple words that do not contain derivational affixes in (6), (7), (8), and (10) have only one prosodic word layer (13a), but words that are morphologically more complex map to prosody into a recursive prosodic word with

multiple layers (13b) (for discussion about recursive and non-recursive prosodic words in BCS in the context of other derivational suffixes, see Talić 2015a,b, 2016).⁴

- (13) a. $(\sigma \quad \sigma^H)_\omega$
 b. $((\sigma)_{\omega(\min)} \quad \sigma^H)_{\omega(\max)}$

The difference between (8) and (12) is then the following. The suffix *-a* is in the only accentual domain in (8), which enables the lexical High tone on this suffix to bleed the default High tone insertion rule. However, in (12), the root itself is a minimal prosodic word where rules of accent assignment need to apply. Since the suffix *-a* is not in this domain, the High tone on the suffix does not bleed the default rule (11), which applies in accentual domains that have no lexical High tones, hence a High tone is inserted to the root. At the level of the maximal prosodic word where the suffix *-a* is present, both the root and the suffix *-a* have a High tone, but the High tone of the root is realized as the leftmost one (this is parallel to (7)).

Given all of the above, when can we expect enclitics to interact with the accent of the host? There are heavy restrictions on this possibility. In fact, assuming that, just like suffixes, enclitics can either have a lexical High tone or not, an enclitic can in principle interact with the accent of its host in exactly one context, defined below:

- (14) An enclitic can interact with the accent of its host only if:
 (i) the enclitic has a lexical High tone;
 (ii) the host does not have a High tone; and
 (iii) the host and the enclitic are in the same minimal prosodic word.

⁴ Under approaches to stress/accent assignment couched in the Distributed Morphology framework (e.g. Marvin 2002; Newell 2004; Piggot and Newell 2006; Samuels 2010), the recursive prosodic word structure would be a reflection of word internal phases, where a category defining head (derivational affix) sends its complement to spell-out, creating an accentual domain that excludes more peripheral affixes. For the purposes of this paper, it does not matter what underlies the prosodic recursivity in morphologically complex words, so I will put those issues aside.

This is why the examples I introduce below contain only hosts that do not have a lexical High tone (there can be no interaction with a host that has a lexical High tone). Just like with the suffixes discussed above, a rising accent on the host indicates that the enclitic is in the same minimal prosodic word and interacts with its accent, while a falling accent on the host indicates that there is no interaction.

Having shown in what kind of contexts an enclitic can interact with the accent of its host, why such contexts are severely restricted, and how to recognize when an enclitic does interact with the accent of its host, I now turn to a more detailed discussion of the hosts that allow enclitics to interact with their prosody.

1.2. The main pattern

There are four classes of enclitics in BCS: (i) the interrogative particle *li*; (ii) auxiliary verbs ('be', 'will', and 'would'); (iii) object pronouns in dative, accusative, and genitive case; (iv) and the clitic *se*, which is found in a variety of constructions (Radanović-Kocić 1988; Riđanović 2003; Marelj 2004). Although this is a very heterogeneous group of items, they do all share one property that has made them rather famous in the generative literature – they have to occur in the second position of their intonational phrase (Radanović-Kocić 1988; Bošković 2001). While the second position requirement has been widely discussed, the interaction of BCS enclitics with the accent of their host has not received any attention in the literature.

Now, despite enclitics having a very limited window where they can in principle interact with the accent of their host due to how lexical tone marking and the rules of accent assignment work in the language (see Section 1.1.), there are a handful of hosts where this interaction is nevertheless possible. Since the relevant paradigm has not been introduced in the earlier literature on BCS

enclitics, I first give separate descriptive generalizations for different enclitics, in order to present the whole pattern. Then, I turn to discussing their theoretical implications and the account of the generalizations in Sections 2 and 3.

The hosts that allow the interaction under consideration here are all monosyllabic⁵; and they are found in questions, conditionals and a certain type of imperatives:

- (15) a. the particle *da* ‘that’
b. question words: *ko* ‘who’, *šta* ‘what’, *što* ‘why’, *gdje* ‘where’

To see whether or not enclitics interact with the prosody of these hosts, first consider what prosody these hosts have in the absence of enclitics. The particle *da* is a proclitic itself (see Werle 2009); when no enclitic follows it, it surfaces unaccented (16a). On the other hand, the question words can constitute their own prosodic words and they get a falling accent (16b-e).

- (16) a. Volim **da** čitam.
like that read
‘I like to read.’
b. **Kò** dolazi?
who comes
‘Who is coming?’
c. **Štâ** kaže?
what says
‘What did he say?’
d. **Štô** plače?
why cries
‘Why is he crying?’

⁵ It also seems to matter that these hosts are open syllables, since there is no interaction between enclitics and toneless hosts such as *mò:st* ‘bridge’, *rà:d* ‘work’, *dà:n* ‘day’, *rât* ‘war’ etc., or the question word *kàd* ‘when’. The lack of interaction with these hosts could follow from the syllable weight and minimal word requirements. Crucially, under the theory of phonological weight (Hyman 1984; Zec 1988; Hayes 1989; McCarthy and Prince 1990; among others), in which a *mora* serves as a measure of syllable weight, open syllables with short vowels (as in (15)) are monomoraic (light), open syllables with long vowels are bimoraic, while closed syllables are monomoraic or bimoraic depending on a language-specific choice (Hayes 1989; Zec 1995). If a minimal word in BCS is bimoraic, and closed syllables count as bimoraic, then with closed syllables, the host itself constitutes a word. With open syllables, on the other hand, the host itself does not meet the minimal word requirement, but incorporating an enclitic into it creates a bimoraic unit, which then may serve as a word.

- e. Gdjè borave?
 where stay
 ‘Where are they staying?’

If BCS enclitics were not to interact with the accent of these hosts, we would expect these hosts to retain the same prosody even when they are followed by enclitics; but if an enclitic were to interact with the accent of its host, we would expect these hosts to have a rising accent when an enclitic follows them. Interestingly, there is a three-way split between enclitics with respect to whether they can interact with the accent of these hosts. Regarding the accent on the host preceding the interrogative particle *li*, we observe the following generalization:

- (17) The particle *da*⁶ or a question word preceding the interrogative particle *li* always get a rising accent.

This is illustrated for all of the relevant hosts in (18).

- (18) a. **Dá** li želiš sladoled? (✓interaction)
 that Q want ice.cream
 ‘Would you like some ice cream?’
 b. **Kó** li dolazi?
 who Q comes
 ‘I wonder who is coming.’
 c. **Štá** li hoće?
 what Q wants
 ‘I wonder what he wants.’
 d. **Štó** li je došao?
 why Q is come
 ‘I wonder why he came.’
 e. Gdjé li su parkirali auto?
 where Q are parked car
 ‘I wonder where they parked the car.’

⁶ The particle *da* has many different usages, some of which are discussed below. However, it is most commonly used as a complementizer, hence I will gloss it as ‘that’ throughout the paper for ease of exposition.

Turning now to auxiliary verb clitics, all auxiliaries other than *je* ‘is’ behave in the same way. While they do not interact with the accent of the particle *da*, auxiliary enclitics always interact with the accent of question words as hosts, as stated in (19).

- (19) a. The particle *da* preceding an auxiliary enclitic has no accent.
 b. A question word preceding an auxiliary enclitic (except *je*)⁷ always has a rising accent.

This is illustrated in (20)-(21), where the particle *da*, followed by different auxiliaries in (20), has no accent, while question words, followed by different auxiliaries in (21), have a rising accent.

- (20) a. Znam [da su (oni) došli]. (✗ interaction)
 know that are they come
 ‘I know that they came.’
 b. Znam [da bi (on) došao].
 know that would he come
 ‘I know that he would come.’
 c. Znam [da ćeš (ti) doći].
 know that will you come
 ‘I know that you will come.’
- (21) a. Kó bi želio doći? (✓ interaction)
 who would like come
 ‘Who would like to come?’
 b. Štá su rekli?
 what are say
 ‘What did they tell you?’
 c. Štó si došao?
 why are come
 ‘Why did you come?’
 d. Gdjé ćeš parkirati auto?
 where will park car
 ‘Where will you park the car?’

⁷ The clitic *je* ‘is’ has several idiosyncratic properties (see e.g. Browne 1974; Bošković 2001) that separate it from other auxiliary clitics. Thus, I put *je* aside here, discussing it separately below.

Object enclitics are particularly interesting because in identical Host+enclitic linear sequences, the clitic interacts with the accent of the host in some constructions, but not in others. This is true of dative, accusative, and genitive enclitics.

- (22) a. The particle *da* preceding object enclitics sometimes has a rising accent and sometimes no accent.
 b. A question word preceding object enclitics sometimes has a rising accent and sometimes a falling accent.

In the examples in (23), the host gets a rising accent, indicating that the High tone spreads from the enclitic onto the host.

- (23) a. **Dá** mi je da provedem ljeta na planini. (✓interaction)
 that me.DAT is that spend summer on mountain
 ‘I wish I could spend the summer on a mountain.’
 b. **Kó** ti je dao sladoled?
 who you.DAT is gave ice.cream
 ‘Who gave you ice cream?’
 c. **Štá** mu je rekao?
 what him.DAT is said
 ‘What did he say to him?’
 d. **Štó** nas je zvao?
 why us.ACC is called
 ‘Why did he call us?’
 e. **Gdjé** vas je vidio?
 where you.ACC.PL is seen
 ‘Where did he see you?’
 f. **Štó** vas je bilo tako malo na predavanju?
 why you.GEN is been that.much little on lecture
 ‘Why were there so few of you at the lecture?’
 g. **Gdjé** ih je bilo mnogo?
 where them.GEN is been a.lot
 ‘Where was there a lot of them?’

However, High tone spreading is blocked in the examples in (24) even though on the surface the same hosts are immediately adjacent to the same enclitics as in (23).

- (24) a. **Da** mi je rekla da će provesti ljeto (✗ interaction)
 that me.DAT is said that will spend summer
 na planini, išao bih s njom.
 on mountain gone would with her
 ‘If she had told me she’d spend the summer on a mountain,
 I would have gone with her.’
- b. Znam **da** mi je donijela knjigu.
 know that me.DAT is bring book
 ‘I know she brought me the book.’
- c. **Kò** ti daje sladoled?
 who you.DAT gives ice.cream
 ‘Who is giving you ice cream?’
- d. **Štà** mu govori?
 what him.DAT says
 ‘What is he telling him?’
- e. **Štò** nas zove?
 why us.ACC calls
 ‘Why is he calling us?’
- f. **Gdjè** vas vidi?
 where you.ACC.PL sees
 ‘Where can he see you?’
- g. **Štò** vas ima tako malo na predavanju?
 why you.GEN have that.much little on lecture
 ‘Why are there so few of you at the lecture?’
- h. **Gdjè** ih ima mnogo?
 where them.GEN have a.lot
 ‘Where are there a lot of them?’

Finally, turning to *je* and *se*, these are the only two enclitics that *never* interact with the accent of their host, i.e. a host preceding *je/se* never has a rising accent. We have seen above that other auxiliaries do not interact with the particle *da*. However, they do interact with the accent of question words as in (19b). The enclitic auxiliary *je*, on the other hand, never interacts with the accent of the host (even when it is a wh-word) (25)-(26).

- (25) a. The particle *da* preceding the enclitic *je* sometimes gets a falling accent⁸ and sometimes no accent.
 b. A question word preceding the enclitic *je* always has a falling accent.

⁸ Note that the falling tone on the particle *da* does not indicate that a High tone spreads from *je* to *da*, i.e. the presence of *je* here affects the accent of *da* in a different way. I will discuss this case in more detail in Section 3.3.

I illustrate this with various hosts in (26).

- (26) a. **Dà** je meni (da pojedem) sladoled. (✗ interaction)
that is me.DAT that eat ice.cream
'I wish I could eat an ice cream.'
- b. Znam **da** je meni donijela knjigu.
know that is me.DAT bring book
'I know she brought the book for me.'
- c. **Kò** je došao?
who is come
'Who came?'
- d. **Štà** je rekao?
what is said
'What did he say?'
- e. **Štò** je došao?
why is come
'Why did he come?'
- f. **Gdjè** je otišao?
where is left
'Where did he leave?'

The enclitic *se* behaves just like *je* in this respect. Interestingly, it has been observed that the enclitic *se* occurs in a wide range of what appear to be rather different constructions (see Radanović-Kocić 1988; Riđanović 2003; Marelj 2004). Nevertheless, there is no interaction between *se* and the accent of the host in any of these constructions.

- (27) a. The particle *da* preceding the enclitic *se* is never accented.
b. A question word preceding the enclitic *se* always has a falling accent.

This is illustrated in (28) for the particle *da* in a couple of those constructions, and in (29) for the question words in a full range of constructions where *se* is used.

- (28) a. Znam **da** se umio. (✗ interaction)
know that SE washed
'I know he washed his face.'
- b. Znam **da** se smatraju budalama.
know that SE consider fools
'I know that they consider themselves fools.'

- (29) a. **Kò** se umio? (Reflexive) (✗ interaction)
 who SE washed.face
 ‘Who washed his/her face?’
- b. **Štò** se smartaju budalama? (Reciprocal)
 why SE consider fools
 ‘Why do they consider each other fools?’
- c. **Štà** se skinulo bijelim vinom? (Middle)
 what SE removed white wine
 ‘What removed with white wine?’
- d. **Štà** se gradilo ovim mašinama? (Passive)
 what SE built these machines
 ‘What was being built with these machines?’
- e. **Štà** se razbilo? (Unaccusative)
 what SE broken
 ‘What broke?’
- f. **Kò** se gurao? (Object-arbitrarization)
 who SE pushes
 ‘Who was pushing some people?’
- g. **Gdjè** se puno radi? (Impersonal)
 where SE a.lot works
 ‘Where does one work a lot?’
- h. **Kò** se poštuje? (Impersonal)
 who SE respect
 ‘Who does one respect in general?/
 Who do people respect in general’
- i. **Štà** se dešava? (Frozen)
 what SE happening
 ‘What is happening?’

To summarize, with respect to the interaction with the accent of the host, enclitics in the variety of BCS under consideration split into three groups: (i) the enclitic that always interacts with the accent of the host - *li*; (ii) the enclitics that never interact with the accent of their host – *je* and *se*; (iii) and the enclitics that interact with the accent of the host in some constructions, and do not interact in other constructions – auxiliaries (other than *je*) and object enclitics (Dative, Accusative, and Genitive). This is given in Table 1.

(17)-(18)	(19)-(24)				(25)-(29)
<i>li</i>	Aux	Dat	Acc	Gen	<i>je, se</i>
(✓interaction)	(✓interaction) (✗interaction)	(✓interaction) (✗interaction)	(✓interaction) (✗interaction)	(✓interaction) (✗interaction)	(✗interaction)

Table 1: *Interaction of enclitics with the accent of their host*

Two main questions that this paradigm gives rise to are: (i) What makes the enclitics *je* and *se* different from all other enclitics that never allows them to interact with the accent of the host?; (ii) What are the differences between constructions in which auxiliary and object enclitics interact with the accent of their host, and those where this interaction fails? Before giving an account of the pattern in Table 1., I first discuss some lexical prosodic properties of the enclitics in question.

1.3. Lexical High tones and enclitics in the prosody

In this section I elaborate on the questions raised above from a purely phonological perspective, examining whether the generalizations established above could be captured only by appealing to (potential) phonological properties of enclitics and their hosts. We will see that while idiosyncratic phonological properties of *je* and *se* might be able to capture why these two enclitics do not interact with the accent of their host (see Section 1.3.1), a purely phonological perspective cannot capture all of the generalizations established in Section 1.2, with the major challenge for such an approach coming from object clitics and auxiliary clitics (other than *je*), as discussed in Section 1.3.2. In the rest of the paper I will then argue that syntactic locality domains play a crucial role here.

1.3.1. Why are ‘*je*’ and ‘*se*’ outsiders?

Je and *se* are the only two enclitics that never interact with the accent of the host. As shown in (10)-(13) in Section 1.1., the lack of interaction between a suffix and a toneless host is either due to the suffix lacking a lexical High tone, or due to it being outside of the minimal prosodic word of the host. Can the same reasons be behind the exceptional behavior of *je* and *se*?

On a par with the standard assumptions about suffixes (see Inkelas and Zec 1988; Zec 1993; Halle 1997, *i.a.*), let us assume that BCS enclitics can either have a lexical High tone or not. That auxiliaries, object clitics, and *li* do have a High tone is clearly indicated by the fact that they can be found in the contexts in which the High tone spreads to their host, giving it a rising accent. In such contexts, these enclitics are in the accentual domain of the host (minimal prosodic word), as in (30), just like the suffix with a High tone in (8).

(30) (štá mu^H ...)ω

Now, the simplest way to explain why toneless hosts followed by *je* or *se* never get a rising accent, which indicates that there is no prosodic interaction between the clitic and the host, is to assume that these two enclitics do not have a lexical High tone. High tone spreading from the clitic to the host then could not take place here, hence the host could not have a rising accent. This treatment of *je* and *se* would be parallel to the account of why the toneless suffix in (10) does not interact with the accent of the root. Under this account, although *je* and *se* could be in the accentual domain of their host, they would not have a High tone that would undergo spreading. If *je* or *se* follows a toneless host in the same accentual domain, as in (31), the default rule of initial High tone insertion (see (11)) would need to take place, yielding a falling initial accent on the host.

(31) a. (štà je)ω
 b. (štà se)ω

A different way of accounting for the exceptional behavior of *je* and *se* could be that they are mapped from the syntax to the prosodic structure differently from other enclitics. Namely, following standard views on the nature of the interaction between the syntax and the prosody proposed by Selkirk (1978/1981, 1980, 1996), Nespor and Vogel (1986), Hayes (1989), Truckenbrodt (1999), among many others, it is widely assumed that utterances have a hierarchical

structure in the prosody and that prosodic constituency is partially informed by the syntactic structure, but it is not completely determined by it, i.e. in many cases, what is a prosodic word does not correspond to only one syntactic word (see the works cited above for more a detailed discussion). With respect to clitics in the prosodic structure, Selkirk (1996) proposes that they can be attached to their host in three different ways.

- (32) a. internal clitics: $(\sigma \sigma)_\omega$ -inside the (minimal) prosodic word of the host
 b. affixal clitics: $((\sigma)_\omega \sigma)_\omega$ -adjoined to the prosodic word of the host
 c. free clitics: $((\sigma)_\omega \sigma)_\phi$ -sister to the prosodic word of the host

The closest to the host are internal clitics, which incorporate into the minimal prosodic word of the host (32a). An affixal clitic adjoins to the prosodic word of the host (32b), creating a recursive prosodic word structure that contains a minimal prosodic word (the host) and a maximal prosodic word (the host+clitic). A free clitic is a sister to the prosodic word of the host and creates a phonological phrase with it (32c). This proposal was motivated by different levels of interaction with phonological rules that clitics exhibit (see Selkirk 1996). In addition to this, it has been argued by Inkelas (1990), Zec and Inkelas (1991), Zec (2005) and Bennet et al (to appear) that clitics subcategorize for the kind of prosodic context they may occur in.⁹

Returning to BCS enclitics from this perspective, *je* and *se* could then differ from other enclitics in that *je* and *se* have a different subcategorization frame determining what prosodic configuration they can find themselves in. In particular, while other enclitics are not specified for what kind of a host they may attach to, and as a result they can map as either internal, or affixal, or free clitics depending on the complexity of their host, *je* and *se* would be subcategorized to be dominated by

⁹ Talić (2015a-b, to appear) shows that the relevant mapping of clitics in BCS is determined not only by their subcategorization, but also by the syntactic environment they occur in. Thus, the same clitic that can be an internal clitic due to its prosodic subcategorization maps not only as internal clitic, but also as an affixal clitic and as a free clitic, depending on the complexity of its host at the output of the syntax.

a prosodic category larger than a minimal prosodic word (here I follow Bennett et al (to appear), who argue that clitics subcategorize for the category that dominates them in the prosodic structure); as a result, they could not be internal clitics. We may formalize this as a constraint specific to *je* and *se*:

(33) $*(\dots X)\omega$; $(X=\{je, se\})$

Now, with (33), *je* and *se* could be either affixal or free clitics, but not internal clitics. If they map as free clitics in (26) and (28), it would be clear why they do not interact with the accent of the host even if they have a lexical High tone – they are completely outside of the prosodic word of the host, the domain of accent assignment rules.

(34) a. $((\text{štà})\omega) je^H\phi$
 b. $((\text{štà})\omega) se^H\phi$

Moreover, even if they adjoin to the prosodic word as affixal clitics, where they are outside of the minimal prosodic word of the host, they still would not interact with the accent of the host. Under this scenario, the default rule of initial High tone insertion has to apply at the level of the minimal prosodic word. Then, at the level of the maximal prosodic word, where *je* or *se* is present, there is a High tone preceding the High tone on *je/se*, and it gets realized as a falling accent. This is parallel to the lack of interaction between the suffix with a High tone and the stem it attaches to in (12).¹⁰

(35) a. $((\text{štà})\omega) je^H\omega$
 b. $((\text{štà})\omega) se^H\omega$

¹⁰ To tease apart whether a clitic is mapped as an affixal or a free clitic, it would be necessary to find more complex contexts, which cannot be constructed for enclitics in BCS (see Talić (2015b, to appear) for an application of the relevant test with proclitics). Thus, I leave both options open here.

The constraint in (33) would capture why *je* and *se* do not interact with the accent of their host in (26), (28), and (29), if these two enclitics have a lexical High tone (as all other enclitics), or if they do not. As shown with the suffix in (12), a weak item outside of the minimal prosodic word of its host cannot interact with the prosody of its toneless host even when that item itself does have a lexical High tone. If the lack of interaction between *je* and *se* and the accent of their host is due to a phonological requirement to map to the prosodic structure outside the minimal prosodic word of their host, then this would suffice to capture why, in the position preceding *je* or *se*, the particle *da* has no accent in (28) and the *wh*-words get a falling accent in (26) and (29). These contexts then do not provide us with evidence that *je* and *se* indeed lack a lexical High tone.

Although some aspects of the phenomenon under consideration could be captured in purely phonological terms (in particular, why *je* and *se* never interact with the accent of their host), I will show below that it is impossible to capture all the intricacies of the phenomenon by appealing only to phonological factors. Rather, syntactic factors need to be taken into consideration to account for all the cases. From this perspective, I discuss in Section 3.3 a construction that indicates that *je* indeed does not have a lexical High tone. Furthermore, with respect to *se*, in Section 3.4, I will show that *se* is never able to enter the minimal prosodic word of its host due to its syntactic properties. Namely, it is never local enough to its host in the syntax to be able to incorporate into its minimal prosodic word. The clitic *se* is then always in a prosodic configuration in which even if it had a lexical High tone, this High tone would not be able to spread to its host.

Before returning to *je* and *se*, in the following section, I discuss clitics whose behavior quite clearly cannot be captured by appealing only to their phonological properties.

1.3.2. Why do Aux/Dat/Acc/Gen enclitics show dual behavior?

We have seen above that the auxiliary and object enclitics sometimes interact with the accent of the host, and sometimes not, as illustrated below with the dative enclitic.

- (36) a. Štá mu je rekao? (✓interaction)
what him.DAT is said
'What did he say to him?'
- b. Štà mu govori? (✗interaction)
what him.DAT tells
'What is he telling him?'

What was discussed regarding the lexical High tone and subcategorization of enclitics in the previous section partially captures only the difference between *je/se* and other enclitics in contexts like (36a). The question still remains why even enclitics other than *je/se* do not interact with the accent of their host in some contexts, i.e. what underlies the contrast between (36a) and (36b).

It is clear that appealing to the presence or absence of a lexical High tone on these enclitics would not suffice here. The rising tone on the host in (36a) indicates that *mu* has a lexical High tone; this High tone, being a lexical property of the clitic, should be present in (36b) as well. Appealing to different prosodic subcategorization of enclitics would not suffice either, since *mu* should have the same subcategorization in both cases.

What is crucial here is that in spite of different behavior, the host+enclitic linear sequence is identical in (36a) and (36b). Note, however, that the constructions are rather different syntactically. In the example in (36a), the dative clitic is followed by *je*, and in the example in (36b), the lexical verb is finite and the dative enclitic is not followed by *je*. How can that affect the prosodic interaction between the host and the enclitic in (36b)?

Given that the host and the enclitic in both instances are apparently immediately adjacent in PF, the above contrast cannot be only due to the phonological properties of either the host or the enclitic. To address this contrast, it is necessary to examine in more detail the structural differences

between these constructions, focusing in particular on determining the positions that the host and the enclitics occupy in the syntax. After doing that, I will show that looking at the interaction between enclitics and the accent of their host from the point of view of their position in the output of the syntax gives us new insights into the nature of the interaction between the syntax and the phonology with respect to the phenomenon under consideration.

In particular, I will show that the contrast in (36), as well as all the generalizations given in Section 1.2, follow from a condition on prosodic incorporation of enclitics defined in terms of syntactic phases, which essentially requires that an enclitic and its host be spelled out simultaneously. Furthermore, I will show that an element spelled-out at an earlier phase may need to excorporate and get spelled out the second time under very limited circumstances (in particular, if its idiosyncratic PF requirements are violated when newly introduced elements are linearized at the next phase level).

Before I turn to giving an account of the pattern under consideration, I will introduce the relevant background concerning the syntactic placement of BCS enclitics and certain non-clitic elements, as well as the theory of phases, and a phase-based prosodic mapping mechanism.

2. Background Assumptions

2.1. A note on the positions of enclitics

BCS enclitics have a second position requirement, i.e. they have to follow exactly one word or one phrase in their domain (cf. the two options in (37a)). In the former case, the only word preceding them can sometimes even be an unaccented functional element (Browne 2004; Werle 2009), as in

(37b-c), in which case the first accent in the relevant clause is present on the word following the enclitics.¹¹

- (37) a. Vesela {su} djeca {su} brala trešnje. *Host=1ω/1φ*
 cheerful are children are picked cherries
 ‘Cheerful children were picking cherries.’
- b. Ustao sam rano, [pa sam popio kafu]. *Host=1σ*
 got.up am early then am drank coffee
 ‘I got up early, and then I drank coffee.’
- c. Da sam popio kafu, ne bi me boljela glava.
 DA am drank coffee not would me hurt head
 ‘If I had had my coffee, I wouldn’t have had a headache now.’

Regarding the domain in which enclitics need to be placed in the second position (i.e. which defines the second position), the traditional claim was that they appear in the second position of their clause. However, Bošković (2001, 2004) provides evidence based on a number of contexts that enclitics can occur after more than one element within a clause, as shown in (38), which involves a fronted heavy constituent (for ‘delayed clitic placement’ see also Browne 1974, 1975; Bennett 1986; Radanović-Kocić 1988, 1996; Zec and Inkelas 1990; Percus 1993; Ćavar and Wilder 1994; Schütze 1994; Bošković 1995, 2000, 2001; Halpern 1995; Progovac 1996; Tomić 1996; Franks 1998, Franks and King 2000, i.a.).

- (38) Sa Petrom Petrovićem [srela se samo Milena].
 with Petar Petrović met SE only Milena
 ‘With Petar Petrović, only Milena met.’

¹¹ Schütze (1994) considers examples where BCS enclitics cannot follow prepositions or negation, which are proclitics, and claims that BCS enclitics cannot follow a syntactic word that is not a prosodic word. This claim is, however, incorrect, as shown in (37b-c), where the enclitics follow unaccented elements which are not prosodic words. The correct generalization is that a BCS enclitic cannot follow an element that is not either base generated in, or moved to, the position preceding it, as shown in Wilder and Ćavar (1994), Franks and Progovac (1994), Progovac (1996), and Bošković (2001, 2004), among others. Schütze (1994) also claims that a proclitic and an enclitic cannot combine into a prosodic word. However, it will be shown below that the particle *da*, which is a proclitic, does combine with an enclitic into a prosodic word in several contexts, with the resulting constituent receiving an accent (see Section 3).

Radanović-Kocić (1988) and Bošković (2001), thus, argue that a more accurate generalization is the one in (39).

(39) BCS enclitics occur in the second position of their intonational phrase.

A great amount of work has been dedicated to answering the question of what is responsible for the second position effect (for a detailed overview, see Franks and King 2000 and Bošković 2001). The proposed approaches differ in whether they hold that clitics are placed into the second position by purely syntactic operations, or by purely phonological operations, or a combination of both, with different extents of involvement of the two modules. Given the extensive literature on this question, I will not be able to summarize arguments for the different approaches here (the second position effect is anyway beyond the scope of this paper, though see the brief remark in footnote 13). What is important for our purposes right now is that there are a number of arguments in the literature that BCS enclitics are not all located in the same structural position (see Bošković 2001 for a summary). To mention just a couple of such arguments here, consider the examples in (40). First, when a part of the syntactic structure is deleted by ellipsis, it is possible to remove only a part of the enclitic sequence under ellipsis. In this respect, Stjepanović (1998) discusses examples like (40a), which involve VP ellipsis. Here, ellipsis eliminates the lower part of the structure containing object clitics, but leaves behind the auxiliary clitic, which then must be higher in the structure. Bošković (2001) also discusses an observation by Damir Ćavar that speakers who allow VP-fronting in the contexts with auxiliary and object clitics also allow this operation to split the clitic sequence. This is illustrated in (40b), where the auxiliary and the pronominal enclitic are clearly not in the same structural position.

- (40) a. Mi smo mu ga dali, a i vi ste (~~mu~~—~~ga~~—~~dali~~) takodje.
 we are him.DAT it.ACC given, and also you are (him.dat it.ACC given) too.
 ‘We gave it to him, and you did, too.’
 b. [_{VP} Dali ga Mariji] su Ivan i Stipe.
 given it.ACC Marija are Ivan and Stipe
 ‘Give it to Marija, Ivan and Stipe did.’

Thus, in my account, I will consider enclitics to be in separate syntactic projections (see Bošković 2001 for a summary of a number of additional arguments to this effect). This is also reflected in the order that they have to occur in. Browne (1974) observes that when multiple enclitics are found in the same clause, they always respect the order in (41a) (see also Zec 1985; Bošković 2001). I assume that this order reflects the projections individual clitics belong to, as in (41b), which is a slightly simplified version of what has been proposed in the earlier literature, but it will suffice for the purposes of this paper (see e.g. Bošković 1995, 2001; Stjepanović 1998; Gračanin-Yuksek 2016):

- (41) a. li (Q/Foc particle) + Aux + Dat + Acc/Gen + {se, je}
 b. [_{CP} C [_{TP} T [_{VP} IO_{cl} DO_{cl} [_{VP} v [_{VP} V....]]]]

The particle *li* is standardly assumed to occupy the C position, realizing an interrogative feature (Bošković 2001, Progovac 1996, Rivero 1993, Schütze 1994, Stjepanović 1999). In BCS yes-no questions, either the finite verb moves and left-adjoins to C (42a-b), or the particle *da* appears in front of *li* (42c) (if the finite verb that moves to C is an auxiliary, it surfaces in its strong form (42b)). On a par with other languages (e.g. English and Spanish), the finite verb (whether the main verb or an auxiliary verb) can move to C only in questions, a common pattern crosslinguistically.

- (42) a. Dolaze li oni?
 coming Q they
 ‘Are they coming?’
 b. Jesu li došli?
 are Q come
 ‘Have they come?’

- c. Da li oni dolaze?
that Q they coming
'Are they coming?'

The particle *li* is also found in emphatic questions, as in (43), where it is preceded by a *wh*-word. Bošković (2001) assumes that in (43) (and some related cases that I will not discuss here because they do not contain the hosts that allow the prosodic interaction under consideration in the paper) the particle *li* is a focus marker placed in C, the element preceding it being adjoined to C (see Section 3).

- (43) Štá li su vidjeli?
what FOC are seen
'I wonder what they have seen./What on earth have they seen?'

Gračanin-Yukseš (2016) argues that *li* is a focus marker in yes-no questions as well, occupying the head of a focus projection below CP. For ease of exposition, I will assume that the position of *li* at the output of the syntax is in C, putting aside whether this results from Foc-to-C movement or *li* being base-generated in C.

Regarding the position of the auxiliaries, it has been argued that they raise from the verbal domain to T (or Agrs) in declaratives and to C in questions (see e.g. Bošković 1995; Stjepanović 1998). The examples in (40), where vP-ellipsis removes the object clitics but not the auxiliary clitic, and where the fronted vP contains an object clitic, leaving behind the auxiliary clitic, show that auxiliary clitics are higher than object clitics in the syntax (for ease of exposition, I will refer to the relevant operations as VP-ellipsis and VP-fronting below).

Next come the object clitics, which have been argued to raise from their base positions in VP to functional projections between TP and VP (see Bošković 2001). It will suffice for our discussion to assume that they are in some projection lower than TP, which is why I am placing them at the edge of vP.

The final position in the linear sequence of clitics is occupied either by the clitic *je* or the clitic *se*, which at first glance suggests that *je* and *se* occupy a syntactic position lower than the functional projections where object clitics reside. I will discuss why object clitics always precede *je* and *se* in BCS in more detail below, and show that this is a result of a phonological constraint on the linearization of certain clitics. Pending that discussion, I note here that there is evidence that both *je* and *se* can occur in positions that are higher than object clitics. Bošković (2001) gives a number of arguments that *je* is higher than pronominal clitics in the syntax. One of them concerns VP-ellipsis. As shown for other auxiliaries in (40a), auxiliaries are in a structural position above object enclitics, hence they can be stranded under an ellipsis process that elides object enclitics. Stjepanović (1998) gives a parallel example involving *je*, which shows that VP-ellipsis that eliminates object clitics can also leave behind the auxiliary *je* (44a). This in turn indicates that *je* is higher in the structure than the pronominal clitics. We have also seen in (40b) that VP-fronting provides evidence that auxiliary clitics are higher in the structure than object clitics. Parallel to the ellipsis operation in (40a), the movement operation in (40b) affects the pronominal clitics, but not the auxiliary clitic, indicating the latter is higher in the structure than the former. Bošković (2001) discusses VP-fronting in the context of the auxiliary *je*, and shows that just like it is possible to front a VP containing an object clitic and leave behind an auxiliary other than *je* in (40b), it is also possible to leave behind the auxiliary *je* in a parallel example in (44b). In contrast, it is not possible to front a constituent containing *je* and leave behind an object clitic, which would be expected if *je* were lower than object clitics.

- (44) a. On mi ga je dao, a i ona je takođe. (Stjepanović 1998: 532)
 he mi.DAT it.ACC is gave, and also she is too
 ‘He gave it to me, and she did, too.’

- b. Dao ga Mariji je Ivan.
 given it.ACC Marija is Ivan
 ‘Given it to Mary, Ivan did.’
- c. *Dao je Mariji ga Ivan.

This indicates that, in the syntax, *je* is higher than object clitics (see Bošković 2001 for a number of additional arguments to this effect). However, when both *je* and object clitics need to be pronounced, then object clitics come first. Bošković (2001) takes this to indicate that this requirement is phonological. In particular, he argues that although *je* is higher than object clitics in the syntax, it follows object clitics in PF due to a phonological requirement to pronounce a lower copy of *je*. In Section 3, based on accent interactions between object clitics and their host, I will argue for a different phonological repair mechanism that reorders clitics in order to satisfy the relevant phonological requirement.

The clitic *se* is rather difficult to pin down to one position in the structure because, as mentioned above, it occurs in many different constructions (29): reflexive, reciprocal, middle, passive, unaccusative, object-arbitrarization, impersonal, and frozen *se*-constructions (see Marelj 2004). Although these constructions seem very diverse, all of them involve a “missing” argument of some sort, and Marelj proposes that *se* is a Case-absorbing morpheme, which can occupy either a high functional projection or a low one (see also Progovac 1997). Thus, the position of *se* in the syntax may depend on what kind of Case it absorbs. With respect to whether *se* occurs higher or lower than object clitics in the syntax, *se* does follow the pronominal clitics in BCS, but we have seen above regarding *je* that the word order is not always a reliable diagnostic here.

Can evidence independent of word order be brought to bear on the issue under consideration? In fact, it can. The contrast in (45) is interesting in this respect. In a clause that contains both the clitic *se* and an object clitic, it is possible to remove the object clitic by VP-ellipsis and leave behind the clitic *se*, as in (45a), which can only happen if *se* is in a projection higher than the

ellipsis site. However, it is not possible to remove *se*, and leave behind the object clitic (45b-c), which indicates that object clitics are lower than *se*, hence they need to be removed by ellipsis.

- (45) a. (?)Ona mu se predstavila, a i on se takodje.
 she him.DAT SE introduced and also he SE too
 ‘She introduced herself to him, and he did, too.’
 b. *Ona mu se predstavila, a i on mu takodje.
 she him.DAT SE introduced and also he him.dat too
 c. *Ona mu se predstavila, a i on mu je takodje.
 she him.DAT SE introduced and also he him.dat is too

In addition to this, the same particle in Czech and Slovenian precedes the object clitics in (46).

- (46) a. Představila jsem se mu včera. (Czech) (Bošković 2001: 59)
 introduced am SE him.dat yesterday
 ‘I introduced myself to him yesterday.’
 b. Se mi je smejal. (Slovenian) (Franks 1998: 34)
 SE me.DAT is laughed
 ‘He was laughing at me.’
 c. Marko se mi predstavil. (Slovenian) (Adrian Stegovec, p.c.)
 Marko SE him.DAT introduced
 ‘Marko introduced himself to him.’
 cf. *Marko mu se predstavil.

This might be taken to suggest that there is a projection for *se* above object clitics in these languages. If BCS is parallel to Slovenian and Czech in this respect, then this should lead to object clitics following *se* in BCS at least in some constructions, contrary to what we find. Recall, however, that PF considerations can affect word order when it comes to clitics. The facts in (45)-(46) indicate that *se* is higher than the pronominal clitics in the syntax (i.e. BCS may in fact be like Czech and Slovenian in this respect). Since the clitic *se* is able to occur higher than object clitics in the syntax (at least in some constructions), but it linearly follows them in PF, the final position of *se* should then be the result of phonological properties of *se*, parallel to why *je* follows object clitics. I will return to this issue below.

Finally, in the presence of *se*, *je* is preferably omitted (Browne 1974; Bošković 2001, 2004), as illustrated by the contrast in (47a-b) and (47c-d). In each pair, both sentences are in the past tense, which is formed by the present tense form of the auxiliary and the participle of the lexical verb. However, while *je* is present in the past tense sentence in (47a) and (47c) (*se* independently cannot occur in these examples), *je* has to be dropped in (47b) and (47d), where the clitic *se* needs to occur.

- (47) a. On je vratio knjigu.
 he is returned book
 ‘He returned the book.’
 b. On se vratio.
 he SE returned
 ‘He returned.’
 c. On je okupao bebu.
 he is bathed baby
 ‘He bathed the baby./He gave the baby a bath.’
 d. On se okupao.
 he se bathed
 ‘He bathed himself./He took a bath.’

I will examine in more detail this deletion of *je* below, pinpointing its exact timing in the derivation by showing that it has a crucial impact on accent assignment and the mapping of clitics to prosody.

In sum, with respect to the height in the syntactic structure, enclitics occupy different functional projections in the clausal spine: the particle *li* and auxiliaries in questions occur in the highest head in the clause (C); in non-interrogative clauses, auxiliaries do not raise to C, so they occur in functional projections below C (e.g. T); and finally, object clitics and *se* reside in the low projections in the verbal domain (see Section 3.4. for evidence that, like object clitics, *se* is lower than auxiliary clitics). I will show below that the syntactic height of enclitics is reflected in the effect that they have on the prosody of their host.

Having discussed what positions the relevant clitics occupy in the structure, I turn now to giving some background regarding the theory of phases as well as the assumptions regarding the mapping of the syntactic structure to the prosody that will be relevant for this paper.

2.2. Phases, Spell-Out, and Prosodic Structure

The syntactic derivation is standardly assumed to proceed in a stepwise fashion through phases, where structure is built from the bottom up, and sent to the interfaces (PF and LF) at particular points in the derivation. Existing theories of phases share the basic assumption that sending structure to the interfaces takes place when a phase head enters the derivation, but they differ regarding what phases are. For Chomsky (2000), phases are CP and vP; when C or v enter the structure, its complement undergoes spell-out, after which the material within the complement becomes inaccessible for further syntactic operations (*The Phase Impenetrability Condition*, Chomsky (2000, 2001)). More recently, a number of researchers have argued that categories are not inherently marked as being phase heads, but that the phasehood of a category depends on its syntactic context (Bobaljik and Wurmbrand 2005; Bošković 2005, 2013, 2014; Gallego and Uriagereka 2007; den Dikken 2007; Despić 2013; M.Takahashi 2011; Wurmbrand 2014, a.o). For example, Bošković (2013, 2014) argues that every lexical category projects a phase, and that in the extended projection of every lexical category as well as within every clause, the highest phrase functions as a phase. In these approaches as well, the complement of the phasal head undergoes spell-out. This is illustrated with the abstract structure in (48), consisting of a lexical category (L) with two functional projections (FP1 and FP2) in its extended domain. In (48), where F2 is a phase head as the head of the highest projection in the extended domain of L, the spell-out domain is its complement FP1.

(48) $[_{FP2} \mathbf{F2} [_{FP1} \mathbf{F1} [_{LP} \mathbf{L}]]]$

However, there are cases where the same lexical category can project different amount of structure in its domain in different constructions, which crucially affects phasehood. Consider, for example, the case where the lexical category L projects only one functional projection, as in (49). In this case, F1 is a phase head as the head of the highest projection in this extended domain, and the spell-out domain is LP.

(49) $[_{FP1} \mathbf{F1} [_{LP} \mathbf{L}]]$

Although I am presenting this approach to phases abstractly, it has been applied to a variety of lexical categories in the literature, i.e. arguments for this view are based on a wide range of core syntactic operations and phenomena (Move, Agree, binding, scope, ellipsis; see the references cited above). Thus, under this approach, spell-out domains are: (i) the complement of the highest head in the extended domain of a lexical category, (ii) the complement of the highest head in a clause, (iii) and the topmost projection in a sentence (i.e. the final spell-out; (iii) is the standard assumption).

Now, regarding the question of what relationship prosodic structure has with syntactic structure, early theories of the syntax-prosody interface were not derivational - the mapping from the syntactic to the prosodic structure was assumed to take place at the final output of the syntax (Selkirk 1986, 2003, 2005; Nespor and Vogel 1986; Truckendbrodt 1999). However, since the theory of phases was proposed, and crucially, since the notion of the spell-out domain was defined as a domain in which elements introduced in the syntax receive their phonological form (and semantic interpretation), there have also been proposals that spell-out domains are the relevant domains for building prosodic structure, i.e. that each spell-out domain is mapped to a prosodic

domain (see Dobashi 2003; Kahnemuyipour 2004, 2009; Adger 2007; Kratzer and Selkirk 2007; Elfner 2012; Sato 2012; and Sato and Dobashi 2016). Thus, based on evidence from the locus of major phrase stress in English, German, and Dutch, Kratzer and Selkirk (2007) argue that the stepwise character of syntactic structure building needs to be taken into account when building prosodic structure.

In the following section, I show that the derivational approach to prosodic structure building is necessary, also addressing the question of how strict the phonological cycles, which are defined over syntactic spell-out domains, are for word-level prosodic processes. More specifically, once an element is spelled out, does it become completely inaccessible for further prosodic interactions with elements introduced at later spell-out points?¹² The interactions of enclitics with the accent of the host discussed in Section 1.2 will prove to be very useful in addressing this question.

3. Cyclic Spell-out of enclitics and High tone spreading

In this section, I argue for a phase-based approach to the prosodic mapping of enclitics in BCS based on the generalizations given in Section 1. Recall that with respect to the interaction between an enclitic and the accent of its host (i.e. the availability of High tone spreading from the enclitic to the host), enclitics fall into three groups: those that always interact with the accent of the host, those that sometimes interact and sometimes not, and those that never interact. Crucially, for an enclitic to interact with the accent of a toneless host, the host and the enclitic need to be in the same minimal prosodic word (see (30) above) and the clitic needs to have a lexical High tone. We

¹² The prosodic domain of the phenomenon under investigation (High tone spreading in BCS) is the prosodic word. I do not discuss here phonological-phrase- and intonational-phrase-level phenomena that have domains as large as an entire clause in the syntax, containing multiple spell-out domains such as those found e.g. in some Bantu languages (see e.g. Selkirk 2011 for a discussion of rightward High-tone spreading and penultimate vowel lengthening in Xitsonga).

have seen so far that the same enclitic interacts with the accent of its host in some constructions, but not in others, i.e. it is incorporated into the minimal prosodic word of the host in some constructions, but not in others.¹³ This was shown for object clitics in (36) above, repeated in (50).

- (50) a. Štá mu je rekao? (✓interaction)
 what him.DAT is said
 ‘What did he say to him?’
 b. Štà mu govori? (✗interaction)
 what him.DAT tells
 ‘What is he telling him?’

A similar contrast is found with auxiliary clitics: in (51a) the High tone spreads from *su* to the preceding wh-word, but there is no High tone spreading to the particle *da* in (51b).

- (51) a. Štó su kupili auto? (✓interaction)
 why are bought car
 ‘Why did they buy a car?’
 b. Kaže da su kupili auto. (✗interaction)
 says that are bought car
 ‘He says that they bought a car.’

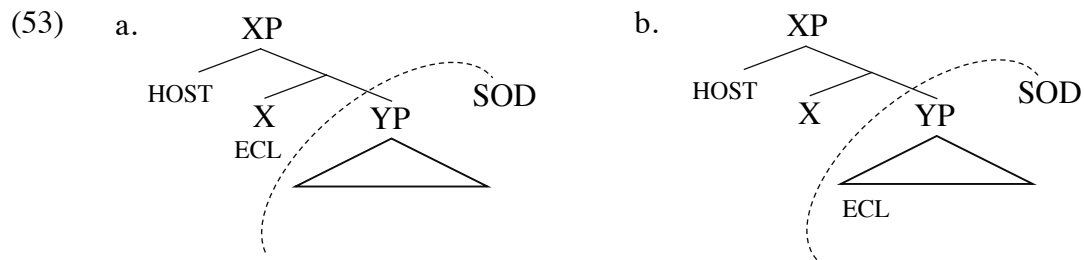
This raises the question of what restricts enclitic incorporation into the minimal prosodic word to some cases; i.e. when is such incorporation possible? To capture the phenomenon under consideration, I propose the following condition on enclitic incorporation:

(52) *Simultaneous Spell-Out Condition (SSC):*

A clitic CL incorporates into the prosodic word of the host H iff CL and H are in the same spell-out domain and they are immediately adjacent.

¹³ As mentioned earlier, the second position requirement on BCS enclitics has received different accounts in the literature (see Section 2.1). The pattern presented here poses a problem for the phonological approach proposed by Radanović-Kocić (1988, 1996), where BCS enclitics are placed after the first strong element via a phonological movement operation. Under Radanović-Kocić’s approach, all enclitics in all constructions are in the same phonological configuration; hence, regarding prosodic interactions, it is predicted that all enclitics with a High tone should behave in the same way in all constructions, i.e. if an enclitic interacts with its host in one construction, it would be expected to interact with the same host in all constructions. The example in (50) shows that this is not the case.

Given that a High tone can spread from the clitic onto its host only if the clitic is incorporated into its minimal prosodic word, according to (52), an enclitic can interact with the accent of its host if the two undergo spell-out at the same time, otherwise, the interaction is not possible. If the clitic undergoes spell-out without the host in the same domain, even when the host linearly precedes it when the higher spell-out domain is sent to PF and the prosodic properties of the host allow for clitic incorporation, the clitic will not incorporate into its minimal prosodic word. This is represented schematically in (53), where the host and the clitic are spelled out in the same domain in (53a), but not in (53b), where the host and the clitic are separated by a spell-out domain boundary.



Thus, when all phonological preconditions for the interaction between an enclitic and its host discussed in Section 1 are met, enclitics are predicted to be able to interact with the accent of their host if they reach spell-out in the configuration (53a), but not if they reach spell-out in the configuration in (53b).¹⁴

In all the examples discussed here, the host preceding enclitics is either a monosyllabic word or the particle *da*, which occur in the topmost projection in the clause (CP or some other projection when CP is missing; see below). I will first discuss how these CP elements are spelled-out without enclitics following them, in order to set the stage for discussing contexts with enclitics

¹⁴ See also footnote 5 regarding the phonological weight of the hosts that allow this interaction, which seems to be a crucial phonological precondition. Thus, the prediction of the structures in (53) and the SSC (52) is relevant for contexts where a monomoraic host is followed by an enclitic with a High tone.

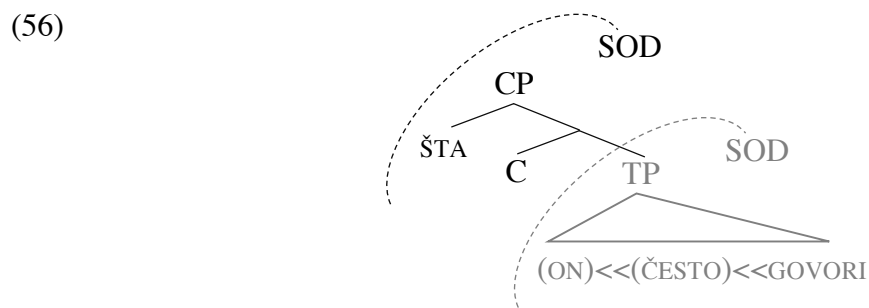
later. What is relevant here is that both *wh*-words and the particle *da* are in the topmost projection in the clauses they occur in. Consider first (54):

- (54) Štā (on) (često) govori?
 what (he) (often) says
 ‘What is he saying? What does he (often) say?’

Following Rudin (1988), I assume that *šta* in (54) is in SpecCP. The rest of the overt elements are in lower projections within the complement of C. Now, finite lexical verbs in BCS can raise to C in questions, as one of the strategies to form yes-no questions – this happens in (55a), where the lexical verb precedes the particle *li*. However, as discussed above, it is also possible not to move the lexical verb, and insert the particle *da* in C instead, as in (55b).

- (55) a. Jede li on jabuke?
 eats Q he apples
 b. Da li on jede jabuke?
 that Q he eats apples
 ‘Is he eating apples?’

Similarly, in (54) the verb remains lower than both the subject and the VP-adverb. This order is neutral; moving the verb in front of the adverb or in front of the subject requires some focus on the verb. Therefore, I assume (54) has the following structure:



Given that the CP here is a phase as the highest projection in the clause, when C enters the derivation, its complement is spelled out. Then, the CP, containing *šta* in SpecCP, becomes a spell-

out domain since the final structure is also sent to spell-out; *šta* is then spelled out only at this point. The task for the PF component at this point is twofold: (i) linearize *šta* with respect to the elements in the lower spell-out domain, and (ii) give *šta* its phonological form (PF), which includes the mapping to the prosodic structure (Dobashi 2003, Sato and Dobashi 2016). Since *šta* is not a clitic that would need to lean onto a host, it is mapped as a prosodic word first, and then integrated into the rest of the prosodic structure.

- (57) a. Linearize: *šta* << [(on)<< (često)<< govori]
 b. PF: (šta)ω (default initial *High tone insertion*)

Accent assignment rules then apply to this prosodic word and insert a default initial High tone because *šta* does not have a lexical High tone. Given that this High tone is prosodic-word-initial, it is realized as a falling accent.

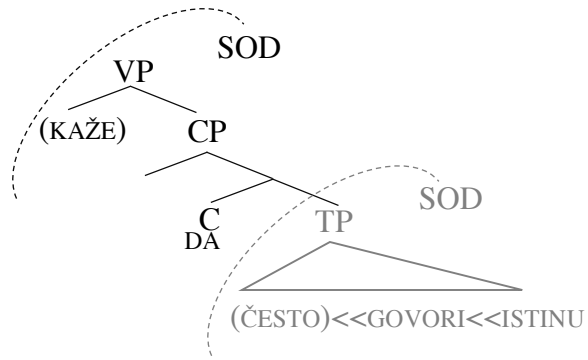
The particle *da* is found in a variety of constructions, where it always occupies the leftmost position. I will assume that in all of the constructions, *da* is the head of the topmost projection in its clause.¹⁵ A context where *da* is not followed by a clitic is found in embedded clauses. In such cases, *da* receives no accent and leans onto the next strong word.

- (58) Kaže [da (često) govori istinu]. (✗ interaction)
 says that (often) says truth
 ‘He says that he (often) tells the truth.’

The relevant part of the structure of (58) is the following:

¹⁵ Todorović and Wurmbrand (to appear) argue that *da* is a ‘finiteness visualizer’, i.e. it spells out the feature [+finite] if no other features overtly mark a domain, so it could be the case that *da* originates in some lower projection and undergoes movement to the topmost projection. The choice between the movement analysis and the base-generation in the highest position analysis would not make a difference for the prosodic phenomena under consideration. I will assume the latter for ease of exposition.

(59)



The structure in (59) represents the point when the main clause little *v* enters the structure and its complement, VP, is sent to spell-out. Since this VP contains the CP headed by *da*, this is the point when *da* is spelled out. At this point, *da* is linearized with respect to the material that was spelled out earlier (the elements within the complement of C), and then it is mapped to the prosodic structure. Now, recall that *da* is a clitic; it does not map to the prosodic structure as a prosodic word. Rather, it leans onto the following accented material, and receives no accent. Unlike other proclitics in BCS, *da* does not interact with the accent of the strong element following it in the dialect under consideration,¹⁶ which suggests that it is a free clitic, i.e. a clitic that is not dominated by a prosodic word category dominating its host in the prosodic structure (see (32c)).

Having discussed how the derivation proceeds with respect to elements located in the CP, in the following section I will analyze the patterns with enclitics that were introduced in Section 1.2. I will examine how the syntactic height of the enclitics affects their prosodic mapping, and show that it determines whether they can have an effect on the prosody of a wh-word or the particle *da* preceding them.

¹⁶ For the interaction of BCS proclitics (e.g. prepositions) with the accent of the host in certain dialects of BCS, see Moskovljević (1927-28); Ružičić (1927); Vuković (1940); Nikolić (1970); Zec and Inkelas (1991); Zec (1993), Zec (2005); Riđanović and Aljović (2009); Talić (2015a,b, to appear).

3.1. The host and the clitic in different SODs

Having shown how wh-words and the particle *da* are spelled out in situations when they are not followed by enclitics, I now add enclitics to those contexts, starting with the cases where the presence of an enclitic following a wh-host or the particle *da* has no effect on their prosody. Let us first consider what happens when object clitics alone are added to (54)/(56) and (58)/(59). Recall that wh-words followed by an object clitic alone have a falling accent (60a-b). This also holds when a wh-word is followed by two object clitics (60c). The particle *da*, on the other hand, receives no accent when it is followed by one or two object clitics (60d-f).¹⁷

- (60) a. Štà mu govori? (✗ interaction)
what him.DAT says
'What is he telling him?'
b. Štà ga pita?
what him.ACC asks
'What is he asking him?'
c. Štò mu ga poklanja?
why him.DAT him.ACC donates
'Why is he donating/giving it to him?'
d. Znam da mu govori istinu.
know that him.DAT says truth
'I know he is telling him the truth.'
e. Znam da ga pita da nas posjeti.
know that him.ACC asks da us.acc visit
'I know he is asking him to visit us.'
f. Znam da mu ga poklanja.
know that him.DAT him.ACC donates
'I know he is donating it to him.'

The falling accent on the wh-word and the lack of an accent on *da* in (60) indicate that the lexical High tone that the object clitics have (see Section 1.3) does not undergo spreading to the syllable

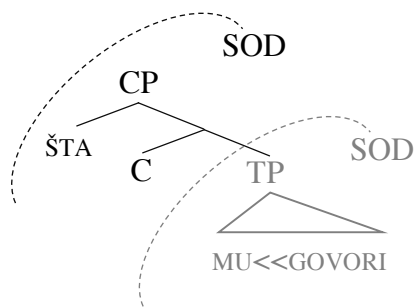
¹⁷ The data in (60) show that the interaction between an object clitic and its host does not depend on the number of clitics present, i.e. if the interaction is blocked with one object clitic, it is also blocked when two object clitics follow it. However, we will see some cases later where the host behaves differently in the relevant respect when one clitic follows it and when two clitics follow it. Crucially, those contexts do not involve two object clitics (see Section 3.3).

preceding them, i.e. the host. Thus, the hosts in these situations keep the same prosody as if the clitics were not there. Why is there no interaction between the object clitics and the accent of the host here?

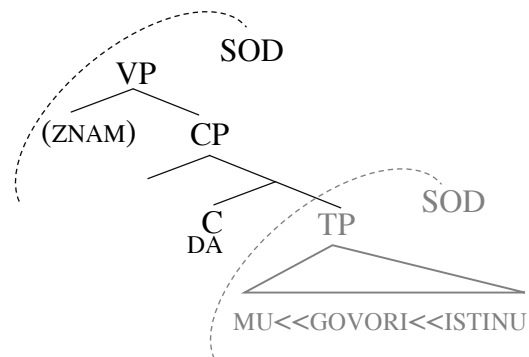
I suggest that what is responsible for this is the Simultaneous Spell-Out Condition (SSC) in (52). Recall that for a High tone to spread from an enclitic to a toneless element preceding it (which would give it a rising accent), the two need to be in the same minimal prosodic word (9)/(14), i.e. the clitic needs to be incorporated as an internal clitic into the minimal prosodic word of the host in Selkirk's (1996) sense. What (60) indicates is that incorporation does not take place when an object clitic, or two object clitics, alone follow a *wh*-word or the particle *da*, since the hosts have the same prosody as if the clitics were not present.

Recall now that, as discussed in Section 2.1, the syntactic positions of object clitics in the output of the syntax are low in the verbal domain. The impossibility of prosodic incorporation of these enclitics during the spell-out of the *wh*-word and the particle *da* is then expected under SSC. The structures for (60a) and (60d) are given in (61a) and (61b), respectively. In both cases, the object enclitics belong to a lower spell-out domain than the spell-out domain of the hosts. Therefore, the incorporation of the clitics into the minimal prosodic word, hence also the interaction with its prosody, is not possible.

(61) a.



b.



Regarding complement *da*-clauses, Todorović and Wurmbrand (to appear) argue that not all *da*-clauses in BCS have the same size. For instance, they argue that, although the clauses like the ones illustrated in (60d-f)/(62a) are CPs, *da*-clauses selected by verbs like *odlučiti* ‘decide’ are smaller than CPs (i.e. different verbs here take clauses of different sizes). Interestingly, regardless of which verb embeds a *da*-clause, the object clitic following the particle *da*, does not interact with its accent, as shown in (62a-b).

- (62) a. Znam [da mu govori istinu]. (✗ interaction)
 know that him.DAT says truth
 ‘I know he is telling him the truth.’
 b. Odlučio je [da mu govori istinu].
 decided is that him.DAT says truth
 ‘He decided to tell him the truth.’

Recall now that the highest clausal projection is a phase. Since *da* is located in the head position of the highest projection in the embedded clauses in both (62a) and (62b), the lack of prosodic interaction between the object clitic and *da* in (62b) is also expected here under the SSC. Since the highest clausal projection is a phase, regardless of its categorial status (see e.g. Bošković 2015), the projection headed by *da* in (62b) is also a phase. The complement of *da*, which contains the object clitics, undergoes spell-out before *da* is spelled out. Hence, incorporation of the object clitics into *da* is not possible in (62b) for the same reason it is not possible in (60d-f)/(62a).

Further cases where an enclitic has no effect on the prosody of the particle *da* are illustrated with embedded declarative clauses in (63). Here, the particle is followed by a slightly higher enclitic, an auxiliary.

- (63) a. Znam da su govorili istinu. (✗ interaction)
 know that are said truth
 ‘I know they were telling the truth.’
 b. Znam da su mu govorili istinu.
 know that are him.DAT said truth

‘I know they were telling him the truth.’

It has been shown above that auxiliaries are in a projection higher than object clitics (40), in T. However, this projection is still within the complement of C, which is spelled out earlier than the particle *da* in C. As a result, auxiliary clitics cannot incorporate into the particle *da* either, and the High tone cannot spread from the auxiliary clitic to *da* in this configuration.

Having discussed cases where the presence of an enclitic does not have an effect on the prosody of its host, I turn to the contexts where enclitics do have an effect on the prosody of their host.

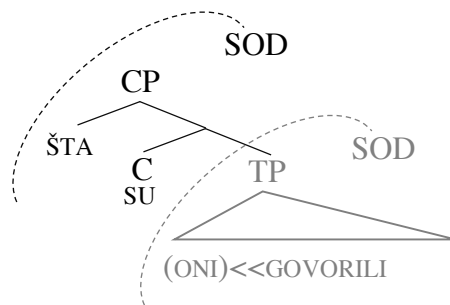
3.2. *The host and the clitic in the same SOD*

The previous section did not discuss *wh*-hosts followed by auxiliaries because there is a difference between declarative clauses with auxiliaries and questions with auxiliaries. As shown in (64), a *wh*-word followed by an auxiliary verb (other than *je* ‘be.3sg’) has a *rising* accent, in contrast to the contexts when the same *wh*-word is not followed by an enclitic at all, or when it is followed only by an object clitic, where it gets a *falling* accent (see (54) and (60)). Recall that the rising tone indicates that High tone spreading has taken place – in this case the High tone from the enclitic spreads to the host.

- (64) a. Štá su (oni) govorili? (✓interaction)
what are they said
‘What were they saying?’
b. Štá ste mu rekli?
what are him.DAT told
‘What did you tell him?’
c. Pita [štá ste mu rekli].
asks what are him.DAT told
‘He is asking what you told him.’
d. Pitao sam ga [štá ste mu rekli].
asked am him.ACC what are him.DAT told
‘I asked him what you told him.’

We have seen so far that object clitics fail to interact with both *wh*-words and the particle *da*, which follows from the SSC (61). A question arises then why auxiliary clitics fail to interact with the particle *da*, on a par with object clitics in (63), but they interact with *wh*-words in (64). The crucial difference here is that the clauses where the particle *da* is followed by an auxiliary are declarative clauses, and the sentences in (64) are questions. If the lack of interaction between the auxiliary and the particle *da* in (63) is due to the SSC, i.e. because the auxiliary belongs to a lower spell-out domain, then (64) indicates that the auxiliary is in a different position in questions. This in fact is the standard assumption, i.e. it is standardly assumed that a finite verb can move to C only in questions in BCS. The auxiliary then raises to C in *wh*-questions. Thus, the relevant part of the structure for (64a) is the following:

(65)

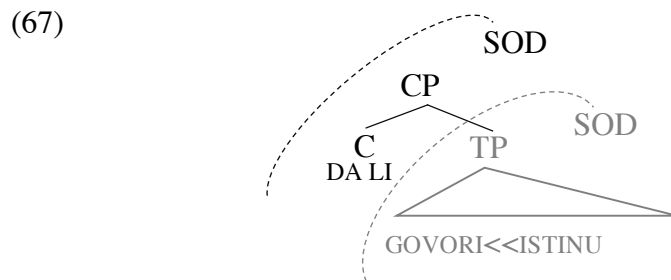


Unlike before, being in the head position of the topmost CP (and the topmost CP being the final spell-out domain), the auxiliary clitic in questions is spelled out in the same domain as the *wh*-word in SpecCP. Given that the *wh*-word and the clitic undergo spell-out simultaneously, the enclitic can incorporate into the minimal prosodic word of the host, and the High tone on the clitic is able to spread to the host, yielding a rising accent on the host.

Recall now that, as discussed in Section 1.2., there is an exceptional context when the particle *da* is followed by an enclitic that interacts with its prosody. In (66), the particle *da* is immediately followed by the question particle *li*. In this case, *da* has a rising accent.

- (66) a. *Dá* *li* govori istinu? (✓interaction)
 that Q says truth
 ‘Is he telling the truth?’
 b. *Dá* *li* *mu* govori istinu?
 that Q him.DAT says truth
 ‘Is he telling him the truth?’
 c. *Dá* *li* *su* *mu* govori istinu?
 that Q are him.DAT said truth
 ‘Were they telling him the truth?’

Following standard assumptions about BCS yes-no questions, both particles are in the C position in the output of the syntax (see Section 2.1). Then, (66a) has the structure below.



The clitic *li* is spelled out in the same domain as the particle *da*, so the two become one minimal prosodic word and the High tone can spread from *li* to *da*, yielding a rising accent on *da*. This is a rare case when the particle *da* itself is accented. Being a proclitic, it does not receive an accent when there is no enclitic following it, or when an enclitic follows it, but the High tone from the enclitic cannot spread to it. This state of affairs leaves an extremely narrow window for *da* to occur accented, which we have seen can be captured under the proposed analysis.

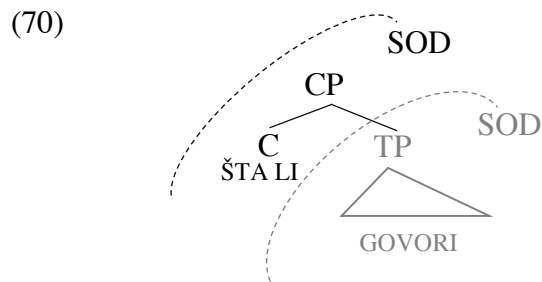
The particle *li* also interacts with the accent of *wh*-hosts, which happens in emphatic questions like (68).

- (68) *Štá* *li* govori? (✓interaction)
 what FOC says
 ‘I wonder what he is saying?’

Interestingly, Bošković (2001) observes that in such questions, it is impossible to have unambiguously phrasal material preceding *li*.

- (69) a. Čiju li ženu (Petar) voli? (Bošković 2001: 27)
 whose FOC wife (Petar) loves
 b. *Čiju ženu li (Petar) voli? (Bošković 2001: 26)
 whose wife FOC (Petar) loves
 ‘**Whose wife** does Petar love?’

Based on the contrast in (69), following Chomsky (1995), Bošković (2001) suggests that elements that are ambiguous between being heads and being phrases (i.e. non-branching elements) can undergo either phrasal movement, or head movement. Thus, in emphatic questions, which allow only a non-branching wh-element to precede *li*, he argues that the wh-element undergoes head movement to *li*.¹⁸ Therefore, they are both in C at the final spell-out. The structure for (68) is in (70).



We have seen so far that accentual interaction between an enclitic and its host is impossible when object clitics follow a wh-word or the particle *da* in constructions like the ones in (60) and when an auxiliary follows the particle *da* in declarative clauses (63), while such interaction is possible when an auxiliary clitic follows a wh-word in questions (64) and when the clitic *li* follows the

¹⁸ As evidence for this analysis, Bošković (2001) shows that the context in question in BCS does not license sluicing, in contrast to Bulgarian, where sluicing is possible and clearly branching wh-phrases, like the one in (69b) can precede *li* (The argument is based on the standard assumption that the licensing of sluicing requires Spec-head agreement).

particle *da* (66) or a *wh*-word in questions (68). I have shown that whether the prosodic interaction in question is possible depends on how high in the syntactic structure the clitic occurs and how local it is to the host. I have argued that the contrast between (60)/(63) and (64)/(66)/(68) can be captured by a simple condition on prosodic incorporation defined over syntactic spell-out domains. Essentially, an enclitic cannot incorporate into the prosodic word of the host and interact with its accent if due to its position in the syntax, the clitic undergoes spell-out earlier than the host; an enclitic can incorporate into the prosodic word of the host if the two undergo spell-out together. In the following section, I address a surprising context where low clitics can interact with the accent of a host in the highest projection in the clause. I will show that this is not a regular case, but that it results from a PF repair mechanism.

3.3. 'je' and the raising of the object clitics

We have seen so far that syntactic cyclicity plays a crucial role in constraining prosodic incorporation of clitics in BCS – a clitic and the host need to be in the same spell-out domain for the clitic to incorporate in the relevant prosodic sense. In other words, a domain that undergoes spell-out in a sense freezes the elements within it so that they do not interact with elements spelled out at higher spell-out domains. There is, however, a very interesting apparent exception to this, where in a very constrained context, an element whose syntactic position is low can be visible to accent assignment rules applying to the minimal prosodic word of the element preceding it in the next spell-out domain.

Recall that the auxiliary *je* 'be.3sg' behaves in a peculiar way compared to other auxiliaries. Crucially, as evidenced by *je* being stranded by VP-ellipsis that eliminates object clitics

(Stjepanović 1998), its syntactic position is higher than object clitics (71) (see also evidence from VP-fronting in (44b), as well as Bošković 2001 for additional evidence to this effect).

- (71) On mi ga je dao, a i ona je takođe. (Stjepanović 1998: 532)
 he mi.DAT it.ACC is gave and also she is too
 ‘He gave it to me, and she did, too.’

In contexts without VP-ellipsis, this should result in the clitic *je* preceding object clitics, just like all other auxiliaries do (72a-b), contrary to what we actually find (72c-d). I illustrate this for dative clitics, but the same holds for accusative and genitive clitics (see e.g. Browne 1974, 2004; Bošković 2001).

- | | |
|-------------------------------------|-------------------------|
| (72) a. Šta <u>ste mu</u> rekli? | ✓ Aux<<Dat |
| what are him.DAT told | |
| ‘What did you tell him?’ | |
| b. *Šta <u>mu</u> <u>ste</u> rekli? | ✗ Dat<<Aux |
| what him.DAT are told | |
| c. *Šta <u>je mu</u> rekao? | ✗ Aux(<i>je</i>)<<Dat |
| what is him.DAT told | |
| d. Šta <u>mu</u> <u>je</u> rekao? | ✓ Dat<<Aux(<i>je</i>) |
| what him.DAT is told | |
| ‘What did he tell him?’ | |

Je being exceptional with respect to other auxiliaries in this regard, it seems that a constraint specific to *je* is at work here, which prevents it from being followed by another enclitic element.

We can formalize it as a constraint on the linearization of *je*, as in (73).

- (73) Constraint on *je*-linearization: **je*<<enclitic

Given that *je* can be followed by a *proclitic*, as shown in (74), the constraint is *only* about clitics that have the same host as *je*, i.e. other enclitics: *je* cannot precede an enclitic that has the same host as *je*.

- (74) Šta je na stolu?
what is on table
'What is on the table?'

Crucially, this is a PF constraint because in the syntax, the clitic *je* behaves like other auxiliaries in being higher than object clitics. Since its syntactic position yields a clitic order that violates this PF constraint, a repair mechanism needs to be employed. Bošković (2001) also argues for such an analysis. For him, the mechanism in question is pronunciation of a lower copy. Adopting Chomsky's (1993) copy theory of movement, he argues that moving elements leave behind full copies in lower positions. It is standardly assumed that the highest copy of a non-trivial chain is pronounced. However, following Bobaljik (1995) and Franks (1998), Bošković (2001) suggests that when pronouncing the highest copy of a moved element would violate a PF constraint, a lower copy can be pronounced instead. Thus, for *je*, he assumes that the position where the auxiliary originates is lower than the final position of object clitics, with the auxiliary raising to a position higher than object clitics.¹⁹ Other auxiliaries always can be, hence must be, pronounced in their moved higher position. However, *je* cannot be followed by an enclitic, so its lower copy is pronounced in order to satisfy the PF requirement on *je* when it co-occurs with an object clitic. The derivation of (72d) under this account is in (75). Notice that the object clitic is in the same position as in the examples we have seen so far, i.e. it is in the verbal domain as before. Thus, under the assumptions adopted here, object clitics are in a spell-out domain lower than the wh-word *šta*.

- (75) [šta je [mu je rekao]]
what is him is said

¹⁹ Note, however, that it is not clear that there is a syntactic position for auxiliary verbs that is lower than the final position of object clitics.

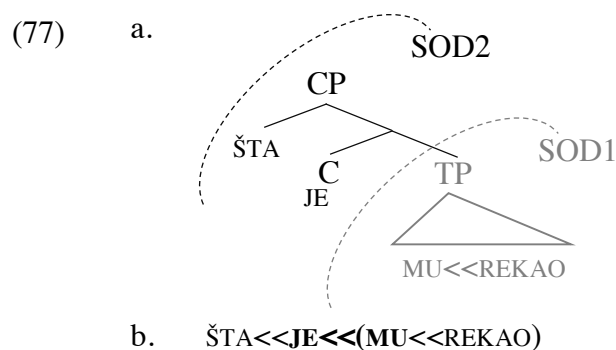
We have seen earlier that an object clitic in a lower spell-out domain cannot interact with the accent of the host in a higher spell-out domain (60)/(61). Under Bošković's analysis in (75), even though there is no overt element between the host and the object clitic in the phonology, it is predicted that the object clitic should not be able to interact with the accent of the host because the two are not in the same spell-out domain.²⁰ This, however, is not what we find. The host in the example (72d) gets a rising accent, which indicates that High tone spreading takes place. This example is repeated in (76a), with accent marking on the host. The same point is illustrated for a *wh*-word preceding a genitive clitic (76b), an accusative clitic (76c), and two object clitics (76d). In each case, there is *je* following these clitics and the host gets a rising accent, unlike in the examples when object clitics follow a *wh*-word and *je* is missing (60).

- (76) a. Štá mu je rekao? (✓interaction)
 what him.DAT is said
 'What did he tell him?'
 b. Štá ga je iznenadilo?
 what him.GEN is surprised
 'What surprised him?'
 c. Štó ga je poklonio njemu?
 why him.ACC is given him.dat
 'Why did he donate/give it to him?'
 d. Štó mu ga je poklonio?
 why him.DAT him.ACC is given
 'Why did he donate/give it to him?'

The presence of prosodic interaction between the host and the object clitics here indicates that the object clitics are in the same spell-out domain as the host in (76). How do they get there (if not in the syntax)? Given that (73) is a constraint that holds in the phonology, I share Bošković's (2001)

²⁰ However, a word of caution is in order here. This prediction depends on what we assume regarding the opacity of spell-out domains for external processes. Under the pronounce-a-lower-copy analysis, it must be possible to readjust a spell-out domain at the point when elements at a higher spell-out domain are being linearized. Thus, under this view, a lower spell-out domain seems to be in a sense reactivated because it is necessary to resurrect a copy that has already been marked for deletion.

intuition that a PF mechanism needs to be responsible for repairing the violation of this constraint. However, rather than activating a lower copy of *je* in an already completed spell-out domain, or lowering *je*, linearizing it after the clitics in the lower spell-out domain, which would not account for the prosodic interaction in (76), I propose that a different PF mechanism is at work here. Namely, the object clitics raise into the spell-out domain of *je*, i.e. the spell-out domain that is currently active. This clitic raising is driven by the constraint on linearization (73). In particular, at the lower spell-out domain (SOD1), which contains only the object clitic and the verb in (76a), the clitic gets linearized to precede the verb in PF. At the next spell-out domain, *šta* and *je* need to be linearized with respect to each other and with respect to the elements from SOD1. The c-command relations in (77a) yield the result in (77b) (see e.g. Kayne 1994). However, this violates the constraint in (73).



To repair this violation, the object clitic relinearizes in front of *je*, as a result of which it ends up in the next higher spell-out domain immediately following the wh-word. Now, when these elements are mapped to their prosodic categories, the object clitic can then incorporate into the minimal prosodic word of the wh-word, and interact with its accent. Since this relinearization of object enclitics is a repair mechanism, it is not available in the context of other auxiliaries, which

do not have the idiosyncratic constraint in (73). Thus, object clitics can never precede other auxiliaries (72b).

In sum, given the contrast between (60) and (76), we can conclude that object clitics can interact with the accent of their host only if they co-occur with a clitic which is in the syntax placed in the higher spell-out domain, but nevertheless follows them in PF. We have seen that this state of affairs can be accounted for under the proposed analysis.

Under the current analysis, the object clitics need to relinearize in front of *je* in PF, which brings them into the SOD of *je* in (76). An interesting prediction of this analysis is the following: If both *je* and object clitics are in the spell-out domain lower than the host, then relinearization of the object clitic in front of *je* should not have any effect on the prosody of the host, i.e. if in such a context an object clitic cannot incorporate into the prosodic word of the host when *je* is not present, it should not be able to incorporate even when *je* is present. This is exactly what we find in several constructions where the particle *da* precedes the clitics.

Recall that *da* preceding an object clitic in an embedded declarative clause, as in (78a), does not have an accent, indicating there is no interaction between *da* and the object clitic in such cases. The same happens when *da* is followed by an auxiliary, illustrated again in (78b).

- (78) a. Znam **da** mu govori istinu. (✗ interaction)
 know that him.DAT says truth
 ‘I know he is telling him the truth.’
 b. Znam **da** su (mu) govoreli istinu.
 know that are (him.DAT) said truth
 ‘I know they were telling (him) the truth.’

We have seen above that this lack of prosodic interaction is due to a spell-out domain boundary separating *da* from the clitics. Assuming that *da* is in the head of the topmost projection in these

complement clauses, it is a phase head under the contextual approach to phases. The auxiliary and the object clitics are in its complement, i.e. a lower spell-out domain.

(79) [CP *da* [TP *su mu govorili istinu*]]
 that are him.DAT said truth

In addition to complement clauses, other contexts where *da* occurs and shows no interaction with clitics following it are conditional clauses (80a-b), a type of *da*-imperatives (80c), and a construction expressing wishes for other people.

- (80) a. *Da mi govori istinu, vjerovao bih mu.* (✗ interaction)
 that me.DAT says truth believed would him.DAT
 ‘If he were telling me the truth, I would believe him.’
 b. *Da si mi govorio istinu, vjerovao bih ti.*
 that are me.DAT said truth, believe would you.DAT
 ‘If you had been telling me the truth, I would have believed you.’
 c. *Da si došao do pet (ili te neću čekati)!*
 that are came by five (or you.GEN NEG.will wait
 ‘You’d better come by five (or I will not wait for you)!’
 d. *Da ti Bog da zdravlje!*
 that you.DAT God gives health
 ‘May God give you health!’

This suggests then that in these clauses as well, the particle *da* is in the head of the highest projection, and the clitics are in a lower domain, so they are unable to interact with *da*.

Since both the auxiliary clitics and object clitics are in the spell-out domain lower than *da*, in the presence of the auxiliary clitic *je* after an object clitic in the contexts in (78) and (80), we expect *da* to still have no accent. This is exactly what we find in complement *da*-clauses (81a) and conditionals (81b).²¹

²¹ There are interfering factors making it impossible to test this for *da*-imperatives and *da*-wishes. Namely, the imperative does not sound natural in the third person, and *da*-wishes need to contain a finite lexical verb which has future reference.

- (81) a. Znam *da* mu je govorio istinu. (✗ interaction)
 know that him.DAT is said truth
 ‘I know that he was telling him the truth.’
 b. *Da* mi je govorio istinu, vjerovao bih mu.
 that me.DAT is said truth believed would him
 ‘If he had been telling me the truth, I would have believed him.’

The surprising contrast in the availability of prosodic interaction between an object clitic followed by *je* and a *wh*-host in (76) and an object clitic followed by *je* with the particle *da* in (81) is thus accounted for under the current analysis.²²

There is, however, one construction where an object clitic followed by *je* can interact with the accent of the particle *da*. This is the ‘desiderative’ construction used to express one’s own wishes for oneself or somebody else’s wishes for themselves. To my knowledge, the precise structure of such constructions in BCS has not been explored at all. They consist of an NP (82a), a *da*-clause (82b), or an infinitive (82c) embedded within a clause that contains the clitic *je*²³, a dative pronoun (usually a clitic) indicating the person to benefit if the wish were to come true, and the particle *da* at the very beginning of the main clause.

- (82) a. *Dá* mi je sladoled. (✓ interaction)
 that me.DAT is ice.cream
 ‘I wish I had an ice cream.’
 b. *Dá* mi je *da* pojedem sladoled.
 that me.DAT is that eat ice.cream
 ‘I wish I could eat an ice cream.’
 c. *Dá* mi je pojesti sladoled.
 that me.DAT is eat.INF ice.cream
 ‘I wish I could eat an ice cream.’

²² In Section 3.4., I discuss further data that are best captured if we assume that the presence of *je* is responsible for the object clitics reaching the higher SOD by moving over *je* in PF, rather than *je* lowering into the lower SOD to follow object clitics.

²³ Other auxiliaries cannot occur here, and *je* cannot occur in the strong form.

What could be the relevant difference between these constructions and all other *da*-clauses that we have seen so far? If *da* is in the head of the topmost projection in the matrix clause in desideratives, and if its complement is a spell-out domain, the only way for the object clitic to end up in the same spell-out domain with *da* is if it moves to it. One possibility is that both the object clitic and the clitic *je* undergo head movement in the syntax here, hence end up sharing the same X^0 with *da*. However, from what we have seen so far, it is not necessary to assume that both clitics move. In the syntax, the object clitic may be in a lower position within the complement of *da* just like in all the constructions we have seen so far. It may then be the case that the clitic *je* undergoes head movement to *da* in the syntax alone.²⁴ Support for *da* and *je* being in the same head position in the syntax in this case, which could be a result of *je* moving to *da* in these constructions, comes from the examples with a full dative pronoun instead of the clitic:

- (83) a. *Dà je meni sladoled.* (✗ interaction)
 that is me.DAT ice.cream
 ‘I wish I had an ice cream.’
 b. *Dà je meni da pojedem sladoled.*
 that is me.DAT that eat ice.cream
 ‘I wish I could eat an ice cream.’
 c. *Dà je meni pojesti sladoled.*
 that is me.DAT eat.INF ice.cream
 ‘I wish I could eat an ice cream.’

Recall that when *da* is followed by an auxiliary in a lower spell-out domain, it does not receive an accent because it is a proclitic itself (see (78) and (80)). This is illustrated with the clitics *je* and *su* in (84).

²⁴ Alternatively, if the matrix clause lacks the CP layer, it could be the case that both *da* and *je* are in a lower clausal projection (see Todorović and Wurmbrand, to appear). As long as both particles are in the same spell-out domain, the effect here is captured.

- (84) a. Znam *da* je meni govorio istinu. (✗ interaction)
 know that is me.DAT said truth
 ‘I know he was telling the truth to me.’
 b. Znam *da* su govorili istinu.
 know that are said truth
 ‘I know they were telling the truth.’

In cases like (84), *da* and the enclitics following it lean onto the first strong word following them and neither *da* nor the enclitics receive an accent. Now, when we use a full dative pronoun instead of an enclitic in desiderative constructions, as in (83), the pronoun then has to follow *je*. This brings about the order where *da* is immediately followed by *je*. If *je* in such cases were in the complement of *da*, *da* should receive no accent, just like it does not receive an accent in (84a). However, in (83) *da* is accented, i.e. *da+je* behave like a separate prosodic word from the full pronoun following them.²⁵ The only way this can happen is if *je* is in the same spell-out domain as *da*, indicating that it does undergo head movement to the same head position.

Interestingly, unlike in the other cases where we have witnessed an interaction between a clitic and the accent of its host, *da* in (83) does not receive a rising, but a *falling* accent. This provides evidence that the clitic *je* itself does not have a lexical High tone. Recall that unlike other auxiliary clitics, *je* does not interact with the accent of wh-hosts even though it occupies the same position as the auxiliaries in (65) (see also discussion in Section 1.3.1).

- (85) Štā je rekao? (✗ interaction)
 what is said
 ‘What did he say?’

²⁵ Note that the embedded declarative clause in (84a) also contains a full pronoun following *je*. However, this does not result in *da* being accented in these constructions, indicating that *je* here is lower in the structure than in desiderative constructions.

Since *je* does not have a lexical High tone, when the head containing *da* and *je* in (83) is mapped to the prosodic structure as a prosodic word, the default rule of initial High tone insertion (11) has to apply, yielding a falling accent on *da*.²⁶

Returning to the examples with the clitic dative pronoun in desiderative constructions (82), the prosodic interaction between the dative clitic and *da* can be accounted for in the same way as the interaction of object clitics and a wh-host when object clitics are followed by *je* in (76). Namely, the dative clitic is in the complement of the head containing *da+je*. At the point when *da* and *je* are linearized in their spell-out domain, in order for *je* not to be linearized in front of another clitic, the dative clitic needs to undergo PF raising to the higher spell-out domain, preceding *je*. Since the dative clitic does have a lexical High tone, in this case High tone spreading takes place; hence, *da* receives a rising accent in (82).²⁷

²⁶ Note that despite of *da* being accented in (83), the clitic *je* does not “interact” with its accent, i.e. there is no High tone on *je* to spread to *da*. Rather, the presence of *je* in the same spell-out domain as *da* makes it possible for the two to map as a minimal prosodic word where the default accentual rule applies in the absence of a lexical High tone, yielding a falling accent on *da*.

²⁷ It is relevant to mention here multiple-wh-questions as another context where wh-words can precede enclitics. In such constructions, the pattern of accent interactions under consideration seems to be the same as with only one wh-word. In multiple-wh-questions in BCS all wh-elements undergo fronting (see e.g. Bošković 2002). As before, when no enclitic follows a sentence initial *ko* or *šta*, those words get a falling accent as in (i).

- | | |
|---|---|
| (i) a. Kò kóga gleda?
who whom watches
‘Who is watching whom?’ | b. Štà kóme daju?
what whom give
‘What are they giving to whom?’ |
|---|---|

When they are followed by a high clitic such as *li* or an auxiliary (other than *je*), they get a rising accent, indicating that the clitic and the wh-word interact.

- | | |
|---|--|
| (ii) a. Kó li koga gleda?
who FOC whom give
‘I wonder who watches whom?’ | b. Štá su kome dali?
what are whom give
‘What did they give to whom?’ |
|---|--|

With object clitics, there is a split between (iiia), where only a dative clitic follows the first wh-word, and (iiib) where a dative clitic+ *je* follow it. In the former case, *ko* and the dative clitic do not interact, but in the latter case, they do.

- | | |
|---|---|
| (iii) a. Kò mu šta daje?
who him.DAT what give
‘Who is giving him what?’ | b. Kó mu je šta dao?
who him.DAT is what give
‘Who gave him what?’ |
|---|---|

Key questions that need to be addressed here are: What kind of a mechanism allows a clitic or a clitic sequence to break up a wh-word sequence? Which copies of wh-elements precisely get pronounced in these

Having explained why low object clitics are able to interact with the accent of their host only when they are followed by *je* (which is placed higher than object clitics in the syntax) in PF, and why such contexts are limited, in the following section, I turn to the contexts with the remaining enclitic, *se*, which will be shown to provide additional support for a phase-based account of clitic incorporation discussed in the previous section, as well as for the proposal that the constraint on the linearization of *je* and the repair mechanism put forth in this section are phonological in nature.

3.4. ‘*se*’

In the previous section, I have argued that there is a phonological constraint on the clitic *je* that disallows contexts where *je* is followed by another clitic, and that in the cases where *je* is followed by other clitics in the syntax, which would violate the constraint in question with a straightforward linearization, there is a PF mechanism that relinearizes those clitics to the position preceding *je*. We have seen that this relinearization sometimes takes place across a spell-out domain boundary, which results in the “offending” clitics following *je* in the syntax, but being spelled out in the next higher spell-out domain in the position preceding *je*.

Crucially, if the only way for clitics placed in a low projection in the syntax to reach a higher spell-out domain is by this PF mechanism, which takes place due to the presence of *je*, then when *je* is absent, these clitics should never be able to reach the higher spell-out domain and interact with the accent of elements in that domain. This is trivially borne out in the contexts when there is no auxiliary verb present, as we have seen above in clauses that contain a finite lexical verb (60).

constructions? It is well-known for BCS, that there are “phonological exceptions” to multiple-wh-fronting (see e.g. Bošković 2002). Since that would lead us to discussing a wide variety of additional issues raised by multiple-wh-questions, I leave this endeavor for a separate project.

Interestingly, there is also a context where *je* is present in the syntax, but it undergoes PF deletion. Browne (1974) and Bošković (2001, 2004) observe that in the presence of the clitic *se*, the clitic *je* is preferably omitted. Compare the example in (86a), where the past tense sentence contains the auxiliary and the participle of the lexical verb (this is a context where *se* cannot occur), and the example with *se* in (86b), where the past tense sentence has the participle of the lexical verb, but *je* is dropped (although this is a context where *je* should occur).²⁸

- (86) a. On je vratio knjigu.
 he is returned book
 ‘He returned the book.’
 b. On se vratio.
 he SE returned
 ‘He returned.’

I suggest that this is due to a contextual morpho-phonological rule that drops the clitic *je* in the context of *se*.

(87) $je \rightarrow \emptyset / _ \dots se$

Now, if the interaction between a syntactically low object clitic and a high wh-word as in (76) and (88) hinges on the object clitic being able to move over *je* in PF, then in a context where *je* is dropped for PF reasons, we would again expect no interaction between the object clitic and the wh-host²⁹.

²⁸ Dropping *je* in the presence of *se* is preferred. However, when *je* is present, there is a bit of a controversy where exactly it occurs – before or after *se*. It is prescriptively enforced to place *je* after *se*, even though many speakers who allow *je* in these contexts only accept *je* in front of *se*. If we keep in mind that *se* has nine more or less related usages (see (29)), this is not surprising. It is possible that *se* has different positions in the structure depending on what role it has. Thus, the controversy over the ordering of *se* and *je* among the speakers who do not have the rule of *je*-deletion may result from this. However, investigating this issue would go beyond the limits of this paper.

²⁹ Note, however, that this is expected if PF-deletion of *je* takes place before the raising of the object clitics to the higher spell-out domain.

- (88) Štá mu je rekao? (✓interaction)
 what him.DAT is said
 ‘What did he tell him?’

In other words, the object clitics in their original spell-out domain would have no motivation to undergo reordering with any elements higher in the structure, so they would never end up in the same domain with the *wh*-word.

This is exactly what we find. As illustrated in (89), where the sentence containing *se* is in the past tense and should contain *je*, but *je* is dropped. As indicated by the falling accent on the *wh*-word, there is no High tone spreading from the object clitic to the host in this case.

- (89) Štâ mu se desilo? (✗interaction)
 what him.DAT SE happened
 ‘What happened to him?’

Recall that there is evidence indicating that the position of the clitic *se* in the syntax is higher than object clitics (45), at least in some of its usages. However, the clitic *se* is similar to *je* in that it cannot be followed by another clitic, i.e. it is subject to a similar constraint as (73), which is given in (90) below.

- (90) Constraint on *se*-linearization: **se*<<enclitic

Therefore, when the complement of C in (89), which contains the object clitic and *se*, is spelled out, the object clitic is linearized in front of *se*, even though the c-command relations would yield order *se*<<*object clitic*³⁰. However, in spite of that, similar to the cases in (81), where PF reordering between the object clitics and *je* takes place within the lower spell out domain, in (89), the linearization of the object clitic in front of *se* does not lead to it being in a higher spell-out domain because the clitic *se* itself is within the complement of C.

³⁰ Recall that *se*<<*object clitic* order is what we find in Czech and Slovenian.

Crucially, given that *je* is dropped in the presence of *se*, the linearization established in the lower spell-out domain is now felicitous even when elements in the higher spell-out domain are being linearized; *je* being deleted, (73) is irrelevant. Thus, there is no need for the PF repair mechanism of rising the object clitics over *je* and into the higher spell-out domain to take place, which explains why the object clitics do not interact with the accent of the wh-words in these cases.

Finally, the presence of *se* has no effect on the prosodic interaction between clitics that are high in the syntax and that get spelled out in the same domain as the host because of their syntactic position (i.e. the prosodic interaction is possible here anyway), as shown for the focus *li* in (91a), the interrogative *li* in (91b), and an auxiliary in (91c).

- (91) a. Štá li su se dogovorili? (✓interaction)
 what FOC are SE agreed
 ‘I wonder what they agreed.’
 b. Dá li su se vidjeli?
 that Q are SE seen
 ‘Did they see each other?’
 c. Štá su se dogovorili?
 what are SE agreed
 ‘What did they agree?’

Thus, the lack of the interaction between the object clitics and their host in (89) is not just a quirk of the constructions containing *se*, it is crucial that the object clitics are low in the syntactic structure, and that the high clitic that would normally pull them out of the lower spell-out domain in past tense sentences is dropped in (89). In (91), all the clitics preceding *se* are higher than *se* in the syntax, immediately following their hosts in the same spell-out domain, so nothing blocks their accentual interaction.

Finally, the clitic *se* itself cannot interact with the accent of the host, as illustrated in (92). I have noted in Section 1.3.1 that this could be due to *se* lacking a lexical High tone.

- (92) a. Znam da se vratio. (✗ interaction)
 know that SE returned
 ‘I know he returned.’
 b. Šta se dešava?
 what SE happening
 ‘What is happening?’

However, having shown that an enclitic can interact with the accent of its host only if the two are in the same spell-out domain due to their syntactic positions or due to a PF repair mechanism, the reason why *se* never interacts with the accent of its host can also come from its position in the syntactic structure. As discussed earlier, *se* is found in a variety of constructions; it is even possible that it occupies different functional projections that are either lower or higher than object clitics. However, all of those projections are in a lower spell-out domain than the one of the relevant hosts (i.e. *se* is not in the same spell-out domain as its host). Support for this comes from evidence that *se* is lower than auxiliary clitics, as indicated by ellipsis, where it is possible to remove the part of the structure containing *se* and leave behind the auxiliary verb, as in (93).

- (93) a. Oni su mu se predstavili, a i mi smo takodje.
 they are him.DAT SE introduced and also we are too
 ‘They introduced themselves to him, and we did too.’
 b. Ja sam mu se predstavila, a i ona je takodje.
 I am him.DAT SE introduced, and also she is too
 ‘I introduced myself to him, and she did too.’

Thus, the clitic *se* is within the complement of C in (92), and parallel to the object clitics in (60), it is not in the same spell-out domain as the wh-word. As a result, it cannot incorporate into its minimal prosodic word, hence it could not interact with its accent even if it had a lexical High tone.

The contexts with *se* provide additional support for the phonological motivation for raising object clitics into the position preceding *je* in (76)/(82), since this mechanism does not apply when *je* is dropped in the presence of *se* (89). The clitic *se* itself never undergoes spell-out in a syntactic

configuration that would result in it incorporating into the minimal prosodic word of its host, so it never interacts with its prosody.

In this section I have shown that all the generalizations regarding the possibility of prosodic interaction between an enclitic and the accent of its host which were introduced in Section 1.2 can be captured in a very simple way under the proposed condition on prosodic incorporation, which is spell-out domain sensitive. In Table 2, I summarize the generalizations in (17), (19), (22), (25), and (27), and indicate where they are discussed in this section.

Generalization	Accent	Example
(17) <i>da+li</i>	Rising	(✓interaction) - (66) & (67)
wh-word+ <i>li</i>	Rising	(✓interaction) - (68) & (70)
(19) <i>da+Aux</i>	No accent	(✗interaction) - (63)
wh-host+Aux (except <i>je</i>)	Rising	(✓interaction) - (64) & (65)
(22) <i>da+Object clitic</i>	Rising or No accent	(✓interaction) - (82) (✗interaction) - (60d-f)/(62) & (61b)
wh-host+Object clitic	Rising or Falling	(✓interaction) - (76) and (77) (✗interaction) - (60a-c) & (61a)
(25) <i>da+je</i>	Falling or No accent	(✗interaction) - (83) (✗interaction) - (84); cf. also (63)
wh-host+ <i>je</i>	Falling	(✗interaction) - (85)
(27) <i>da+se</i>	No accent	(✗interaction) - (92a)
wh-host+ <i>se</i>	Falling	(✗interaction) - (92b)

Table 2. *Summary of the generalizations*

3.5. *Truncated infinitives in BCS*

In addition to the hosts discussed here, a reviewer points out another construction involving future clitic auxiliaries that has been observed to exhibit some affixal properties, which becomes relevant in the context of our current discussion about how closely attached clitics are to their hosts and what effect that may have on the prosody of the host. This construction involves *truncated*

infinitives (okrnjeni infinitiv; e.g. Stevanović 1962: 209; Stanojčić and Popović 1992: 114), where the verbal stem (in some cases just the verbal root) and the future auxiliary constitute a word, with the infinitive affix being omitted (truncated), as in (94) (Despić (2017) discusses these constructions in Standard Serbian). Such truncated infinitives are found throughout the BCS speaking area, including the dialect discussed here.

- (94) ra:d-i-ćeš
 work-TV-fut.2sg
 ‘you will work’

Recall that High tone spreading applies when an auxiliary clitic follows a *wh*-hosts in questions, in which case the *wh*-host gets a rising accent. This also holds for future auxiliaries, as illustrated in (95) and (96).

- (95) Gdjé ćeš parkirati auto?
 where will park car
 ‘Where will you park the car?’

- (96) a. gdjé ću d. gdjé ćemo
 where will.1sg where will.1.pl
 b. gdjé ćeš e. gdjé ćete
 where will.2sg where will.2.pl
 c. gdjé će f. gdjé će:
 where will.3sg where will.3.pl

Furthermore, some verbal stems are toneless and a H tone spreads to them from affixes with a H tone following them. For example, consider the toneless stems in (97) which are followed by a participle suffix *-la*. All these stems get a rising accent, indicating that *-la* has a High tone that spreads.

- (97) a. náš-la
 find-PRT
 b. dóš-la
 come-PRT

- c. *prěš-la*
go.over-PRT
- d. *sjéd-i-la*
sit-TV-PRT

The question that arises here is whether a stem like this will also interact with a future clitic after the infinitive marker gets truncated between them. Namely, Despić (2017) argues that the future clitic undergoes Local Dislocation (see Embick and Noyer 2001; Embick 2007, 2010) in order to satisfy its second position requirement (cf. Bošković 2001), which results in the future clitic being linearized as an affix after the infinitive, as in (98a). This further provides the context for the infinitival suffix to be truncated by rule in (98b).

- (98) a. $[[V][T[*fut*]]] = /sjes-ti-ćeš/$
 b. $ti \rightarrow \emptyset / [[V- _] [T[*fut*]]] (V = ti-infinitive)$

Despić (2017) shows that in such cases the verbal stem and the clitic to show some phonological interaction. For instance, place assimilation between the final consonant of the stem and the initial consonant of the clitic obligatorily applies when the verbal stem has a final /s/ or /z/. This is shown in (99).

- (99) *sješ-ćeš* → $/sjes-ćeš/$
 sit-will.2sg
 ‘you will sit’

However, regarding accent assignment with truncated infinitives, we do not expect there to be any interaction between the verbal stem and the future clitic. Crucially, the infinitival stem first forms a prosodic word with the infinitival suffix (*-ti/ -ći*) at some point in the derivation before the context for the truncation of *-ti* is created. Consider the untruncated infinitives in (100) with the toneless verbal stems from (97) that get a rising accent when they are followed by an affix with a High tone

in their accentual domain (as a result of High tone spreading). Notice that in all of the cases in (100), the verbal stem gets a falling accent when it precedes the infinitival suffix.

- (100) a. **nà**:-cí
find-inf
b. **dò**:-cí
come-inf
c. **prè**:-cí
go.over-inf
d. **sjè**s-ti
sit-inf

This indicates that the default rule of High tone insertion takes place and the infinitival stem gets a High tone on the initial syllable, which is realized as a falling accent. Now, when the future clitic is placed after the infinitive, which is followed by the truncation of the infinitival suffix, the stem still keeps its High tone. Given that this High tone is the leftmost one in this sequence of morphemes, we do not expect the High tone on the future clitic to be realized and spread to the infinitival stem (see discussion in Section 1). That is, infinitival stems that have a falling accent when the infinitival suffix is present are not expected to surface with a rising accent in truncated infinitives in this dialect, despite becoming immediately adjacent to the future clitic with a High tone. As shown in (101), truncated infinitives have a falling accent on a par with their untruncated counterparts.

- (101) a. **nà**:-céš
find-will.2sg
b. **dò**:-céš
come-will.2sg
c. **prè**:-céš
go.over-will.2sg
d. **sjè**š-céš
sit-will.2sg

In sum, the High tone that the verbal stem receives before the infinitival suffix is truncated remains on the verbal stem and gets realized, preventing the High tone on the future clitic from interacting with the verbal stem.

5. Conclusion

In this paper, I have argued for a phase-based approach to the mapping of clitics to the prosodic structure; more precisely, I have shown that whether a clitic can incorporate into the minimal prosodic word of the host in the phonology depends on how local the clitic is to the host in the syntax. The mapping of clitics from the syntactic to the prosodic structure crucially depends on the height of the clitics in the syntactic structure, and whether the clitics and the host belong to the same spell-out domain. I have argued that a clitic cannot incorporate into the minimal prosodic word across a spell-out domain boundary, i.e. that a minimal prosodic word cannot be formed in the prosody from two elements that belong to two different spell-out domains. In the dialect of BCS explored in this paper, this is reflected in whether or not enclitics can interact with the accent of the host they attach to. In particular, I have shown that most BCS enclitics have a lexical High tone, and that this High tone can undergo spreading to the syllable of the host only if the enclitic and the host belong to the same spell-out domain. I have also discussed a restricted context where an element that has undergone spell-out needs to relinearize with an element in the next spell-out domain in order to satisfy a phonological constraint. This PF re-ordering operation was shown to have consequences for prosodic incorporation of clitics. By linearizing a clitic in a higher spell-out domain than where syntax would place it, it enables clitics that are normally too low syntactically to interact with the accent of the host to undergo such interaction.

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