Cyclic clitic incorporation and High-tone spreading in Bosnian/Croatian/Serbian

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In this talk I focus on a previously unexplored phenomenon of **High-tone spreading (HTS)** from ***enclitics*** to their hosts in a dialect of Bosnian/Croatian/Serbian (BCS) spoken in central Bosnia and Herzegovina.

The empirical puzzle: In the absence of enclitics:
- wh-words like *šta* 'what' have a falling accent: št**à**
- the complementizer *da* 'that' has no accent: d**a**

Diacritics:
falling accent: **[`]**
rising accent: **[´]**

The presence of enclitics:
- in some contexts has no effect on the accent of *šta* or *da:*

(1) a. Št**à** mu govori? (✘HTS)
what him.DAT says
'What is he telling him?'

b. Znam d**a** mi je donijela knjigu. (✘HTS)
know that me.DAT is bring book
'I know she brought me the book.'

c. Znam d**a** su mi donijeli knjigu. (✘HTS)
know that are me.DAT brought book
'I know they brought me the book.'

- in other contexts these hosts get a **rising** accent (H-tone spreading from the enclitic):

(2) a. Št**á** mu je rekao? (✔HTS)
what him.DAT is said
'What did he say to him?'

b. D**á** mi je da provedem ljeto na planini. (✔HTS)
that me.DAT is that spend summer on mountain
'I wish I could spend the summer on a mountain.'

c. Št**á** su rekli? (✔HTS)
what are said
'What did they say?'

→ I will argue that enclitics that can be preceded by a rising accent have a lexical High tone.
→ In identical Host+Enclitic sequences, enclitics with a lexical H tone can spread that tone to their host in some constructions (2), but not in others (1).

This contrast reveals an important *syntactic* condition on prosodic mapping of BCS clitics, and supports the idea that the mapping from the syntactic to the prosodic structure is **phase bound**

(see e.g. Dobashi 2003; Kahnemuyipour 2004, 2009; Kratzer and Selkirk 2007; Sato 2012; Sato and Dobashi 2016; among others).

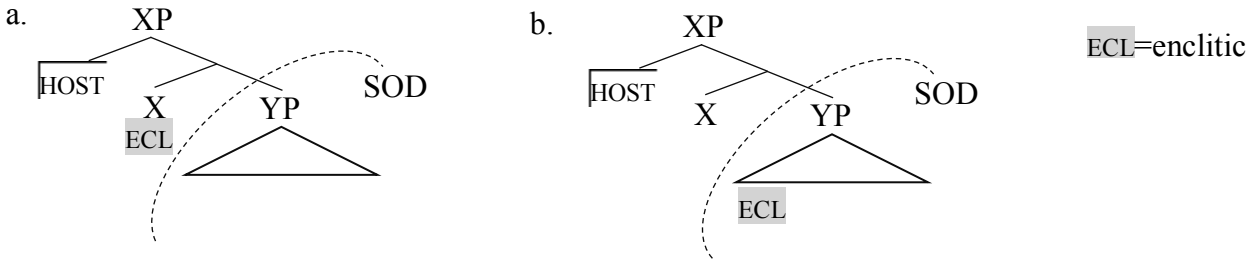
In my analysis of the split between (1)&(2), I follow Selkirk (1996) in assuming that clitics can attach to the prosodic structure in the three ways given in (3):

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

→ Based on HTS, I will show that clitics in (2) are internal clitics, but not in (1).

I propose:
(4) *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 (SOD) and they are adjacent.

(5)



(✔HTS) (✘HTS)

Finally, a clitic that is not in the same SOD as its host can be moved into the SOD of its host under very narrowly defined phonological conditions which stem from idiosyncratic needs of one particular clitic (the clitic *je* 'be.3sg').

The structure of the talk
§1. BCS accent, High-tone spreading, and lexical High tone in enclitics
§2. Enclitics in the syntax
§3. Spell-out domains and clitic incorporation

1. Lexical accent and High-tone spreading

BCS has pitch accents – falling or rising accent on prominent syllables.
Accent is contrastive, as we can see in the minimal pairs (6a&c) and (6b&d).

(6)

	falling	*rising*	
a.	k**ò:**se: ‘steep.NOM.PL.FEM.LF/ ‘steep.GEN.SG.FEM.LF’	c. k**ó:**se: ‘steep.GEN.SG.FEM.SF’	*long*
b.	k**ò**se: ‘mow.3PL.PRES’	d. k**ó**se: ‘hair.GEN.SG’	*short*

Diacritics:
falling accent: **[`]**
rising accent: **[´]**

Falling and rising accents result from:
- vocabulary items in BCS having or lacking a lexical H tone (e.g. Inkelas and Zec 1988),
- accent-assignment rules, which determine whether a High tone needs to be inserted and which High tone is realized in cases of multiple lexical High tones in the same prosodic word.

→ Under what <u>phonological conditions</u> can an enclitic affect the accent of its host?

Consider first suffixes:
- It is not controversial that suffixes either have or lack a lexical High tone.
- Given this, there are four possible contexts with a monosyllabic host followed by a suffix:

(7) a. $(\sigma + \sigma)\omega$ No lexical H; default initial H insertion →Falling initial accent
e.g. d**à:**n+a ‘day.GEN.SG’

The presence of a lexical H bleeds the default initial High tone insertion:

b. $(\sigma^{H} + \sigma)\omega$ The only H present is realized → Falling initial accent
e.g. br**à**^{H}t+a ‘brother.GEN.SG.M’

c. $(\sigma^{H} + \sigma^{H})\omega$ The leftmost H is realized → Falling initial accent
e.g. l**ò**^{H}pt+a^{H} ‘ball.NOM.SG.F’

d. **$(\sigma + \sigma^{H})\omega$** **High tone spreading** **→ Rising initial accent**
e.g. ž**é**n-a^{H} ‘woman-NOM.SG.F’

→ A suffix affects the accent of the word *only if* it has a H tone and if it follows a toneless host, in which case HTS takes place and gives the host a **rising accent**.

However, if the same suffix (-a^{H}) is outside of the *minimal prosodic word* of the same toneless host (*žen-*), then the host gets the default initial H tone and H-tone spreading from the suffix is blocked, as in (8) with an additional derivational suffix.

(8)

Combination	*Example*	*Accent*	
$((\sigma)\omega + \sigma^{H})\omega$	žè:n-**k**-a^{H} woman-**N**-F.NOM.SG ‘female specimen’	Falling	(✘ HTS)

A suffix affects the accent of the word *only if* it is in the minimal prosodic word (the smallest accentual domain) with a toneless host, in which case HTS takes place and gives the host a **rising accent**.

1.1. HTS from enclitics:

- Given that a **rising accent** results from the rule of HTS, I suggest that enclitics that can be preceded by a host with a rising accent have a lexical H tone, on a par with suffixes (e.g. (7d))
- Just like with suffixes, there is exactly one phonological environment where HTS is possible from an enclitic:

(9) 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 enclitic is incorporated into the minimal prosodic word.

$(\sigma + \sigma^{H})\omega$

✔HTS = **rising** accent on the immediately preceding syllable
✘HTS = falling or no accent on the immediately preceding syllable

Hosts that allow interaction are all monosyllabic[1]; and they are found in questions, conditionals and a certain type of imperatives:

(10) a. the particle *da* 'that'
b. question words: *ko* 'who', *šta* 'what', *što* 'why', *gdje* 'where'

Enclitics interacting with their hosts:

(11)

li (Q/Foc)	Aux	Dat	Acc	Gen	*je*, *se*
(✔HTS)	(✔HTS) (✘HTS)	(✔HTS) (✘HTS)	(✔HTS) (✘HTS)	(✔HTS) (✘HTS)	(✘HTS)

The main puzzle: Why is High-tone spreading sometimes blocked with clitics that have a High tone (even in identical host+clitic sequences)?

2. Syntactic positions of BCS enclitics

BCS enclitics occur in a fixed order (Browne 1974):

(12)

1	2	3	4	5
li 'Q/Foc'	Aux (except ***je*** 'be.3.sg.pres')	Dat	{Acc} {Gen}	{*se*} 'self/passive…' {***je***} 'be.3sg.pres'

[1] It also seems to matter that these hosts are open syllables, since there is no interaction between enclitics and toneless hosts such as *most* 'bridge', *rad* 'work', *dan* 'day' etc, or the question word *kad* 'when'.

Second position (2P) requirement (Browne 1974; Comrie 1981; Wilder and Ćavar 1994; Franks and Progovac 1994; Progovac 1996; Bošković 2001):

- BCS ECLs have to occur after the first word or a phrase:

(13) Vesela {**su**} djeca **{su}** brala trešnje. *Host=1ω/1ϕ*
cheerful are children are picked cherries
'Cheerful children were picking cherries.'

Less discussed (or subsumed under 1ω hosts), but also possible (e.g. Browne 2004; Werle 2009):

- BCS ECLs can occur after some unaccented function words:

(14) a. 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.'
b. Ja znam da **su** **mu** oni vjerovali.
I know that are him.DAT they believed
'I know that they believed him.'

Bošković 2001: ECL have to be in the second position in their intonational phrase.

Approaches to 2P:

(15)

(a) ECLs are located in the 2P in the syntax; no phonological reordering	Franks and Progovac 1994; Roberts 1994; Wilder and Ćavar 1994; Dimitrova-Vulchanova 1995
(b) ECLs located in the same position in the syntax (adjoined to IP); Prosodic Inversion takes place if that position is initial	Halpern 1992, 1995; Schütze 1994; King 1996
(c) ECLs are moved into the 2P in the phonology due to [+clitic] feature	Radanović-Kocić 1988, 1996
(d) ECLs are not in the same position in the syntax (the syntax is blind to their 2P requirement; ECLs don't move to 2P in the syntax); PF filters out and repairs phonologically infelicitous orders	Bošković 1995, 2001; Franks 1998

→Given that ECLs are in the same syntactic position in all constructions under (15a-b) and in the same phonological position under (15a-c), Host+clitics are in the same configuration in the phonology in all constructions under these approaches.

→ **Prediction** of (15a-c) regarding HTS from enclitics to their hosts:

- The host preceding all clitics should always have the same accent (either rising or falling);

- there should be no Host+enclitic sequence where HTS is sometimes possible and sometimes blocked.

⇒ This is not what we find.

→ BCS enclitics are in syntactic position**s** they merge to or move to for syntactic reasons, and they do not occupy the same syntactic head position (see e.g. Bošković 1995, 2001; Stjepanović 1998; Gračanin-Yuksek 2016), which is in line with the approach to 2P in (15d).

(16) a. Q/Foc/{Aux} + {Aux} + Dat + Acc/Gen + *se*
b. [$_{CP}$ C [$_{TP}$ T [$_{vP}$ IO_{cl} DO_{cl} [$_{vP}$ v [$_{VP}$ V….]]]

Some arguments for placing clitics in different positions: Ellipsis (Stjepanović 1998; Bošković 2001) and VP-fronting (Bošković 2001 (based on p.c. with D. Ćavar)):

(17) 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.'

→ Auxiliaries higher than object clitics
Recall that the only auxiliary that always follows object clitics is *je* 'be.3sg'.
→ Even *je* is higher than object clitics in the syntax:

(18) a. On mi ga je dao, a i ona **je** <e> također.
he mi.DAT it.ACC is gave, and also she is too
'He gave it to me, and she did, too.'
b. [$_{VP}$ Dao **ga** Mariji] **je** Ivan.
given it.ACC Marija is Ivan
'Given it to Mary, Ivan did.'
c. *Dao je Mariji ga Ivan. (Stjepanović 1998: 532)

3. Spell-out domains and clitic incorporation

- Following standard assumptions, spell-out domains (SODs) are:
(i) complements of phase heads (Chomsky 2000, 2001)
(ii) the topmost projection in a sentence as the final spell-out

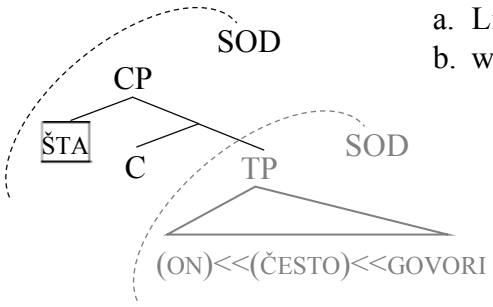
- Incremental prosodic structure building: at each SOD a part of the prosodic structure is built; some readjustments are possible before the final prosodic structure (Dobashi 2003; Kahnemuyipour 2004, 2009; Adger 2007; Kratzer and Selkirk 2007; Sato 2012; and Sato and Dobashi 2016).

3.1. Spelling out the hosts when there are no enclitics following them

A wh-host without a clitic following it has a <u>falling</u> accent:

(19) Štà (on) (često) govori?
what (he) (often) says
'What is he saying? /What does he (often) say?'

(20)

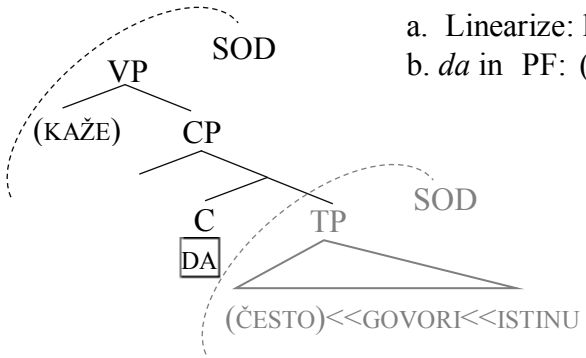


a. Linearize: šta << [(on)<< (često)<<govori]
b. wh-word in PF: (šta)ω →default initial *H-tone insertion*

da-complementizer without a clitic following it has <u>no accent</u>

(21) Kaže [da (često) govori istinu].
says that (often) says truth
'He says that he (often) tells the truth.'

(22)



a. Linearize: kaže da << [(često)<<govori<<istinu]
b. *da* in PF: ((da) (često)ω …)ϕ → free clitic; *no H-tone insertion*

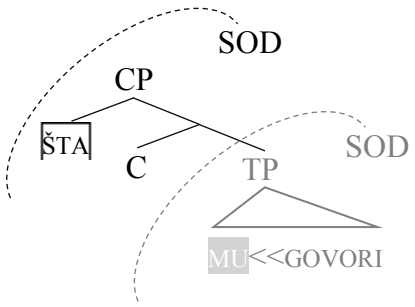
→ When hosts retain this prosody even when followed by an enclitic, this indicates that the host and the clitic are not in the same minimal prosodic word.

3.2. The host and the clitic in different SODs

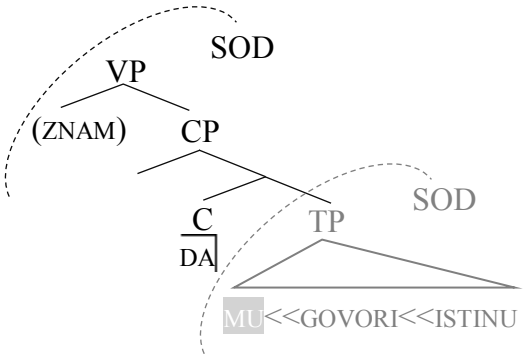
Object clitics – low in the verbal domain:

(23) a. Štà mu govori? falling accent (✘HTS)
what him.DAT says
'What is he telling him?'
b. Znam da mu govori istinu. no accent
know that him.DAT says truth
'I know he is telling him the truth.'

(24) a.



b.

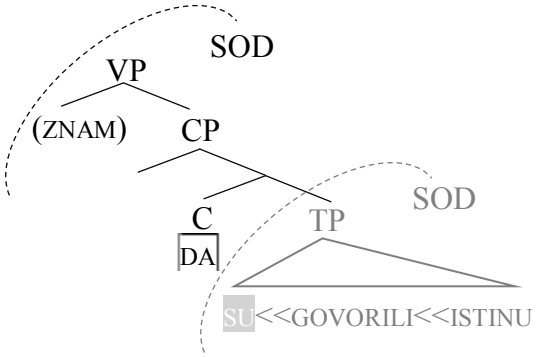


→ The object clitic and the host do not form a minimal prosodic word.

Auxiliary clitics in declaratives:
→ Even with a slightly higher clitic in T, no interaction with *da* in C.

(25) a. Znam **da** su govorili istinu. no accent (✘HTS)
know that are said truth
'I know they were telling the truth.'
b. Znam **da** su mu govorili istinu. no accent
know that are him.DAT said truth
'I know they were telling him the truth.'

(26)



→ The auxiliary clitic and the host do not form a minimal prosodic word.

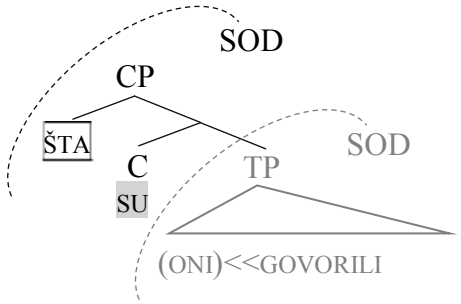
3.3. The host and the clitic in the same SOD
While finite verbs in BCS declarative clauses are in positions lower than C, it is standardly assumed that they can move to C in questions.

(27) Jesu li oni govorili istinu?
are Q they told truth
'Were they telling the truth?'

Auxiliary clitics in questions – raise to C

(28) a. Štá su (oni) govorili? rising accent (✔HTS)
what are they said
'What were they saying?'
b. Štá ste mu rekli? rising accent
what are him.DAT told
'What did you tell him?'

(29)



→ The auxiliary and the host **do** form a minimal prosodic word.

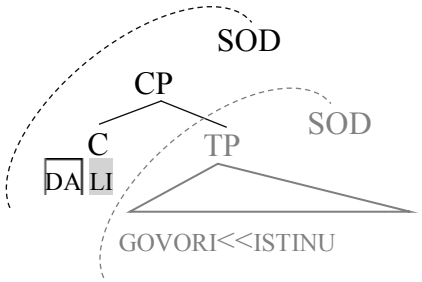
The clitic "li" in questions

The particle *li* is standardly assumed to occupy the C position, realizing an interrogative feature in yes-no questions (30) (Bošković 2001; Progovac 1996; Rivero 1993; Schütze 1994; Stjepanović 1999) or focus feature in emphatic questions (32), where it is preceded by a wh-word (Bošković 2001).[2]

→ The clitic *li* always spreads its H tone to the host, as in (30)/(32), giving it a rising accent.

(30) Dá li govori istinu? rising accent (✔HTS)
that Q says truth
'Is he telling the truth?'

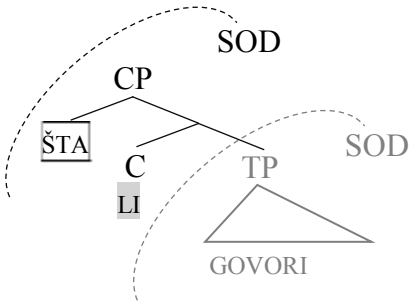
(31)



[2] Gračanin-Yuksek (2016) argues that *li* is a focus marker in yes-no questions as well, base generated in the head of a FocusP below CP. For the purposes of this paper, it is enough to assume that the position of *li* in the final output of the syntax is in C, putting aside whether this results from Foc-to-C movement or *li* being base generated in C.

(32) Štá li govori? rising accent (✔HTS)
what FOC says
'I wonder what he is saying?'

(33)



→ An enclitic is in the same minimal prosodic word of the host and interacts with its accent if they are in the same spell-out domain.

(34) *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 adjacent.

3.4. 'je'(be.3sg) and the raising of the object clitics

Syntactically, this clitic occupies the same position as other auxiliary clitics, i.e. it is **higher than object clitics**, just like all other auxiliaries.

Recall evidence from Stjepanović (1998), Bošković (2001): VP-ellipsis

(35) On mi ga je dao, a i ona **je** <e> također.
he mi.DAT it.ACC is gave and also she is too
'He gave it to me, and she did, too.' (Stjepanović 1998: 532)

This should result in the clitic *je* preceding object clitics, just like other auxiliaries do. However, this is not what we find.

(36) a. Šta ste mu rekli? ✔Aux<<Dat
what are him.DAT told
'What did you tell him?'

b. *Šta mu ste rekli? ✘Dat<<Aux
what him.DAT are told

c. *Šta je mu rekao? ✘Aux(*je*)<<Dat
what is him.DAT told

d. Šta mu je rekao? ✔Dat<<Aux(*je*)
what him.DAT is told
'What did he tell him?

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

Crucially, this is a **PF constraint** (cf. Bošković 2001) because in the syntax, the clitic *je* behaves like other auxiliaries in being higher than object clitics (35).

Recall that object clitics in the absence of any other clitic do not interact with the accent of the host (see (23)/(38) because they are not in the same SOD.

(38) Štà mu govori? falling accent (✘HTS)
what him.DAT says
'What is he telling him?'

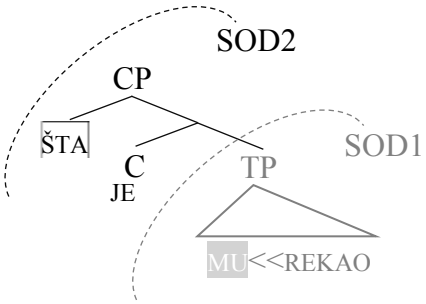
Interestingly, when *je* follows an object clitic in questions, the clitic interacts with the accent of its host.

(39) Štá mu **je** rekao? rising accent (✔HTS)
what him.DAT is said
'What did he tell him?

→The rising accent on the host in (39) indicates that the object clitic is in the same minimal prosodic word of the host, and in the same spell-out domain as the host according to (34).

How does it get there (if not in the syntax)?
→ PF mechanism: The object clitic and *je* reorder to satisfy the constraint on linearization (37).

(40) a.



b. ŠTA<<**JE<<(MU**<<REKAO)

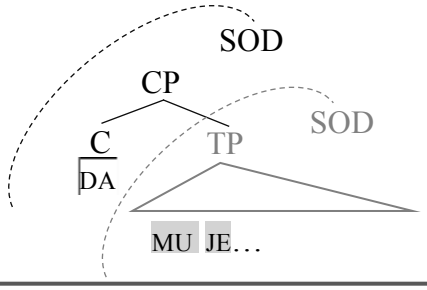
(i) At the lower spell-out domain (SOD1), which contains only the object clitic and the verb in (40a), the clitic gets linearized to precede the verb in PF.

(ii) 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.

(iii) The c-command relations in (40a) yield the result in (40b) (see e.g. Kayne 1994). However, this violates the constraint in (37).

(iv) In PF *mu* (dative Ecl) moves over *je* to satisfy the idiosyncratic requirement of *je* in (37):
ŠTA<<**MU<<JE**<<REKAO

Prediction 1:
If both *je* and object clitics are in the spell-out domain lower than the host as in (41), then PF-reordering of the object clitic in front of *je* should not have any effect on the prosody of the host.

(41) 

(✘HTS)

Recall: *da*+*mu* = no interaction in constructions like (42):

(42) a. Znam **da** mu govori istinu. (✘HTS)
know that him.DAT says truth
'I know he is telling him the truth.'

b. **Da** mi govori istinu, vjerovao bih mu. (✘HTS)
that me.DAT says truth believed would him.DAT
'If he were telling me the truth, I would believe him.'

In such constructions, even if *je* follows object clitics, there is no interaction with *da*:

(43) a. Znam **da** mu je govorio istinu. (✘HTS)
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. (✘HTS)
that me.DAT is said truth believed would him
'If he had been telling me the truth, I would have believed him.'

Prediction 2:
If low clitics can reach a higher spell-out domain only by a PF reordering, which takes place due to the presence of *je*, then <u>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</u>.

→ We have seen this before in constructions where there is no auxiliary (23).
→ Additional contexts with *se*
Browne (1974) and Bošković (2001, 2004): in the presence of the clitic *se* 'self', the clitic *je* is preferably omitted.

(44) a. On <u>je vratio</u> knjigu.
he is returned book
'He returned the book.'

BCS past tense:
Aux + participle

b. On **se** vratio. (*je* dropped)
he SE returned
'He returned.'

Recall that an object clitic interacts with the accent of the host when *je* follows it:

(45) Štá mu je rekao? rising accent (✔HTS)
what him.DAT is said
'What did he tell him?

However, there is no interaction when *je* is dropped in the presence of *se*:

(46) Štà mu se desilo? **falling** accent (✘HTS)
what him.DAT SE happened
'What happened to him?'

Crucially, the presence of *se* has no effect on the interaction between higher clitics and the accent of their host.

(47) a. Štá li su se dogovorili? (✔HTS)
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?'

*3.4.1. Object clitic raising in PF vs. pronouncing lower copy of **je***

Current proposal about PF repair:

(48) je << object.cl → object.cl<<je (*mu* moves in PF in front of *je*)

Bošković (2001):

(49) je object.cl je → ~~je~~ object.cl je (pronounce lower copy of *je*)

The main argument Bošković gives for the pronunciation of lower copy of *je* in the presence of object clitics comes from contexts with sentential adverbs:

- without object clitics, *je* can be higher than a sentential adverb (just like other auxiliaries), as indicated by the availability of the sentential reading of 'correctly' in (50a).
- object clitics cannot be higher than sentential adverbs, and *je* following an object clitic cannot be higher than a sentential adverb either, as indicated by the unavailability of a sentential reading of 'correctly' in (50b).

(50) a. Jovan je *pravilno* odgovorio Mileni.
Jovan is correctly answered Milena
'Jovan did the right thing in answering Milena.' (sentential)
'Jovan gave Milena a correct answer.' (manner)
b. On joj je *pravilno* odgovorio.
he her is correctly answered
#'He did the right thing in answering her.' (#sentential)
'He gave her a correct answer.' (manner) (Bošković 2001)

Based on this, Bošković (2001) argues that object clitics never raise to a position preceding *je*.

In order to repair the infelicitous order *je<<obj.cl, he suggests that *je* originates in a position lower than the surface position of object clitics, and even though it moves higher in the syntax, a lower copy is pronounced as last resort.

→ Given that the sentential adverb reading is missing in (50b), I agree that object clitics do not raise over *je* in the syntax. However, the PF raising of object clitics into the spell-out domain of *je* would also not raise an object clitic over a sentential adverb.

Crucially, when 'correctly' is a manner adverb and both *je* and the object clitic are higher than the adverb in the syntax, *je* and the object clitic are adjacent and the PF reordering I argued for can and has to apply.

(51) [je [obj.cl manner adverb …]] → *obj.cl* moves in front of *je* in PF

However, when 'correctly' is a sentential adverb, *je* is higher than the adverb in the syntax, but the object clitic is lower than the adverb. The two clitics are not adjacent. The requirement of *je* to not be followed by other clitics is not violated. Thus, the PF repair cannot apply.

(52) [je sentential adverb [obj.cl …]] → *obj.cl* cannot move over *je* in PF

As a result, the only order that the PF can yield is:

(53) *On je pravilno joj odgovorio.
he is correctly her answered

→ This is ruled out because the 2P requirement of the object clitic is violated.
Therefore, it is not necessary to appeal to the pronunciation of lower copy of *je* to capture the sentential adverb reading facts.

Furthermore, such an analysis does not capture why the presence of *je* makes object clitics phonologically close to an element in the highest position in the sentence (e.g. a wh-word in the topmost SpecCP).

Conclusions:

- I have argued that the mapping of clitics from their syntactic positions to the prosodic structure is constrained by phases.
- This was supported by evidence involving High-tone spreading from enclitics to their hosts in a dialect of BCS, showing that a clitic can incorporate into the minimal prosodic word of the host only if it is in the same spell-out domain, i.e. linear adjacency between the clitic and the host is not enough for incorporation.
- I have argued that one apparent exception to the Simultaneous Spell-Out Condition comes from idiosyncratic phonological requirements of one particular item that behaves differently from other BCS enclitics in several respects.
- The observation that enclitics in this dialect have a lexical High tone is new (BCS clitics are usually considered to lack lexical High tones, i.e. to be non-accentogenic). The High tone on the enclitics indicated by the fact that there are contexts where the host preceding such enclitics gets a rising accent, which results from the rule of High tone spreading in BCS.

References:

Bošković, Željko. 1995. Participle movement and second position cliticization in Serbo-Croatian. *Lingua* 96. 245-266.

Bošković, Željko. 2001. *On the nature of the syntax-phonology interface*: Cliticization and related phenomena. Amsterdam, Elsevier.

Bošković, Željko. 2004. Clitic placement in South Slavic. *Journal of Slavic Linguistics* 12. 37-90.

Browne, Wayles. 1974. On the problem of clitic placement in Serbo-Croatian. In Richard Brecht and Catherine V. Chivany, *Slavic transformational syntax,* 36-52. University of Michigan.

Browne, Wayles. 2004. Serbo-Croatian enclitics for English speaking learners. *Journal of Slavic Linguistics* 12. 249-283.

Chomsky, Noam. 2000. Minimalist inquiries. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89-155. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1-52. Cambridge, MA: MIT Press. [Chomsky, Noam. 1999. Derivation by phase. *MIT Occasional Papers in Linguistics 18*].

Comrie, B. 1981. Language universals and linguistic typology: Syntax and morphology. University of Chicago Press, Chicago.

Dimitrova-Vulchanova, Mila. 1995. Clitics in Slavic. Studia Lingusitica 49. 54-92.

Dobashi, Yoshihito. 2003. Phonological phrasing and syntactic derivation. Ithaca, NY: Cornell University dissertation.

Franks, Steven and Ljiljana Progovac. 1994. On the placement of Serbo-Croatian clitics. In G. Fowler, H. Cooper, and J. Ludwig, (eds*.), Proceedings of the 9th Biennial Conference on Balkan and South Slavic Linguistics, Literature and Folklore*, Vol. 7, 69-78. Indiana Slavic Studies, Bloomington.

Franks, Steven. 1998. Clitics in Slavic. Paper presented at the Comparative Slavic Morphosyntax Workshop, Indiana University, Bloomington.

Gračanin-Yuksek, Martina. 2016. Size matters: The syntax of disjunctive questions. *Linguistic Inquiry* 47(2).283-305.

Halpern, Aaron. 1992. Topics in the placement and morphology of clitics. Doctoral dissertation, Stanford University.

Inkelas, Sharon and Draga Zec. 1988. Serbo-Croatian Pitch Accent: The interaction of tone, stress, and intonation. *Language* 64 (2). 227-248.
Kahnemuyipour, Arsalan. 2004. The syntax of sentential stress. Toronto, Canada: University of Toronto dissertation.
Kahnemuyipour, Arsalan. 2009. The syntax of sentential stress. Oxford: Oxford University Press.
Kayne, Richard S. 1994. The antisymetry of syntax. Cambridge, MA: MIT Press.
King, T. H. 1996. Slavic clitics, long head movement, and prosodic inversion. Journal of Slavic Linguistics 4. 274-311.
Kratzer, Angelika and Elisabeth Selkirk. 2007. Phase theory and prosodic spellout: The case of verbs. *The Linguistic Revew* 24. 93-135.
Progovac, Ljiljana. 1996. Clitics in Serbian/Croatian: Comp as the second position. In Aaron Halpern and Arnold Zwicky (eds.), *Approaching second: Second position clitics and related phenomena*, 411-428. Stanford, CA: CSLI Publications.
Rivero, María Luisa. 1993. Bulgarian and Serbo-Croatian yes-no questions: V raising to *li* versus *li* hopping. *Linguistic Inquiry* 24. 567-575.
Radanović-Kocić, Vesna. 1988. The grammar of Serbo-Croatian clitics: A synchronic and diachronic perspective. Doctoral dissertation, University of Illinois.
Radanović-Kocić, Vesna. 1996. Placement of Serbo-Croatian clitics: A prosodic approach. In A. Halpern & A. Zwicky (eds.), *Approaching second: Second position clitics and related phenomena*, 429-445. Stanford, CA: CSLI.
Roberts, Ian. 1994. Second position effects and agreement in Comp. Formal Approaches to Slavic Linguistics (FASL) 3.
Sato, Yosuke and Yoshihito Dobashi. 2016. Prosodic phrasing and the that-trace effect. *Linguistic Inquiry* 47(2). 333-349.
Sato, Yosuke. 2012. Phonological interpretation by phase: Nuclear stress, domain encapsulation and edge sensitivity. In Ángel Gallego (ed.), *Phases: Developing the framework*, 283-308. Berlin: Mouton de Gruyter.
Schütze, Carson. 1994. Serbo-Croatian second position clitic placement and the phonology-syntax interface. *MIT Working Papers in Linguistics* 21. 373-473.
Selkirk, Elisabeth. 1996. The prosodic structure of function words. In K. Demuth and J. Morgan (eds.), *Signal to Syntax: Bootstrapping from speech to grammar in early acquisition, 187-213.* Lawrence Erlbaum.
Stjepanović, Sandra. 1998. On the placement of Serbo-Croatian clitics: Evidence from VP ellipsis. *Linguistic Inquiry* 29. 527-537.
Werle, Adam. 2009. *Word, Phrase, and Clitic Prosody in Bosnian, Serbian, and Croatian.* Amherst, MA: University of Massachusetts dissertation.
Wilder, Chris and Damir Ćavar. 1994. Long head movement? Verb movement and cliticization in Croatian. *Lingua* 93. 1-58.