

## Pronominal licensing in SC

Ivana Jovović (UConn): [ivana.jovovic@uconn.edu](mailto:ivana.jovovic@uconn.edu)

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### 1 Introduction

- My starting point is the binding contrast between Serbo-Croatian (SC) and English in (1-2): the ungrammaticality of co-indexed pronouns in SC (1) is attributed to a Condition B violation by Despić (2013, 2011).<sup>1</sup>

(1) [<sub>NP</sub> **Kusturicin**<sub>1</sub> [najnoviji film]] (\**ga*<sub>1</sub>) je zaista razočarao (\**njega*<sub>1</sub>). SC

Kusturica's latest movie is him<sub>CL</sub>. really disappointed him<sub>STR.PRN</sub>.

[intended] 'Kusturica's latest movie really disappointed him<sub>1</sub>'.

(2) [<sub>DP</sub> **Kusturica**<sub>1</sub>'s [latest movie]] really disappointed *him*<sub>1</sub>. English

- I will argue that (1) is *not* a binding violation and show that co-indexed readings of pronouns in (1) depend on pragmatic notions like topic/focus interpretation of the antecedent, rather than the categorial status of the traditional NP (TNP) in SC.
- In fact, the categorial status of the TNP is irrelevant here.
- I will establish novel discourse conditions regarding when co-indexed pronouns in SC are licensed:
  - co-indexed readings of weak/clitic pronouns are allowed if the antecedent is a discourse topic.
  - co-indexed readings of strong pronouns depend on focus, in more than one way.

### 2 Despić's (2013, 2011) argument in a nutshell

- Bošković (2012, 2008): presence or absence of articles in a language is not merely a PF phenomenon but corresponds to an important structural difference.
  - languages fall into two broad types – those in which the TNP includes a DP layer (like English) and those in which it does not (SC).<sup>2</sup>
- Despić (2011, 2013) (see also Franks 2019) argues that the binding contrast in (1-2) provides further support for Bošković's (2012, 2008) NP/DP analysis:
  - The presence of a DP projection in English is assumed to prevent the antecedent from c-commanding the pronoun, hence the coindexation is allowed in (2).

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<sup>1</sup> Note that Despić assumes a non-focused interpretation for the pronoun in (1a). As will be discussed later, focus on pronouns can affect binding relations in important ways. Clitics in SC occur in the second position of their intonational phrase, hence the difference in the placement of the pronominal element in (1) (see Bošković 2001).

<sup>2</sup> On the NP/DP analysis, see also Fukui 1988, Corver 1992, Zlatić 1997, Chierchia 1998, Cheng & Sybesma 1999, Willim 2000, Baker 2003, Marelj 2011, Despić 2011, 2013, Takahashi 2011, Talić 2017, Zanon 2015, among many others).

→ SC lacking the DP layer, the antecedent c-commands out of the subject phrase, causing a Condition B violation in (1)

- Thus, the possibility of co-indexed readings of pronouns in (1-2) boils down to the categorial status of the nominal containing the antecedent in Despić's account.

### 3 Discourse constraints on co-indexed pronouns

#### 3.1 Why antecedents matter

- Consider (3-5): strong & clitic pronouns are allowed in (4B-5B) respectively, in contrast to (3B), where both are ruled out.
- If (3B) is ungrammatical because of Condition B, then no pronoun should be allowed in (4B-5B) either since the latter are structurally identical to (3B).
- The crucial factor determining the interpretive possibilities for pronouns in (3B-5B) is actually the discourse status of the antecedent, as specified by context questions given in (3A-5A).

(3) A: *Who did Kusturica's latest movie disappoint?*

B: **Kusturicin**<sub>1</sub> najnoviji film (\**ga*<sub>1</sub>) je razočarao (\**njega*<sub>1</sub>)

Kusturica's latest movie him<sub>CL</sub> is disappointed him<sub>STR.PRN</sub>.

[intended] 'Kusturica<sub>1</sub>'s latest movie disappointed him<sub>1</sub>.

(4) A: *Who was disappointed by what?*

B: **Kusturicin**<sub>1</sub> najnoviji film (✓*ga*<sub>1</sub>) je razočarao (✓*njega*<sub>1</sub>)

Kusturica's latest movie him<sub>CL</sub> is disappointed him<sub>STR.PRN</sub>.

'Kusturica<sub>1</sub>'s latest movie disappointed him<sub>1</sub>.'

(5) A: *What about Kusturica? I know directors usually admire their own movies – is he like that?*

B: **Kusturicin**<sub>1</sub> najnoviji film (✓*ga*<sub>1</sub>) je razočarao (\**njega*<sub>1</sub>). Na ostale je ponosan.

Kusturica's latest movie him<sub>CL</sub> is disappointed him<sub>STR.PRN</sub>. On rest is proud

'Kusturica<sub>1</sub>'s latest movie disappointed him<sub>1</sub>. He is proud of the others.'

- Consider first how co-indexed strong pronouns are licensed.
- In (4B), the antecedent of the pronoun represents new information focus as the NP containing it corresponds to the *wh*-constituent provided in the context question in (4A) (the so-called *question-answer congruence test*, Büring 2005: 4).  
→ the relevant interpretation of the strong pronoun is allowed here, as opposed to (3B) and (5B)
- The antecedent in (3B) and (5B) is *not* new information focus:  
→ it represents discourse-given information in (3B) (see (3A))

→ in (5B), it functions as a discourse topic/aboutness phrase, as the *What about X?* test applied in (5A) forces this topic construal (Reinhart 1981)

- Strong co-indexed forms are licensed by antecedents that are new information focus!
- New information focus licenses the strong form only if placed on the antecedent, not on the pronoun itself, as is the case in (3B) where the strong pronoun also bears main sentential stress.
- Importantly, it is only new information focus antecedents that can license the co-indexed strong form – contrastively focused antecedents cannot do so (6B):<sup>3</sup>

(6) A: *Kusturica's latest movie disappointed Sijan.*

B: Ne. \*SIJANOV<sub>1</sub> najnoviji film je razočarao *njega*<sub>1</sub>.

No. Sijan's latest movie is disappointed him<sub>STR.PRN.</sub>

'No. Sijan's latest movie disappointed him.'

- However, contrastive focus on the pronoun itself licenses the relevant interpretation (7B):

(7) A: *Did Kusturica's latest movie disappoint his sister?*

B: Ne. Kusturicin<sub>1</sub> najnoviji film je razočarao **NJEGA**<sub>1</sub>.

No. Kusturica's latest movie is disappointed him<sub>STR.PRN.</sub>.

'No. Kusturica<sub>1</sub>'s latest movie disappointed him<sub>1</sub> (not his sister).'

- Co-indexed clitics, on the other hand, require antecedents that are discourse topics, hence the clitic in (5B) is grammatical under the intended interpretation.  
→ the discourse topic in (3B) is the entire NP, not just the antecedent *Kusturica*, and the co-indexed clitic is disallowed.<sup>4</sup>

### Interim summary

- I showed that the availability of co-indexed readings of pronouns in cases like (1) depend on topic/focus interpretation of the antecedent in the following manner:
  - co-indexed strong pronouns are allowed if the antecedent is new information focus (if no appropriate antecedent is available, co-indexing is possible if the pronoun bears contrastive focus);
  - co-indexed clitics are allowed if the antecedent is a discourse topic.

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<sup>3</sup> Small capital letters mark contrastive focus.

<sup>4</sup> Note, however, that the clitic in (3B) is ruled out even when not co-indexed with the possessor. As prosodically weak elements which cannot bear stress, clitics are incompatible with new information focus (hence, they are also ruled out in (4B)): SC being a nuclear stress rule (NSR) language, the part of the sentence representing neutral new information focus obligatorily surfaces sentence-finally, following the presupposed material, and bearing the main sentential stress (see Stjepanović 1999). This clashes with two key properties of clitics – as a second position element, the clitic cannot appear sentence-finally and, as a prosodically weak element, it cannot be contrastively focused either.

- Thus, depending on the above discourse conditions, co-indexed pronouns in configurations like Despić's (1) above can in fact be allowed, which is crucially unexpected if (1) were a Condition B effect (true Condition B violations cannot be ameliorated by discourse factors).

### 3.2 Strong and weak pronouns in English

- I will show that co-indexed pronouns in configurations parallel to Despić's (2) above are not always grammatical despite Condition B not being an issue here.<sup>5</sup>
- English pronouns also show sensitivity to the discourse properties of their antecedents in such cases, on a par with SC pronouns.
- Consider (8-9):

(8) A: *What about John? Who disappointed him?*

B: John<sub>1</sub>'s friends disappointed **him**<sub>1</sub>.

(9) A: *Who disappointed who?*

B: \*John<sub>1</sub>'s friends disappointed **him**<sub>1</sub>.

B': John<sub>1</sub>'s friends disappointed **HIM**<sub>1</sub>.

- As indicated by the context question in (8A), the antecedent of the pronoun in (8B) is a topic and the relevant interpretation is allowed.
- If the antecedent is new information focus, as in (9B), the co-indexed pronoun is disallowed unless the pronoun bears stress, as in (9B').  
 → unstressed English pronouns pattern with SC clitics: they can only be co-indexed with topic antecedents (cf. (8B-9B));  
 → stressed ones parallel SC strong pronouns: they require new information focus antecedents (9B') (a co-indexed stressed pronoun in contexts like (8A) must be disjoint from the topic antecedent)
- Comparing the two:

(10) A: *What about John? Who disappointed him?*

B: John<sub>1</sub>'s friends disappointed **him**<sub>1</sub> / \***HIM**<sub>1</sub>

SC in this context: **ga**<sub>1</sub> / \***njega**<sub>1</sub> / \***NJEGA**<sub>1</sub>

(11) A: *Who disappointed who?*

B: John<sub>1</sub>'s friends disappointed **HIM**<sub>1</sub> / \***him**<sub>1</sub>

SC in this context: **NJEGA**<sub>1</sub> / **njega**<sub>1</sub> / \***ga**<sub>1</sub>

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<sup>5</sup> Recall the assumption that the possessor in such cases does not c-command the pronoun in English (Despić 2011, based on Kayne 1994).

(12) A: *Did John's friends disappoint his sister?*

B: No, John<sub>1</sub>'s friends disappointed **HIM**<sub>1</sub> / \***him**<sub>1</sub>.

SC in this context: **NJEGA**<sub>1</sub> / \***njega**<sub>1</sub> / \***ga**<sub>1</sub>

- The observed parallelism indicates that that English also has a weak/strong split in its pronominal system, at least for its object pronouns.
- Support from Bošković (1997, 2004):  
**Bošković (1997)** argues *wager*-class verbs can only ECM elements analyzable as X<sup>0</sup>s, i.e. clitics. As a result, they cannot ECM coordinated pronouns (14), since clitics cannot be coordinated (cf. French (15)). Also, the pronoun in (13) must be unstressed.

(13) Mary alleged **him** to have kissed Jane.

(14) \*Mary alleged **him and her** to have kissed Jane

(15) \*Je **le et la** rencontre tous les jours.

I him and her meet all the days

[intended] 'I meet him and her every day.'

**Bošković (2004)**: Quantifier-float in (17) is licensed by clitic movement. Contrastively focused and coordinated object pronouns (i.e. non-clitics) cannot float a quantifier (18-19):

(16) \*Mary hates the students all.

(17) Mary hates **them** all. (Bošković 2004: 706)

(18) \*Mary hates **THEM** all.

(19) \*Mary hates **you, him and her** all. (Bošković 2004: 708)

→ *But why does the initial contrast in (1-2) hold?*

- The way stress assignment works in SC and English respectively is crucial for the interpretation of pronouns in this case.
- Consider a modified version of (1-2), given in (20) (I am focusing on SC strong forms):<sup>6</sup>

(20) a. \*Kusturicin<sub>1</sub> papagaj je ujeo **njega**<sub>1</sub>.

Kusturica's parrot is bit him<sub>STR.PRN</sub>.

'Kusturica<sub>1</sub>'s parrot bit him<sub>1</sub>.'

b. Kusturica<sub>1</sub>'s parrot bit **him**<sub>1</sub>.

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<sup>6</sup> The reason I modified Despić's examples in (1-2) above is because they are very odd pragmatically. Namely, the choice of the verb *to disappoint* creates an additional presupposition which makes the intended coreference pragmatically implausible (unless the context is further specified).

- In SC, the main sentential stress (assigned by the NSR) and neutral new information focus align: the most deeply embedded element is stressed (by the NSR) and interpreted as (neutral) new information focus.<sup>7</sup>
- The output of the NSR does not always align with focus structure in English (Zubizaretta 1998).<sup>8</sup>  
→ the pronoun placement in (20a) leads the speaker to perceive and interpret the pronoun as new information focus, and accordingly build a context that forces such interpretation (in this case, *Who did Kusturica's parrot bite?*), hence the ungrammaticality.<sup>9</sup>  
→ this is not the case in (20b) – without a specific context, the main stress falls on the verb rather than the pronoun (Zubizaretta 1998).
- Italian behaves like SC with respect to the NSR (see Cinque 1993, Zubizaretta 1998 for more details):  
(21) \*Il pappagallo di Gianni<sub>1</sub> ha colpito *lui*<sub>1</sub>.  
the parrot of John's has bit him<sub>STR.PRN</sub>.  
[intended] 'John<sub>1</sub>'s parrot bit him<sub>1</sub>.'  
→ Italian is a DP language – the ill-formedness of (21) not predicted under Despić's analysis.

### Interim summary

- Co-indexed readings of pronouns in (1-2) crucially depend on the discourse properties of the antecedent.
- Coindexation in principle possible even when under the analysis proposed in Despić, the pronoun is c-commanded by a local antecedent (1), and it can be disallowed when the antecedent does not c-command the pronoun (2).

### 4 Apparent & real Condition B effect

- Comparing (1) (repeated here as (22)) with traditional Condition B effect (23):

(22) a. \*[<sub>NP</sub> Kusturicin<sub>1</sub> [najnoviji [film]]] je zaista razočarao *njega*<sub>1</sub>.

Kusturica's latest film is really disappointed him<sub>STR.PRN</sub>

b. \*[<sub>NP</sub> Kusturicin<sub>1</sub> [najnoviji [film]]] *ga*<sub>1</sub> je zaista razočarao.

Kusturica's latest movie him<sub>CL</sub> is really disappointed

<sup>7</sup> SC being a free word order language, there are independently available movement operations that can affect elements which do not bear new information focus, leaving elements bearing new information focus in the sentence final position (see Stjepanović 1999).

<sup>8</sup> In fact, certain types of phonologically realized constituents, including defocalized and anaphoric elements, may be invisible to the NSR in English (see Bresnan 1972, Zubizaretta 1998 for more details).

<sup>9</sup> The issue does not arise if the pronoun is not in sentence final position and does not receive main sentential stress, as in (i) below.

(i) Kusturicin<sub>1</sub> najnoviji film je zaista razočarao *njegovog*<sub>1</sub> prijatelja.

Kusturica's latest movie is really disappointed his friend

'Kusturica<sub>1</sub>'s latest movie really disappointed his<sub>1</sub> friend.'

[intended] Kusturica<sub>1</sub>'s latest movie really disappointed him<sub>1</sub>.

(23) a. \*Kusturica<sub>1</sub> je razočarao *njega*<sub>1</sub>.

Kusturica is disappointed him<sub>STR.PRN.</sub>

b. \*Kusturica<sub>1</sub> *ga*<sub>1</sub> je razočarao.

Kusturica him<sub>CL.</sub> is disappointed

[intended] 'Kusturica disappointed himself.'

- (23) cannot be repaired in the ways shown above for (22) (cf. (24-4), (25-7), (26-5):

→ co-indexed strong pronouns disallowed even if the antecedent is new information focus (24) or if the pronoun is contrastively focused (25);

→ topic antecedents cannot license co-indexed clitics (26)

(24) A: *Who disappointed who?*

B: \*Kusturica<sub>1</sub> je razočarao *njega*<sub>1</sub>.

\*STR.PRN.

Kusturica is disappointed him<sub>STR.PRN.</sub>

[intended] 'Kusturica disappointed himself.'

(25) A: *What about Kusturica? Did he disappoint his sister?*

B: \*Ne. Kusturica<sub>1</sub> je razočarao *njega*<sub>1</sub>/NJE<sub>GA</sub><sub>1</sub>.

\*STR.PRN.

No. Kusturica is disappointed him<sub>STR.PRN.</sub>/him<sub>FOC.</sub>

[intended] 'No. Kusturica disappointed himself.'

(26) A: *What about Kusturica? I know that directors usually admire themselves and their own work – is he like that?*

B: \*Ne. Kusturica<sub>1</sub> *ga*<sub>1</sub> je razočarao.

\*CL.

No. Kusturica him<sub>CL.</sub> is disappointed

[intended] 'No. Kusturica disappointed himself.'

→ clear-cut contrast between cases of possessor binding (22) & traditional Condition B cases (23) where the antecedent is not a possessor.

- More evidence:

(27) a. Njegov<sub>1</sub> otac *ga*<sub>1</sub> smatra glupim.

✓CL.

His father him<sub>CL.</sub> considers stupid

'His<sub>1</sub> father considers him<sub>1</sub> stupid.'

b. \*On<sub>1</sub> *ga*<sub>1</sub> smatra glupim.

\*CL.

He him<sub>CL.</sub> considers stupid [intended] 'He<sub>1</sub> considers him<sub>1</sub> stupid.'

(G. Cinque, p.c.)

## 5 Evidence from intersentential anaphora

- The same discourse constraints on co-indexed pronouns in (1) also hold in cases of intersentential anaphora, where Condition B is clearly not at issue.
- Strong pronouns must be disjoint from topic antecedents even though the two are not in a c-command relationship – only weak pronouns are felicitous in such cases (28-29):<sup>10</sup>

(28) A: *What about John<sub>1</sub>?*

B: Marija je čula da se **pro**<sub>1</sub> / ??**on**<sub>1</sub> preselio u Minhen.

Marija is heard that *se*<sub>REF.CL.</sub>*pro* / *he*<sub>STR.PRN.</sub> moved in Munich.

‘Mary heard that he<sub>1</sub> moved to Munich.’

(29) A: *What about John<sub>1</sub>?*

B: Marija je čula da *pro* su **ga**<sub>1</sub> / ??**njega**<sub>1</sub> uhapsili juče.

Mary is heard that *pro* are *him*<sub>CL.</sub> / *him*<sub>STR.PRN.</sub> arrested yesterday

‘Mary heard that they arrested him<sub>1</sub> yesterday.’

- The antitopicality ban on strong pronouns holds even if the topical antecedent is strongly preferred by the background context (30).

→ co-indexing only possible with the new information focus antecedent (*Maša*)<sup>11</sup>

→ weak pronoun must be used for coreference with the topic antecedent (*Marija*)

(30) A: *Every weekend Marija invites a colleague from work to her place. Do you know who she invited for dinner today?*

B: Danas je [Marija<sub>1</sub>]<sub>TOP</sub> ugostila [Mašu<sub>2</sub>]<sub>FOC</sub>. **Ona**<sub>2/\*1</sub> je napravila veliki nered praveći salatu!

Today is Marija invited Maša. She<sub>STR.PRN.</sub> is made big mess making salad

‘Today, Mary<sub>1</sub> invited Maša<sub>2</sub>. She<sub>2</sub> made a big mess making a salad!’

- If we move *Maša* to a position where it can no longer receive main stress (by the NSR) and is interpreted as given (the so-called *defocalized phrase scrambling* (Stjepanović 1999)), the antecedent possibilities for the strong pronoun flip:

→ the pronoun can only refer to *Marija*, which is now interpreted as new information focus by virtue of being sentence-final (31):

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<sup>10</sup> SC strong pronouns parallel German *d*-(emonstrative) pronouns in this respect. Unlike personal pronouns, *d*-pronouns in German are argued to carry an antitopicality presupposition that bans them from co-referring with topical antecedents (see Bosch, Rozario and Zhao 2003, Bosch and Umbach 2007, Hinterwimmer 2015). The same behavior has been observed for pronouns in Dutch (see Kaiser 2011, a.o.) and Finnish (Kaiser and Trueswell 2008).

<sup>11</sup> Recall that if part of a sentence is new information focus, the focused element, whatever it is, must be in the sentence final position, following the presupposed material and bearing the main sentential stress.

(31) A: *Every weekend Maša gets invited for dinner by a colleague from work. Do you know who is hosting her today?*

B: Danas je [Mašu<sub>2</sub>] ugostila [Marija<sub>1</sub>]<sub>FOC</sub>. *Ona*<sub>1/\*2</sub> je napravila veliki nered praveći salatu!

Today is Maša<sub>ACC</sub> invited Marija<sub>NOM</sub>. She<sub>STR.PRN.</sub> is made big mess making salad

'Today, Mary<sub>1</sub> invited Maša<sub>2</sub>. She<sub>1</sub> made a big mess making a salad!'

- Defocalized phrase scrambling provides direct evidence that SC strong pronouns require new information focus antecedents (cf. 30-31).
- In that regard, they function as *topic-shift anaphors* (Givón 1983, Van Kampen 2004), taking focused antecedents and turning them into new topics.<sup>12</sup>
- By contrast, co-indexed weak pronouns have a pragmatic role of marking *topic continuity* rather than topic-shift.

### Interim summary

- The same discourse conditions on co-indexed pronouns hold in cases like (1) as well as in cases of intersentential anaphora, where Condition B is not at issue in the first place.
- Cases of possessor binding as Despić's (1) above can be allowed provided that the discourse conditions are satisfied.
- Traditional Condition B cases (where the antecedent is not a possessor) cannot be rescued in any way.
- Thus, (1) should not be analyzed as a Condition B violation.

### 6 Third way of licensing co-indexed strong pronouns

- The availability of co-indexed readings of strong pronouns in SC was shown to depend on focus such that the relevant interpretation is allowed only if the antecedent of the pronoun represents new information focus or if the pronoun bears contrastive focus.
- However, contrastive focus on elements other than the pronoun can also license the strong form.
- Consider (32) below:

(32) A: *What did Marija do yesterday?*

B: **Marija**<sub>1</sub> je juče dobila dobru ideju. *Ona*<sub>1</sub> uvijek ima najbolje ideje!

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<sup>12</sup> However, the above discourse requirements on different types of pronouns in SC hold only in cases where both forms are in principle available; if no such alternation exists even in principle (e.g. coordination, PPs), strong forms can be co-indexed with topic antecedents (i). Thus, the topic-shift function of strong pronouns should also be relativized to the presence of alternative, weaker forms.

(i) A: *What about Kusturica? Who hates him?*

B: Kusturicini<sub>1</sub> prijatelji mrze [*njega*<sub>1</sub> i njegovu porodicu].

Kusturica's friends hate him<sub>STR.PRN.</sub> and his family

'Kusturica<sub>1</sub>'s friends hate him<sub>1</sub> and his family.'

Marija is yesterday got good idea. She<sub>STR,PRN</sub> always has best ideas

‘Yesterday **Marija**<sub>1</sub> had a good idea. **She**<sub>1</sub> always has the best ideas!’

- The grammaticality of the co-indexed strong pronoun in (32) is surprising – neither the pronoun nor the antecedent is focused (in fact, the antecedent is a topic in this case!).
- However, the adverb *always* is focused.
- If focus on the adverb is what licenses the strong form in (32), it is predicted that weak pronouns would be degraded in (32), on a par with the cases discussed above where focus was placed either on the pronoun or on the antecedent.
- Borne out: weak pronouns not possible in such cases (cf. (32-33)).<sup>13</sup>

(33) **Marija** je juče dobila odličnu ideju. ?\*Uvijek **pro** ima najbolje ideje!

Marija is yesterday got excellent idea. Always *pro* has best ideas

‘Yesterday **Marija**<sub>1</sub> got an excellent idea. **She**<sub>1</sub> *always* has the best ideas!’

- Not only focus on adverbs, but also focus on other arguments (34-35):<sup>14</sup>

(34) a. **Marija**<sub>1</sub> je prilično rezervisana osoba. **Ona**<sub>1</sub> se *samo* Petru povjerava.

Marija is pretty reserved person. She<sub>STR,PRN</sub> *se*<sub>REF,CL</sub> only Petar<sub>DAT</sub> confides.in

b. **Marija**<sub>1</sub> je prilično rezervisana osoba. ??**pro**<sub>1</sub> *samo* Petru se povjerava

Marija is pretty reserved person. *pro* only Petar<sub>DAT</sub> *se*<sub>REF,CL</sub> confides.in

‘**Marija**<sub>1</sub> is a pretty reserved person. **She**<sub>1</sub> confides in Petar *only*.’

(35) a. **Marija**<sub>1</sub> je prilično rezervisana osoba. *Samo* Petar **nju**<sub>1</sub> poznaje.

Marija is pretty reserved person. Only Petar *her*<sub>STR,PRN</sub> knows.

b. **Marija**<sub>1</sub> je prilično rezervisana osoba. ?? *Samo* Petar **je**<sub>1</sub> poznaje.

Marija is pretty reserved person. Only Petar *her*<sub>CL</sub> knows

‘**Marija**<sub>1</sub> is a pretty reserved person. *Only* Peter knows **her**<sub>1</sub> well.’

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<sup>13</sup> The same effect is observed for pronouns in object positions.

<sup>14</sup> Focus on verbs, as in (i), has the same effect. Additionally, as pointed out to me by W. Browne, focusing the entire sentence can also license the strong form. This is shown in (ii), where the strong form co-indexed with the topic antecedent (note that the pronoun is not interpreted contrastively here) is preferred over the weak one.

(i) A: **Marija**<sub>1</sub> još radi na tom projektu.

Marija still works on that project

‘Marija is still working on that project.’

B: Ne. **Ona**<sub>1</sub> je ODUSTALA od tog projekta.

No. She<sub>STR,PRN</sub> is given.up. from that project

‘No. She has given up on that project.’

(ii) A: *Milan promised to help us build a tree house next week.*

B: [Znam (??**ga**<sub>1</sub>) ja **njega**<sub>1</sub>]<sub>FOC</sub> Ta ljenština ništa džabe u životu nije uradila.

know him<sub>CL</sub> I him<sub>STR,PRN</sub> that sloth nothing for.free in life not done

‘I know him very well. That sloth did nothing for free in his entire life.’

- In line with cases like (1) above, if the antecedent is a topic, the strong pronoun is licensed by focus – this time on an element other than the pronoun itself!
- The above data provide additional evidence that focus is crucial for licensing of strong pronouns – they in fact add another way in which focus can facilitate co-indexed readings of strong pronouns.

### Interim summary

- In addition to contrastive-focus-on-the-pronoun effect discussed earlier, contrastively focused adverbs/arguments can also license the strong form.
- Conditions on licensing of strong co-indexed pronouns in SC:  
*A strong co-indexed pronoun is licensed by focus in the following ways:*
  - (a) the antecedent is new information focus (Sec. 3&4);
  - (b) the pronoun is contrastively focused (Sec. 3);
  - (c) another element is contrastively focused (Sec. 6).
- The grammaticality of co-indexed weak pronouns was shown to depend on the topic interpretation of the antecedent.
- These diverging antecedent requirements for weak and strong pronouns in SC yield different pragmatic effects – while the former mark topic continuity, the latter have a topic-shift function.

### 7 Discourse constraints on cataphora

- The structural account of the sort proposed by Despić (2013, 2011) cannot satisfactorily explain the SC data like (36) below.
- Despić (2013, 2011): (36) is a Condition C violation.

(36) \*[<sub>NP</sub> *Njegov*<sub>1</sub> [<sub>NP</sub> najnoviji film]] je zaista razočarao **Kusturicu**<sub>1</sub>.

His latest movie is really disappointed Kusturica

[intended] ‘His<sub>1</sub> latest movie really disappointed Kusturica<sub>1</sub>.’

- Despić's (2013, 2011) account predicts that cases like (36) would be grammatical in a DP language.
- However, consider English data in (37-38) (from Kuno 1972: 303):

(37) A: *Who visited John and Mary?*

*John = old information*

B: **His**<sub>1</sub> brother visited **John**<sub>1</sub>, but no one visited Mary.

(38) A: *Who visited who?*

*John = new information*

B: \***His**<sub>1</sub> brother visited **John**<sub>1</sub>.

- (38B) cannot be a Condition C violation since the pronoun is assumed not to c-command the R-expression.
- Applying the same test to SC (36):

(39) A: *Who visited Jovan and Marija?*

*Jovan = old information*

B: *Njegov*<sub>1</sub> brat je posjetio **Jovana**<sub>1</sub>, ali niko nije posjetio Mariju.

His brother is visited Jovan<sub>ACC</sub>. but no.one not visited Marija<sub>ACC</sub>.

'His<sub>1</sub> brother visited Jovan<sub>1</sub>, but no one visited Marija.'

(40) A: *Who visited who?*

*Jovan = new information*

B: \**Njegov*<sub>1</sub> brat je posjetio **Jovana**<sub>1</sub>, ali niko nije posjetio Mariju.

His brother visited Jovan<sub>ACC</sub>. but no.one not visited Marija<sub>ACC</sub>.

[intended] 'His<sub>1</sub> brother visited Jovan<sub>1</sub>, but no one visited Marija.'

→ backwards pronominalization/cataphora is licensed only if the referent of the pronoun represents discourse-given information (37-39), not if it is new information (38-40).

→ the violation in SC (36) above is not due to a constraint on R-expressions (i.e. Condition C), but discourse constraints on cataphora (i.e. co-indexed pronouns in backwards pronominalization)!

- Evidence from Bulgarian:

(41) \*[<sub>DP</sub> [<sub>DP</sub> D [<sub>NP</sub> *Negovijat*<sub>1</sub> [<sub>NP</sub> papagal]]]] uxapa **Ivan**<sub>1</sub> včera.

His parrot bit Ivan yesterday

[intended] 'His<sub>1</sub> parrot bit Ivan<sub>1</sub> yesterday.'

(Franks 2019: 73)

- The violation in (41) can be rescued by clitic doubling (42) (from Franks 2019, fn. 19):

(42) [<sub>DP</sub> [<sub>DP</sub> D [<sub>NP</sub> *Negovijat*<sub>1</sub> [<sub>NP</sub> papagal]]]] **go**<sub>1</sub> uxapa **Ivan**<sub>1</sub> včera.

His parrot him<sub>CL</sub> bit Ivan yesterday

'His<sub>1</sub> parrot bit Ivan<sub>1</sub> yesterday.'

- Rudin (1997): for clitic doubling to be licensed in Bulgarian, the doubled arguments must necessarily be topics (i.e. the aboutness phrases).

→ the availability of backwards pronominalization does not correlate with the presence or absence of c-command between co-indexed elements.

### 7.1 Real & apparent Condition C

- Clear Condition C violations in SC cannot be rescued in the manner indicated above (cf. (39-43)):

(43) A: *Who disappointed Jovan?*

*Jovan = old information*

B: \**On*<sub>1</sub> je razočarao **Jovana**<sub>1</sub>.

He is disappointed Jovan

lit. 'He<sub>1</sub> disappointed Jovan<sub>1</sub>.'

- Clear Condition C cases cannot be improved by fronting, contrary to (36) (cf. (36-44), (43-45)):<sup>15</sup>

(44) [**Kusturicu**<sub>1</sub>]<sub>i</sub> je *njegov*<sub>1</sub> najnoviji film zaista razočarao *t*<sub>i</sub>.

Kusturica<sub>ACC</sub>. is his latest movie really disappointed *t*

'His<sub>1</sub> latest movie really disappointed Kusturica<sub>1</sub>.'

(45) \***[Jovana]**<sub>1</sub><sub>i</sub> je *on*<sub>1</sub> razočarao *t*<sub>i</sub>.

Jovan<sub>ACC</sub>. is he disappointed *t*<sub>i</sub>

[intended] 'He<sub>1</sub> disappointed Jovan<sub>1</sub>.'

→ SC (36) is not a Condition C violation!

- Chomsky's (1981) definition of Condition C:

*A non-pronominal definite description must be disjoint in reference from a DP that c-commands it.*

- If (36) is a Condition C violation, why is (46) grammatical?<sup>16</sup>

(46) Kusturicin<sub>1</sub> najnoviji film je zaista razočarao Kusturicu<sub>1</sub>.

Kusturica's latest movie is really disappointed Kusturica

'Kusturica<sub>1</sub>'s latest movie really disappointed Kusturica<sub>1</sub>.'

- On the other hand, (47) (i.e. a non-possessor case) is expectedly grammatical:

(47) \*Kusturica<sub>1</sub> je zaista razočarao Kusturicu<sub>1</sub>.

Kusturica is really disappointed Kusturica

lit. 'Kusturica<sub>1</sub> disappointed Kusturica<sub>1</sub>.'

- Back to Bulgarian:

Clear Condition C cases in Bulgarian (48) cannot be rescued by clitic doubling (49) (cf. (42-49)):

(48) \***Toi**<sub>1</sub> misli će papagalāt uxapa **Ivan**<sub>1</sub> včera.

he thinks that parrot.def bit Ivan yesterday

[intended] 'He<sub>1</sub> thinks that the parrot bit Ivan<sub>1</sub> yesterday.'

(49) \***Toi**<sub>1</sub> misli će papagalāt **go**<sub>1</sub> uxapa **Ivan**<sub>1</sub> včera.

he thinks that parrot.def. him.CL. bit Ivan yesterday

[intended] 'He<sub>1</sub> thinks that the parrot bit Ivan<sub>1</sub> yesterday.'

(I. Krapova, p.c.)

<sup>15</sup> Despić (2011: 73-75) also observes that fronting the R-expression makes examples like (36) acceptable and that such movement does not ameliorate clear Condition C cases like (43). (Despić suggests that (45) is actually a Condition B violation since the R-expression c-commands the pronoun from the moved position; however, it is then expected that (i) below, where the R-expression is embedded within the QP, should be grammatical, contrary to fact).

(i) \***[Pet Jovanovih**<sub>1</sub> prijatelja]<sub>i</sub> je **on**<sub>1</sub> razočarao *t*<sub>i</sub>.

Five Jovan's friends is he disappointed

[intended] 'He<sub>1</sub> disappointed five of Jovan<sub>1</sub>'s friends.'

<sup>16</sup> To account for the contrast between the ill-formed (36) and the well-formed (46), Despić (2011) adopts a more restricted version of Condition C proposed by Lasnik (1989) given in (i):

(i) An R-expression is pronoun-free.

→ Bulgarian (41) is not a Condition C violation!

### Interim summary

- Discourse constraints on backwards pronominalization similar to those relating to forward pronominalization discussed above – discourse properties of ‘antecedents’ relevant here as well!
- Identical possessor vs. non-possessor distinction
- Cases like SC (36) should not be analyzed as Condition C violations (Condition C violations cannot be rescued this way).

### 8 Conclusion

- I established novel discourse conditions on licensing co-indexed weak & strong pronouns in SC.
- Different antecedent requirements – weak pronouns require antecedents that are discourse topics, while the grammaticality of co-indexed strong forms depends on focus in more than one respect.
- Conditions on licensing of strong co-indexed pronouns in SC:
  - (i) *A co-indexed strong pronominal form is licensed:*
    - (a) if its antecedent bears new information focus
    - (b) if the pronoun is contrastively focused
    - (c) if another element in the same sentence as the pronoun bears contrastive focus
- The diverging antecedent requirements for weak/strong pronouns in SC yield different pragmatic effects – the former mark topic continuity, the latter have a topic-shift function.
- I also observed that English pronouns show similarities with SC strong and weak pronouns in terms of the above antecedent requirements.
- Against Condition B analysis of (1) proposed in Despić (2013, 2011):
  - discourse conditions on co-indexed pronouns hold both in cases like (1) and in cases of intersentential anaphora, where co-indexed elements are clearly not in a c-command relationship.
  - clear-cut contrast between cases of possessor binding and traditional Condition B configurations, where the antecedent is not a possessor – apparent & real Condition B!
- Apparent & real Condition C
- Discourse constraints on cataphora:
  - if the referent of the pronoun is discourse-given information, the coindexation is allowed in possessor cases
  - if the referent of the pronoun is new information, coindexation is disallowed in possessor cases

## References

- Baker, Mark. 2003. *Lexical categories: Verbs, nouns, and adjectives*. Cambridge: Cambridge University Press
- Bosch, Peter, Tom Rozario, and Yufan Zhao. 2003. Demonstrative pronouns and personal pronouns: German *der* vs. *er*. In *Proceedings of the eacl 2003 workshop on the computational treatment of anaphora*, 61-68. East Stroudsburg, PA: Association for Computational Linguistics.
- Bosch, Peter and Carna Umbach. 2007. Reference determination for demonstrative pronouns. In *Intersentential pronominal reference in child and adult language*. In Dagmar Bittner and Natalia Gargarina (eds.). *Zas Papers in linguistics* 48, 39-51. Berlin: ZAS.
- Bošković, Željko. 1997. *The syntax of nonfinite complementation: An economy approach*. Cambridge, Mass.: MIT Press.
- Bošković, Željko. 2001. *On the nature of the syntax-phonology interface: Cliticization and related phenomena*. Amsterdam: Elsevier Science.
- Bošković, Željko. 2004. Be careful where you float your quantifiers. *Natural Language and Linguistic Theory* 22: 681-742.
- Bošković, Željko. 2008. What will you have, DP or NP? In *Proceedings of NELS* 37:101-114.
- Bošković, Željko. 2012. On NPs and Clauses. In *Discourse and Grammar: From Sentence Types to Lexical Categories*. In G. Grewendorf, T.E. Zimmermann (eds.), 179-242. Berlin: Mouton de Gruyter.
- Bresnan, Joan. 1972. *Theory of complementation in English syntax*. PhD dissertation, MIT.
- Büring, Daniel. 2005. Towards a Typology of Focus Realization. Ms., UCLA.
- Chierchia, Gennaro. 1998. Reference to kinds across languages. In *Natural Language Semantics* 6: 339-405.
- Cheng, Lisa L.-S., and Rint Sybesma. 1999. Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30:509-542.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Cinque, Guglielmo. 1993. A Null Theory of Phrase and Compound Stress. *Linguistic Inquiry*, 24:239-298
- Corver, Norbert. 1992. Left branch extraction. In *Proceedings of NELS* 22: 67-84.
- Despić, Miloje. 2011. Syntax in the Absence of Determiner Phrase. PhD dissertation, UConn, Storrs.
- Despić, Miloje. 2013. Binding and the structure of NP in Serbo-Croatian. *Linguistic Inquiry*, 44(2): 239-270.
- Franks, Steven. 2019. Binding and Phasehood in South Slavic Revisited. *Studies in Polish Linguistics* 14 (2): 61-80.
- Fukui, Naoki. 1988. Deriving the differences between English and Japanese. *English Linguistics* 5: 249-270.
- Givón, Thomas. 1983. 'Topic continuity in discourse: the functional domain of switch reference.' In *Typological Studies in Language 2: Switch Reference and Universal Grammar*. In J. Haiman and P. Munro (eds.), 150-280. Amsterdam, Philadelphia: John Benjamins.
- Hinterwimmer, Stefan. 2015. A unified account of the properties of German demonstrative pronouns. In *NELS 40: Semantics Workshop on Pronouns*, ed. by Patrick Grosz, Prityy Patel-Grosz, and Igor Yanovich, 61-107. Amherst: University of Massachusetts, Graduate Linguistic Student Association.

- Kaiser, Elsi, and John C Trueswell. 2008. Interpreting Pronouns and Demonstratives in Finnish: Evidence for a Form-specific Approach to Reference Resolution. In *Language and Cognitive Processes* 23(5): 709-48.
- Kaiser, Elsi. 2011. Saliency and contrast effects in reference resolution: The interpretation of Dutch pronouns and demonstratives. In *Language and Cognitive Processes*, 26(10), 1587-1624.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- Kuno, Susumu. 1972. Functional Sentence Perspective: A Case Study from Japanese and English. *Linguistic Inquiry* 3(3): 269-320.
- Lasnik, Howard. 1989. *Essays on Anaphora*. Dordrecht: Kluwer.
- Marelj, Marijana. 2011. Bound-Variable Anaphora and Left Branch Condition. In *Syntax* 14: 205-229. doi:10.1111/j.1467-9612.2011.00156.x
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27: 53-94.
- Rudin, Catherine. 1997. AgrO and Bulgarian pronominal clitics. In *Formal Approaches to Slavic Linguistics (FASL)* 5, ed. by Martina Lindseth and Steven Franks, 224-252. Ann Arbor, MI: Michigan Slavic Publications.
- Stjepanović, Sandra. 1999. What do second position cliticization, scrambling and multiple wh-fronting have in common? PhD dissertation, UConn.
- Takahashi, Masahiko. 2011. Some theoretical consequences of Case-marking in Japanese. PhD dissertation, UConn, Storrs.
- Talić, Aida. 2017. From A to N and Back: Functional and Bare Projections in the Domain of N and A. PhD dissertation, UConn, Storrs.
- Van Kampen, Jacqueline. 2004. 'Learnability order in the French pronominal system'. In *Selected Papers from Going Romance 2002*. Amsterdam, Philadelphia: John Benjamins, 163-183.
- Willim, Ewa. 2000. On the grammar of Polish nominals. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 319-346.
- Zanon, Ksenia. 2015. On Hybrid Coordination and Quantifier Raising in Russian. PhD dissertation, Indiana University.
- Zlatic, Larisa. 1997. The structure of the Serbian noun phrase. PhD dissertation, University of Texas, Austin.
- Zubizarreta, Maria Luisa. 1998. *Prosody, focus, and word order*. Cambridge, Mass.: MIT Press.