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Size Matters: The Syntax of Disjunctive Questions¹

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1. Introduction

Disjunctive questions (DQs) are questions that contain a disjunction phrase, as in (1).

1. Did John eat beans or rice? (Han and Romero 2004a: 528)

The string in (1) is ambiguous. It may be interpreted as having the yes/no (YN) reading in (2a) or as having the alternative (ALT) reading in (2b). The two readings are disambiguated by radically different intonation patterns (Bartels 1999, Pruitt 2008, Pruitt and Roelofsen, 2013; Roelofsen and van Gool 2010).

2. a. Is it the case (or isn't it) that John ate either beans or rice? YN
b. Which of the two did John eat: beans or rice? ALT

A lot of work has been done on deriving the two readings of a DQ (Biezma and Rawlins, 2012; Han and Romero 2004a, 2004b; Larson 1985, McCawley 1988, Roelofsen and van Gool 2010, Pruitt and Roelofsen 2011). In this paper I contribute to this body of work by investigating DQs in Croatian. I focus on the environments, to the best of my knowledge unnoticed so far, in which a DQ has the ALT reading, but not the

¹ Acknowledgements to be added.

YN reading.² I argue that the two readings of a DQ involve representations that differ in the size of the disjuncts: in YN readings, the disjoint constituents cannot include the Focus⁰ head, which in effect reduces them to the size not bigger than the TP, but for an ALT reading to arise, the disjuncts must crucially be larger than the TP (Pruitt and Roelofsen 2011).

The analysis is in line with Han and Romero's (2004a, 2004b) proposal that ALT readings involve big disjuncts, with the ellipsis of material in the second disjunct. In their 2004 *LI* publication (Han and Romero 2004b), the authors notice that DQs with preposed negation lose the ALT reading, as illustrated by the contrast in (3).

- | | |
|---------------------------------------|--------------------------|
| 3. a. Did John not eat beans or rice? | ✓YN reading/✓ALT reading |
| b. Didn't John eat beans or rice? | ✓YN reading/*ALT reading |

Han and Romero (H&R) argue that this contrast follows from their (2004a) analysis of DQs, on which ALT readings are derived from clausal (vP or TP) disjunction with parts of the second disjunct deleted (*à la* Schwarz's (1999) analysis of *either/or* constructions). Drawing on Larson's (1985) analysis of disjunction, the authors also propose that ALT readings contain a wh-operator (null [*Q*] in matrix ALT DQs, *whether* in embedded ones), which moves from the disjunction site to the CP layer of the clause, marking the scope of disjunction. Thus, the LF responsible for the ALT reading of (1) looks like (4).

4. [_{CP} Q_i did [_{orP} t_i [_{orP} John eat beans or ~~John eat~~ rice]]] (Han and Romero, 2004a: 537)

² Environments in which a DQ retains the YN reading but loses the ALT reading are discussed in Larson (1985), Han and Romero (2004a, 2004b), and Beck and Kim (2006).

H&R propose that pre-posed negation introduces into the structure the operator VERUM, which places “extra focus on polarity-related items such as auxiliary verbs or negation” (pg. 181). A DQ with pre-posed negation loses the ALT reading because all the possible representations of such a DQ are ill-formed. On the possibility where VERUM (introduced by the pre-posed negation) is present in both disjuncts, as in (5b), it is deleted in the second conjunct, violating the Focus Deletion Constraint (FDC), stated in (6), on which focused elements cannot be deleted.

5. a. Didn't John eat beans or rice?

b. $Q_i t_j$ [VERUM_F didn't John eat BEANS_F] or [~~VERUM_F didn't John eat~~ RICE_F]

6. *Focus Deletion Constraint* (Han and Romero, 2004b: 199)

Focus-marked constituents at LF (or their phonological locus) cannot delete at Spell-Out.

The FDC is not violated if VERUM is external to disjunction, as in (7). However, in that case, the wh-operator Q would have to move across it, which leads to intervention effects for the wh-chain (Kim 2002).

7. Q_i VERUM_F t_j [didn't John eat BEANS_F] or [~~didn't John eat~~ RICE_F]

Finally, an FDC violation can be avoided if VERUM is only present in the first disjunct, so that it neither blocks the movement of Q, nor is deleted at PF. What is wrong with this possibility, represented in (8), is that it violates the Focus Condition in (9), which requires that the two disjuncts be semantically parallel to one another.

8. $Q_i t_j$ [VERUM_F didn't John eat BEANS_F] or [~~didn't John eat~~ RICE_F]

9. *Focus Condition*

(Han and Romero, 2004b: 194)

$[\alpha \sim C]$ is felicitous if $C \in [[\alpha]]^f$ or C implies a member of $[[\alpha]]^f$.

H&R’s account of the loss of the ALT reading with pre-posed negation is only tenable if this reading involves deletion in the second disjunct, which in turn requires the disjuncts to be ‘big’ (vPs or TPs). The analysis proposed in this paper follows H&R’s account in maintaining that on the ALT reading, the DQ contains big disjuncts, but departs from it in arguing that ‘big’ necessarily means ‘bigger than the TP’. H&R do not explicitly investigate YN readings of DQs, but they do point out analyses of YN readings that are compatible with their account of ALT readings. On one of them, YN readings involve a disjunction of clauses of opposite polarity, with the deletion of the entire second disjunct together with the disjunction *or*, as in (10a). On the other, illustrated in (10b), no clausal disjunction is present and Q does not associate with *or*. Evidence from Croatian DQs discussed here supports the latter proposal.

10. a. $[_{CP} Q_i \text{ did } [_{orP} t_i \text{ } [_{orP} \text{John eat beans or rice } \text{or John not eat beans or rice}]]]$
 b. $[_{CP} Q \text{ did John eat } [_{orP} \text{beans or rice}]]$ (Han and Romero, 2004a: 557)

The paper is organized as follows: in section 2, I introduce Croatian DQs and show that in certain cases, YN readings disappear. Section 3 presents the analysis of the observed phenomena. Section 4 presents additional support for the analysis, and section 5 is the conclusion.

2. Disjunctive Questions in Croatian

YN questions in Croatian are formed by the particle *li*, which is a second position clitic

that follows the first prosodic word in its clause (Franks and King 2000, Rivero 1993).

There are two different strategies for the formation of YN questions in the language,

depending on what element serves as the host for *li* (Alexander 2006):

- i. The *Comp-strategy*: *li* follows the complementizer *da*, as in (11a);
- ii. The *inversion strategy*: *li* follows the tensed verb of the clause, as in (11b).

11. a. **Da li** Jan jede jabuke? *Comp-strategy*

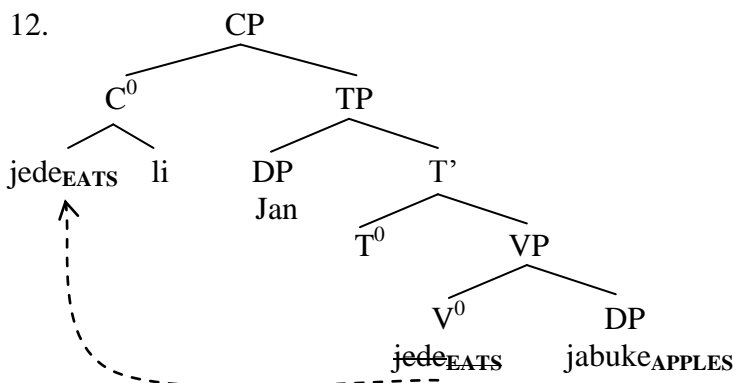
that LI Jan eat apples

‘Does Jan eat apples/Is Jan eating apples?’

b. **Jede li** Jan jabuke? *Inversion strategy*

eats LI Jan apples

The clitic *li* is standardly assumed to be the question particle and has often been claimed to occupy the C⁰ position (Bošković 2001, Progovac 1996, Rivero 1993, Stjepanović 1999, Schütze 1994, among others). The inversion strategy of YN question formation has been analyzed (Franks 1999, Franks and King 2000, Rivero 1993) as involving the movement of the tensed verb to C⁰ in order to host the clitic *li*, as shown in (12).



In the remainder of the paper, I adopt this analysis, *modulo* the claim that *li* occupies C⁰

position. Instead, I propose that it in fact occupies a lower functional head, probably Focus⁰ (section 3.2).

The two strategies for forming YN questions in Croatian (the Comp-strategy and the inversion strategy) are both attested in DQs, as shown in (13). Moreover, the DQs in (13a) and (13b) do not differ in the availability of the YN or ALT readings: both are available in both examples.

13. a. **Da li** Jan voli Hanu ili Doru? *Comp-strategy*
 that LI Jan loves Hana.ACC or Dora.ACC ✓ALT / ✓YN
 ‘Does Jan love Hana or Dora?’

b. **Voli li** Jan Hanu ili Doru? *Inversion-strategy*
 loves LI Jan Hana.ACC or Dora.ACC ✓ALT / ✓YN

DQs formed by the Comp-strategy (COMP-DQ) and those formed by the inversion strategy (INV-DQ) behave differently, however, when the disjuncts involve a tensed verb. Such COMP-DQs have both readings, as in (14), but INV-DQs in (15) lack the YN reading.

14. a. **Da li** Vid [čita novine] ili [gleda vijesti]? COMP-DQ
 that LI Vid reads newspaper or watches news ✓ALT / ✓YN
 ‘Does Vid read the newspapers or watch the news?’

b. **Da li** [Vid traži posao] ili [Dan diže kredit]? COMP-DQ
 that LI Vid seeks job or Dan lifts loan ✓ALT / ✓YN
 ‘Is Vid looking for a job or Dan getting a loan?’

15. a. **Čita li** Vid novine ili gleda vijesti? INV-DQ
 reads LI Vid newspaper or watches news ✓ALT /*YN
 ‘Does Vid read the newspapers or watch the news?’
- b. **Traži li** Vid posao ili Dan diže kredit? INV-DQ
 seeks LI Vid job or Dan lifts loan ✓ALT /*YN
 ‘Is Vid looking for a job or Dan getting a loan?’

I argue that the disappearance of the YN reading in INV-DQs in (15) is explained if this reading arises when the disjuncts are ‘small’, i.e. as big as they appear on the surface and not as big as to include the clitic *li*. The verb-movement out of the first disjunct only (necessary for the phonological support of *li*) is disallowed because it violates the Coordinate Structure Constraint (CSC), as illustrated in (16).

16. * V1-*li* ... [_{orP} [t_{V1} ...] or [V2 ...]] INV-DQ: *YN reading

The ALT reading survives because it involves disjuncts that are ‘big’ (bigger than a TP) and involve deletion of material in the second disjunct (Han and Romero 2004a, 2004b). On this reading, each disjunct contains *li* and the tensed verb moves disjunct-internally, so no CSC violation obtains, as shown in (17).

17. [_{orP} [V1-*li* ... t_{V1} ...] or [*li* ... V2...]] INV-DQ: ALT reading

I present the details of the analysis in the next section.

3. Analysis: Size matters

3.1. The structure of a DQ with the YN reading

I propose that the INV-DQs in (15) do not have the YN reading because the disjuncts each

contain a tensed verb, and it is the tensed verb that phonologically hosts *li*. The verb however, moves only from the first disjunct, in violation of the CSC, as shown in (18).

18. [Čita_i li Vid [&P [VP *t_i* novine] [&' ili [VP gleda vijesti]]]]? INV-DQ
 reads_i LI Vid *t_i* newspaper or watches news *YN
 ‘Is Vid reading the newspaper or is he watching the news?’

The COMP-DQs in (14), where *li* is phonologically supported by the externally merged complementizer *da*, retain the YN reading because they do not involve verb movement, so no violation of the CSC obtains. If the YN reading in the examples in (15) is excluded due to a CSC violation, then in the representation that underlies this reading, *li* is external to the disjunction, i.e. the disjuncts are too small to contain the position occupied by *li*. This is confirmed by the fact that the INV-DQ in (13b), repeated in (19) below, which contains disjoint object DPs, retains the YN reading despite the fact that the verb moves to *li*. This suggests that in (13b/19), the verb movement does not violate the CSC, i.e. does not proceed out of the disjunction phrase. Thus, no contrast obtains between COMP-DQs and INV-DQs when the constituent that moves to *li* is external to the disjunction.

19. [Voli_i li Jan *t_i* [&P [DP Hanu] [&' ili [DP Doru]]]]? ✓YN
 loves LI Jan *t_i* Hana.ACC or Dora.ACC
 ‘Does Jan love either Hana or Dora?’

These considerations taken together argue for the claim that, on the YN reading, the disjuncts in a DQ are always ‘small’, i.e. not bigger than they appear on the surface.

3.2. The structure of a DQ with the ALT reading

In this section I examine the structure of INV-DQs in (15), which yields the (attested) ALT

reading. The fact that this reading survives, even though the YN reading does not, suggests that the derivation of the ALT reading in an INV-DQ has a way of avoiding a CSC violation, i.e. that the movement of the verb in the first disjunct to *li* is syntactically legitimate. This argues for disjuncts that are big enough to include the clitic *li*, so that the movement of the first verb to *li* remains disjunct-internal. Consequently, CSC is not violated. This analysis of, for example, (15a), illustrated in (20), thus necessarily involves ellipsis in the second disjunct, argued for by H&R (2004a, 2004b).

20. [_{&P} [Čita_i li Vid [_{VP} *t_i* novine]] [_& ili [_H Vid [_{VP} gleda vijesti]]]]? *YN
 reads_i LI Vid *t_i* newspaper or ~~H Vid~~ watches news
 ‘Is Vid reading the newspaper or is he watching the news?’

Note, however, that on the ALT reading of (15a-b), the disjuncts must crucially be *bigger* than the TP (cf. H&R 2004a, 2004b). Assuming, quite plausibly, that *li* occupies a position higher than the TP, if the ALT reading of these examples involved disjoint TPs, we would expect them to lack both the YN and the ALT reading (i.e. to be ill-formed) since the derivation of the ALT reading would also incur a CSC violation, as (21) shows.

21. a. [Čita_i li [_{&P} [_{TP} Vid *t_i* novine] [_& ili [_{TP} ~~Vid~~ gleda vijesti]]]]?
 reads LI Vid *t_i* newspaper or Vid watches news
 ‘Is Vid reading the newspaper or is he watching the news?’
 b. [Traži_i li [_{&P} [_{TP} Vid *t_i* posao] [_& ili [_{TP} Dan diže kredit]]]]?
 seeks LI Vid *t_i* job or Dan lifts loan
 ‘Is Vid looking for a job or Dan getting a loan?’

We thus need an analysis on which disjuncts in the ALT reading of a DQ are bigger than

the TP.³ The simplest possibility to explore is that ALT readings involve disjoint CPs. Such a proposal is compatible with the analysis of Croatian YN questions, illustrated in (12) above, on which *li* occupies C⁰ and the tensed verb moves to this position to provide phonological support for the clitic. It is also compatible with English examples like (22a-b), which have the ALT reading and have been argued to involve disjoint CPs.⁴

22. a. Did Sally bring wine or did she bring juice? Pruitt and Roelofsen (2011)
 b. Did John call grandma or did Paul visit grandpa?

Croatian, however, behaves differently from English in that the second disjunct cannot be

³ A reviewer asks whether big disjuncts are required in *all* DQs with ALT readings, suggesting that the ALT readings in DQs like (19), in which the tensed verb that moves to *li* is external to the disjunction, could also be captured by an analysis which posits small disjuncts. The reviewer suggests that the Croatian data discussed here (and also English data in (22) below) call for an asymmetric analysis of DQs, on which YN readings require small disjuncts, but ALT readings are compatible with both big and small disjuncts. In section 4.4.1, where I discuss multiple ALT DQs we will see that the asymmetric account of Croatian DQs, suggested by the reviewer, cannot be maintained.

⁴ Example (22b) is due to a reviewer, who judges it as having only the ALT reading. My informants, however, seem to be able to access the YN reading of this example as well. If the example indeed has the YN reading, then DQs in English have different properties than in Croatian. I leave for further research how exactly these differences should be captured. In footnote 6, I discuss briefly a possible structure for English DQs with the ALT reading.

an interrogative clause, as shown in (23), regardless of the interrogation strategy used.⁵

The ill-formedness of (23a-b) suggests that disjuncts in a DQ are not full CPs.

23. a. **Da li Jan piše knjigu ili da li Vid radi na scenariju?*

that LI Jan writes book or **that** LI Vid works on script

‘Is Jan writing a book or Vid working on a script?’

b. **Piše li Jan knjigu ili radi li Vid na scenariju?*

writes LI Jan book or **works** LI Vid on script

Interestingly, a disjunction of full CPs is allowed if embedded under an imperative *tell me*, as shown in (24). Examples in (24), however, have neither the YN nor the ALT reading. Instead, they instruct the hearer to answer either one disjunct or the other.

24. a. *Reci mi da li nam Eva pjeva ili da li nam Ana pleše.*

Tell me that LI us.DAT.CL Eva sings or that LI us.DAT.CL Ana dances

‘Tell me either whether Eva is singing for us or whether Ana is dancing for us.’

b. *Reci mi pjeva li nam Eva ili pleše li nam Ana.*

Tell me sings LI us.DAT.CL Eva or dances LI us.DAT.CL Ana

‘Tell me either whether Eva is singing for us or whether Ana is dancing for us.’

In order for an embedded DQ to be interpreted either as a YN question or as an ALT question, the second disjunct again cannot contain any overt sign of interrogation: *li*, *da* and/or inverted verb must all be absent. Such DQs, illustrated in (25), lose the YN reading when disjuncts involve the tensed verb that moves to *li*, just like the matrix DQs.

⁵ I omit comparable examples in which the two disjuncts are derived through different interrogation strategies since they could also be excluded on the lack of parallelism.

25. a. Reci mi da li nam Eva pjeva ili nam Ana pleše. ✓ALT / ✓YN

Tell me that LI us.DAT.CL Eva sings or us.DAT.CL Ana dances

‘Tell me whether Eva is singing for us or Ana is dancing for us.’

b. Reci mi pjeva li nam Eva ili nam Ana pleše. ✓ALT /*YN

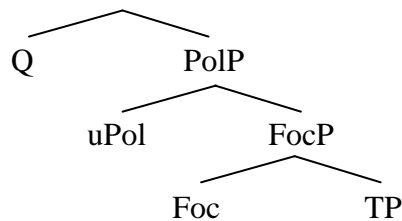
Tell me sings LI us.DAT.CL Eva or us.DAT.CL Ana dances

‘Tell me whether Eva is singing for us or Ana is dancing for us.’

The question now arises as to how to derive the difference in meaning between the embedded DQs in (24a-b), which seem to involve CP-disjunction (as evidenced by the presence of the complementizer/inverted verb in both disjuncts), and the ALT interpretation of the embedded DQs in (25a-b), which I argue also involve a disjunction of constituents bigger than the TP. It is plausible to derive this difference from different scope relations that hold between the disjunction and the interrogative feature (present on C^0) in the two sets of examples. The reading of (24a-b), where the disjuncts are CPs, is intuitively compatible with an analysis on which both C^0 's are in the scope of the disjunction, yielding a disjunction of interrogatives (asking the addressee to answer either one of the two questions). The ALT reading observed in (25a-b) and in all the matrix DQs we have seen, obtains if the disjunction is in the scope of the single interrogative C^0 , instructing the hearer to answer the single *or*-question. This implies that on the ALT reading, the constituents disjoint by *ili* ‘or’ are not CPs, although they are big enough for each to contain the clitic *li*. Consequently, the clitic *li* in Croatian does not seem to occupy the position of the interrogative C^0 head. We thus need an analysis on which *li* appears in a position lower than C^0 , but higher than the TP.

One possibility is to follow Holmberg (2013), where it is argued that a direct question always contains a free variable, which moves to [Spec, FocP] and is the focus of the question. In *wh*-questions, the variable is a *wh*-phrase, while in YN questions, it is polarity. The question also contains “an illocutionary force feature *Q*, which encodes a request to the addressee to provide a value for the variable such that the resulting propositions is true.” (pg. 8) Questions thus have the structure in (26).

26.

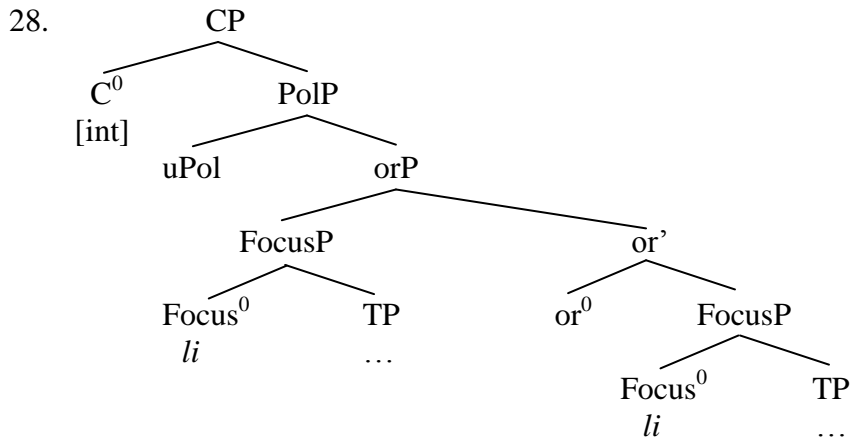


This view is compatible with Rizzi’s (1997, 2001) proposal that the left periphery of a clause contains multiple functional heads that dominate the TP, as in (27).

27. Force Top* Foc Top* Fin IP

In what follows, I will assume that DQs have the same basic structure as simple YN questions, and will use the label C^0 to refer to the position that is called Force⁰ in Rizzi’s system and *Q* in Holmberg’s system. I will further maintain that the interrogative feature (which provides the question force of the utterance) resides on C^0 , while *li* occupies the position of a lower head, perhaps Focus⁰. An ALT DQ, then, involves a disjunction of focus phrases, embedded under an interrogative C^0 and the polarity phrase, as in (28).⁶

⁶ If (28) is the correct representation for Croatian DQs with the ALT reading, then a question arises as to whether the same structure underlies the English DQs in (22), where the presence of a fronted auxiliary in each disjunct suggests a disjunction of CPs. If these



On this analysis, the movement of the tensed verb in INV-DQs (and simple YN questions formed by the inversion strategy) targets the Focus⁰ head, where it adjoins to *li* (thus the verb movement, although syntactic in nature, seems to be motivated by phonological considerations, i.e. the cliticness of *li*). In COMP-DQs (and simple YN questions derived

examples have the structure in (28), then the auxiliaries do not in fact occupy C⁰, but rather Foc⁰ position. One piece of evidence that this might indeed be so comes from (i) below, where each disjunct contains a fronted negation.

- i. Isn't John selling the car or isn't Mary getting a loan? *YN/?²ALT

None of my informants could access the YN reading of this example and all of them found it severely degraded on the ALT reading. These judgments indicate that in English DQs the disjuncts cannot be as big as to include Pol⁰ (the position of the negation in (i)) either on the YN or on the ALT reading. Recall also from fn. 4 that examples in (22) were judged to be ambiguous between the YN and the ALT readings, suggesting that in English, disjunction of FocPs may give rise to both ALT and YN readings.

by the Comp-strategy), *li* is supported by the complementizer *da* in C^0 .⁷

Some support for the analysis on which *li* lexicalizes Focus⁰ comes from the fact that in a YN question, a constituent other than the verb may raise to *li*, in which case the relevant constituent is interpreted as narrowly focused. This is shown in (29).

29. VIDA li je Jan vidio?

Vid.ACC LI AUX Jan.NOM seen

‘Was it Vid that Jan saw?’

The analysis is also compatible with the fact that *li* may appear in non-interrogative contexts; for example, in exclamations, as illustrated in (30).

30. Lijepe li djevojke!

beautiful.GEN LI girl.GEN

‘What a beautiful girl!’

If I am correct in claiming that on the ALT reading, the disjuncts are FocPs, headed by *li*, and do not include the interrogative head, we would like to know what excludes examples in (31) below, i.e. why the *li* in the second disjunct has to obligatorily be deleted even when nothing else seems to be.

31. a. *Piše li Jan knjigu ili li Vid radi na scenariju?

writes LI Jan book or LI Vid works on script

⁷ The fact that an interrogative C_0 is lexicalized by a declarative complementizer is not problematic: Aboh and Pfau (2011), for example, discuss the co-occurrence of the declarative complementizer and a question particle in embedded interrogatives in Gbe and Bantu languages, where the former shows up clause-initially, the latter clause-finally.

b. *Da li Jan piše knjigu ili li Vid radi na scenariju?
that LI Jan writes book or LI Vid works on script

One possible solution is that the presence of *li* immediately following the *ili* ‘or’ is excluded due to some kind of haplology.⁸ The two end up adjacent because nothing can appear between them: the complementizer *da* is excluded since the syntactic position that hosts it (C^0) is not part of either of the disjuncts. The verb movement to *li* (Focus⁰) is disallowed because the disjunction *ili* ‘or’ can itself host clitics, as we have seen in (25), where it phonologically hosts the pronominal clitic *nam* ‘to-us’. Thus we end up with the presumably illegal sequence *ili li*, which is destroyed by the obligatory deletion of *li*.⁹

If the present analysis is on the right track, the disjuncts in ALT DQs, although they are underlyingly always bigger than the TP, are not CPs (at least in Croatian), but rather FocPs. Such a structure, containing a single C^0 head that scopes over the disjunction correctly derives the meaning of ALT DQs: they instruct the reader to answer the single *or*-question, rather than instructing him/her to answer one of the disjoint questions. This is compatible with Krifka’s (to appear) observation that speech acts (structurally encoded as CPs) can easily be conjoined, but resist disjunction (Krifka takes Rizzi’s ForceP to be the category interpreted as a speech act). The fact that speech acts can be conjoined but not disjoint, argues Krifka, derives the fact that “only universal quantifiers, which are generalized conjunctions, can scope over speech acts” (pg. 19), as illustrated by the contrast in the availability of pair-list readings between the wh-question

⁸ I would like to thank Susi Wurmbrand for helpful discussion of this issue.

⁹ It is unclear to me at this point whether this requirement is phonological or semantic.

in (32a), with a universal quantifier *every guest*, and the one in (33a), in which the quantifier is *most guests* ((32)–(33) are from Krifka (to appear)).

32. a. What did every guest bring to the party?

b. For every guest x: What is y such that x brought y to the party?

33. a. What did most guests bring to the party?

b. #For most guests x: What is y such that x brought y to the party?

The analysis of ALT DQs argued for here is also compatible with Pesetsky's (2000) observation that "a clause interpreted as a question may not request anything less than a full answer." (pg. 64) Pesetsky notes that certain expressions (*almost every NP*, *few NP*, *only NP*), which at LF normally can take scope wider than on the surface, cannot do so in the context of a wh-question. This is illustrated in (34) for *almost everyone*.

34. Which newspaper did almost everyone write to about this book? (Pesetsky 2000: 64)

[cannot express the following request for information: "Give me an almost complete list of people paired with the newspapers they wrote to about this book."]

Pesetsky also discusses intervention effects in English multiple questions with D-linked wh-phrases and points out, as noted by Kiss (1986) and Hornstein (1995), that even though D-linking of wh-phrases obviates superiority violations, as shown in (35a), the effect re-emerges if a scope-bearing element intervenes between the C^0 and the wh-phrase *in situ*, as in (35b). Although both (35a) and (35b) contain negation, in (35a), it does not intervene between C^0 and the *in situ* wh-phrase *which person*, while in (35b) it does, ruling the sentence out on a superiority violation.

35. a. Which book did which person not read ___? (Pesetsky 2000: 60)

b. *Which book didn't which person read ___?

Importantly, if the scope-bearing element is a quantifier such as *everyone*, as in (36), the example is grammatical, presumably due to the fact that the quantifier undergoes Quantifier Raising (QR) and at LF does not intervene between the C^0 and the *in situ* wh-phrase *which newspaper*.

36. Which book did everyone write to which newspaper about ___? (Pesetsky 2000: 63)

However, if the quantifier is such that if it underwent QR, the question would require a non-exhaustive answer, such as *almost everyone*, as in (37) taken from Pesetsky 2000 (pg. 64), then QR is impossible and consequently, the intervention effect re-appears.

37. ??Which book did almost everyone write to which newspaper about ___?

If Pesetsky is correct, i.e. if a question always requires a full answer, it is not surprising that a matrix DQs cannot have the interpretation which instructs the reader to answer either of the disjuncts. This reading (or the structure that might underlie it) does not exist since it asks for a non-exhaustive answer and as such is incompatible with the fact that a DQ is a question. Accordingly, disjuncts in a matrix DQ cannot be CPs.¹⁰ A DQ embedded under *tell me*, however, may contain disjoint CPs, as in (24), because the

¹⁰ A reviewer points out that besides exhaustive answers, wh-questions also admit mention-some answers, suggesting that the data discussed by both Krifka and Pesetsky is more likely to be explained by Krifka's analysis, which crucially relies on universal quantifiers being generalized conjunctions. As far as I can tell, the fact that DQs do not have the reading on which the hearer is instructed to answer either one of the disjoint questions is equally compatible with both Krifka's and Pesetsky's approach.

matrix clause is not a question but a command, so the demand that it makes on the hearer may, in fact, request an answer for only one (either one) of the two disjoint embedded questions.¹¹

To sum up, the analysis proposed in this section explains the fact that in COMP-DQs, both readings are systematically available, while in INV-DQs, the YN reading is available as long as neither of the disjuncts involves the verb which raises to *li*.

4. Additional support for the analysis

The analysis I proposed for the fact that some INV-DQs lack the YN reading predicts that such DQs will retain the YN reading as long as the movement of the verb which hosts *li* does not violate the CSC. In what follows, we will see that this is exactly what we find.

4.1. Non-finite verbs

Example (38) shows an INV-DQ in which the disjuncts are the size of a VP, but contain

¹¹ As pointed out by a reviewer, if speech acts resist disjunction in matrix contexts, then they should resist disjunction in embedded contexts as well. This seems to be falsified by examples in (24), where the presence of the complementizer *da* indicates the presence of C⁰ in both embedded disjuncts, which in turn suggests a disjunction of speech acts. While I share the reviewer's worry, it seems to me that embedded disjoint interrogatives require a different treatment than matrix ones: either we need to say that such CPs are not speech acts, and thus can be disjoined, or we need to say that at the embedded level, speech acts can, in fact, be disjoined. See Krifka (to appear) and McCloskey (1996) for a discussion of embedding question speech acts.

participial rather than tensed verbs. Such a DQ is ambiguous between the YN and the ALT reading. This is expected since the participial verbs do not leave their respective disjuncts; instead, *li* is supported by the disjunction-external auxiliary *jesi*.

38. Jesi li [napisao seminar] ili [proveo istraživanje]? ✓_{ALT}/✓_{YN}
 aux.2SG LI [written.PART paper] or [conduct.PART study]
 ‘Have you written a paper or conducted a study?’

Similarly, in the subject control example in (39) below, the disjuncts are at least VPs (probably TPs with two controlled PRO subjects), but the YN reading is present since the infinitival verbs *ići* ‘go’ and *gledati* ‘watch’ do not move out of their disjuncts. The verb that supports the clitic *li* is the finite matrix verb *želi* ‘wants’.

39. Želi li Jan ići kući ili gledati film? ✓_{ALT}/✓_{YN}
 wants LI Jan go.INF home.LOC or watch.INF movie.ACC
 ‘Does Jan want to go home or watch a movie?’

4.2.ATB movement of the tensed verb

The movement of the tensed verb to *li* avoids violating the CSC if it proceeds in an Across-The-Board (ATB) fashion from both disjuncts. Since ATB movement is only available to elements that are identical in both disjuncts, the analysis predicts that when the disjuncts are VPs (or TPs) but contain identical verbs, an INV-DQ should have both the YN and the ALT reading. Example (40) below shows that this prediction is borne out.

40. Prodaje li Jan auto ili Hana stan? ✓_{ALT}/✓_{YN}
 sell.3SG LI Jan car.ACC or Hana apartment.ACC
 ‘Is Jan selling the car or (is) Hana selling the apartment?’

4.3. COMP-DQs without the YN reading

In this subsection we will see that disjuncts in the DQ with the YN reading are indeed smaller than the TP. The relevant examples involve COMP-DQs in which *li* is supported by the complementizer *da* ‘that’ (so CSC does not come into play) but which nevertheless lack the YN reading. I argue that this is due to the fact that the structure of the disjuncts in such DQs is necessarily bigger than the TP.

Consider the contrast in (41). Both DQs in (41) are COMP-DQs and both involve clausal disjuncts, as evidenced by the presence of a different subject in each. The only difference between them is the fact that in (41a), the second disjunct does not contain the auxiliary clitic *je*, while in (41b) it does. Yet, only the DQ in (41a) has the YN reading.

41. a. **Da li je** Iva osvojila zlato ili Ana ispala iz natjecanja? ✓_{ALT} / ✓_{YN}
that LI aux Iva won gold or Ana dropped from competition
‘Did Iva win the gold or Ana drop out of the competition?’
- b. **Da li je** Iva osvojila zlato ili **je** Ana ispala iz natjecanja? ✓_{ALT} / *_{YN}
that LI aux Iva won gold or aux Ana dropped from competition
‘Did Iva win the gold or did Ana drop out of the competition?’

I argue that (41b) lacks the YN reading because the presence of the auxiliary in the second disjunct forces the disjuncts to be bigger than the TP, i.e. it forces the structure of the ALT reading. This can be traced to the properties of auxiliaries in Croatian.

In this language, auxiliaries are second position clitics, similar to *li*. In clauses that contain both *li* and an auxiliary clitic, both clitics appear in the second position of the

clause, in a clitic cluster.¹² When the clause is a YN question derived through the COMP-strategy, both clitics follow the complementizer *da* and precede the subject, as in (42). It is thus reasonable to assume that (at least in interrogative clauses) second position clitics occupy a position in the C-layer of the clause (Bošković 2001, Progovac 1996, Rivero 1993, Stjepanović 1999, Schütze 1994, among others).

42. Da **li je** Ivan ustao?

that **LI aux.3SG** Ivan got-up

‘Did Ivan get up?’

Given that the second disjunct in (41b) contains the auxiliary clitic *je*, which presumably occupies a position higher than the TP, it follows that the disjuncts in (41b) are bigger than TPs, as illustrated in (43). This structure, however, only maps onto the ALT reading and the DQ therefore lacks the YN reading.

43. Da [_{&P} [_{li je_i} [_{TP} Iva *t_i* osvojila zlato]]

that LI aux Iva *t_i* won gold

[_{&'ili} [_Ĥ je_j [_{TP} Ana *t_j* ispala iz natjecanja]]]]

or _Ĥ aux Ana *t_j* dropped from competition

The COMP-DQ (41a), in which the auxiliary is absent from the second disjunct, has the YN reading because it can receive an analysis on which disjuncts are no bigger than TPs. On this view, the auxiliaries from both disjuncts ATB move out of the disjunction phrase to form a clitic cluster with the single *li*, positioned higher than the disjunction, as in (44).

¹² In a clitic cluster, clitics appear in the order:

LI < AUX (except for 3rd person singular auxiliary *je*) < DAT(pron) < ACC(pron) < *je*

44. [CP Da li je_i [_{&P} [TP Iva *t_i* osvojila zlato]] [_& ili [TP Ana *t_i* ispala iz natjecanja]]
 that LI aux Iva *t_i* won gold or Ana *t_i* dropped from competition

Additional support for the claim that it is the (TP external) *position* of the auxiliary clitic *je*, rather than its mere presence which leads to the absence of the YN reading in (41b), comes from DQs that contain a negated version of the auxiliary. When the auxiliary is negated, it ceases to be a clitic and no longer needs to occupy the second position in the clause; instead it occupies its canonical position, presumably T⁰. Crucially, a COMP-DQ with a negated auxiliary in both disjuncts retains the YN reading, as in (45).¹³

45. ?Da li Iva nije obukla čarape ili Ana nije obula cipele? ✓_{ALT} / ✓_{YN}
 that LI Iva neg-AUX put-on socks or Ana neg-AUX put-on shoes

‘Did Iva not put her sock son or (did) Ana not put her shoes on?’

The contrast in the presence of the YN reading in (41) thus supports the analysis on which

¹³ In Croatian, examples like (45) are possible, but rather marginal. A DQ with negation usually involves either the inversion strategy, as in (i), or the interrogative particle *zar*, as in (ii). In both cases, the DQ has only the YN reading (Han and Romero 2004b) and carries the presupposition that the positive proposition is true.

i. Ne pije li Jan Coca-Colu ili Fantu? ✓_{YN} / *_{ALT}

Neg drinks LI Jan Coca-Cola or Fanta

‘Doesn’t Jan drink Coca-Cola or Fanta?’

ii. Zar Jan ne pije Coca-Colu ili Fantu? ✓_{YN} / *_{ALT}

Q Jan neg drink Coca-Cola or Fanta

‘Doesn’t Jan drink Coca-Cola or Fanta?’

the YN reading cannot have a structure in which the disjuncts are bigger than the TP.

4.4. Disjoint subjects

Another piece of evidence in favor of the proposed analysis comes from DQs with disjoint singular subjects. Somewhat surprisingly, in Croatian, DQs with disjoint singular subjects are not ambiguous, regardless of the interrogation strategy used. The two readings are disambiguated by the number morphology on the verb. If the verb is plural, the DQ has only the YN reading, whereas if the verb is singular, the DQ has only the ALT reading. This contrast is shown in (46) for COMP-DQs and in (47) for INV-DQs.

46. a. Da li Jan ili Vid **idu** u školu? *ALT / ✓YN

that LI Jan.NOM or Vid.NOM **go.3PL** in school

‘Is it the case that either Jan or Vid goes to school?’

b. Da li Jan ili Vid **ide** u školu? ✓ALT /*YN

that LI Jan.NOM or Vid.NOM **go.3SG** in school

‘Does Jan go to school or does Vid go to school?’

47. a. **Idu** li Jan ili Vid u školu? *ALT / ✓YN

go.3PL LI Jan.NOM or Vid.NOM in school

‘Does either Jan or Vid go to school?’

b. **Ide** li Jan ili Vid u školu? ✓ALT /*YN

go.3SG LI Jan.NOM or Vid.NOM in school

‘Does Jan go to school or does Vid go to school?’

Singular disjoint subjects in a Croatian declarative clause can also appear either with singular or plural agreement on the verb, as shown in (48). The two sentences differ

in whether they have the inclusive *or* reading (48a) or the exclusive *or* reading (48b).¹⁴

48. a. Jan ili Vid idu u školu. *Inclusive or reading*

Jan.NOM or Vid.NOM go.3PL in school

‘Jan or Vid goes to school.’

b. Jan ili Vid ide u školu. *Exclusive or reading*

Jan.NOM or Vid.NOM go.3SG in school

‘Either Jan or Vid goes to school.’

Given the agreement contrasts in (48), coupled with their interpretation, it is plausible to assume that (48a) involves a disjunction of DPs, as in (49), while (48b), as well as (i) in footnote 14 involve a disjunction of TPs, as in (50).¹⁵

¹⁴ Singular agreement is the only option for the *ili...ili* ‘either...or’ construction, as in (i).

i. Ili Jan ili Vid ide /*idu u školu.

or Jan.nom or Vid.nom go.3sg /*go.3pl in school

‘Either Jan or Vid goes to school.’

¹⁵ A reviewer suggests that the data could also be derived by a purely semantic account that relies on a semantic approach to number marking, defended recently by Sauerland, Anderssen, and Yatsushiro (2005). On this approach, the plural is regarded as unmarked and is used whenever the speaker cannot commit him/herself to the singular, which conveys cardinality ‘one’. The inclusive *or* reading allows for both disjuncts to have the property denoted by the VP, so the singular morphology on the verb is blocked and the unmarked plural appears. On the exclusive *or* reading, the singular marking on the verb is then expected for semantic reasons even if the disjuncts are not bigger than DPs. The

49. [&P [DP Jan] [&'ili [DP Vid]]] idu u školu
 Jan.NOM or Vid.NOM go.3PL in school

50. [&P [TP(Ili) Jan ~~ide~~—~~u školu~~] [&'ili [TP Vid ide u školu]]]
 (or) Jan.NOM ~~go.3SG in school~~ or Vid.NOM go.3SG in school

Why it is that singular disjoint subjects in Croatian allow plural agreement remains mysterious (see Morgan 1985, Peterson 1986, Jennings 1994, Eggert 2002 for relevant

reviewer points out that the semantic account outlined above is preferred, given that on Schwarz's (1999) analysis of *either/or* constructions in English, the disjunction involves deletion only if *either* (the first *ili* in (50)) appears displaced from the first disjunct. Since in our examples this is not the case, it might be an indication that we are in fact not dealing with a clausal disjunction, in which case the syntactic account proposed in the main text fails. I agree with the reviewer that the purely semantic analysis of the verb's number marking with disjoint subjects accounts for the observed facts, and it may well be that it is the correct account. However, the syntactic analysis that I proposed is not implausible either, since *either (ili)* behaves quite differently in Croatian than it does in English. Croatian *ili* has different distribution from English *either*, and unlike in English, the *ili...ili* 'either...or' construction in Croatian never allows the narrow scope for the disjunction (relative to other scope bearing elements in the clause). Thus, the fact that the first *ili* in (50) does not appear displaced from the first disjunct cannot be taken as evidence that disjuncts are small, the way the non-displacement of *either* can in English. Consequently, the data are compatible with both the syntactic account presented in the main text and the semantic account proposed by the reviewer.

discussion).¹⁶ However, regardless of the answer to this question, the covariance between the number marking on the verb and the interpretation of a DQ with singular disjoint subjects, observed in (46) and (47), is expected on the proposed analysis. If the YN reading of a DQ requires small disjuncts, as I have been arguing, we predict that on this reading, when the subject disjunction phrase involves singular DPs, the verb shows obligatory plural agreement, as in the declarative sentence in (48a). In INV-DQs, illustrated in (47a), this reading persists because the disjunction phrase contains only subject DPs, so the movement of the verb to *li* does not violate the CSC. On the ALT reading of a DQ, which requires clausal disjuncts, obligatory singular agreement on the verb is expected, since in the bi-clausal structure, each subject agrees with the verb in its own clause.

Not surprisingly, the ambiguity between the two readings reappears if the disjuncts within the subject phrase are plural. Such DQs obligatorily appear with a plural verb and are ambiguous between the YN and the ALT reading.

51. a. Da li dječaci ili djevojčice idu na izlet? ✓_{ALT} / ✓_{YN}
 that LI boys.NOM or girls.NOM go.3PL on trip
 ‘Are boys or girls going on a trip?’

¹⁶ Plural agreement on the verb with singular disjoint subject DPs is reported as possible in English (Morgan 1985, Peterson 1986), Modern Greek (Kazana and Flouraki 2009), as well as in certain contexts in Russian (Ivlieva 2012) and Mi’Gmaq (Bale 2012).

- b. Idu li dječaci ili djevojčice na izlet? ✓ALT / ✓YN
 go.3PL LI boys.NOM or girls.NOM on trip
 ‘Are boys or girls going on a trip?’

4.4.1. Multiple ALT DQs

Finally, consider the logically possible interpretations of a DQ that contains multiple disjunctions: a disjunction of subjects and a disjunction of predicates, as sketched in (52).

52. Subject: (A or B); predicate: (C or D)

If each disjunction gives rise to two possible readings (YN and ALT), there are four different readings, given in (53), that are in principle available to such multiple DQ.

53. a. Subjects: YN, predicates: YN c. Subjects: ALT, predicates: YN
 b. Subjects: YN, predicates: ALT d. Subjects: ALT, predicates: ALT

The reading in (53d) is, however, not attested. Let us inspect the DQ in (54), which involves disjoint singular subjects: {*Dan*, *Vid*} and disjoint PPs: {*u kino* ‘to the cinema’, *u kazalište* ‘to the theater’}. I chose to mark the verb in (54) with singular agreement because, as discussed above, the presence of a singular verb excludes the YN reading with respect to the disjuncts in the subject phrase, i.e. it eliminates the readings in (53a-b).

However, of the two remaining readings (53c-d), spelled-out in (55), only (55a) survives.

54. a. Da li Dan ili Vid ide u kino ili u kazalište?
 that LI Dan.NOM or Vid.NOM goes.3SG in cinema or in theater
 ‘Is Dan or Vid going to the cinema or to the theater?’

55. a. Is it Dan or is it Vid who is going to the cinema or the theater?

- b. *Is it Dan or is it Vid who is going to the cinema or is it Dan or is it Vid who is going to the theater?

This is predicted if the ALT reading arises when each disjunct is clausal (with the deletion in one of the disjuncts). The fact that the verb in (54) is singular indicates that the subject disjunction is clausal, i.e. there is a deletion in the first disjunct, as in (56).

56. [Is Dan <going [_{PP} ~~to the cinema or to the theater~~]>] or [is Vid going [_{PP} to the cinema or to the theater]]

The VP (deleted in the first disjunct, overt in the second) contains a ‘small’ disjunction of the PPs, and this yields the reading in (55a). For the reading in (55b) to arise, however, in addition to the disjunction of clauses in (56), the DQ would also have to contain the disjoint clauses in (57):

57. [Is SUBJECT going to the cinema] or [is ~~SUBJECT~~ going to the theater]?

The clausal disjunction in (57) is possible if each disjunct contains a ‘small’ DP disjunction in the subject phrase (overt in the first disjunct, deleted in the second). But, this is incompatible with the fact that subject disjunction is also clausal, as required by the singular verb. The reading in (55b) seems to require either that the disjunction in (56) somehow be embedded in each disjunct in (57), or *vice versa*. So, this configuration effectively requires that a clause be embedded in itself, which is impossible.

The analysis of ALT readings by H&R makes the same prediction since they also argue that ALT readings involve big disjuncts (TPs or vPs). On the other hand, it is difficult to see how (55b) is blocked on analyses on which ALT readings could be derived from small disjuncts (as suggested by the reviewer from fn. 3). For example, Larson

(1985) proposes that ALT DQs are derived from disjuncts of any size, by the movement of the *scopal indicator* (SI), which originates at the left edge of the disjunction phrase and moves to [Spec, CP], marking the scope of the disjunction. The SI is *whether* in embedded ALT questions and O (the null indicator) in the matrix ones. Effectively, the SI behaves like a wh-phrase. Given that Croatian is a multiple wh-fronting language with more than one landing site available for wh-phrases, it is unclear what blocks movement of multiple SIs on this analysis. Beck and Kim (2006) argue against the analysis on which disjunction phrases are wh-phrases by showing, among other things, that multiple ALT readings, like the one in (55b), are impossible. On the other hand, they argue, based on intervention effects in ALT DQs, that the disjuncts “cannot be too large” (pg. 204). The ALT readings arise because in addition to the ordinary semantic value, the disjunction also contributes the focus semantic value, which is an alternative set that contains the two ordinary meanings of the disjuncts. The focus semantic value propagates all the way to the TP level, at which point the question operator lifts it to the level of ordinary semantics. As far as I can tell, on this analysis, the TP in (54) should be able to receive the focus semantic value in (58), which incorrectly derives the reading in (55b).

58. $\{\lambda w. \text{Dan is going to the cinema in } w, \lambda w. \text{Dan is going to the theater in } w,$
 $\lambda w. \text{Vid is going to the cinema in } w, \lambda w. \text{Vid is going to the theater in } w\}$

In this subsection, then, we saw that DQ with disjoint subjects support the analysis on which ALT readings involve big disjuncts and YN readings small disjuncts. In the next section, I discuss DQs with pre-posed negation.

4.5.DQs with pre-posed negation

Han and Romero (2004b) show that the ALT reading of a DQ disappears with pre-posed negation, as in (59).

59. Didn't John drink coffee or tea? (Han and Romero, 2004b: 180) ✓_{YN}/*_{ALT}

Recall from the introduction that on H&R's analysis, such DQs lose the ALT reading crucially because the disjuncts are big (vPs or TPs) and parts of the second disjunct are deleted. In Croatian, preposing the negation is the standard way of forming negative YN questions, shown in (60).¹⁷ The negative marker *ne/ni* surfaces as an affix on the tensed verb at the front of the question. Thus, negated DQs in Croatian are always INV-DQs. As expected, such DQs only have the YN reading, as illustrated in (60).

60. Ne pije li Jan kavu ili čaj? ✓_{YN}/*_{ALT}

Neg drinks LI Jan coffee or tea

'Doesn't Jan drink coffee or tea?'

If the analysis proposed here is correct, it appears that (61) cannot be the source of (60).



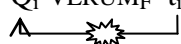
61. *[ne pije li Jan kavu] ili [~~li Jan ne pije~~ čaj]

Neg drinks LI Jan coffee or ~~LI Jan Neg drinks~~ tea

This structure can be excluded in several ways. We could follow H&R and assume that besides big disjuncts, the ALT readings necessarily involve the movement of the wh-operator Q from the left edge of the disjunction to the [Spec CP]. The unavailability of (61) follows automatically, since the operator VERUM, introduced by the pre-posed negation, would either be deleted in the second disjunct (violating the Focus Deletion

¹⁷ But see (45) and the discussion in footnote 13.

Constraint), as in (62a), or it would be present in the first disjunct only (violating the Focus Condition), as in (62b). Finally, VERUM could be external to the disjunction, in which case it would interfere with the movement of Q to [Spec CP], as in (62c).

62. a. Q_i t_i [VERUM_F ne pije li Jan KAVU_F] or [~~VERUM_F Jan ne pije~~ ČAJ_F]

 b. Q_i t_i [VERUM_F ne pije li Jan KAVU_F] or [~~Jan ne pije~~ ČAJ_F]

 c. Q_i VERUM_F t_i [ne pije li Jan KAVU_F] or [~~Jan ne pije~~ ČAJ_F]


It is, however, not clear that ALT DQs in Croatian involve wh-movement. For example, the DQ in (63) is well-formed on both readings, although the disjunction is embedded in the complex NP, which is otherwise an island for wh-movement.

63. Vjeruješ li u tvrdnju da je Petar dao otkaz ili otišao u mirovinu?
 believe.2SG LI in claim that aux Petar given resignation or gone in retirement
 ‘Do you believe the claim that Petar resigned or retired?’

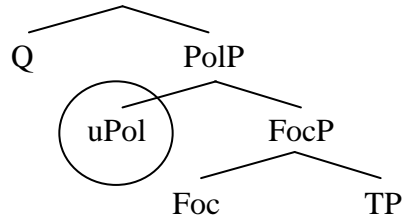
If no operator movement is involved in the derivation of ALT readings, then the representation in (61) should actually be licit because it could involve the analysis in (62c), modulo the Q-movement. However, given that the ALT reading is absent, it must be that something excludes (61). I believe that the impossibility of (61) is related to the fact that a negated YN question in Croatian cannot contain a strong NPI *ni* ‘either’, as shown in (64), and always conveys a positive expectation on the part of the speaker.

64. Ne dolazi li i /*ni Petar?
 Neg comes LI and(also)/ *neither Petar
 ‘Isn’t Petar coming too/*either?’

Holmberg (2013) shows that a subset of English speakers judge English YN questions

with contracted negation (*n't*) in the same way. He proposes that for those speakers, the *n't* is externally merged in the C-domain, more precisely in the Pol^0 , the head that dominates the FocP in (65), repeated from (26). The TP does not contain negation, which excludes the NPI and suggests that the speaker believes that the positive answer is true.¹⁸

65.



I would like to suggest that the negative affix in Croatian negated YN questions is also externally merged in PolP and that the verb from the first disjunct raises to Pol^0 to support it. Since the disjuncts in the ALT reading are FocP 's, this movement violates the CSC, just as the comparable movement of the tensed verb to *li* violates it in INV-DQs with VP or TP disjuncts. In fact, if we negate an INV-DQ with VP or TP disjuncts, which only has the ALT reading, it becomes ill-formed since neither of the two readings are able to survive. This is confirmed by (66b) below, which is ungrammatical because the ALT reading – the only reading available in the INV-DQ with disjoint VPs, shown in (66a) – is “destroyed” by the pre-posed negation.

¹⁸ Sailor (2013) presents experimental evidence that English speakers do not accept strong NPIs, such as punctual *until*- and *for*- phrases, in polar questions with high negation (**Didn't John finish the assignment until yesterday?*), suggesting that such questions do not allow for the “inner” negation reading (cf. Ladd 1981).

66. a. Piše li Dan knjigu ili recenzira članak? ✓ALT /*YN

writes LI Dan book or reviews article

‘Is Dan writing a book or reviewing an article?’

b. *Ne piše li Dan knjigu ili recenzira članak?

Neg writes LI Dan book or reviews article

‘Isn’t Dan writing a book or reviewing an article?’

4.6. Intervention effect in DQs

The proposed analysis also fits well with Beck and Kim’s (2006) discussion of ALT readings, where they show that the ALT reading of a DQ disappears if the disjunction phrase is preceded by a focus sensitive operator, as shown in (67).

67. Does only John like Mary or Susan? (Beck and Kim, 2006: 167) ✓YN /*ALT

Again, the present analysis predicts that in INV-DQs which lack the YN reading (due to a CSC violation), an addition of a focus sensitive operator before the disjunction should lead to ungrammaticality. This prediction is also borne out, as shown by (68b). The ill-formedness of (68b) can be explained by the violation of the Focus Deletion Constraint, which prevents the deletion of focused material, as shown in (69).

68. a. Gleda li Vid televiziju ili sluša radio? ✓ALT /*YN

watches LI Vid television or listens radio

‘Does Vid watch TV or listens to the radio?’

b. *Gleda li samo Vid televiziju ili sluša radio?

watches LI only Vid television or listens radio

‘Does only Vid watch TV or listens to the radio?’

69. **[gleda li samo Vid televiziju] ili [~~li samo Vid~~ sluša radio?*
watches LI only Vid television or ~~li only Vid~~ listens radio

5. Conclusion

In this paper I have argued that the two readings of a DQ (ALT and YN) have very different syntactic sources. On the YN reading, the disjuncts are as big as their surface string suggests and cannot exceed the TP. By contrast, on the ALT reading, the disjuncts are always bigger than the TP, but are not as big as the CP. For concreteness, I proposed that they are FocPs, and that *li* is the lexicalization of the Focus head, but nothing hinges on this particular choice: any other functional head between T^0 and C^0 would do. There is obligatory deletion of material in the second disjunct, and the deleted material minimally includes the clitic *li* (for unknown reasons, perhaps due to haplology).

The proposal argues against the analysis of ALT readings by Beck and Kim (2006), who based on intervention effects, discussed in section 4.6, argue that on this reading, the position of the intervener “puts a roof on the size of the disjuncts” (pg. 204).

Finally, the data from Croatian I discussed suggest that there is something very syntactic about the differences between the YN and the ALT reading of a DQ, and that any semantic explanation of these differences must be supplemented by different syntactic representations of the two readings.

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