A case for the Clause-Mate Condition

Abstract: Lasnik (2014) reports Bosnian/Croatian/Montenegrin/Serbian (BCMS) data that violate the Clause-Mate Condition in multiple sluicing, arguing that the Clause-Mate Condition is thus not a universal constraint. We revisit this claim and show that the reported data are subject to some confounds. Based on novel data that avoid these confounds, we argue that BCMS multiple sluicing does obey the Clause-Mate Condition. Furthermore, we show that multiple *wh*-movement also shows the same locality restrictions.

Keywords: multiple sluicing, multiple *wh*-question, Clause-Mate Condition, *wh*-movement, Bosnian/Croatian/Montenegrin/Serbian

1 Introduction

This paper deals with multiple sluicing in BCMS with special reference to the so-called Clause-Mate Condition (CMC) (Takahashi 1994, Nishigauchi 1998, Merchant 2001, Lasnik 2014, Abels and Dayal 2017, 2023, Barros and Frank 2023, Cortés Rodríguez and Griffiths 2024a,b, a.o.). According to the CMC, all remnants of sluicing must be in the same (finite) clause; if they are separated by a clause boundary, multiple sluicing is disallowed, as evidenced by the contrast between (1a) and (1b). (For better visualization of the data, we use subscripts matching the *wh*-phrase (boldfaced) with its correlate (underlined) throughout the paper.)

(1) a. Harriet claimed [$_{CP}$ that every teacher$_1$ spoke with some student$_2$], but I don't know **which teacher$_1$ with which student$_2$**. *no CMC violation*

b. *[$_{CP}$ Every teacher$_1$ reported [$_{CP}$ that Harriet spoke with some student$_2$]], but I don't know **which teacher$_1$ with which student$_2$**.[1] *CMC violation*

(Cortés Rodríguez and Griffiths 2024a:53)

CMC has been shown to be a robust cross-linguistic constraint. As first pointed out by Nishigauchi (1998), there is one configuration in which the CMC can (apparently) be violated, namely, when the embedded subject pronoun (boxed) is bound by a universal quantifier in the matrix clause, as in (2). This contrasts with (1b), in which the embedded subject is referentially independent.

(2) [$_{CP}$ Everybody$_1$ claimed [$_{CP}$ that $\boxed{\text{they}_1}$ had talked to some professor$_2$]], but I don't know **who$_1$ to which professor$_2$**. *CMC violation obviated by quantifier*

(Abels and Dayal 2017:5)

Examples like (2) have attracted a lot of attention in the literature: it is debated whether they are genuine exceptions to the CMC and how they are to be accounted for (see the afore-mentioned studies). Importantly, in the baseline case, i.e., when there is no quantifier binding the embedded subject, as in (1b), only five languages have been claimed to disobey the CMC: BCMS, Romanian, Indonesian, Bangla, and Kashmiri. Note, however, that apart from the rather brief notes found in the literature, these languages have not been studied in detail; recently, Abels and Dayal (2023) have raised the question whether they are real exceptions, as there are some uncertainties surrounding the data reported. For BCMS, the claim that the language allows CMC violations comes from Lasnik 2014 – a claim that this squib sets out to revisit.

This paper is organized as follows. Section 2 discusses the earlier findings suggesting that BCMS is an exception to the CMC (Lasnik 2014) and the issues related to them. Section 3 summarizes the empirical study we conducted in order to verify whether CMC violations are indeed allowed in BCMS. Section 4 discusses the theoretical implications of our findings for the locality conditions on *wh*-movement. Section 5 concludes.

2 BCMS as an apparent exception to the CMC

In his study on English multiple sluicing, Lasnik (2014) takes an excursus on multiple *wh*-fronting languages. He provides two BCMS examples: (3) illustrates CMC violations in multiple sluicing, while (4) shows *wh*-movement from two different clauses in multiple *wh*-questions.

(3) [$_{CP}$ Neko$_1$ misli [$_{CP}$ da je Ivan nešto$_2$ pojeo]].
someone.NOM think.PRS.3SG that AUX Ivan something.ACC eaten
?Pitam se **ko**$_1$ **šta**$_2$.
ask.PRS.1SG self who.NOM what.ACC
'Someone thinks that Ivan ate something. I wonder who what.' (Lasnik 2014:7)

(4) [$_{CP}$ **Ko**$_1$ **šta**$_2$ t_1 misli [$_{CP}$ da je Petar pojeo t_2]]?
who.NOM what.ACC think.PRS.3SG that AUX Petar eaten
'Who thinks that Petar ate what?' (Lasnik 2014:7)

Based on this, Lasnik (2014) claims that *i)* CMC violations are allowed in BCMS multiple sluicing, as evidenced by (3), and *ii)* the same speakers who accept (3) also accept multiple *wh*-movement targeting two different clauses, as in (4).[2] This correlation is reported to hold for six speakers, with two of them finding (3) hard to parse; one speaker rejects both (3) and (4).

Based on this, Lasnik (2014:7) concludes: "If this pattern holds more generally, in this language with genuine multiple *wh*-movement, there is no evidence for a finite clause constraint on multiple sluicing per se." In subsequent studies these claims have been by and large taken for granted, e.g., Abels and Dayal (2023) argue that the CMC violations in BCMS are unproblematic for the theory since multiple sluicing and multiple *wh*-questions pattern alike.

However, we would like to point out certain issues with the data presented by Lasnik (2014). First, he reports a correlation between multiple sluicing and multiple *wh*-questions for the majority of speakers, but the interspeaker variation is left unexplained. An even more pressing problem is that, as far as we can tell, the conclusion that the CMC is not operative in BCMS is made solely based on the two examples given in (3) and (4).

Moreover, the data presented in Lasnik 2014 are subject to potential confounds that might have influenced the acceptability of the examples. To begin with, the choice of *wh*-phrases, and especially wh_2, is not ideal. In particular, *šta* 'what' in (3) and (4) can be understood as the internal argument of the matrix verb *misli* 'think' (with the direct object of the embedded

verb being null). Additionally, the *wh*-phrase *šta* 'what' has a discourse use, meaning roughly 'why', as illustrated in (5).[3]

(5) **Šta** se države tiče ako ja volim da budem nepismen?
what self state concern.PRS.3SG if I like.PRS.1SG that be.PRS.1SG illiterate
'What/Why does the state care if I like being illiterate?' (srWaC)[4]

Furthermore, Lasnik's sluicing example does not control for the distinction between Single-Pair and Pair-List readings. Abels and Dayal (2023:fn. 1) argue that truly convincing cases of multiple sluicing "must use unambiguous singular *wh*-phrases in contexts that force [Pair-List] reading". Otherwise, we might be dealing with (asyndetic) coordination of two single sluices, e.g., *who ~~thinks that (Ivan ate something)~~ (and) what ~~Ivan ate~~*. Observe, however, that example (3) from Lasnik 2014 includes ambiguously singular/plural *wh*-phrases ('who' and 'what'). The sentence can therefore potentially be interpreted as either a Single-Pair or a Pair-List question (the presumed possible answers seem to be 'Sally thinks he ate soup' or 'Sally thinks he ate soup, Tina thinks he ate a falafel, Jane thinks he ate a toast'). In fact, the use of *neko* 'someone' as correlate$_1$ likely makes the Single-Pair reading more prominent, as the Pair-List reading in BCMS multiple sluicing is induced with the correlate *svako* 'everyone' (Vicente 2018:493).

These potential confounds cast doubts on the validity of the claims made for BCMS. In the next section we will report the findings of our new empirical study, which aimed at investigating the possibility of CMC violations in a more rigorous manner.

3 New empirical study

Below we present the new empirical findings of an acceptability judgment study on multiple sluicing and multiple *wh*-questions in BCMS. In this study, 12 native speakers of different varieties of BCMS (all linguists) provided judgments on a 5-point Likert scale (1 unacceptable, 5 acceptable). The judgments were collected between October 2024 and June 2025. The speakers were contacted via email; the test sentences were given to them in written form (with no glossing or further annotation, e.g., traces). We start the presentation of our findings with a brief discussion of CMC violations with bound pronominal subjects in 3.1. We also re-tested

the minimal pair of Lasnik 2014; the findings are summarized in 3.2. After describing our methodology in 3.3, we report and discuss the results of our study in 3.4 and 3.5, respectively.

3.1 CMC violations with a pronomimal subject bound by a universal quantifier

Based on cross-linguistic evidence, CMC violations with bound pronominal subjects are predicted to be acceptable, cf. (2). The two examples we tested in BCMS, one with simplex *wh*-phrases and the other one with D-linked *wh*-phrases, received average score of 2.7 and 3.3, respectively, as illustrated in (6) for the latter. We note that their acceptability shows interspeaker variation: CMC violations featuring a universal quantifier binding the embedded subject are fully acceptable for the majority of speakers (the mode value for example (6) was a 4), but not acceptable for the minority of speakers. Based on this we conclude that CMC violations with bound pronominal subjects are overall acceptable in BCMS, especially with D-linked *wh*-phrases. We do not intend to account for these cases, but their mean scores will be taken as a baseline for comparison when discussing the (un)acceptability of CMC violations without a quantifier binding the subject.

(6) [$_{CP}$ U ovoj grupi je svaki student$_1$ rekao [$_{CP}$ da je $\boxed{pro_1}$ nekom profesoru$_2$
in this group AUX every student said that AUX some professor.DAT
pročitao svoj esej]]. Pitam se **koji student$_1$ kom profesoru$_2$**.
read self essay ask.PRS.1SG self which student which professor.DAT
'In this group every student said that they have read their essay to some professor. I wonder which student to which professor.' [Average score: 3.3]

3.2 Re-testing Lasnik's original examples

The judgments obtained for Lasnik's (2014) examples were significantly different from what he reports. The multiple sluicing example shown above in (3) was given the average score of 1.8, i.e., it is ungrammatical, which is also reflected in the judgments of individual speakers: no speaker judged it as acceptable, there were only two speakers who judged is as marginal (giving it a 3). The multiple *wh*-example in (4) received the average score of 2.3, with three speakers judging it as acceptable (giving a 4 or a 5). Interestingly, these three speakers gave the sluicing example a 1 or a 2, and the two speakers who found the sluicing example marginal gave the multiple *wh*-question different scores (a 1 or a 3). In sum, contra to what Lasnik 2014

claims, *i)* the average scores suggest that these two examples are not acceptable, and *ii)* the judgments of individual speakers do not allow us to establish a correlation in the acceptability of CMC violations between multiple sluicing and multiple *wh*-questions.

3.3 New dataset: methodology

In our study, we included multiple sluicing and multiple *wh*-question examples; they were minimal pairs to each other. In order to avoid the confounds discussed in Section 2, we constructed test sentences that control for *i)* the initial position of wh_2, which can only be an argument of the embedded verb and, importantly, *šta* 'what' was not used; *ii)* the Pair-List reading: following Abels and Dayal (2023:fn. 1), all examples include an adverbial quantifier that distributes over the correlates. Furthermore, in all of our examples wh_1 linearly precedes wh_2, as long-distance *wh*-movement and multiple sluicing show Superiority effects in BCMS (Rudin 1988, Bošković 1997, Stjepanović 2003). Our test sentences featured nominative, accusative, and dative *wh*-phrases, in three combinations: wh_1:NOM wh_2:NOM ('NOM:NOM' henceforth), wh_1:NOM wh_2:DAT ('NOM:DAT' henceforth), and wh_1:DAT wh_2:ACC ('DAT:ACC' henceforth). We also controlled for the type of *wh*-phrases: both simplex and D-linked *wh*-phrases were tested.

Examples (7) and (8) illustrate the DAT:ACC condition with simplex *wh*-phrases for multiple sluicing and multiple *wh*-questions, respectively. (The full dataset is given in the Appendix.)

(7) [$_{CP}$ U svakoj kancelariji šef je <u>nekome$_1$</u> govorio [$_{CP}$ da je Jovan prevario
in every office boss AUX someone.DAT told that AUX Jovan deceived
<u>nekoga$_2$</u>]]. Pitam se **kome**$_1$ **koga**$_2$.
someone.ACC ask.PRS.1SG self who.DAT who.ACC
Intended: 'In every office the boss told someone that Jovan deceived someone. I'm wondering to whom ~~the boss told that Jovan deceived~~ whom.'

(8) [$_{CP}$ **Kome**$_1$ je **koga**$_2$ u svakoj kancelariji šef govorio t_1 [$_{CP}$ da je Jovan
who.DAT AUX who.ACC in every office boss told that AUX Jovan
prevario t_2]]?
deceived
Intended: 'Who did the boss tell in every office that Jovan deceived whom?'

3.4 Findings: multiple sluicing and multiple *wh*-questions

The results for multiple sluicing are given below, broken down by the case-marking combinations and the type of the *wh*-phrases: simplex in Table 1a and D-linked in Table 1b. Table 2 summarizes the results for multiple *wh*-questions, broken down by the case-marking combinations and the type of the *wh*-phrases: simplex in Table 2a and D-linked in Table 2b.

Table 1: Multiple sluicing

(a) simplex *wh*-phrases

	mean	mode	low	high
NOM:NOM	1.1	1	1	2
NOM:DAT	2.1	1	1	4
DAT:ACC	1.5	1	1	3

(b) D-linked *wh*-phrases

	mean	mode	low	high
NOM:NOM	1.9	1	1	4
NOM:DAT	2.4	2	1	5
DAT:ACC	2.0	1	1	5

Table 2: Multiple *wh*-questions

(a) simplex *wh*-phrases

	mean	mode	low	high
NOM:NOM	1.0	1	1	1
NOM:DAT	1.4	1	1	2
DAT:ACC	1.7	1	1	3

(b) D-linked *wh*-phrases

	mean	mode	low	high
NOM:NOM	1.1	1	1	2
NOM:DAT	1.3	1	1	2
DAT:ACC	1.7	1	1	4

3.5 Discussion of the findings

We suggest that the mean scores (highlighted in gray in Table 1 and 2) clearly indicate that *i)* CMC violations in multiple sluicing are judged as unacceptable, across all conditions for both *wh*-types, and *ii)* the *wh*-phrases in multiple *wh*-questions cannot originate in two different clauses, just like in multiple sluicing. In fact, the multiple *wh*-question examples have received slightly lower scores than their multiple sluicing counterparts; we will return to this below.

We would like to point out some further factors that might be influencing the judgments for individual conditions. First, the examples of the NOM:NOM condition with simplex *wh*-phrases

have received the lowest scores, which is likely due not only to the CMC violation but also to the so-called Anti-homophony rule observed in BCMS, according to which sequences of homophonous *wh*-words are not allowed (see Bošković 2002). Second, the results also show that D-linked *wh*-phrases received slightly higher scores in multiple sluicing. In our view, these findings fit well with the cross-linguistic observations about the effect of D-linking and (prosodic) heaviness in multiple sluicing.

We noted above that although CMC violations were judged as unacceptable in both multiple sluicing and multiple *wh*-questions, the examples in the latter condition received slightly lower scores. We interpret this as follows. All of our examples, in both the multiple sluicing and multiple *wh*-question condition, violate the CMC, which makes them ungrammatical. In multiple sluicing, however, the resulting surface string, wh_1 wh_2, is amenable to several construals since its syntax is left phonologically unpronounced. We tentatively propose that the multiple sluicing examples might have received a slightly higher score as some speakers potentially interpreted the *wh* sequence as an instance of asyndetic coordination (*wh*&*wh*-coordination is independently available in BCMS alongside multiple *wh*-fronting; see Citko and Gračanin-Yuksek 2013, Bošković 2024, a.o.). We note that the minimal pairs of our multiple sluicing examples with the overt coordinator *i* 'and' flanked by the two *wh*-phrases are judged as acceptable, especially with D-linked *wh*-phrases, as shown in Table 3 (compare with Table 1).

Table 3: Multiple sluicing coordination

(a) simplex *wh*-phrases

	mean	mode	low	high
NOM:NOM	1.8	1	1	3
NOM:DAT	3.3	4	1	5
DAT:ACC	3.4	4	1	5

(b) D-linked *wh*-phrases

	mean	mode	low	high
NOM:NOM	4.2	5	2	5
NOM:DAT	4.2	5	1	5
DAT:ACC	3.7	5	1	5

Finally, we would like to discuss the interspeaker variation observed. It is important to emphasize that although our findings are suggestive of interspeaker variation, we cannot establish a correlation like the one reported in Lasnik 2014. Our study allows us to make two observations. First, the speakers who found the examples of multiple sluicing with D-linked *wh*-phrases as (somewhat) acceptable judged their minimal pairs in the multiple *wh*-question con-

dition as (completely) ungrammatical. Second, some speakers showed the opposite: for them the *wh*-phrases originating from two different clauses was more acceptable in multiple *wh*-questions than in multiple sluicing. We also note that there is some intraspeaker variation: the judgments of individual speakers for individual examples are not systematic.

The overall conclusion based on our study is that the CMC does hold for multiple sluicing and multiple *wh*-questions in BCMS. This contradicts the claims made by Lasnik (2014). In the next section we turn to the theoretical implications of these findings.

4 Theoretical implications

In empirical terms, the CMC states that the sluiced *wh*-phrases must be in the same finite clause. There are several theoretical proposals how to derive this (see Takahashi 1994, Lasnik 2014, Park 2014, Abels and Dayal 2017, 2023, Grano and Lasnik 2018, Citko 2020, Barros and Frank 2023). Most of these analyses try to motivate the clause-boundedness of wh_2, e.g., by assuming that wh_2 undergoes a movement type different from *wh*-movement. In this way, the proposals often end up being language-specific (see Abels and Dayal 2023 on this point). For example, Takahashi (1994) claims that multiple sluicing in Japanese involves *wh*-cluster formation, which is locally restricted A-movement; Lasnik (2014) proposes for English that wh_2 undergoes rightward movement, which is clause-bound (cf. Right Roof Constraint), and Citko (2020) argues that multiple sluicing in Polish is in fact gapping. More generally, Abels and Dayal (2023) state that wh_2 undergoes covert movement from the embedded clause and that sluicing makes covert movement overt.

Our study shows that multiple sluicing and multiple *wh*-questions in BCMS pattern alike in that the two *wh*-phrases must originate in the same clause. Given that sluicing is a complex operation combining *wh*-movement and deletion/non-pronunciation, and that *wh*-movement is thus the common element of the two constructions, it seems natural to tie the observed locality restriction to the more general properties of multiple *wh*-movement, at least for multiple *wh*-fronting languages like BCMS. *Wh*-phrases in BCMS are said to undergo either focus or *wh*-movement, importantly though, both long-distance multiple *wh*-fronting and multiple sluicing have been shown to feature proper *wh*-movement, as evidenced by Superiority effects, which are absent with focus movement (see Bošković 1997, 2002, Stjepanović 2003).

Our study demonstrated the locality between wh_1 and wh_2 in multiple *wh*-questions (cf. (8) and the discussion in Section 3). We also tested a context where the two *wh*-phrases move from two different *embedded* clauses, as in (9). This turned out to be ungrammatical.[5] Thus, it seems that what prevents combining the movement of wh_1 from the matrix clause and wh_2 from the embedded clause, and what prevents combining the movements of the two *wh*-phrases from two different embedded clauses is the presence of a finite clause boundary between the source positions of the two *wh*-phrases.

(9) *[$_{CP}$ **Kome**$_1$ je **koga**$_2$ Petar čuo [$_{CP}$ da je Ivan objašnjavao $\boldsymbol{t}_1$ [$_{CP}$ da je
who.DAT AUX who.ACC Petar heard that AUX Ivan explained that AUX
Marija izljubila $\boldsymbol{t}_2$]]]?
Marija kissed
Intended: 'To whom did Petar hear that Ivan explained that Marija kissed who?'

[Average score: 1.1]

At this point an important note is in order. It is well-known that BCMS utilizes both single and multiple long-distance *wh*-fronting, as illustrated in (10) and (11), respectively. In the latter, the two *wh*-phrases can move from the same embedded clause.[6]

(10) **Šta**$_2$ želite da vam **ko**$_1$ kupi $\boldsymbol{t}_2$?
what.ACC want.PRS.2PL that you.DAT who.NOM buy.PRS.3SG
'What do you want who to buy you?' (Rudin 1988:453)

(11) **Ko**$_1$ si **koga**$_2$ tvrdio da je $\boldsymbol{t}_1$ istukao $\boldsymbol{t}_2$?
who.NOM AUX who.ACC claimed that AUX beaten
'Who did you claim beat whom?' (Bošković 1997:5)

In light of these properties of long-distance *wh*-fronting in BCMS, we suggest that it is neither the type of movement nor the clause-boundary per se that blocks wh_2 from moving in CMC-violating contexts like (8) and (9). The BCMS data also suggest that it is not only covert movement that is clause-bound, as suggested by Abels and Dayal (2023). Rather, the locality restrictions on *wh*-movement in BCMS discussed in this squib lead us to think that the Clause-Mate Condition is operative not just in multiple sluicing but also in multiple *wh*-questions and that there needs to be a local relationship between wh_1 and wh_2: in both contexts they need to move from the same clause.

5 Conclusion

In this paper, we argued that – contra previous claims made by Lasnik (2014) – multiple sluicing in BCMS obeys the CMC. This brings us a step closer to postulating the CMC as a universal constraint, as it removes BCMS from the list of counterexamples. By constructing and testing examples that force a Pair-List reading and combine different types of *wh*-phrases, we show that the CMC is obeyed not only in multiple sluicing but also in multiple *wh*-questions. Unlike existing accounts of the CMC that tie the clause-boundedness of wh_2 to that being a different kind of movement, the parallelism between multiple sluicing and multiple *wh*-movement in BCMS suggest that the CMC is related to the nature of multiple *wh*-movement.

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Notes

Acknowledgments: TBA

[1]The glosses in examples from other sources have been modified for consistency. The glosses used are the following: 1 = first person, 2 = second person, 3 = third person, ACC = accusative, AUX = auxiliary, DAT = dative, NEG = negative, NOM = nominative, PL = plural, PRS = present, SG = singular.

[2]In a recent paper, Bošković (2024) has also argued that multiple *wh*-movement is not clause-bound.

[3]This potential confound applies to the example presented in Bošković (2024), too, as it also features *šta* 'what'.

[4]The Serbian Web Corpus (srWaC) is available at: `https://www.sketchengine.eu/srwac-serbian-corpus/`. Last accessed: June 19, 2025.

[5]Comorovski (1986:175, ex. 10) has claimed that this kind of long-distance multiple *wh*-movement is licit in Romanian, which is another CMC-violating language according to the literature. We note, however, in the Romanian example discussed, wh_2 is 'what' and the matrix verb is a transitive one, i.e., the potential confound mentioned in Section 2 might be at play. We leave this question open for future research.

[6]Note that this is subject to interspeaker variation and that extraction of two *wh*-phrases is not equally available with all types of matrix predicates (see Rudin 1988, Bošković 1997 *et seq*, Progovac 2005); this was confirmed by the judgments of our consultants as well.

Appendix: Dataset

The examples in this section do not include judgment marks. Rather, the average score that each item received is given next to the example.

❶ Multiple sluicing

① wh_1:NOM wh_2:NOM: simplex (12) and D-linked (13)

(12) [$_{CP}$ Za svaku feštu neko$_1$ je tvrdio [$_{CP}$ da je neko$_2$ pojeo
for every party someone.NOM AUX claimed that AUX someone.NOM eaten
veganski sendvič, ali ne znam **ko**$_1$ **ko**$_2$.
vegan sandwich but NEG know.PRS.1SG who.NOM who.NOM
Intended: 'For every party someone claimed that someone ate a vegan sandwich but I don't know who who.' [Average score: 1.1]

(13) [$_{CP}$ Za svaku feštu neki student$_1$ je tvrdio [$_{CP}$ da je neki gost$_2$
for every party some student.NOM AUX claimed that AUX some guest.NOM
pojeo veganski sendvič, ali ne znam **koji student**$_1$ **koji gost**$_2$.
eaten vegan sandwich but NEG know.PRS.1SG which student.NOM which guest.NOM
Intended: 'For every party some student claimed that some guest ate a vegan sandwich but I don't know which student which guest.' [Average score: 1.9]

② wh_1:NOM wh_2:DAT: simplex (14) and D-linked (15)

(14) [$_{CP}$ U svakoj kancelariji neko$_1$ misli [$_{CP}$ da je Petar tamo
in every office someone.NOM think.PRS.3SG that AUX Petar there
nekome$_2$ ukrao novac]]. Pitam se **ko**$_1$ **kome**$_2$.
someone.DAT stolen money ask.PRS.1SG self who.NOM who.DAT
Intended: 'In every office someone thinks that Peter stole money from someone. I'm wondering who from whom.' [Average score: 2.1]

(15) [$_{CP}$ U svakoj kancelariji neki šef$_1$ misli [$_{CP}$ da je Petar tamo
in every office some boss.NOM think.PRS.3SG that AUX Petar there
nekom sekretaru$_2$ ukrao novac]]. Pitam se **koj šef**$_1$ **kom**
some secretary.DAT stolen money ask.PRS.1SG self which boss.NOM which
sekretaru$_2$.
secretary.DAT
Intended: 'In every office a boss thinks that Peter stole money from a some secretary. I'm wondering which boss from which secretary.' [Average score: 2.4]

③ wh_1:DAT wh_2:ACC simplex (16) (=(7)) and D-linked (17)

(16) [$_{CP}$ U svakoj kancelariji šef je nekome$_1$ govorio [$_{CP}$ da je Jovan prevario
in every office boss AUX someone.DAT told that AUX Jovan deceived
nekoga$_2$]]. Pitam se **kome**$_1$ **koga**$_2$.
someone.ACC ask.PRS.1SG self who.DAT who.ACC
Intended: 'In every office the boss told someone that Jovan deceived someone. I'm wondering to whom whom.' [Average score: 1.5]

(17) [$_{CP}$ U svakoj kancelariji šef je nekom sekretaru$_1$ govorio [$_{CP}$ da je Jovan
in every office boss AUX some secretary.DAT told that AUX Jovan
neku mušteriju$_2$ prevario]]. Pitam se **kom sekretaru**$_1$ **koju**
some customer.ACC deceived ask.PRS.1SG self which secretary.DAT which
mušteriju$_2$.
customer.ACC
Intended: 'In every office the boss told some secretary that Jovan deceived some customer. I'm wondering to which secretary which customer.' [Average score: 2]

❷ Multiple *wh*-questions

① wh_1:NOM wh_2:NOM: simplex (18) and D-linked (19)

(18) [$_{CP}$ **Ko**$_1$ je **ko**$_2$ za svaku feštu t_1 tvrdio [$_{CP}$ da je t_2 pojeo veganski
who.NOM AUX who.NOM in every party claimed that AUX eaten vegan
sendvič]]?
sandwich
Intended: 'Who claimed at every party (that) who ate a vegan sandwich?' [Average score: 1]

(19) [$_{CP}$ **Koji student**$_1$ je **koji gost**$_2$ za svaku feštu t_1 tvrdio [$_{CP}$ da je t_2
which student.NOM AUX which guest.NOM at every party claimed that AUX
pojeo veganski sendvič]]?
eaten vegan sandwich
Intended: 'Which student claimed at every party (that) which guest ate a vegan sandwich?' [Average score: 1.1]

② wh_1:NOM wh_2:DAT: simplex (20) and D-linked (21)

(20) [$_{CP}$ **Ko**$_1$ **kome**$_2$ u svakoj kancelariji t_1 misli [$_{CP}$ da je Petar tamo ukrao t_2
who.NOM who.DAT in every office thinks that AUX Petar there stolen
novac]]?
money

Intended: 'Who thinks in every office that Petar stole money from whom?'

[Average score: 1.4]

(21) [$_{CP}$ **Koji šef**$_1$ **kom sekretaru**$_2$ u svakoj kancelariji t_1 misli [$_{CP}$ da je
which boss.NOM which secreatry.DAT at every office thinks that AUX
Petar tamo ukrao t_2 novac]]?
Petar there stolen money
Intended: 'Which boss thinks in every office that Petar stole money from which secretary?'

[Average score: 1.3]

③ wh_1:DAT wh_2:ACC simplex (22) (=(8)) and D-linked (23)

(22) [$_{CP}$ **Kome**$_1$ je **koga**$_2$ u svakoj kancelariji šef govorio t_1 [$_{CP}$ da je Jovan
who.DAT AUX who.ACC in every office boss told that AUX Jovan
prevario t_2]]?
deceived
Intended: 'Whom did the boss tell in every office that Jovan deceived whom?'

[Average score: 1.7]

(23) [$_{CP}$ **Kom sekretaru**$_1$ je **koju mušteriju**$_2$ u svakoj kancelariji šef govorio t_1
which secretary.DAT AUX which customer.ACC in every office boss told
[$_{CP}$ da je Jovan prevario t_2]]?
that AUX Jovan deceived
Intended: 'Which secretary did the boss tell in every office that Jovan deceived which customer?'

[Average score: 1.7]

❸ Multiple sluicing coordination

① wh_1:NOM wh_2:NOM: simplex (24) and D-linked (25)

(24) [$_{CP}$ Za svaku feštu <u>neko</u>$_1$ je tvrdio [$_{CP}$ da je <u>neko</u>$_2$ pojeo
for every party someone.NOM AUX claimed that AUX someone.NOM eaten
veganski sendvič, ali ne znam **ko**$_1$ **i** **ko**$_2$.
vegan sandwich but NEG know.PRS.1SG who.NOM and who.NOM
Intended: 'For every party someone claimed that someone ate a vegan sandwich but I don't know who and who.'

[Average score: 1.8]

(25) [$_{CP}$ Za svaku feštu <u>neki student</u>$_1$ je tvrdio [$_{CP}$ da je <u>neki gost</u>$_2$ pojeo
for every party some student.NOM AUX claimed that AUX some guest.NOM eaten
veganski sendvič, ali ne znam **koji student**$_1$ **i koji gost**$_2$.
vegan sandwich but NEG know.PRS.1SG which student.NOM and which guest.NOM

Intended: ‘For every party some student claimed that some guest ate a vegan sandwich but I don’t know which student and which guest.’ [Average score: 4.2]

② wh_1:NOM wh_2:DAT: simplex (26) and D-linked (27)

(26) [$_{CP}$ U svakoj kancelariji neko$_1$ misli [$_{CP}$ da je Petar tamo
in every office someone.NOM think.PRS.3SG that AUX Petar there
nekome$_2$ ukrao novac]]. Pitam se **ko**$_1$ **i** **kome**$_2$.
someone.DAT stolen money ask.PRS.1SG self who.NOM and who.DAT
Intended: ‘In every office someone thinks that Peter stole money from someone. I’m wondering who and from whom.’ [Average score: 3.3]

(27) [$_{CP}$ U svakoj kancelariji neki šef$_1$ misli [$_{CP}$ da je Petar tamo
in every office some boss.NOM think.PRS.3SG that AUX Petar there
nekom sekretaru$_2$ ukrao novac]]. Pitam se **koj** **šef**$_1$ **i** **kom**
some secretary.DAT stolen money ask.PRS.1SG self which boss.NOM and which
sekretaru$_2$.
secretary.DAT
Intended: ‘In every office a boss thinks that Peter stole money from a some secretary. I’m wondering which boss and from which secretary.’ [Average score: 4.2]

③ wh_1:DAT wh_2:ACC simplex (28) and D-linked (29)

(28) [$_{CP}$ U svakoj kancelariji šef je nekome$_1$ govorio [$_{CP}$ da je Jovan prevario
in every office boss AUX someone.DAT told that AUX Jovan deceived
nekoga$_2$]]. Pitam se **kome**$_1$ **i** **koga**$_2$.
someone.ACC ask.PRS.1SG self who.DAT and who.ACC
Intended: ‘In every office the boss told someone that Jovan deceived someone. I’m wondering to whom and whom.’ [Average score: 3.4]

(29) [$_{CP}$ U svakoj kancelariji šef je nekom sekretaru$_1$ govorio [$_{CP}$ da je Jovan
in every office boss AUX some secretary.DAT told that AUX Jovan
neku mušteriju$_2$ prevario]]. Pitam se **kom** **sekretaru**$_1$ **i** **koju**
some customer.ACC deceived ask.PRS.1SG self which secretary.DAT and which
mušteriju$_2$.
customer.ACC
Intended: ‘In every office the boss told some secretary that Jovan deceived some customer. I’m wondering to which secretary and which customer.’ [Average score: 3.7]