Conjunction Saves Multiple Sluicing: How *(and) Why?

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In this talk, we analyze coordinated multiple wh-sluicing and its relationship to multiple sluicing, coordinated wh-questions and coordinated clefts. We start with the puzzle in (1a-b): *why does the ungrammatical multiple wh-sluice in English improve when the wh-phrases are coordinated?*

(1) a.   ?*Someone saw something, but I can't remember **who what.**   (Lasnik 2014: 8)
      b.   Someone saw something, but I can't remember **who or what.**

The contrast in (1a-b) is reminiscent of the contrast (2a-b): the ungrammatical multiple wh-questions also improve when the fronted wh-phrases are coordinated. Thus, the next question is *whether perhaps coordinated wh-sluicing is derived from coordinated wh-questions* (CWHs)?

(2) a.   ***What where** does John sing?   (3)
      b.   **What and where** does John sing?
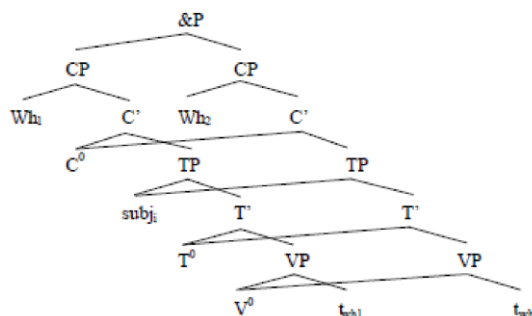
Gračanin-Yuksek (2007) and Citko and Gračanin-Yuksek (2013) attribute the contrast in (2a-b) to the fact that coordinated wh-questions in English are unrelated to multiple wh-questions, and have the multidominant bi-clausal structure in (3). Such a structure explains why coordinated wh-questions are ungrammatical if they involve two arguments: (4a) below, if one wh-phrase is the subject: (4b), and if one wh-phrase is a direct object when the verb is obligatorily transitive: (4c).

(4) a.   ***What and to whom** did John give? / *Do you know **what or to whom** John gave?
      b.   ??/*Tell me **who and when** sang?
      c.   ***What and when** did John fix? / *Do you know **what or when** John fixed?

We show, however, that *the bi-clausal multidominant structure in (3) cannot be the right structure for coordinated wh-sluices.* If it were, CWHs and coordinated wh-sluices should be subject to the same restrictions, which is not what we find. (5a) shows that coordinated wh-sluices can involve two arguments, (5b) shows that one of the coordinated wh-phrases can be a subject, and (5c) shows that one of the coordinated wh-phrases in coordinated wh-sluicing with obligatorily transitive verb can be a direct object. Crucially, in all these respects, coordinated wh-sluices contrast with coordinated wh-questions, as shown by the ungrammaticality of the parallel CWH examples in (4a-c).

(5) a.   I know that John gave something to someone, but I don't know **what or to whom.**
      b.   Someone has already sung this song, but I don't know **who and/or when.**
      c.   I know that John fixed something one of these days, but I don't know **what or when**.

Abels and Dayal (2017: Fn 16) suggest that coordinated sluices are derived from pseudoclefts. On such an analysis, (6) would the source of the coordinated sluice in (1b):

(6) I know that someone saw something but I don't know **who** it was **or what** it was.

We show that this *cannot* be the right structure for coordinated wh-sluices either, by applying Merchant's (2001) diagnostics to distinguish clefts with wh-pivots from singular sluicing constructions. First, adjuncts can appear in coordinated wh-sluices, but not in clefts: (7a-b). Second, aggressively non-D-linked wh-phrases are disallowed in coordinated wh-sluicing, but not in clefts: (8a-b). Third, coordinated wh-sluices allow swiping but clefts with wh-pivots do not: (9a-b).

(7) a.   I know that John fixed something somehow, but I don't know **what or how.**
      b.   I know that John fixed something somehow but I don't know **what** it was **or how** (*it was).

(8) a.   *Someone saw something, but I can't remember **who (the hell) or what the hell**.
      b.   Someone saw something, but I can't remember **who (the hell)** it was **or what the hell** it was.

(9) a.   John spoke to someone about something but I don't know **who to** or **what about**.
      b.   *John spoke to someone about something but I don't know **who to** it was or **what about** it was.

Furthermore, in languages in which wh-pivots in clefts are nominative, we expect to find coordinated wh-phrases in sluicing to be nominative if sluices were derived from clefts. This is not what we find:

(10) a. Ktoś   kierował czymś,   ale nie wiem, **kto**   to był **i co**   to było.   *Polish*
someone managed something.instr but no know who.nom it was and what.nom it was
'Someone managed something but I don't know who and what it was.'

   b. Ktoś   kierował czymś,   ale nie wiem, **kto   i   czym   /*co.**
someone managed something.instr but no know who.nom and what.instr /*what.nom
Someone managed something but not know who and what.'

We thus propose that wh-phrases in coordinated multiple sluicing undergo independent movements in separate clauses, followed by ellipsis in each. The structure of the coordinated wh-sluice in (1b) is (11):

(11)   … I can't remember [$_{CP}$ **who**$_i$ [$_{TP}$ ~~t_i saw something~~] **or** [$_{CP}$ **what**$_i$ [$_{TP}$ ~~he/she/they$_i$ saw t_i~~]].

This structure explains why coordinated wh-sluices behave differently from multiple (non-coordinated) wh-sluices, coordinated wh-questions, and clefts (and thus predicts no similarities between them).

First, it explains why ungrammatical multiple wh-sluicing improves when the wh-phrases are coordinated ((1a) vs. (1b)). *Second*, it explains why coordinated wh-sluicing has a wider distribution than multiple sluicing. Multiple sluicing in English is possible if the second wh-remnant is a PP (Bolinger 1978, Richards 2010): contrast (1a) with (12). No such restriction holds of coordinated wh-sluices.

(12) ?Someone talked about something, but I can't remember **who about what.**   (Lasnik 2014: 8)

Third, it explains the fact that, like their non-elided sources, coordinated multiple sluices have single pair readings (noted by Abels and Dayal (2017) and Gribanova (2009: 142), who builds on Grebenyova's (2006) work on multiple sluicing). *And fourth*, it explains why coordinated multiple sluices are not subject to the so-called Clausemate Condition (Abels and Dayal 2017), which requires wh-phrases in multiple sluicing to originate within the same (finite) clause (see Lasnik 2014, Merchant 2001, Nishigauchi 1998, Takahashi 1994, among others). Since (13) is not a multiple sluicing configuration, the Clausemate Condition simply does not apply.

(13) Some student thought that some professor resigned, but I don't know **which student and which professor.**

Since English does not allow multiple wh-fronting, it is not surprising that coordinated wh-sluicing in English has a bi-clausal source. However, we argue that the analysis in (11) for coordinated wh-sluicing should also be extended to multiple wh-fronting languages that allow mono-clausal coordinated wh-questions (CWHs) with the structure in (14). Such CWHs behave differently from CWHs in English in that, e.g., they allow coordination

(14)   of wh-arguments, as illustrated in (15a) for Croatian.
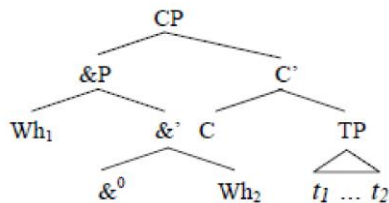
However, coordinated wh-sluices in Croatian cannot be derived from (14), as shown by the distribution of the discourse particle *to*, which can appear only *once* in mono-clausal CWHs in (15a), but is allowed to appear *twice* in a comparable coordinated wh-sluice in (15b).

(15) a. **Kome   (to) i   što (*to)** Jan daje?   *Croatian*
to-whom **TO** and what **TO** Jan gives
Int.: 'What and to whom is Jan giving?'

   b. Jan nekome   nešto   daje. Reci mi **kome to i   što   to.**
Jan to-someone something gives tell me who   **TO** and what **TO**
'Jan is giving something to someone. Tell me who to and what.'

Thus, coordinated sluicing seems to be independent of multiple wh-fronting and requires a bi-clausal source that is unrelated to multiple sluicing, (multiple) clefts and multiple coordinated wh-questions.

Selected references: Abels, C. & V. Dayal. 2017. On the syntax of multiple sluicing and what it tells us about wh scope taking, Ms.; **Gribanova, V.** 2009. Structural adjacency and the typology of interrogative interpretations. *Linguistic Inquiry* 40: 133-154. **Lasnik, H.** 2014. Multiple sluicing in English? Syntax 17: 1-20. **Merchant, J.** 2001. *The Syntax of Silence.* OUP. **Richards, N.** 2010. *Uttering Trees.* Cambridge, MA: MIT Press.