

# On the Interaction between Multidominance and Ellipsis

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Two ways to ‘PF-reduce’ syntactic structure:

- Ellipsis: some material, syntactically present and interpreted, is not pronounced subject to recoverability (Merchant 2001)
- Multidominance (MD): some material, literally *shared* between multiple constituents, is pronounced once, but interpreted more than once.

Can Ellipsis be reduced to Multidominance, or vice versa?

The existence of PF-reduced constructions whose properties derive from one or the other mechanism (ellipsis/MD) suggests the answer is *NO*:

- Ellipsis: Verb Phrase Ellipsis, sluicing (Ross 1969, Merchant 2001, Johnson 2001, among many, many others)
- Multidominance: Across-the-Board Extraction, Coordinated Wh-Questions (Williams 1978,

Goodall 1987,..., Citko 2005, Gračanin-Yuksek 2007, Citko & Gračanin-Yuksek 2013, 2021)

- Ellipsis/Multidominance: Right Node Raising (Barros & Vicente 2011)

If *both* PF-reduction mechanisms are in principle available:

- What factors influence the choice between ellipsis and MD?
- How do the two interact with one another: can multiply-dominated material be elided and if so, under what circumstances?

To answer these questions, we focus on coordinate structures in which the elements that survive PF-reduction are *wh*-phrases: **Coordinated Wh-Questions (CWHs)** and **Coordinated Sluices (CSs)**.

- |     |  |            |
|-----|--|------------|
| (1) | <b>What and/or when</b> should you teach?                            | <b>CWH</b> |
| (2) | Someone saw something, but I can't remember <b>who and/or what</b> . | <b>CS</b>  |

CSs and CWHs differ in several respects:

- *compatibility with obligatory arguments*

Coordination of obligatory arguments is impossible in CWHs, but possible in coordinated sluicing:

- |     |    |  |            |
|-----|----|--|------------|
| (3) | a. | *Do you know <b>what and to whom</b> John gave?                                    | <b>CWH</b> |
|     | b. | I heard that John gave something to someone. Do you know <b>what and to whom</b> ? | <b>CS</b>  |

➤ *transitivity restrictions*

In CWHs involving obligatory transitive verbs, coordination of a wh-object with a wh-adjunct is impossible. No such restriction holds of coordinated sluicing:

- (4) a. \*Do you know **what or when** John bought? CWH  
b. I know that John bought something sometime last week, but I don't remember **what or when**. CS

➤ *interpretation*

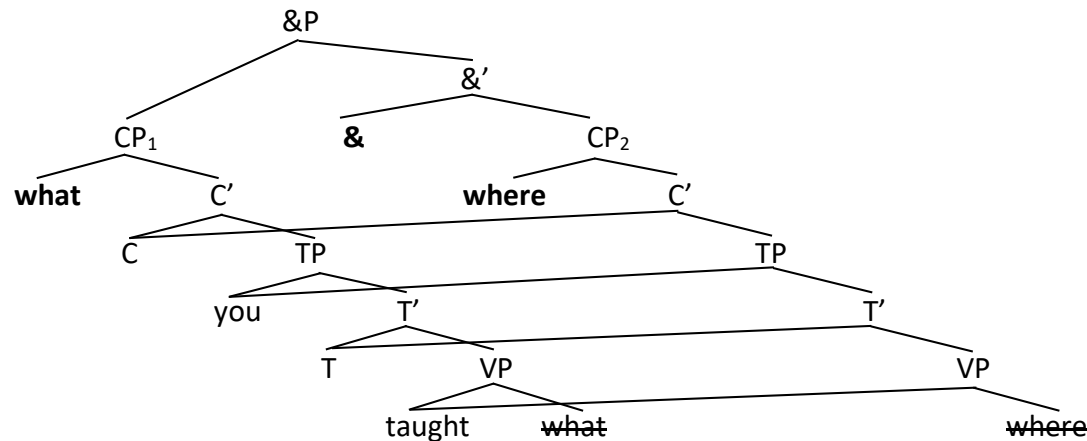
In CSs, unlike CWHs, the wh-phrase introducing the first conjunct (*what*) is interpreted in the second conjunct:

- (5) a. **What and where** did John sing? CWH  
b. = **What** did John sing and **where** did John sing?  
(6) a. I heard that John sang something, but I forgot **what and where**. CS  
c. = ... but I forgot **what** John sang and **where** he sang *it*.

➤ **WHs and CSs have different structures** (Citko and Gračanin-Yuksek 2013, 2020)

- (7) a. I don't know **what and where** you taught.  
 b. I don't know

**CWH**



- **No obligatory arguments:** Coordination of obligatory arguments would lead to thematic requirements of the verb not being satisfied in one or both conjuncts.
- **Interpretation:** Since CP<sub>1</sub> does not contain the wh-phrase that introduces CP<sub>2</sub> and vice versa, the wh-phrase that introduces CP<sub>2</sub> cannot be interpreted in CP<sub>1</sub> and vice versa.

Since CSs have different properties, they *cannot* have the structure in (7).

Two structures to consider:

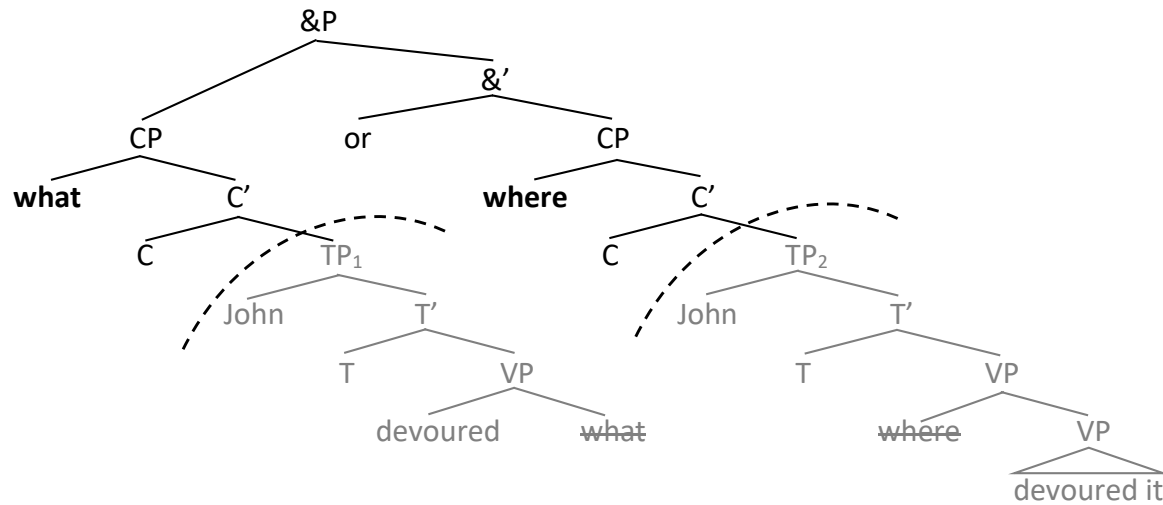
(8) a. John devoured something, but I don't know **what or where**.

CS

b. Ellipsis *without* Multidominance

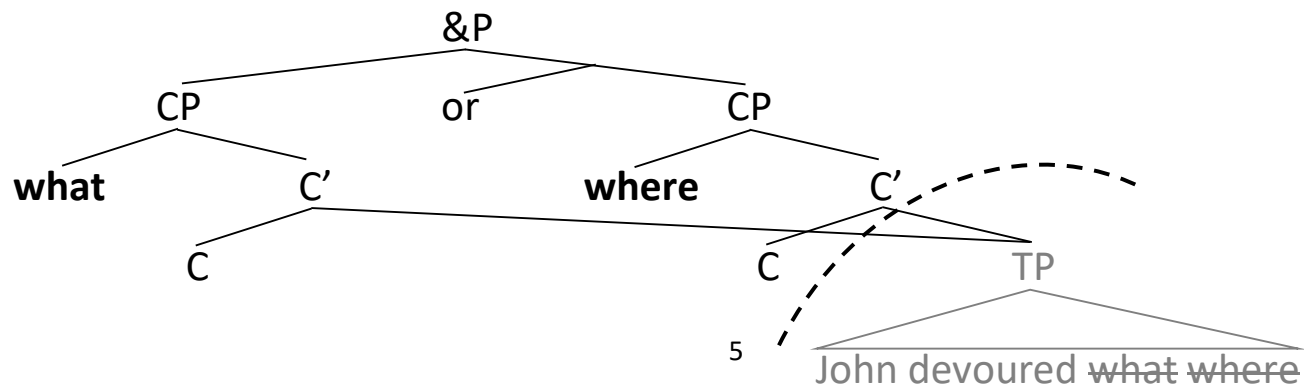
(Citko & Gračanin-Yuksek 2020)

... but I don't know



c. Ellipsis *with* Multidominance

... but I don't know



Both ((8)b) and ((8)c) derive the properties of CSs:

- Each conjunct is interpreted as a complete CP.
- The interpreted TP is not pronounced in either conjunct.
- Coordination of obligatory arguments is possible.
- Both wh-phrases are interpreted in each conjunct.

### Questions:

**Q1: Which of these two structures, *Ellipsis with MD* or *Ellipsis without MD*, is the right structure for CSs, and why?**

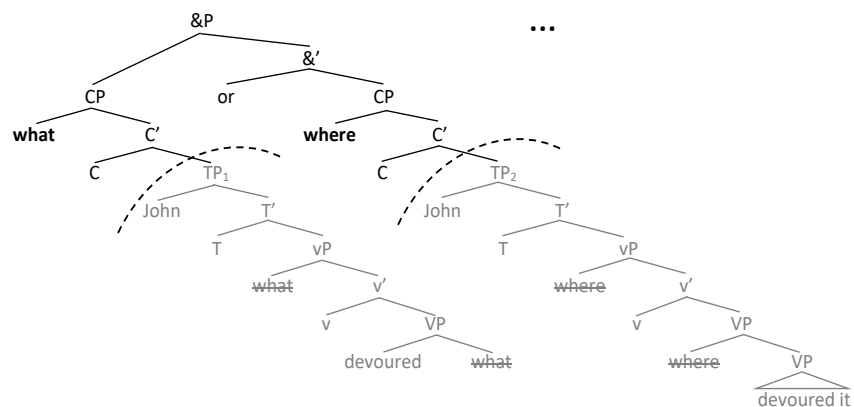
**Q2: Why cannot CWHs involve the structure of CSs and have the properties that go with it?**

**Q3: Why cannot CSs involve the structure of CWHs and have the properties that go with it?**

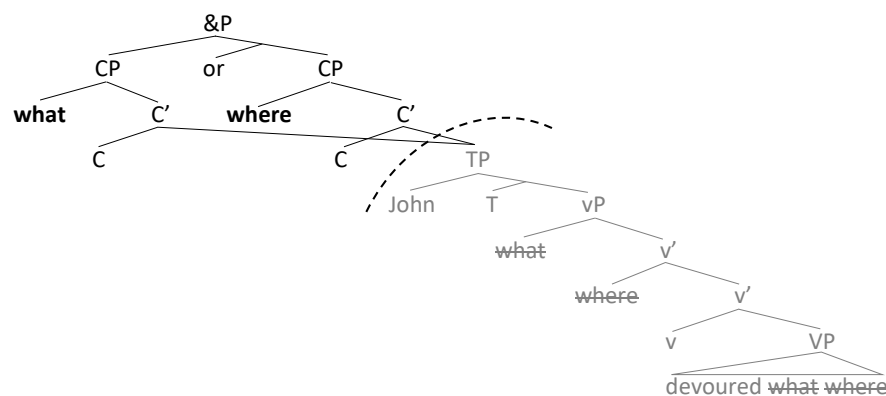
**Q1: Which of the two structures is the right structure for CSs, and why?**

(9) a. John devoured something, but I don't know **what or where**.

b. Ellipsis *without* MD



c. Ellipsis *with* MD



Ellipsis *without* MD involves:

- *More* structure building (the PF-reduced TP is generated twice – once per conjunct), *and*
- *Two* applications of ellipsis

Ellipsis *with* MD involves:

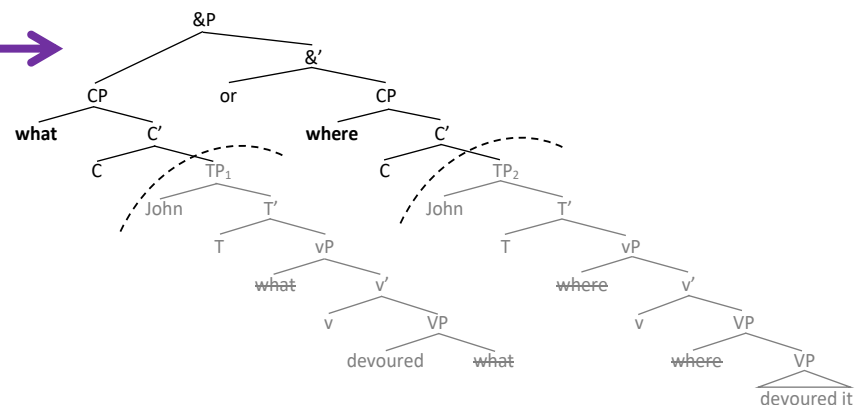
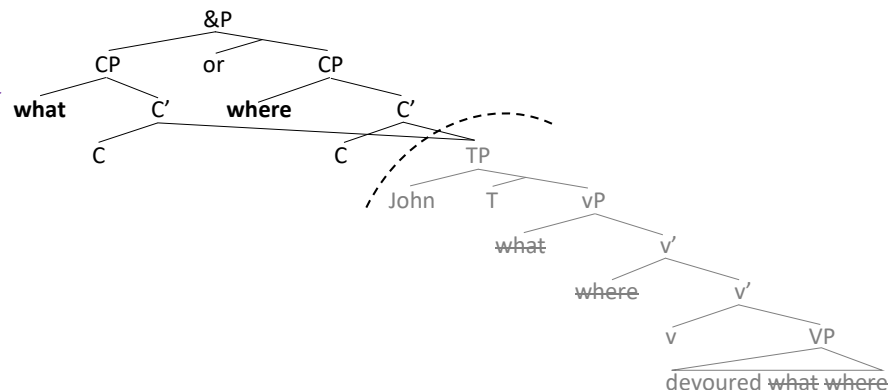
- *Less* structure building (the PF-reduced TP is generated once), *and*
- *A single* application of ellipsis

**Q1: Which of the two structures is the right structure for CSs, and why?**

**A1:** CSs necessarily involve the Ellipsis with MD structure because this structure is *more economical*.

**BUT:**

- In the **ELLIPSIS WITH MD** structure, the wh-phrases end up in the specifiers of separate CPs, but still go through multiple specifiers of a single v. This looks like a **MWF** (multiple wh-fronting) configuration.
- English doesn't have MWF.
- In the **ELLIPSIS WITHOUT MD** structure, neither vP has multiple specifiers.
- Hence, no MWF involved.



So why do we even consider that English CSs might have the Ellipsis with MD structure?



*Because ellipsis!*

Ellipsis ameliorates island violations (Ross 1969; Chomsky 1972; Lasnik 2001; Merchant 2001, Fox & Lasnik 2003, but see Barros, Elliott & Thoms 2014, 2015):

- (10) a. They want to hire someone who speaks a Balkan language, but I don't remember which. (Merchant 2000: 42)
- b. She bought a big car, but I don't know how big. (Merchant 2008: 136)
- c. A biography of one of the Marx brothers is going to be published this year — guess which! (Merchant 2001: 185)
- d. They persuaded Kennedy and some other Senator to jointly sponsor the legislation, but I can't remember which one. (Chung et al.'s 1995: 273)
- e. Ben will be mad if Abby talks to one of the teachers, but she couldn't remember which. (Merchant 2000: 42)

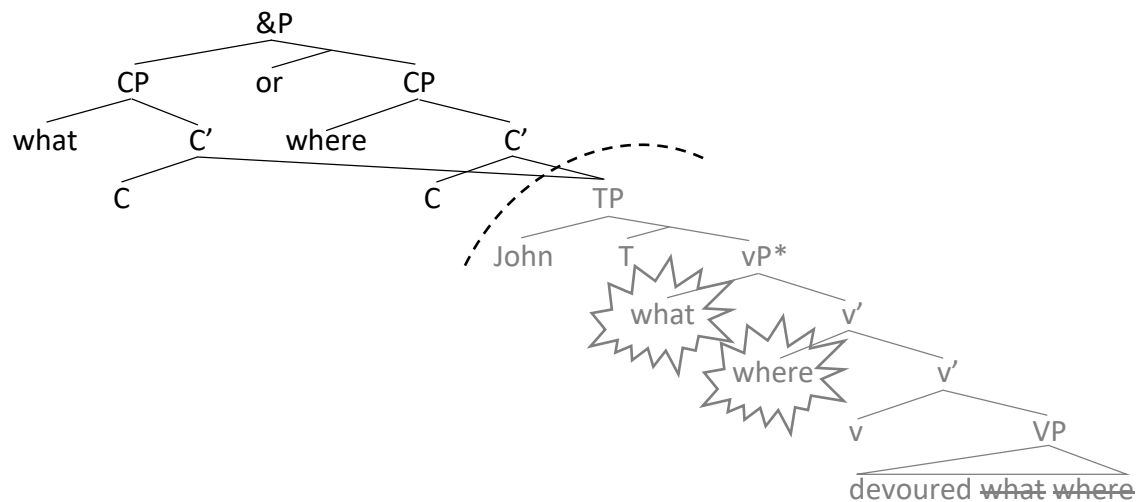
Under the “salvation-by-deletion” account of island repair under ellipsis, the illegitimately crossed island boundaries receive a mark (\*).

- (11) They want to hire someone who speaks a Balkan language, but I don't remember which (Balkan language) [TP they want to hire [NP someone \*[CP who speaks ~~which~~ Balkan language]]]

(12) They want to hire someone who speaks a Balkan language, but I don't remember which <(Balkan language) [TP they want to hire [NP someone \*[CP who speaks ~~which Balkan language~~]]]>

We apply this reasoning to argue that the structure involving Ellipsis *with* MD is the right structure for CSs despite multiple vP specifiers.

(13) a. John devoured something, but I don't know **what or where**.  
 b. ...



Could the Multiple Wh-Fronting (MWF) parameter be PF parameter?

(14) **MWF Parameter**

**MWF languages:** Multiple wh-specifiers at phase edges do not cause a problem at the PF-interface (a phase node with multiple wh-specifiers does not receive a \*).

**Non-MWF languages:** Multiple wh-specifiers at phase edges *do* cause a problem at the PF-interface (a phase node with multiple wh-specifiers *does* receive a \*).

This formulation of the MWF parameter correctly predicts that English doesn't front all wh-phrases in multiple questions, and that it doesn't permit multiple sluicing:

(15) \***Who what** saw?

(16) ?\*Someone saw something, but I can't remember **who what**. (Lasnik 2014: 8)

It also removes the potential issue with the Ellipsis *with* MD structure: multiple wh-specifiers of vP are deleted.

## Caveat

The MWF Parameter might be too strong, given the fact that multiple sluices are not universally disallowed in non-MWF languages.

- (17) a. Jemand hat was gesehen, aber ich weiß nicht, **wer was**. *German*  
someone has something seen but I know not who what  
(lit.) 'Someone saw something, but I don't know who what.'
- b. Kapjos idhe kapjon, alla dhe kseropjos **pjon**. *Greek*  
someone.NOM saw someone.ACC but not I.know who.NOM who.ACC  
(lit.) 'Someone saw someone, but I don't know who whom.'

(Merchant 2006: 285)

English: both CP and vP edges count with respect to the MWF Parameter:

- no wh-questions with multiple wh-fronting
- only biclausal (hence coordinated) sluicing allowed

German, Greek: only vP counts with respect to the MWF Parameter:

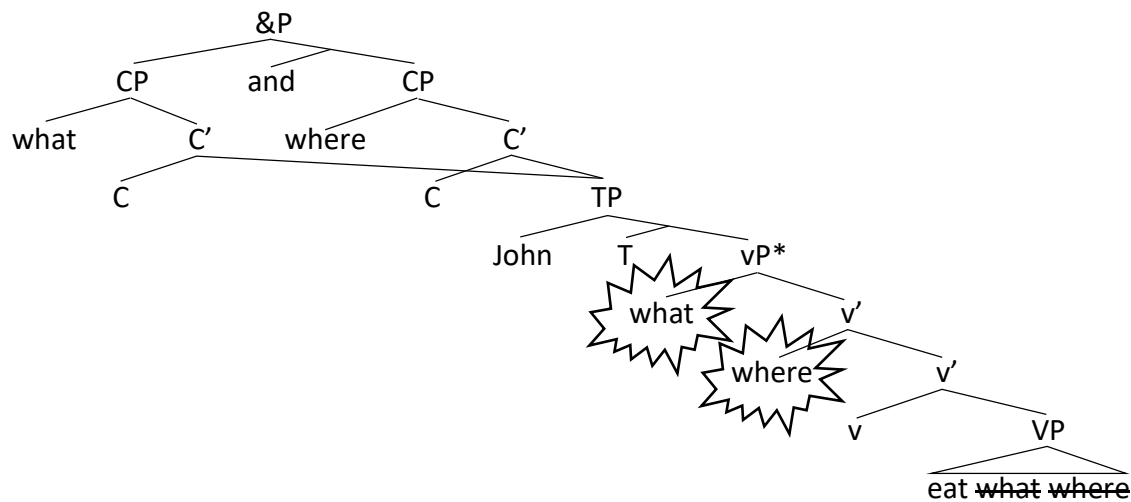
- no wh-questions with multiple wh-fronting
- multiple sluicing allowed (multiple wh-specifiers of C fine, multiple wh-specifiers of vP deleted)

*Q2: Why cannot CWHs involve the structure of CSs (and have the properties that go with it)?*

(18) a. **What and where** did John eat?

**CWH**

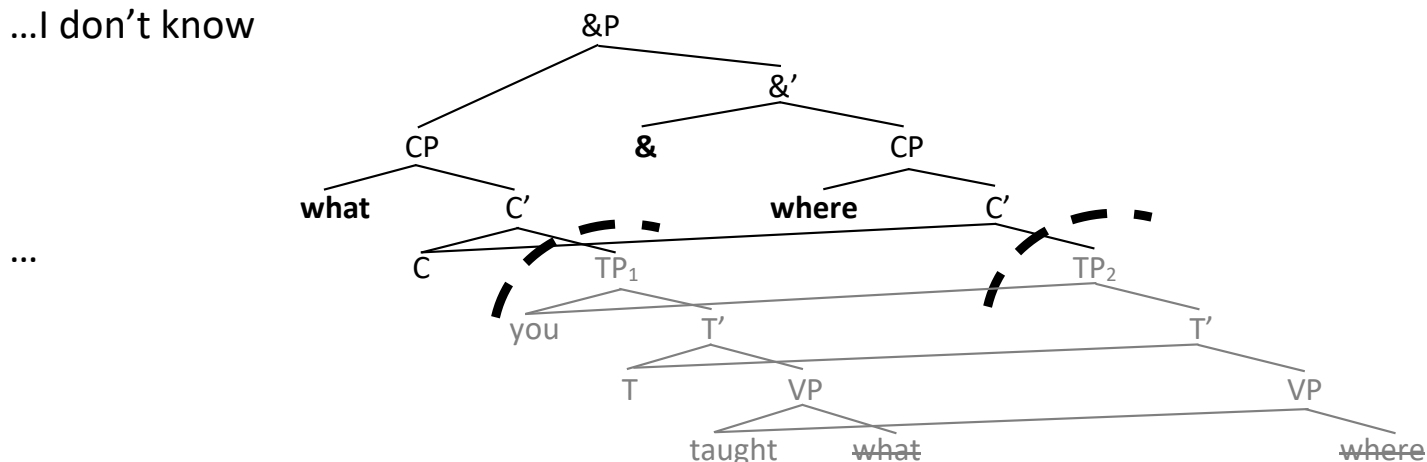
b. ...



**A2:** CWHs cannot involve the structure of CSs (and share the properties of CSs) because they do not involve ellipsis (so the offending MWF configuration remains).

**Q3: Why cannot CSs involve the structure of CWHs + Ellipsis and have the properties that go with it?**

- (19) a. I know you taught something somewhere but I don't know **what or where**. **CS**  
 b. ...I don't know



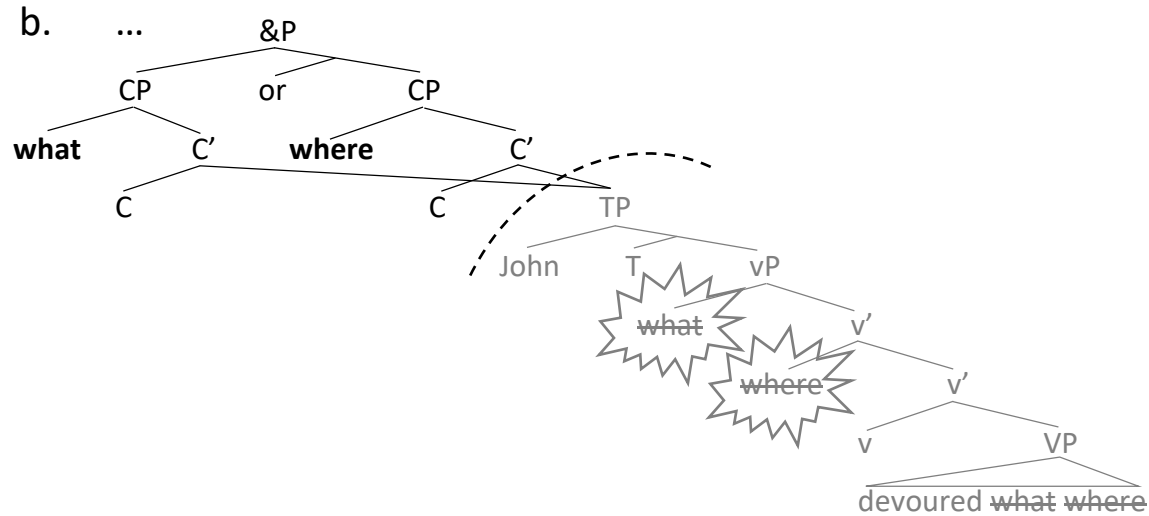
This structure also violates economy (Citko & Gračanin-Yuksek 2020).

- Ellipsis can only apply if it has an effect on pronunciation.
- Ellipsis is triggered by an E(llipsis) feature, which instructs “the PF system to skip its complement for purposes of parsing and production.” (Merchant 2001: 60)
- The E feature is located on C.
- Since both TP<sub>1</sub> and TP<sub>2</sub> are its complements, both have to be deleted.
- Deleting one TP (say TP<sub>1</sub>) will already have deleted the string *John sang*. Thus, deleting TP<sub>2</sub> will have no further effect on pronunciation.

Why *doesn't* the structure we proposed for CSs violate economy?

(20) a. John devoured something, but I don't know **what or where**.

CSs



Here, each conjunct has its own C, so ellipsis applies vacuously only if *both* C's bear the E-feature. Since the presence of the E-feature on both C's is not forced, the structure is well-formed.

## Summary

- CWHs and CSs have different structures
- CSs involve Ellipsis + MD, which is more economical than the alternative with no MD
- CWHs cannot have the structure of CSs because they do not involve ellipsis.
- CSs cannot have the structure of CWHs because economy prevents ellipsis from applying vacuously.



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