

## An analysis of Indonesian *Wh*-questions and Pseudoclefts

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### 1. Basic properties of Indonesian *Wh*-questions

- Basic Word Order - Three types of sentences

(1) a. Transitive/Active sentences

Dia	me-lihat	perempuan	itu
He	meN-see	woman	that

‘He sees that woman.’

b. Passive 1

Perempuan	itu	dia	Ø-liat.
woman	that	he	see

‘That woman was seen by him.’

c. Passive 2

Buku	itu	di-baca	(oleh)	Amir.
book	that	PASS-read	by	Amir

‘That book was read by Amir.’

- ✓ SVO language (unlike other Austronesian languages)
- ✓ (1a) – The prefix *meN* represents transitivity.
- ✓ (1b) – The patient/theme is moved to Spec,TP and the agent is pronoun located in Spec, vP.
- ✓ (1c) – Regular passive form in that it contains the passive morpheme *di-*.

- *Wh*-movement

(2) a. Siti membeli buku itu. (declarative sentence)

Siti	membeli	buku	itu.
Siti	meN-buy	book	that

‘Siti membeli buku itu’

b. Siapa yang membeli buku itu? (subject *wh* question)

who	YANG	meN-buy	book	that
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‘Who bought that book?’

c. \*Apa yang Siti membeli? (object *wh* question with the transitive verb)

What	YANG	Siti	meN-buy
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‘What did Siti buy?’

d. Apa yang Siti Ø-beli? (object *wh* question with the passive verb)

what	YANG	Siti	buy
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‘What did Siti buy?’

- ✓ (2a) – declarative sentence
- ✓ (2b) – subject *wh*-question with transitive verb with *meN*.
- ✓ (2c) – The distribution of *meN* is also affected by whether *wh*-movement has applied over it. Thus, object extraction is not possible
- ✓ (2d) – When the verb is a passive form (*Ø-beli*), object extraction is permitted.

✧ Two analyses of the derivation of sentence (2d)

i. VP-fronting: Travis (2008) with some modification inspired by Paul (2001) (cf. Jeoung, 2018)

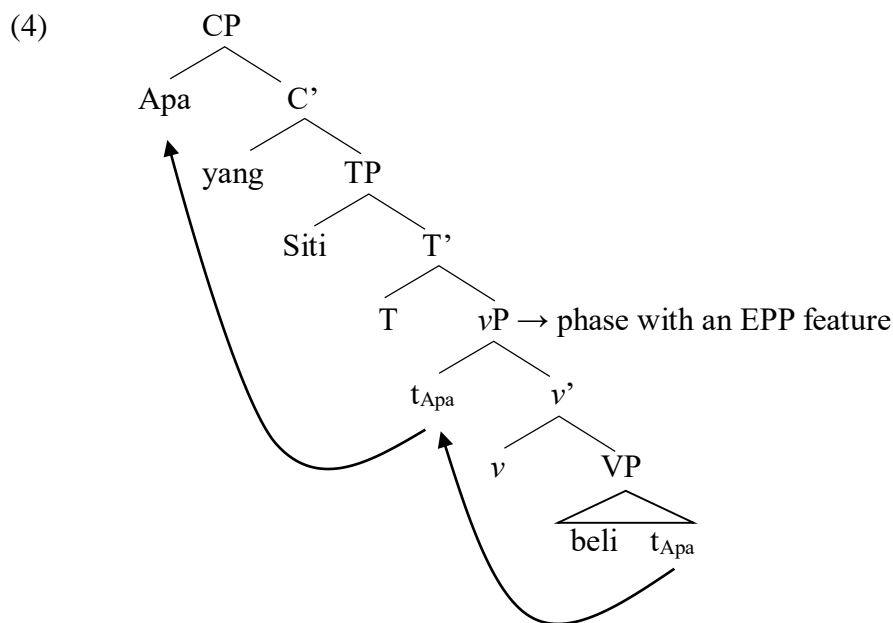
(3) a. Apa yang Siti beli (=2d)  
 b. [TP [DP yang Siti buy] [VP Ø<sub>V</sub> apa]]  
 SUBJECT (= what Siti bought) VP PREDICATE (= is apa)

[Ø<sub>V</sub> Apa]<sub>i</sub> [TP [DP yang Siti buy] [VP t<sub>i</sub>]]

c. The thing that Siti bought is what?

- ✓ (3b) – *yang* is a relative complementizer located inside the subject and moved *wh*-element is in fact a concealed VP.
- ✓ (3a) is derived from a copular construction with null copula.

ii. Overt WH-movement: Aldridge (2008) (cf. Cole and Hermon 2005)



**Proposals**

- a. DP *wh*-movement does exist in Bahasa Indonesian
- b. The morpheme *yang* in interrogative sentences and the interrogative null head selecting  $vP_{COP}$  are bundled single CT heads.

**2. Wh-movement in Bahasa Indonesian**

- Wh-element can be located in their scope positions

(5) a. Siapa (yang) membeli buku itu?  
 Who YANG meN-buy book that  
 ‘Who bought that book?’

- b. Apa \*(yang) Ali beli?  
What YANG Ali buy  
'What did Ali buy?'
- c. Mengapa (\*yang) John mererit tadi?  
Why YANG John shout just now  
'Why did John shout just now?'
- d. Di mana (\*yang) Ali membeli buku itu?  
at where YANG Ali meN-buy that book  
'Where did Ali buy that book?'
- e. Bagaimana (\*yang) Ali membeli buku itu?  
How YANG Ali meN-buy book that  
'How did Ali buy that book?'

- ✓ (2a) – When the subject DP is extracted, *yang* is optional
- ✓ (2b) – The extraction of the object DP needs *yang*.
- ✓ (2c-e) – non-DP extraction needs the absence of *yang*.

- *Wh*-elements can stay in their in-situ positions

- (6) a. Siapa membeli buku itu?  
who meN-buy book that  
'Who bought that book?'
- b. Siti beli apa?  
Siti buy what  
'What did buy read?'
- c. Fatimah menangis kenapa?  
Fatimah cry why  
'Why does Fatimah cry?'
- d. Ali membeli buku itu di mana?  
Ali meN-buy book that at where  
'Where did Ali bought that book?'
- e. Ali membeli buku itu bagaimana?  
Ali meN-buy book that how  
'How did Ali buy that book?'

- ✓ (6a-b) – *yang* is not necessary when *wh*-elements do not move to their scope positions.
- ✓ (6c-e) – Adjuncts need not undergo movement

- Why is *yang* obligatory in object *wh*-movement, while optional in subject *wh*-movement?

- (5) a. Siapa yang membeli buku itu?  
Who YANG meN-buy book that  
a'. Siapa membeli buku itu?  
'Who bought that book?'

- ✓ (5a) and (5a') have different structures.
- ✓ In the former, *siapa* is moved to its scope position over *yang*, while in the latter, *siapa* does not.

**Interim Conclusion**

- a. When DP *wh*-elements, such as *siapa* ‘who’ and *apa* ‘what’ are located in their scope positions, *yang* must occur.
- b. When non-DP *wh*-elements including *di mana* ‘at where’, *kenapa* ‘why’, *bagaimana* ‘how’ are in their scope positions, the complementizer must be null.

**3. The Copula *Adalah* in Bahasa Indonesian**

- Bahasa Indonesian allows copular inversion construction

(7) Regular copular inversion

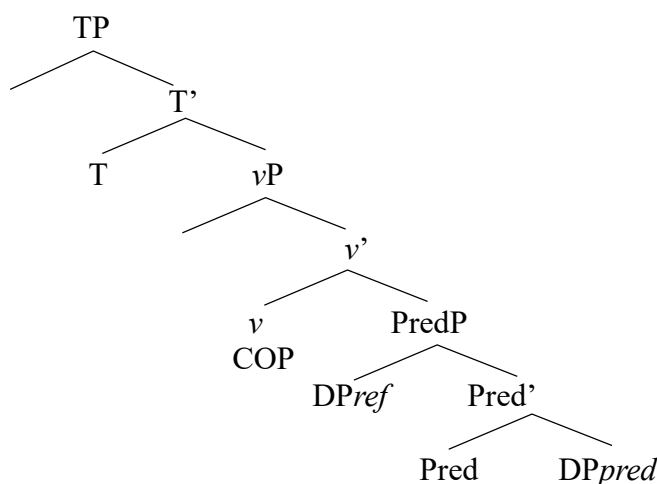
- a. John      adalah    seorang    murid/pelajar  
    John      COP      a            student  
    ‘John is a student.’
- b. Murid/Pelajar    itu      adalah    John.  
    That student      COP      John  
    ‘That student is John.’

(8) Pseudocleft inversion

- a. Buku      itu      (adalah)      yang    Ali    beli.  
    book    that      COP            C      Ali    buy  
    ‘That is the what Ali bought.’
- b. Yang      Ali    beli    (adalah)      buku    itu.  
    C          Ali    buy    COP            book    that  
    ‘What Ali bought is that book.’

- Assumption – Mikkelsen (2006)

(9)



- ✓ When T doesn't bear [uTop], neither DP bear [iTop] → predicational clause (7a), (8a)
- ✓ When T bears [uTop] and DP<sub>pred</sub> bears [iTop] → specificational clause (7b), (8b)

- Copular inversion with *wh*-element is not allowed

- (10) a. Yang dianggap tua adalah siapa?  
C treated old COP who  
‘The one treated as an elder is who?’
- b. \*Siapa adalah yang dianggap tua?  
who COP C treated old  
‘Who is the one treated as the elder one?’

**Question 1**

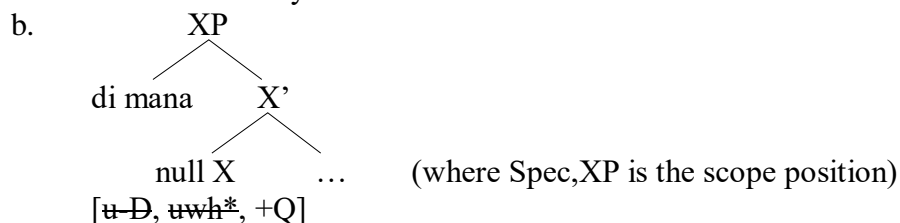
Why is the contrast between (10a) and (10b) observed, even though copular inversion is possible?

- The sentences in (10a) and (10b) are copular clauses.
- In (10a), the subject is *siapa*, while the predicate is CP [*yang dianggap tua*].
- *yang* in the copular construction is the relative complementizer inside the predicate CP
- The sentence is an interrogative sentence, and the *yang* is not present in the clausal spine.
- Recall that  
When *yang* is not present in the clausal spine in interrogative sentences, only non-argument *wh*-elements including *di mana* ‘at where’, *kenapa* ‘why’, *bagaimana* ‘how’ can be in their scope positions.
- We propose here the null head interrogative sentences selecting  $v_{COP}P$  is a bundled single CT head, which contains the feature of the null interrogative C and T. (Martinović 2015; Erlewine 2018; Hsu 2017)
- ✓ Null interrogative C:
  - Recall that when null interrogative C is introduced into the derivation, the moved element must be non-DP element.
  - [u-D(, uwh\*), +Q], whereby [u-D] means uninterpretable non-D feature
  - When uwh\* is present, overt *wh*-movement occurs; *wh*-elements must be non-DP elements.
  - When uwh\* is absent, *wh*-in-situ sentences are generated, and *wh*-elements are interpreted via unselective binding

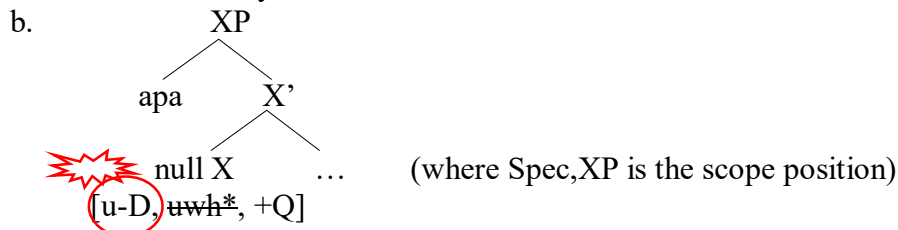
- ✓ T: EPP

(11) Non-DP *wh*-element movement

- a. Di mana (\*yang) Ali membeli buku itu?  
at where YANG Ali meN-buy that book  
‘Where did Ali buy that book?’



- (12) DP *wh*-element movement  
 a. Apa \*(yang) Ali beli?  
 What C Ali buy  
 ‘What did Ali buy?’



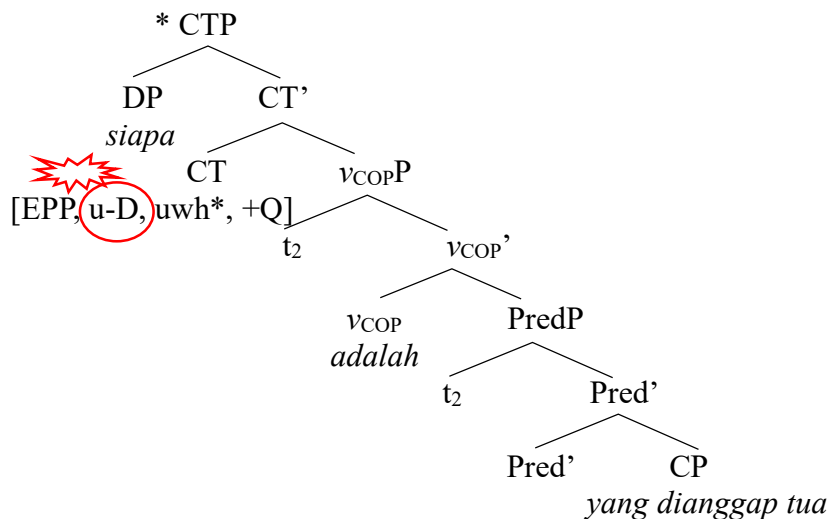
- An answer to the question 1

**Question 1**

Why is the contrast between (10a) and (10b) observed, even though copular inversion is possible?

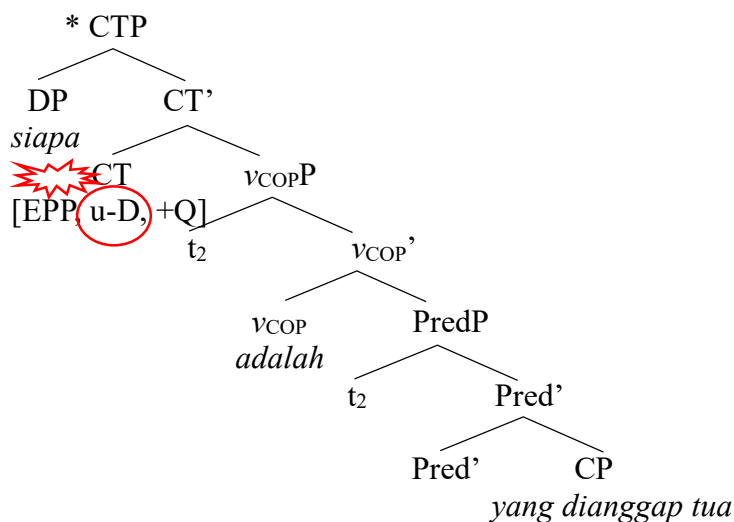
- ✓ Two types of null interrogative bundled CT head
  - [EPP, u-D, uwh\*, +Q]
  - [EPP, u-D, +Q]

- (13) a. When CT contains [EPP, u-D, uwh\*, +Q] and subject *siapa* moves to Spec,CTP



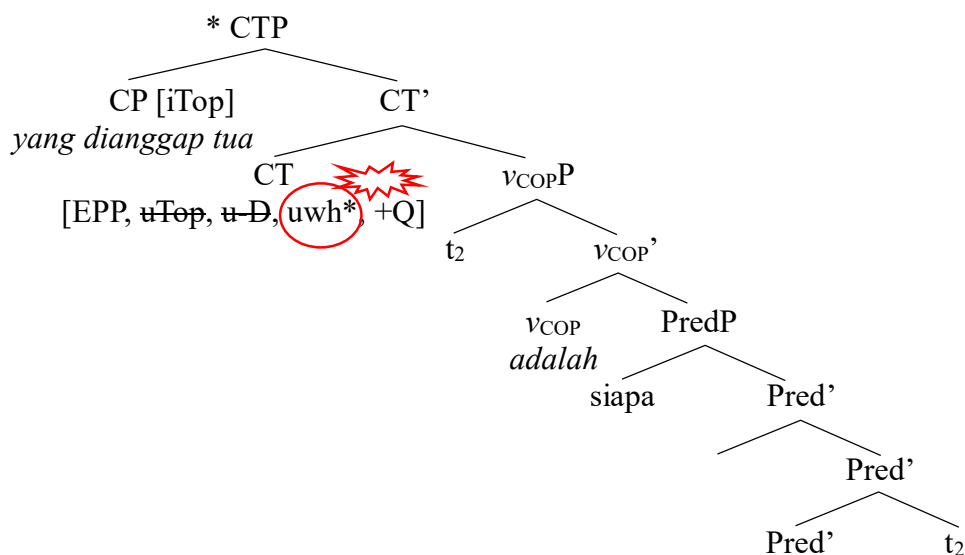
- ✓ CT and the subject *siapa* establish an Agree relation, and the subject moves to Spec, TP.
- ✓ The EPP requirement are satisfied and *uwh\** is deleted.
- ✓ The *u-D* feature is not deleted → this derivation crashes!
- ✓ The *u-D* feature might be deleted through an Agree relation with a non-subject element → split Agree, which is undesirable

b. When CT contains [EPP, u-D, +Q] and the subject *siapa* moves to Spec,CTP



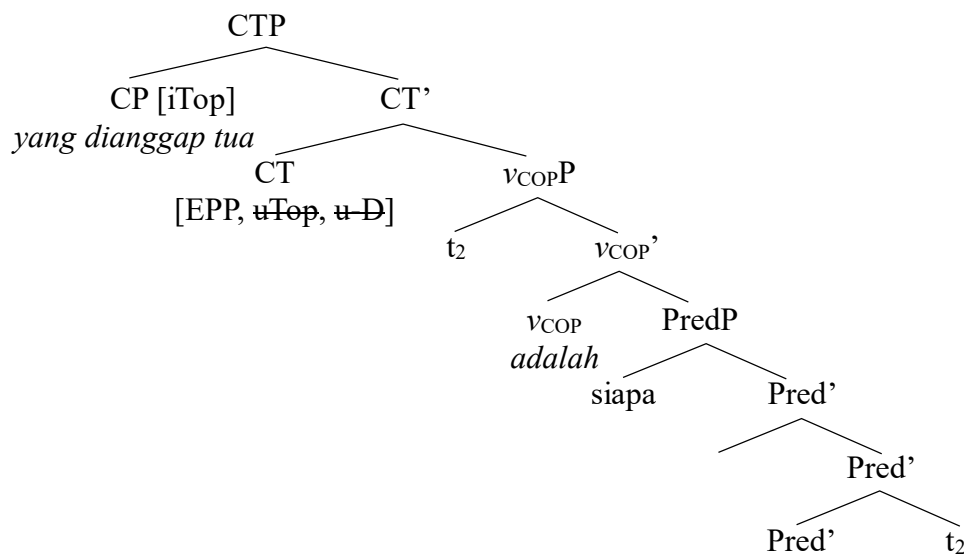
- ✓ CT and the subject *siapa* establish an Agree relation, and the subject moves to Spec, TP.
- ✓ The EPP requirement are satisfied.
- ✓ u-D feature is not deleted → this derivation crashes!
- ✓ The u-D feature might be deleted through an Agree relation with a non-subject element → split Agree, which is undesirable

c. When CT contains [EPP, uTop, u-D, uwh\*, +Q] and the predicate *yang dianggap tua* moves to Spec,CTP



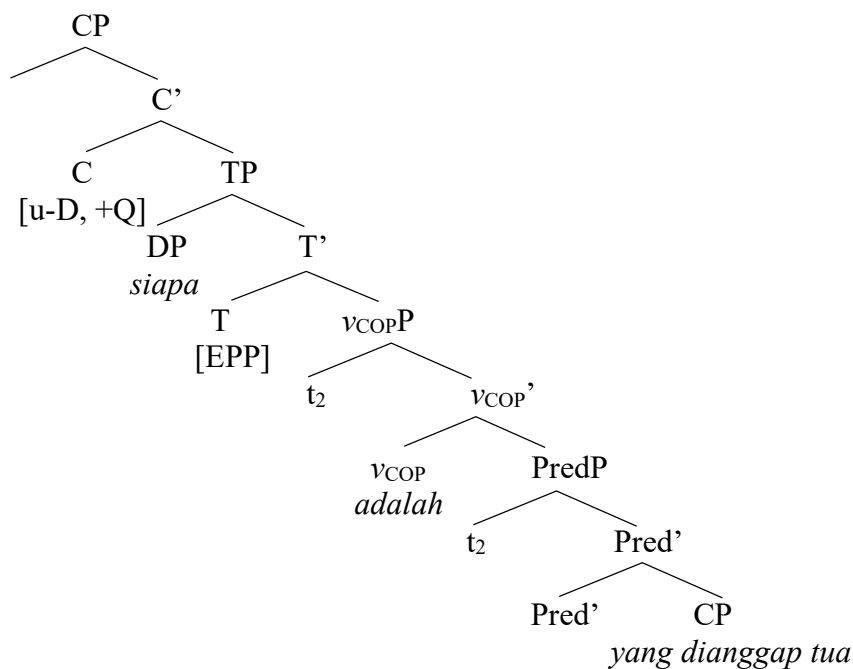
- ✓ When CT Agrees with the predicate *yang dianggap dua*, and it moves to Spec,CTP, the *uwh\** cannot be deleted. → this derivation crashes!

d. When CT contains [EPP, uTop, u-D, +Q] and the predicate *yang dianggap tua* moves to Spec,CTP



- ✓ CT establishes an Agree relation with the predicate *yang dianggap dua*.
- ✓ All the featural requirements of CT are satisfied at once, which does not induce split Agree.
- What happens when C and T are separate heads?

(14) When C contains [u-D, +Q], and T contains the EPP?



- ✓ [u-D] can be deleted through Agree with TP.
- ✓ It is erroneously predicted that the sentence (10b) would be grammatical.



#### 4. Movement of WH

- The copula *adalah* in (15a) can be omitted, as illustrated in (15b) (cf. Kaufman 2018)

(15) a. Yang dianggap tua adalah siapa? (=10a)  
         C treated old COP who  
         ‘The one treated as an elder is who?’  
     b. Yang dianggap tua siapa?  
         C treated old who  
         ‘The one treated as an elder is who?’

- According to Travis (2008), (16a) is generated through VP-fronting, as illustrated in (16b)

(16) a. Siapa yang dianggap tua?  
         who C treated old  
         ‘Who is treated as the elder one?’  
     b. [ $\emptyset_V$  Siapa]<sub>i</sub> [TP [DP yang dianggap tua] [VP  $t_i$ ]]

- If the VP-fronting approach is on the right track, it is predicted that (17a), which has the structure identical to (16b) except the phonological realization of the copula, would be grammatical.

(17) a. \*adalah siapa yang dianggap tua?  
         COP who C treated old  
         ‘Who is treated as the elder one?’  
     b. [adalah Siapa]<sub>i</sub> [TP [DP yang dianggap tua] [VP  $t_i$ ]]

- Thus, the omission of *adalah* cannot be the result of phonological deletion

(18) a. \*adalah siapa yang dianggap tua?  
         COP who C treated old  
         ‘Who is treated as the elder one?’  
     b. Siapa yang dianggap tua?  
         who C treated old  
         ‘Who is treated as the elder one?’

- ✧ One might argue that the VP-fronting approach is still available, if we assume that there is a particular morphological/phonological reason that makes the copula *adalah* cannot be pronounced at the sentence initial position in *wh*-question sentences. This is the reason (18a) is ungrammatical, while (18b) is not.  
     → plausible, but I have no idea why this is so.

- We cannot simply say that (18b) is generated through VP-fronting

**Question 2**

How can (18b) be generated?

- We propose that (18b) is not derived from the copular construction.
  - ✓ *yang* is not an element located inside the predicate CP.
  - ✓ *yang* is the head in the interrogative clausal spine, whose specifier position is a scope position of *wh*-elements.
- Recall that when *yang* is present in interrogative sentences, only DP *wh*-elements can be located in the scope position of *wh*-elements.
- If non DP *wh*-elements are in the scope positions and are followed by *yang*, the sentences are ungrammatical.

(19) a. Apa \*(yang) Ali beli? (=5b)

What YANG Ali buy

‘What did Ali buy?’

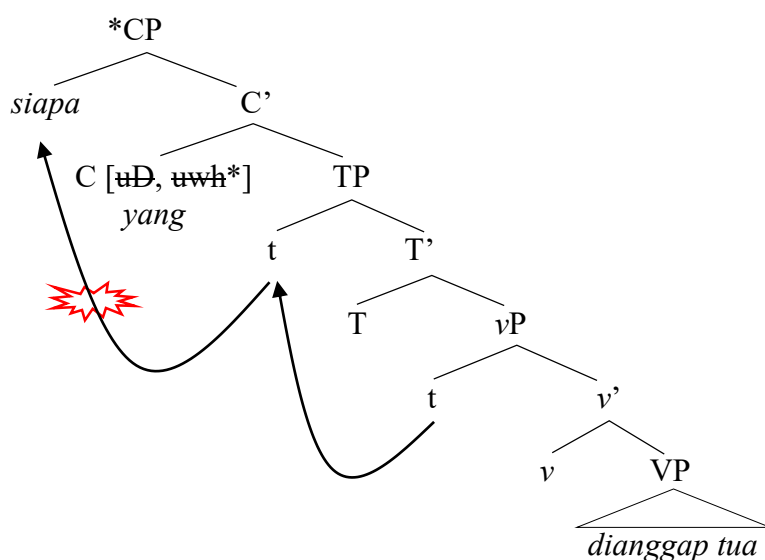
b. Mengapa \*(yang) John mererit tadi? (=5c)

why YANG John shout just now

‘Why did John shout just now?’

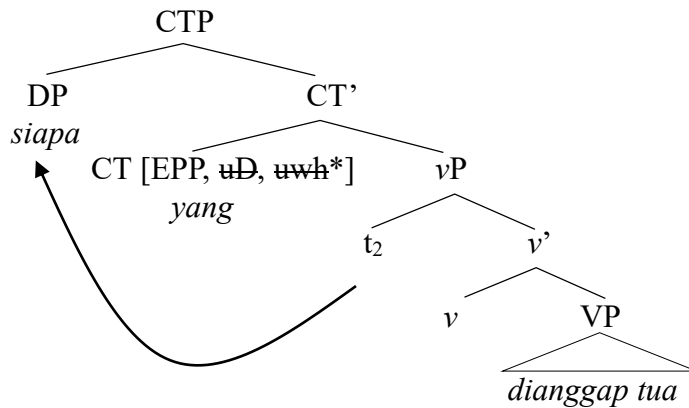
- We assume that the head X whose specifier position is the *wh*-scope position contains [uD].  
 → When X contains [uD, *uwh*\*], the moved *wh*-moved element located in Spec,XP must be an DP *wh*-element.

(20) Scenario 1



- Movement from Spec,TP to Spec,CP is too short – Anti-locality (Bošković 2016; Douglas 2016, 2017; Amaechi and Georgi 2019; Deal 2019; Erlewine 2019)

(21) Scenario 2



- **Prediction:** no Complementizer-trace effect

(22) Siapa yang Bill harap yang akan membelikan baju untuknya?  
 Who CT Bill hope CT will buy clothes for him  
 "Who does Bill hope will buy clothes for him"

- ✓ The modal is located in AuxP/ModalP located below TP

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