

The composition of wh-words in Indonesian

Deriving constituent questions from wh-variables

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3 strategies for wh questions [1]

(1) Wh-in-situ question

Susan tahu Tina suka **apa**?
Susan know Tina like what
'What does Susan know that Tina likes?'

(2) Fronted-wh question

Siapa yang Susan tahu **siapa** suka kue coklat?
who C.Foc Susan know like cake chocolate
'Who does Susan know likes chocolate cake?'

(3) Partial-wh question (with matrix question interpretation)

Kamu tahu **apa** yang Tina suka **apa**?
2s know what C.Foc Tina like
'What do you know Tina likes?'

2 interpretations for wh-words [2,3]

Wh-words can also be interpreted as wh-variables, i.e. not as matrix interrogative clauses:

(4) Wh-variable: Partial-wh interpreted as indirect question, cf. (3)

Susan tahu **apa** yang Tina suka **apa**.
Susan know what C.Foc Tina like
'Susan knows what Tina likes.'

(5) Wh-variable

Kamu boleh minum **apa** saja.
2s may drink what saja
'You can drink anything.' (modified from Sneddon 1996:171)

(6) Wh-variable

sesuai untuk **siapa-siapa** yang **siapa-siapa** suka makanan Jepang
appropriate for who-who C.Foc like food Japan
'appropriate for anyone/whoever likes Japanese food'

Cole & Hermon 1998 [2] on two types of Malay wh-words

wh-word	occurs in	
OP+VAR	Moved-wh questions	<ul style="list-style-type: none"> Question operator (OP) merged 'in lexicon' with overt wh-word (VAR) in (2) and (3) wh-word always marks question scope
OP...VAR	Wh-in-situ questions	<ul style="list-style-type: none"> Overt wh-word (VAR) merged separately from question operator (OP) in (1), which binds variable from scopal position Claim: wh-in-situ must take wide scope

Outstanding issues from C&H 1998:

- To derive wide wh scope in (3), movement of OP+VAR is followed by a "split": VAR remains but OP moves to scopal position (matrix CP)
- C&H assume (1) always has wide scope and that (2) is always a matrix question. However, wh-variable interpretations are not accounted for.

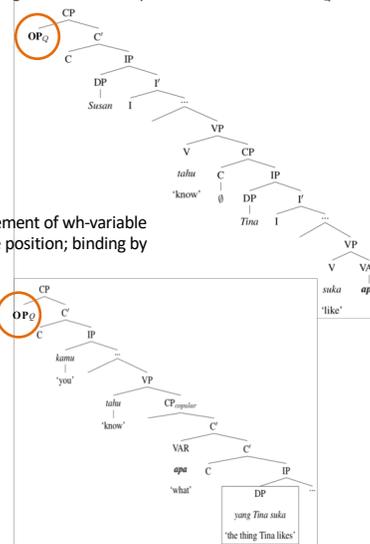
Proposal: A simplified analysis for wh-words

- All nominal wh-words in Indonesian are composed of wh-variable VAR (following C&H's proposal for OP...VAR, but eliminating OP+VAR)
- VAR is (unselectively) bound by a question operator, OP_Q

The position of OP_Q derives various scopal and interpretive possibilities: matrix question, embedded/indirect question, wh-variable.

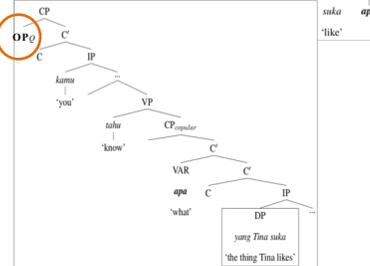
(7) Wh-in-situ question: Binding of wh-variable *apa* 'what' from matrix OP_Q

'What does Susan know Tina likes?'
cf. example (1)



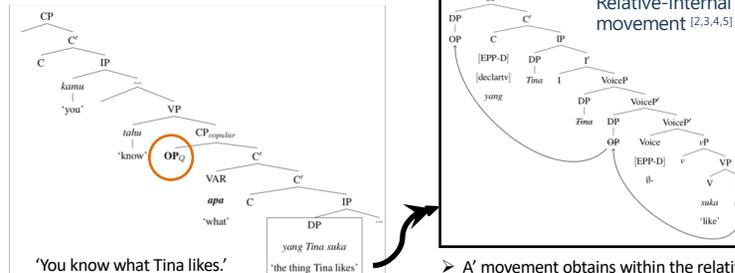
(8) Partial-wh question: Movement of wh-variable *apa* 'what' to intermediate position; binding by OP_Q in matrix clause

'What do you know Tina likes?'
cf. example (3)



(9) Partial-wh movement, with wh-variable reading only: Movement of wh-variable *apa* 'what' to intermediate position; local binding by OP_Q

'You know what Tina likes.'
cf. example (4)



Additional evidence

- The complementizer *bahwa* blocks binding of VAR by OP_Q across clause boundary:

(10) Wh-in-situ disallows *bahwa*

* Susan tahu **bahwa** Tina suka **apa**? (cf. example 1)
Susan know C Tina like what
'What does Susan know that Tina likes?'

- Consequently, *bahwa* allows only wh-variable reading with partial wh movement:

(11) Partial-wh with *bahwa*

Sudah jelas **bahwa** kamu tahu **apa** yang Tina suka **apa** (cf. examples 3, 4)
Perf clear 2s know C what C.Foc Tina like

- ✓ 'It is clear that you know what Tina likes.' (wh-variable/indirect question reading)
- X 'What is it clear that you know Tina likes?' (matrix question reading)

Since *bahwa* does not allow matrix question interpretation, (10-11) support an analysis in which OP_Q must bind the wh-variable *apa* from within the embedded clause, as illustrated in (9).

Implications

- Simplified analysis: one type of stored wh-word, composed of a wh-variable (VAR)
- Eliminates need for OP+VAR to move, then split (cf. C&H 1998)
- One mechanism, binding by OP_Q, derives the various question possibilities
- Indonesian is not a language that has both VAR and the 'lexically fused' OP+VAR
- Future directions: Could all languages form questions from only wh-variables? i.e. languages that do not allow wh-in-situ and partial wh

Another puzzle solved: movement within islands

C&H 1998 and Saddy 1991 both note that partial wh-questions such as (3) appears to prohibit syntactic movement *within islands*, e.g. the embedded NP below:

(12) Modified from Cole & Hermon 1998:235

* Kamu sayang perempuan yang Ali pikir [apa yang telah makan apa]
2s love woman C.Foc Ali think what that already eat
'You love the woman who Ali thinks ate what?'

- This was taken as support for C&H's proposal that OP+VAR moves to intermediate position, followed by independent movement of OP (blocked in 12 by island).
- However, analysis of cleft structure shows (12) is ruled out because both *perempuan* and *apa* must be extracted from the same clause (see Jeoung 2018).

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- A' movement obtains within the relative clause via a null Operator (OP)
- Overt wh-word *apa* is a matrix predicate that is raised to SpecCP