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Partial Wh-*Movement in Indonesian, Criterial Freezing, and Sub-Extraction*

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Abstract

This paper develops a new analysis of partial *wh*-movement in Indonesian, a construction which raises seemingly challenging problems for criterial freezing. It is proposed that partially-moving *wh*-phrases in Indonesian are structured as focused expressions properly containing a *wh*-interrogative phrase. It is argued that the derivation of partial *wh*-movement in Indonesian involves sub-extraction, or movement out of a moved element, to evade a freezing violation that would otherwise ensue. More specifically, it involves focus movement of the focused XP to the intermediate non-interrogative C-system, followed by sub-extraction of the QP from the XP to the matrix interrogative C-system. The analysis receives independent empirical support from the amelioration of freezing effects observed in focused *wh*-questions in Japanese.

Keywords: criterial freezing, partial *wh*-movement, movement out of moved element, multi-criterial configuration, Indonesian

Résumé

Cet article développe une nouvelle analyse du déplacement-*qu* partiel en indonésien, une construction qui soulève des problèmes apparemment difficiles pour le gel critériel. Il est proposé que les syntagmes Qu- à déplacement partiel en indonésien sont structurés comme des expressions focalisées contenant un syntagme Qu- interrogatif. Il est avancé que la dérivation du déplacement- *qu* partiel en indonésien implique une sous-extraction, ou un déplacement hors d'un élément déplacé, afin d'éviter une violation du gel qui s'ensuivrait autrement. Plus précisément, il s'agit d'un mouvement de focalisation du XP focalisé vers le système C intermédiaire non-interrogatif, suivi d'une sous-extraction du QP du XP vers le système C interrogatif matriciel. L'analyse trouve un soutien empirique indépendant dans l'amélioration des effets de gel observée dans l'interrogation focalisée en japonais.

Mots-clés: gel critériel, déplacement partiel des mots-*qu*, mouvement hors de l'élément déplacé, configuration multi critérielle, indonésien

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1. Introduction

In this article, I develop a new analysis of partial *wh*-movement in Indonesian which resolves apparent challenges posed by this construction for criterial freezing (hereafter, CF) (Rizzi 2006, 2010, 2015, 2016, 2017).[1] I propose that this construction involves a multi-criterial configuration, wherein an XP endowed with a criterial feature F_1 (focus) properly contains a YP endowed with another criterial feature F_2 (Q); the partial movement structure is derived when the XP undergoes focus movement into the specifier of an embedded non-interrogative CP, followed by sub-extraction of the YP contained within the XP to move to the specifier of the matrix interrogative CP. The proposed analysis leads to the expectation that there should be other cases of multi-criterial configurations involving focus-/*wh*-movement created by sub-extraction. I will show that this expectation is borne out by Japanese *wh*-questions additionally marked with the focus particle *sae* 'at least' (Maeda 2019).

The paper is organized as follows. In section 2, I review Cole and Hermon's (2000) pseudo-cleft analysis of partial *wh*-movement in Indonesian and highlight that such a derivation entails a multi-criterial movement – overt focus movement, followed by covert *wh*-movement – a configuration that should be erroneously ruled out by CF. In section 3, I propose that the derivation of this construction employs sub-extraction, or movement out of a moved element, to evade a freezing violation by means of a two-layered configuration involving partially moving *wh*-phrases in this language. According to this analysis, such *wh*-phrases are made up of two layers, with the focus layer immediately dominating the Q layer. The partial movement structure is obtained when the embedding focus phrase undergoes focus movement to an intermediate C-system, thereby "sheltering" the embedded QP from incurring a freezing violation, followed by sub-extraction of the QP from within the focus phrase to target the matrix interrogative C-system. In section 4, I show that my new approach to multi-criterial movement is independently supported by cases of Japanese *wh*-questions endowed with an additional focus feature, as documented in Maeda (2019). I conclude in section 5 with a brief discussion of some remaining issues.

Unless otherwise indicated, all the Indonesian data in this paper were collected by the author from two Indonesian speakers who are both familiar with acceptability judgement tasks used in syntax. One speaker is Javanese from Kendal, Central Java and has used Indonesian for communication and schools since childhood, together with Central Javanese (her mother language). The other speaker uses a variety of Peranakan Javanese spoken in Malang to communicate with his parents and relatives. He has learned Standard Indonesian from kindergarten to high school and is familiar

[1]Abbreviations: ACC: accusative; AV: active voice; COMP: complementizer; COND: conditional; COP: copula; CR: criterial freezing; DAT: dative; DEM: demonstrative; FOC: focus; FUT: future tense; LOC, locative; NEG: negation; NOM: nominative; PFV: perfective; POSS: possessive; PP: pronominal prefix; PST: past tense; PTCP: participle; PV: passive voice; Q: question particle; SG: singular; SP: subject prefix; T: tense/aspect affix; TOP: topic; 1/2/3: first/second/third persons.

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with Colloquial Jakarta Indonesian from TVs and newspapers as well as from his friends; he lived in Jakarta as an undergraduate student for around eight months in 2004–2005. The author created the relevant Indonesian examples on his own first and later had the speakers check their acceptability based on their judgements of what would constitute some "standard" version of Indonesian.

2. THE PARTIAL *WH*-MOVEMENT PARADOX IN INDONESIAN

Indonesian has three options for forming *wh*-questions (Saddy 1991; Cole and Hermon 1998, 2000; Cole et al. to appear): full *wh*-movement, partial *wh*-movement, and *wh*-in-situ. These options are illustrated in (1a–c).

(1) a. [$_{CP1}$ **siapa$_i$** yang Bill pikir [$_{CP2}$ Tom cintai t_i]]? (full *wh*-movement)
who COMP Bill think Tom love
'Who does Bill think Tom loves?'

b. [$_{CP1}$ Bill pikir [$_{CP2}$ **siapa$_i$** yang Tom cintai t_i]]? (partial *wh*-movement)
Bill think who COMP Tom love
'Who does Bill think Tom loves?'

c. [$_{CP1}$ Bill pikir [$_{CP2}$ Tom men-cintai **siapa**]]? (*wh*-in-situ)
Bill think Tom AV-love who
'Who does Bill think Tom loves?'

Cole and Hermon (2000) propose that partial movement of nominal *wh*-phrases with *yang* in Indonesian/Malay consists of two movement steps: focus movement of a nominal *wh*-phrase to an intermediate CP, followed by further movement of the same phrase to the matrix CP. To illustrate their analysis, let us start by considering an example of a nominal *wh*-question as in (2).

(2) **Apa$_i$** *(yang) Ali beli t_i?
what COMP Ali buy
'What did Ali buy?' (Cole and Hermon 2000: 98)

Cole and Hermon argue that (2) has a pseudo-cleft sentence shown in (3) as its derivational base, which differs minimally from a regular non-*wh* cleft construction in (4a), in that the focused constituent is the *wh*-phrase *apa* 'what' in the former, but the focused phrase *buku* 'book' in the latter. Examples (4a—b) show that fronting of the focus phrase to the sentence-initial position is optional.

(3) Yang Ali beli (adalah) **apa**?
COMP Ali buy COP what
'What is it that Ali bought?' (Cole and Hermon 2000: 98)

(4) a. Yang Ali beli (adalah) buku.
COMP Ali buy COP book
'What Ali bought is a book.'

b. Buku-lah yang Ali beli.
book-FOC COMP Ali buy
'It is a book that Ali bought.'
(Cole and Hermon 2000: 100)

Based on these parallels between nominal *wh*-questions with *yang* and regular cleft constructions, Cole and Hermon argue for a pseudo-cleft derivation for the

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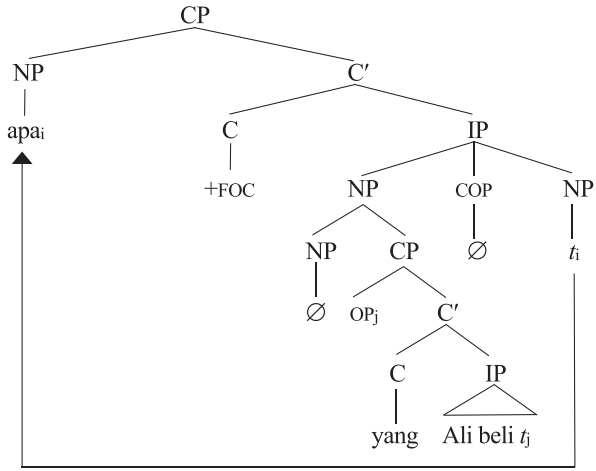
former. According to this analysis, the relevant part of the derivation for the nominal *wh*-question in (2) is as shown in (5).

(5)



focus movement (Cole and Hermon 2000: 99)

The derivation in (5) involves two NPs. One is the headless relative clause subject introduced by the relative complementizer *yang*. Within this NP, the null operator undergoes movement from its base thematic position to the specifier of the local CP. The other NP is a nominal expression, an in-situ *wh*-phrase. The headless relative clause subject and the *wh*-phrase, in turn, are connected by the null variant of the optional copula *adalah* 'be' (see (3) and (4a)). The surface *wh*-initial word order is derived by overt focus movement of the *wh*-phrase to the specifier of the matrix CP.

Given Cole and Hermon's (2000) analysis, then, the derivation of partial (nominal) *wh*-movement at least involves focus movement to an intermediate C-system, as depicted in (6).

(6) $[_{CP1} \ldots [_{C1'} C_1[+Q]] \ldots [_{CP2}$ *wh*-phrase$_i$ $[_{C2'} C_2[+FOC]] \ldots t_i \ldots]]]]$

Focus movement (criterial movement)

The focus movement analysis of partial *wh*-movement in Indonesian is indirectly supported by Kikuyu, in which a *wh*-phrase can undergo partial movement only if it is prefixed with an overt focus particle. For example, in (7), the *wh*-phrase *o* 'who' combines with the focus particle *ne* to form *nóo*. See also Muriungi (2005) and Abels (2012) for the same observation in Kĩîtharaka.

(7) [$_{CP1}$ ó-γw-ˈéciiri-á [$_{CP2}$ **nóo$_i$** Ngóγe a-úγ-íre [$_{CP3}$ áte t_i o-ɔn-iré Kanaakɛ]]]?
SP-T-think-T FOC-who Ngugi SP-say-T that PP-see-T Kanake
'Who$_i$ do you think that Ngugi said t_i saw Kanake?' (Sabel 2000: 424)

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Rizzi (2006, 2010, 2015, 2016, 2017) holds that a focus head counts as a criterial position and argues that an XP moved to a position associated with some scope/discourse properties (e.g., Q, Foc, Top, relative) must stop in that position.[2] This principle, known as CF, is defined as shown in (8).

(8) Criterial Freezing (first version): A phrase meeting a criterion is frozen in place. (Rizzi 2006: 112)

The derivation in (6) means, then, that the *wh*-phrase undergoes criterial movement to the specifier of the intermediate focus head and must stop there as the result of CF.

However, there is convincing evidence, first documented by Saddy (1991) (see also Cole and Hermon 1998, 2000 for further data), that a *wh*-phrase supposedly frozen in an embedded C-system, as in (6), undergoes further criterial *wh*-movement into the matrix C-system. Saddy's evidence supporting this additional covert *wh*-movement comes from island effects shown in (9) and (10).

(9) Subject Island Effects in Indonesian

a. * **Siapa$_i$** yang kamu kira [$_{DP\ (=island)}$ gambar t_i] di-jual?
who COMP you think picture PV-sell
'*Who$_i$ do you think [pictures of t_i] were sold?'

b. * Kamu kira (bahwa) [$_{CP}$ [$_{DP\ (=island)}$ cerita bahwa **siapa$_i$** yang t_i
you think COMP story that who COMP
men-geritik Jon itu] di-jual]?
AV-criticize Jon the PV-sell
'*Who$_i$ do you think that [the story that t_i criticized John] was sold?'

c. Kamu kira (bahwa) [$_{CP}$ [$_{DP\ (=island)}$ cerita bahwa **siapa** men-geritik
you think COMP story that who AV-criticize
Jon itu] di-jual]?
Jon the PV-sell
'*Who$_i$ do you think that [the story that t_i criticized John] was sold?'
(Saddy 1991: 191, 195)

(10) Adjunct Island Effects in Indonesian

a. * **Dengan siapa$_i$** kamu cemburui Bill [$_{CP\ (=island)}$ karena saya berbicara t_i]?
with who you jealous Bill because I speak
'*With whom$_i$ did you feel jealous of Bill because I spoke t_i?'

b. * Kamu men-cemburui Bill [$_{CP\ (=island)}$ karena **dengan siapa$_i$** saya berbicara t_i]?
you AV-jealous Bill because with who I speak
'*With whom$_i$ did you feel jealous of Bill because I spoke t_i?'

[2]This point is explicitly stated in Rizzi (2006), as shown in (i):

(i) "The halting and freezing positions are criterial positions, defined by heads such as Q, Foc, Top, etc., expressing scope-discourse properties…" (Rizzi 2006: 104)

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c. Kamu men-cemburui Bill [$_{CP\ (=island)}$ karena saya berbicara **dengan siapa**]?
you AV-jealous Bill because I speak with who
'*With whom$_i$ did you feel jealous of Bill because I spoke t_i?'
(adapted from Saddy 1991: 191, 195)

Example (9a) is ungrammatical because the overt *wh*-movement of *siapa* 'who' crosses the subject island. More telling is the ungrammaticality of (9b) despite the fact that, unlike in (9a), the *wh*-phrase does not seem to cross the island boundary, at least overtly. As a point of comparison, the grammaticality of (9c) shows that an in-situ *wh*-phrase is insensitive to the subject island effect. In the case of the absence of island effects in *wh*-in-situ questions in Indonesian/Malay, Cole and Hermon argue that "the (*wh*-OP) question operator is merged at the root Spec CP, and, therefore, unselectively binds a *wh*-variable in its scope" (1998: 240), following Tsai (1994) and Reinhart (2006). Saddy (1991) argues that the ungrammaticality of (9b) is accounted for if the partially moved *wh*-phrase undergoes covert *wh*-movement into the matrix CP, triggering the subject island violation. A similar argument for covert *wh*-movement can be made on the basis of the data in (10a–c) with regard to adjunct island effects.

In fact, a scope interaction between a quantifier in the matrix clause and the partially moved *wh*-phrase in Indonesian presents further support for the covert *wh*-movement step. In German, another partial *wh*-movement language, a partially moved *wh*-phrase cannot take scope over elements in the matrix clause in LF. This observation is illustrated in (11), for which Pafel notes that "wide scope of the universal quantifier seems to be the only option" (2000: 340). The impossibility of the wide scope reading of the *wh*-phrase *wo* 'where' with respect to the universal quantifier *jeder* 'everyone' in the matrix clause is indeed confirmed by the semantic anomaly of the example in (12), which is so constructed to fit a small discourse which forces this particular scope construal (*wh*>∀).[3]

(11) [$_{CP1}$ Was meint jeder [$_{CP2}$ wo die besten Weine wachsen]]?
what believe everyone where the best wines grow
'Where does everyone think that the best wines grow?' [∀>*wh*: **wh*>∀]
(Pafel 2000: 340)

(12) #Ich möchte nicht von jedem einzelnen wissen, was er glaubt, wo
I want NEG of each individual know what he think where
die besten Weine wachsen. Sondern ich möchte wissen, [$_{CP1}$ was jeder
the best wines grow but I want know what everyone
glaubt, [$_{CP2}$ wo die besten Weine wachsen]].
think where the best wines grow
'It is not the case that, for every *x*, I want to know where *x* thinks that the best wines grow. Instead, I want to know where everyone thinks that the best wines grow.' (Pafel 2000: 341)

Partial *wh*-movement in Indonesian behaves differently, for Saddy (1991) points out that in (13), the partially moved *wh*-phrase may take scope over the universal quantifier in the matrix clause.

[3]Thanks to an anonymous reviewer for drawing my attention to this scope fact from German partial *wh*-movement as a point of comparison with its Indonesian counterpart.

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(13) [$_{CP1}$ Setiap orang tahu [$_{CP2}$ **apa$_i$** yang Tom beli t_i]]? (partial *wh*-movement)
every person know what COMP Tom buy
'What does every person know Tom bought?' [∀>wh: wh>∀] (Saddy 1991: 200)

The scope pattern illustrated in (13) then lends further support to the covert *wh*-movement analysis for partial *wh*-questions in Indonesian.

In light of the two observations from Saddy (1991) on island-sensitivity and scope facts, the full derivation of partial *wh*-movement in Indonesian must now be as shown in (14) instead of (6).

(14) [$_{CP1}$ … [$_{C1'}$ C_1[+Q] … [$_{CP2}$ *wh*-phrase$_i$ [$_{C2'}$ C_2[+FOC] … t_i …]]]]

Wh-movement Focus movement → multi-criterial configuration

However, (14) involves a multi-criterial configuration where a single *wh*-phrase enters into more than one criterial relationship with two discourse-functional heads (i.e., Foc and Q) in the left periphery of the two successive clauses, seemingly violating the CF. In the next section, I will develop a proposal to resolve this challenge raised by partial *wh*-movement in Indonesian for CF.

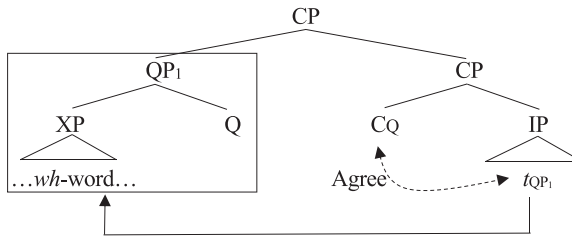
3. The partial *wh*-movement paradox, sub-extraction, and multi-criterial movements

My analysis builds on what one might call the two-layered hypothesis for *wh*-/focus-phrases developed by Cable (2007) and Horvath (2000, 2005). I will briefly outline this hypothesis in section 3.1 to lay the groundwork for my analysis of Indonesian partial *wh*-movement in section 3.2.

3.1. The two-layered hypothesis for *wh*-/focus-phrases

Cable (2007) proposes that the interrogative C head probes for an interpretable Q-feature of the Q-particle, not any feature of the *wh*-word itself, contrary to the standard generative assumption. In this theory, schematically depicted in (15), the C head agrees with the QP, and this agreement, in turn, triggers movement of the QP into the specifier of the CP.

(15)



(adapted from Cable 2007: 34)

In a similar vein, Horvath (2000, 2005) argues that so-called 'focus movement' in Hungarian is triggered by the Exhaustive-Identification Operator (EI-OP), a phonologically null variant of the overt association-with-focus particle *csak* 'only',

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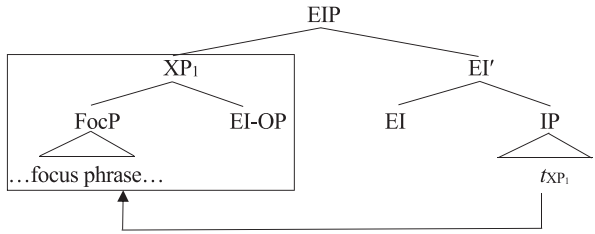
and hence has nothing to do with the focus feature itself. According to this analysis, 'focus movement' in this language is analyzed as overt movement of an XP containing the EI-OP operator, not of the FocP itself, as schematically represented in (16).

(16)



This analysis is supported by the observation that focus movement to the immediately preverbal position in Hungarian is available only if the target of the movement is construed as exhaustively identifying the true answer to a question. To illustrate this observation, consider (17–18).

(17) Question: Kinek mutattad be Jánost?
who.DAT you.introduced.him to John.ACC
'Who did you introduce John to?'

Answer: a. [AZ UNOKAHÚGOMNAK] mutattam be Jánost.
the my.niece.DAT showed.1SG in John.ACC
'I introduced John to MY NIECE.'

b.* Bemutattam Jánost [AZ UNOKAHÚGOMNAK]
in.showed.1SG John.ACC the my.niece.DAT
'I introduced John to MY NIECE.' (Horvath 2005: 7)

(18) Question: Hol tudhatnám meg a vonatok menetrendjét?
Where know.can.COND.1SG PFV.PTCP the trains schedule.POSS-ACC
'Where could I find out about the train schedule?'

Answer: Megtudhatod (például) [AZ INTERNETEN] …
PRF.PTCP.know.can.2SG for.example the internet.on
'You can find out about it, for example, on the internet.'
(Horvath 2000: 7)

In (17), the dative phrase is understood to present the exhaustive answer to the *wh*-question, and is subject to overt focus movement to the immediately preverbal position, as shown by the contrast in grammaticality between (17a) and (17b). The postpositional phrase in (18), by contrast, is not similarly understood and thus stays in its base thematic position instead of undergoing focus movement.

3.2. Criterial freezing, sub-extraction, and multi-criterial movement in Indonesian

Let us hypothesize that what appears to be a *wh*-phrase in Indonesian partial *wh*-movement is actually made up of two layers: the focus layer and the Q layer (see also Sabel (2000) for a similar proposal that *wh*-movement involves checking both [+wh] and [+focus] features, and section 5 for a relevant discussion). I propose that partial *wh*-movement in Indonesian is obtained when the FocP undergoes overt

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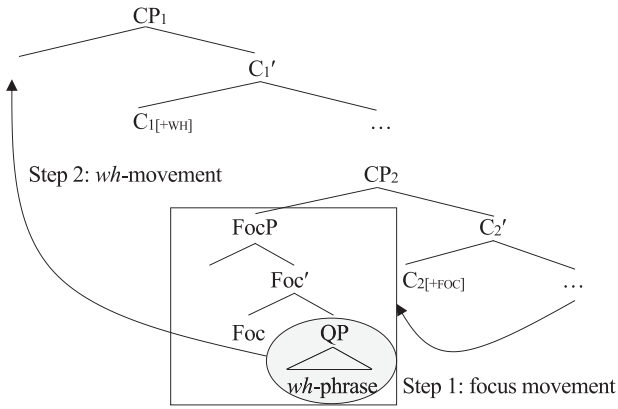
focus movement into an embedded C-system, followed by covert sub-extraction of the QP contained within the FocP to the matrix C-system, as depicted in (19).

(19)



The two-step derivation in (19) successfully overcomes the problem identified in section 2. The FocP undergoes a criterial movement into [Spec, CP_2] and is frozen in place as the result of CF. The FocP contains a QP endowed with Q-feature; the QP, then, is sub-extracted from within the FocP and undergoes another criterial movement into [Spec, CP_1] and stops there.

The proposed analysis has close affinities with Abels's (2012) theory of partial *wh*-movement. According to his theory, *wh*-phrases in partial *wh*-movement languages such as Kĩîtharaka and Indonesian/Malay are externally merged with a null operator, $O[_{Foc}][_{uWh\downarrow\uparrow}]$, which has a valued focus feature and an unvalued *wh*-probe; the operator in question first undergoes focus movement, pied-piping the *wh*-phrase to an intermediate CP, and subsequently undergoes *wh*-movement on its own, obligatorily stranding the *wh*-phrase, as schematically depicted in (20).[4]

(20) partial *wh*-movement: $[_{CP1}\ O_{[Foc][uWh\downarrow\uparrow]}\ C_{1[wh\downarrow\uparrow]} \ldots\ [_{CP2}\ O + wh\text{-phrase}\ _{[Foc][uWh\downarrow\uparrow]}\ C_{2[Foc\downarrow\uparrow]} \ldots]]$

In Abels's framework, the notation [*u*F↓↑] denotes a feature whose sharing requires mutual c-command between a syntactic head H and a different syntactic object O (Abels 2012). In (20), $C_{2[Foc\downarrow\uparrow]}$ and $C_{1[wh\downarrow\uparrow]}$ are designed to implement focus movement and *wh*-movement, respectively. It is to be noted, however, that the derivation in (20) violates CF in that the same operator first undergoes focus movement to the embedded clause and then undergoes *wh*-movement to the matrix clause. This is precisely the situation that is circumvented by the sub-extraction analysis in (19).

[4]My analysis is reminiscent of Hicks's (2009), who argues that a *tough*-construction is obtained by A′-movement of the outer DP to the embedded [Spec, CP] to check the [+wh] feature, followed by A-movement of the inner DP to the matrix [Spec, TP]. The first step here instantiates *smuggling* in Collins's (2005a, 2005b) sense to evade a locality violation which should be triggered by the embedded CP phase. See also Belletti (2017) for a similar idea.

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I wish to address one issue at this point. As is clear from (19), the relevant derivation violates the traditional ban on movement out of moved elements (Ross 1967, 1974; Postal 1972; Culicover and Wexler 1977; Collins 1994; Takahashi 1994; Müller 1998, 2010; Boeckx 2008; Gallego 2009; Uriagereka 2012), as subsequent *wh*-movement of the QP is launched from within the moved FocP.[5] However, Bošković (2018, 2021) argues that the traditional ban holds only for successive-cyclic movement out of a moved element, and presents evidence that elements that are either base-generated at, or moved to, the edge of a moved element, independently of successive-cyclic movement, can actually undergo sub-extraction – a generalization that he derives from the interaction of the Phase Impenetrability Condition (PIC) and labelling (Chomsky 2013, 2015). Consider (21) and (22). Serbo-Croatian example (21) illustrates that the possessor XP, base-generated at the edge of the YP, can move out of the YP (the TNP stands for the traditional NP). Example (22), from Dutch, shows that the R-pronoun, standardly assumed to move to the specifier of the PP, may undergo movement out of the relevant phrase even if the latter itself is moved. Both cases are grammatical despite the fact that movement of the possessor phrase/R-pronoun violates the freezing ban, unlike in (23), where the derivation involves successive-cyclic movement of the *wh*-phrase out of the DP to the specifier of the interrogative CP.

(21) Jovanovu$_i$ je on [$_{TNP}$ t_i sliku]$_j$ vidio t_j.
John's.ACC is he picture.ACC seen
'He saw John's picture.' (Bošković 2021: 58)

(22) waar$_i$ had jij dan [$_{PP}$ t_i mee t_i]$_j$ gedacht dat je
where had you then with thought that you
de vis t_j zou moeten snijden?
the fish would must cut
'What did you think you should cut the fish with?' (Bošković 2021: 59)

(23) ?* I wonder who$_i$ [$_{DP}$ friends of t_i]$_j$ hired Mary. (Bošković 2021: 56)

Bošković (2018, 2021) argues that the generalization above can be deduced as follows. In any situation where the *wh*-phrase must move to the edge of the DP phase in a successive-cyclic fashion due to the PIC, as exhibited in (23) the relevant movement does not result in labelling of the syntactic object so formed due to the lack of feature-sharing. This then de-phases the syntactic object on top of the DP phase, deriving the freezing effect observed in (23) under the assumption that only phases can undergo movement (Chomsky 2000, 2001; see also Matushansky 2005, Rackowski and Richards 2005, J. H.-T. Cheng 2012, Harwood 2013, Legate 2014 and Bošković 2015). On the other hand, if an XP is base-generated at, or moved to, the edge of YP, independently of the PIC, as illustrated in (21) and (22), that means

[5]I thank an anonymous reviewer for this question and for drawing my attention to Bošković's (2018, 2021) labelling-based theory of the ban on movement out of moved elements.

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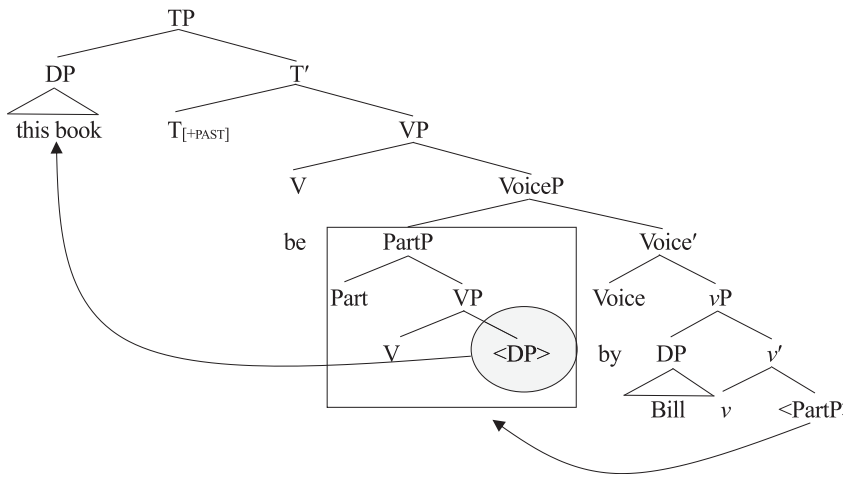
that merger of the XP and the YP can involve feature-sharing for labelling, so that the new syntactic object created by this merger is not delabelled. It follows that movement of the XP can successfully be launched from the already moved YP. The proposed deduction, then, replaces the traditional freezing ban with the new generalization in (24), which, in turn, can be reformulated as in (25) within the labelling framework.

(24) Phases with non-agreeing specifiers cannot undergo movement. (Bošković 2021: 61)

(25) Unlabelled elements cannot undergo movement. (Bošković 2021: 61)

Importantly, Bošković (2021) points out that the smuggling derivation of the kind proposed by Collins (2005a, 2005b) along the lines shown in (26) is in compliance with his revised phase-theoretic/labelling-based replacement of the traditional freezing ban if the direct object *this book* does not undergo movement into [Spec, PartP], as argued by Collins himself, but instead moves out of the PartP directly to [Spec, TP], as schematically depicted below.[6]

(26)



This derivation suggested by Bošković (2021) is not blocked by (24) or (25), for the PartP is not only a non-phase head (i.e., VoiceP is the phase head for Collins 2005a), but also lacks a specifier in the first place, thereby making the two conditions irrelevant.

Notice, however, that Bošković's deduction of the revised generalization in terms of the interaction of the PIC with labelling actually disallows the smuggling derivation shown in (26) because it is based on the assumption that only phases can undergo movement; the PartP, a non-phasal object, undergoes movement in this derivation. For this reason, Bošković (2018, 2021) actually puts forth a new deduction of the conditions in (24) and (25) which nonetheless does not block movement of non-phases. Let us assume that movement is triggered by an uninterpretable/

[6]Of course, as noted by Bošković (2021), one may well maintain Collins's (2005a) original smuggling derivation if the direct object moves to [Spec, PartP] for feature sharing instead of the reflex of the PIC-driven successive cyclicity, in which case the derivation still complies with the conditions in (24) and (25). I will leave this possibility aside here.

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unvalued feature of the moving element (Bošković 2007, 2011) and that the movement of a syntactic object resulting from the merger of X and Y requires it to be labelled so that either X or Y may project and pass the relevant feature to the object. These assumptions have the desired consequence that unlabelled elements cannot undergo movement, allowing the generalization, but without the proviso that only phases are entitled to movement. With these assumptions in place, it is easy to see that my proposed derivation for partial *wh*-movement in Indonesian in (19) is entirely parallel to Bošković's rendition of the smuggling derivation for the passive construction in (26): The FocP moves to the specifier of the embedded C-system/the Foc head. The QP contained within the FocP then undergoes direct movement out of it without passing through its specifier to the specifier of the matrix interrogative C-system. Consequently, this derivation is in accordance within Bošković's (2018, 2021) replacement of the traditional ban on movement out of moved elements.

3.3. A challenge from partial *wh*-questions in Indonesian without the focus marker *yang*

As noted by Cole and Hermon (2000) and Cole et al. (to appear), non-nominal *wh*-phrases such as *kenapa* 'why' and *bagaimana* 'how' cannot co-occur with *yang*, as shown in (27), but nonetheless may still undergo partial *wh*-movement, as illustrated by the grammaticality of (28).

(27) **Kenapa$_i$** (*yang) Ali di-pecat t_i?
why COMP Ali PV-fire
'Why was Ali fired?' (Cole and Hermon 2000: 106)

(28) John pikir [$_{CP1}$ **kenapa$_i$** Mary rasa [$_{CP2}$ Ali di-pecat t_i]]?
John think why Mary feel Ali PV-fire
'Why does John think that Mary felt that Ali was fired?'
(Cole and Hermon 2000: 106)

Example (27) appears to indicate that the derivation of (28) cannot be based on the pseudo-cleft construction with optional focus movement. Indeed, the headless relative clause option, available for nominal *wh*-phrases, is blocked for non-nominal *wh*-phrases, as shown in (29). Note, furthermore, that island effects are observed between the overt landing site of the adjunct *wh*-phrase and its intended scope position, as shown in (30), suggesting that covert *wh*-movement indeed takes place.

(29) *Yang Fatimah pergi adalah **kenapa**?
COMP Fatimah go COP why
'Why did Fatimah leave?' (Cole and Hermon 2000: 107)

(30) * Kamu sangat marah [$_{CP}$ karena **kenapa$_i$** dia di-pecat t_i]?
you very angry because why he PV-fire
'Why$_i$ are you very angry because he was fired t_i?'

Cole and Hermon conclude that the derivation of non-nominal partial *wh*-questions like (29) should be as shown in (31) and suggest that the overt movement to [Spec, CP_2] is triggered not by the focus feature, but instead by the need of the

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moved *wh*-operator itself, namely, that "a question operator must be located in the specifier relationship with a complementizer" (2000: 109).[7]

(31) [CP1 C1[+WH] …. [CP2 kenapai C2 *t*i]]

Covert *wh*-movement Greed (cf. Cole and Hermon 2000: 109)

Note that just because the pseudo-cleft derivation is unavailable for non-nominal partial *wh*-questions does not mean that the overt movement step of their derivation *cannot* be focus-driven. In fact, I will argue below that my analysis can be maintained for such *wh*-questions as well. Suggestive evidence for this position comes from Fortin's (2009) observation that Indonesian is a "unique focus language" in the sense of Stoyanova (2008). Rizzi (1997) observes that Italian blocks multiple focus phrases, as illustrated in (32a). He further notes that a *wh*-phrase can co-occur with a topic, but not with a focused phrase, as shown by the contrast in grammaticality between (32b) and (32c). The contrast falls into place if Italian allows only one focus position per clause and *wh*-movement targets [Spec, FocP].[8]

(32) a. * A GIANNI IL LIBRO daro (non a Piero, l'articolo). [two focus phrases]
to Gianni the book give.FUT.1SG NEG Piero the.article
'TO GIANNI, THE BOOK, I will give, not to Piero, the article.'

b. A Gianni, che cosa gli hai detto? [one topic/one *wh*-phrase]
to Gianni what to.3SG have.2SG tell.PST
'To Gianni, what did you tell him?'

c. * A GIANNI che cosa hai detto (non a Piero)? [one focus/one *wh*-phrase]
to Gianni what have.2SG tell.PST NEG to Piero
'TO GIANNI, what did you tell (not to Piero)? (Rizzi 1997: 290, 291)

Fortin (2009) provides examples in (33a–c) to show that Indonesian behaves on a par with Italian. The language thus blocks multiple focus phrases within a single clause, as illustrated in (33a). It also blocks a focus phrase marked with the focus particle *lah* to co-occur with a *wh*-phrase, whether the latter undergoes movement or remains in-situ: see (34b, c). Note that a *wh*-phrase or a focused phrase can co-occur with a topic phrase in the same clause, as shown in (33d, e).

(33) a. * Kemarin-lah pintu itu-lah yang Ali buka. [two focus phrases]
yesterday-FOC door DEM-FOC COMP Ali open
'It was YESTERDAY that Ali opened THIS DOOR.'

[7]Cole and Hermon (2000) make this point with Singaporean Malay, noting that for their consultants, (2) is grammatical without *yang*, arguing that *yang*-less *wh*-questions do not involve focus movement. I focus here on the issue raised by non-nominal partial *wh*-questions, leaving aside whether my solution can be extended to *yang*-less nominal *wh*-questions in Singaporean Malay.

[8]Sabel (2000) points out that the single focus restriction is also observed in Kikuyu. The ungrammaticality of a focus phrase and a *wh*-phrase together indicates that *wh*-movement shares the same position with, and hence instantiates, focus movement in Kikuyu.

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b. * Kemarin-lah siapa$_i$-kah yang t_i menelpon? [one focus/one *wh*-phrase]
yesterday-FOC who-Q COMP AV.phone
'It was YESTERDAY that who called?'

c. * Kemarin-lah kamu menelpon siapa? [one focus/one *wh*-phrase]
yesterday-FOC you AV.phone who-Q
'It was YESTERDAY that you called who?'

d. Kemarin, buku ini, siapa$_i$ yang t_i baca? [one topic/one *wh*-phrase]
yesterday book DEM who COMP read
'Yesterday, this book, who read?'

e. ? Kemarin-lah buku itu, kamu baca? [one topic/one focus phrase]
yesterday-FOC book DEM you read
'Was it YESTERDAY that as for this book, you read it?'

((33a–d) from Fortin 2009: 37, 43)

Now, given Fortin's observation, my analysis of *yang*-less partial *wh*-questions predicts that partial *wh*-movement should be blocked for non-nominal *wh*-phrases in the presence of another focused expression in the embedded clause. This prediction is borne out by the inability of a partially moved non-nominal *wh*-phrase as to co-occur with *kemarin-lah* 'yesterday', as shown in (34a).

(34) a. * [$_{CP1}$ Kamu pikir [$_{CP2}$ kenapa$_i$ Ali di-pecat kemarin-lah bukan hari ini t_i]]?
you think why Ali PV-fire yesterday-FOC NEG day DEM
'Why do you think that it was YESTERDAY, not today, that Ali was fired?'

b. * [$_{CP1}$ kenapa$_i$ kamu pikir [$_{CP2}$ t_i' Ali di-pecat kemarin-lah bukan hari ini t_i]]?
why you think Ali PV-fire yesterday-FOC NEG day DEM
'Why do you think that it was YESTERDAY, not today, that Ali was fired?'

Also expected is the fact, illustrated in (34b), that the full *wh*-movement variant is ungrammatical; the single focus condition is violated at the time when the adjunct *wh*-phrase stops in [Spec, CP_2]. The new observation above, thus, provides support for the view that partial *wh*-movement of both nominal and non-nominal *wh*-phrases involves focus movement despite the fact that the derivation of the latter is not visibly based on the pseudo-cleft source headed by *yang* with focus movement.

If all Indonesian *wh*-phrases are contained within the FocP layer, one might wonder whether my proposed analysis would predict that multiple *wh*-questions should be unacceptable, given the single focus constraint noted above. However, Yanti (2000) points out that Jambi, a local variety of Malay/Indonesian, allows multiple *wh*-questions, as shown in (35a–c).[9]

(35) a. Siapo la ŋam^{b}ɪʔ apo [di mano]?
who PFV AV.take what LOC where
'Who has taken what where?'

b. [Di mano]$_i$ siapo la ŋam^{b}ɪʔ apo t_i?
LOC where who PFV AV.take what

[9]Thanks to an anonymous reviewer for this question and for drawing my attention to Yanti (2000).

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'Who has taken what where?'

c. [Di mano]$_i$ apo$_j$ siapo am^{b}ɪʔ t_j t_i ?
LOC where what who take
'Who took what where?' (Yanti 2000: 217)

Furthermore, I consulted two Indonesian speakers (see the final paragraph of section 1) regarding their own Indonesian counterparts to the Jambi Malay examples, given in (36a–c). They report that the examples in (36a) and (36b) are acceptable, though they both prefer the former to the latter. By contrast, (36c) is completely unacceptable to both of them.

(36) a. Siapa mengambil apa [di mana]?
who AV.take what LOC where
'Who took what where?'

b. [Di mana]$_i$ siapa mengambil apa t_i?
LOC where who AV.take what
'Who took what where?'

c. * [Di mana]$_i$ apa$_j$ siapa ambil t_j t_i?
LOC where what who take
'Who took what where?'

The right empirical generalization to be drawn from (36a–c), then, seems to be that multiple *wh*-questions are grammatical in Indonesian as long as only one instance of overt *wh*-movement takes place to the interrogative CP, with the other *wh*-phrase(s) remaining in situ. Under my proposed system, this means that in-situ *wh*-phrases in the language are not associated with the focus feature, unlike partially moved *wh*-phrases, for otherwise such phrases should undergo focus movement. For this reason, I maintain, following Cole and Hermon (1998, 2000), that in-situ *wh*-phrases in Indonesian, lacking the multilayered focus/Q-structure, do not undergo any syntactic movement, but are rather variables licensed in situ by the base-generated *wh*-operator at the scopal [Spec, CP] through unselective binding/choice functions (Tsai 1994, Reinhart 2006) (see section 2).[10]

To sum up, I have argued that a uniform multilayered analysis can be maintained for partial movement involved in both nominal and non-nominal *wh*-questions regardless of whether such questions are accompanied by the focus marker *yang*. In fact, pursuing this analysis further, one might well propose that nominal *wh*-questions are in fact derived through the same mechanism as non-nominal *wh*-questions without necessarily assuming that they are derived from the underlying pseudo-cleft sentence. One indication that this analysis is on the right track comes from the

[10]My current analysis predicts that (33c) should be grammatical with the *wh*-phrase *siapa* 'who' staying in situ. Following a reviewer's suggestion, I rechecked (33c) with my consultants, who responded that it is only grammatical without *lah*, as in (i).

(i) Kemarin(*-lah) kamu menelpon siapa? [one focus/one *wh*-phrase]
yesterday-FOC you AV.phone who-Q
'It was YESTERDAY that you called who?'

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observation that the overt realization of the copula *adalah* 'be' is impossible in the nominal *wh*-question with *yang* in (37) but optional in the pseudo-cleft sentence in (38) (repeated from (3)), which should be the source for (37) under Cole and Hermon's (2000) analysis of nominal *wh*-questions.

(37) **Apa$_i$** yang Ali beli (*adalah) t_i?
what COMP Ali buy COP
'What did Ali buy?' (Cole and Hermon 2000: 98)

(38) Yang Ali beli (adalah) **apa**?
COMP Ali buy COP what
'What is it that Ali bought?' (Cole and Hermon 2000: 98)

This discrepancy thus casts doubt on the idea of relating the two constructions in question in derivational terms through focus movement and indicates that (38) is indeed a pseudo-cleft with an in-situ *wh*-phrase, whereas (37) involves instead focus movement of the nominal *wh*-phrase without the pseudo-cleft source, just as in non-nominal *wh*-questions such as (27) and (28).[11]

4. Further evidence for the multi-criterial focus/*wh*-movement from Japanese

I have argued in section 3 that sub-extraction from a double-layered complex *wh*-phrase in Indonesian creates a leeway for multi-criterial movement involving the satisfaction of two independent criterial features – Q and focus – for partial *wh*-movement in the language. In this section, I show that this analysis receives support from grammatical instances of *wh*-questions in Japanese endowed with an additional focus feature, recently documented in Maeda (2019).

The Japanese particle *-sae* in (39a), which otherwise corresponds to *even* in English, may also yield the 'at least' interpretation in the antecedent of a conditional clause, as shown in (39b).

(39) a. Taroo-sae sono paatii-ni kita.
Taro-even that party-to came
'Even Taro came to the party.'

b. [Taroo-sae kure-ba], sono paatii-wa moriagaru daroo.
Taro-at.least come-if that party-TOP fun will
'If at least Taro comes, the party will be fun.' (Kusumoto 2001: 11)

Kusumoto (2001) argues that the *sae*-marked XP undergoes covert focus movement into the CP region headed by a conditional head on the basis of the contrast in grammaticality between (40) and (41). Example (40) is a baseline example to show that an

[11] I am grateful to an anonymous reviewer for pointing out this implication of my analysis, as well as the fact that the same re-analysis of nominal *wh*-questions could be motivated on different grounds. Assuming the analysis of (2) by Cole and Hermon (2000) depicted in (5), its derivation technically involves focus movement from the post-copula focus position of the pseudo-cleft to the left-peripheral focus projection, in violation of CF. I leave this possibility open in this article.

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XP marked by the particle may be associated with a conditional C head separated by more than one clausal boundary. The degraded status of (41) indicates that association of the *sae*-marked XP with the conditional C head is blocked by the adjunct island, which shows that the former undergoes covert movement into the specifier of the latter.

(40) [$_{TP}$ Taroo-ga Ziroo-ni [$_{CP}$ nomimono-sae kattekuru yooni] iu no-o
Taro-NOM Jiro-DAT drink-at.least buy COMP tell COMP-ACC
oboeteoke]-ba, hokanomono-wa kondodemo yoi.
remember-if other.things-TOP at.another.time good
'If Taro remembers to tell Jiro to buy at least drinks, other things can be prepared at another time.'

(adapted from Kusumoto 2001)

(41) ?? [$_{TP}$ Taroo-ga Ziroo-ni [$_{CP\ (=island)}$ nomimono-sae kattekureru-kara] sunaoni
Taro-NOM Jiro-DAT drink-at.least buy-because directly
arigatoo-to iere]-ba, Ziroo-mo uresii darooni.
thank.you-COMP can.say-if Jiro-also glad will
'If Taro can say thank you to Jiro directly because he will buy at least drinks, Jiro will be glad.'

(adapted from Kusumoto 20019)

Turning now to the syntax of *wh*-questions in Japanese, examples in (42–44) are designed to show that this construction causes a CF effect through covert *wh*-movement. As pointed out by Miyagawa (1998) and Yoshida (1999, 2016), the two Q-particles in Japanese – *nokai* and *ndai* – can only be used for *yes-no* questions and *wh*-questions, as shown in (42) and (43), respectively.

(42) a. John-ga kita nokai? b.* Dare-ga kita nokai?
John-NOM came Q who-NOM came Q
'Did John come?' 'Who came?' (Yoshida 2016: 59)

(43) a.* John-ga kita ndai? b. Dare-ga kita ndai?
John-NOM came Q who-NOM came Q
'Did John come?' 'Who came?' (Yoshida 2016: 59)

Keeping this restriction in mind, consider (44). Here, the matrix clause is typed as a *wh*-question, as required by the Q-particle *ndai*, whereas the embedded clause is headed by the other Q-particle *ka*. The ungrammaticality of this example is accounted for if the *wh*-phrase undergoes covert movement into the embedded [Spec, CP] en route to the matrix [Spec, CP], triggering a CF violation.

(44) * John-wa [$_{CP}$ Mary-ga nani-o katta ka] sitteiru ndai?
John-TOP Mary-NOM what-ACC bought Q know Q
'What did John know whether Mary bought?' (Yoshida 2016: 60)

We have seen thus far two types of criterial movement in Japanese: focus movement of an XP-*sae* on its 'at least' reading associated with a conditional C head, and covert Q-movement of an in-situ *wh*-phrase. Crucially for my present purposes, Maeda (2019) observes that the *wh*-expression additionally marked with the focus

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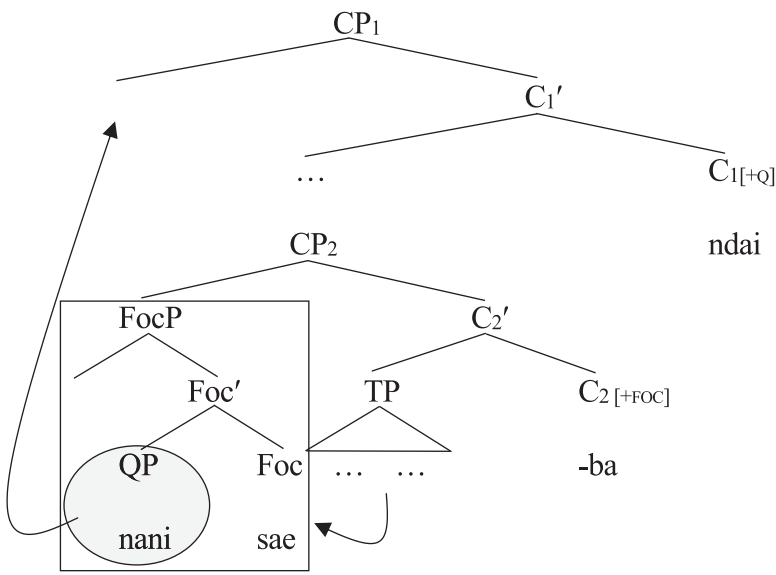
particle, i.e., *nani-sae*, can receive two criterial interpretations in (45) – the Q-interpretation and the focus-interpretation – without any loss of grammaticality.

(45) [$_{CP1}$[$_{+Q}$] Kenta-wa [$_{CP2}$[$_{+FOC}$] nani-sae tabere-ba] yorokobu ndai]?
Kenta-TOP what-at.least eat-if glad Q
'What is it that Kenta is glad if he at least eats?' (adapted from Maeda 2019)

This example indicates that Japanese instantiates multi-criterial movement involving *wh*-/focus-features. I take Maeda's finding as additional support for the creation of a multi-criterial configuration through sub-extraction, just as what I have proposed for partial *wh*-movement in Indonesian. More specifically, the relevant part of the derivation for (45) should now be as depicted in (46). The *wh*-phrase *nani-sae* is made up of the focus layer dominating the Q-layer, just like a partially moved *wh*-phrase in Indonesian. The FocP undergoes focus movement into the CP_2 and is frozen in place. However, the FocP has shielded its contained QP through this movement process so that the latter may evade a CF violation. Subsequently, the QP layer undergoes sub-extraction and covert movement into CP_1 to check the Q-feature against its local interrogative C head.[12]

(46)



5. Conclusions and Open Issues

In this paper, I have developed a new analysis of partial *wh*-movement in Indonesian that resolves seemingly challenging problems for CF. The analysis adopts the spirit of

[12]Maeda (2019) shows that the order in criterial satisfaction between focus- and *wh*-features in a multi-criterial configuration is not fixed.

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Cable's (2007) and Horvath's (2000, 2005) multi-layered approach to *wh*-/focus-questions and proposes that the construction involves focus movement of the FocP, followed by *wh*-movement of the QP sub-extracted from the FocP. A critical step of this derivation is one where the movement of the FocP contains the QP to enable sub-extraction so that the QP may evade a CF violation in a subsequent derivational step. The proposed analysis receives independent support from the amelioration of CF effects under focused *wh*-questions in Japanese, as reported in Maeda (2019).

There is no denying that there is some deep-seated computational principle such as CF which requires optimal one-to-one correspondence between an XP and its scope-discourse function. Suggestions of this sort have also been made by Abels's *Interpret Once under Sharing* (2012: 13), which states that every syntactic object has only one dedicated scope/discourse position relative to a given criterial feature. I have shown that there are certain cases where this otherwise strict correspondence breaks down. One overall picture that emerges from the current investigation then is that such cases have in common that an XP endowed with a criterial feature properly contains a YP endowed with another criterial feature, with the former having the potential to protect the latter from incurring a CF violation. My hypothesis is that this step affords a leeway for multi-criterial configurations to be satisfied without causing any CF violation.

There are important challenges ahead in the research program developed here, among which is the question of what it is about partial *wh*-movement in Indonesian that makes sub-extraction of the QP alone from within the FocP possible. A quick survey of the literature on CF effects (given in Table 1) suggests that CF is cross-linguistically robust, indicating that this derivation must be severely constrained. Note that the works cited in Table 1 are concerned with CF effects brought about by movement of the same XP to more than one criterial position instead of sub-extraction of YP out of the XP. If there were no constraints on when sub-extraction can be employed, then the relevance of CF would be significantly weakened as a general computational principle, an undesirable outcome.

The challenge above is linked to the biggest puzzle concerning the very phenomenon of partial *wh*-movement, namely, why this construction is impossible in many other languages such as English. I hypothesize, following the insights of Cheng (1991, 1997, 2000) and Watanabe (1991, 1992, 2001) (see also Kuroda 1965 and Nishigauchi 1990), that the required sub-extraction of the QP is made possible by a particular morphological structure of *wh*-words in Indonesian such that the interrogative Q operator is morphologically dissociated from the core which provides the *wh*-word itself. Indeed, this morphological decomposition of a *wh*-word into the Q operator and the *wh*-core is independently supported by Cole and Hermon's (1998) observation that *wh*-words in Indonesian/Malay can be used as variables bound by other operators different from the *wh*-operator, as shown in (47–48).

(47) a. Dia tidak membeli apa-apa untuk saya.
he NEG AV.buy what-what for me
'He did not buy anything for me.'

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1st movement	2nd movement	Languages	Penalty	Primary references
wh-movement	*wh*-movement	English	*	Lasnik and Saito (1992); Epstein (1992)
wh-movement	focus movement	Italian	*	Rizzi (2006)
wh-movement	topicalization	English	*	Grohmann (2003); Bošković (2008)
topicalization	quantifier raising	English; Spanish	*	Lasnik and Uriagereka (1988); Epstein (1992); Uribe-Echevarria (1992); Bošković (2008)
topicalization	NPI movement	English	*	Lasnik and Uriagereka (1988); Epstein (1992)
topicalization	*wh*-movement	English; German	*	Lasnik and Uriagereka (1988); Epstein (1992); Müller and Sternefeld (1993, 1996)
scrambling	*wh*-movement	German	*	Müller and Sternefeld (1993, 1996)
scrambling	focus movement	German	*	Müller and Sternefeld (1993)
focus movement	*wh*-movement	Serbo-Croatian	*	Bošković (2008)

Table 1: A Typological Survey of CF Effects

b. Dia tidak membeli apa-pun untuk saya.
he NEG AV.buy what-also for me
'He did not buy anything for me.' (Cole and Hermon 1998: 239)

(48) a. Saya tidak kenal siapa-siapa di universiti itu.
I NEG know who-who at university DEM
'I didn't recognize anyone at that university.'

b. Saya tidak kenal siapa-pun di universiti itu.
I NEG know who-also at university DEM
'I didn't recognize anyone at that university.' (Cole and Hermon 1998: 239)

In (47a) and (48a), the *wh*-word is bound by the existential quantifier created by reduplicating the question word. In a similar vein, in (47b) and (48b), the *wh*-word is bound by the existential quantifier realized by the word *-pun* 'also'.[13]

The morphological separability characterizing Indonesian *wh*-words also provides a principled answer to the question raised by a reviewer as to why the *wh*-phrase is pronounced in the intermediate position (i.e., the tail of the *wh*-chain created by further movement of the QP to the matrix [Spec, CP]). This question is important in view of the now-standard guiding assumption in the minimalist framework that the so-called *overt* vs. *covert* movement distinction is dispensed with in favour of the single-output model of movement (Bobaljik 1995, Brody 1995, Groat and O'Neil 1996, Pesetsky 1998, Nissenbaum 2000) whereby so-called 'overt' and 'covert' movements are obtained when the phonological component selects the head and tail of a movement chain for pronunciation/externalization, respectively. The forced stranding and pronunciation of a *wh*-phrase in an intermediate position in a partial *wh*-movement construction is a simple consequence of its derivation, in which it is the 'invisible' Q-operator that undergoes movement to the matrix [Spec, CP] instead of the whole QP that contains the operator and the *wh*-core. Note that this derivation is still able to capture Saddy's (1991) core observation introduced in section 2 that 'covert' *wh*-movement of a *wh*-phrase from its intermediate pronounced site to the matrix C-system obeys island effects and yields its wide scope over a universally quantified subject in the matrix clause.

L. L.-S. Cheng (1997, 2000) argues that partial *wh*-movement is made available in German for the same morphological reason as Indonesian: the paradigm in (49) from this language shows that indefinite expressions are created by combining their corresponding *wh*-cores with the prefix *irgend*.

(49)

wh-phrases		existential quantifiers	
wer	'who'	*irgendwer*	'someone'
was	'what'	*irgendwas*	'something'

[13]Many languages have an indeterminate system as shown in (47) and (48) which nonetheless seems not to correlate with partial *wh*-movement. Japanese and Chinese are *wh*-in-situ languages with elaborate indeterminate systems. The correlation between partial *wh*-movement and an indeterminate system is a one-way correlation such that some other independent language-particular properties block partial *wh*-movement. Needless to say, a much more in-depth typological investigation is necessary.

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wann	'when'	*irgenwann*	'sometime'
wo	'where'	*irgenwo*	'somewhere'
welche	'which'	*irgendwelche*	'some kind of'

(Cheng 2001: 86)

Recall, however, that I have argued that partial *wh*-movement in Indonesian has a different derivation from its German counterpart not only with respect to the presence/absence of the overt scope marker in the matrix CP, but also with respect to the scope interaction between the partially moved *wh*-phrase and a universal quantifier in the matrix clause. L. L.-S. Cheng (1997, 2000) analyzes German partial *wh*-movement in terms of overt *wh*-feature movement from a *wh*-phrase in an intermediate position to the matrix C-system. Updating her analysis in line with contemporary minimalist framework, which does away with Chomsky's (1995) feature-movement theory, the construction may be reanalyzed as the result of agreement between the matrix C head and the intermediate *wh*-phrase, thereby also accounting for the impossibility of the aforementioned scope interaction.

The other challenge relates to the more general issue of whether *wh*-words have the focus-/*wh*-structure in most, perhaps all, of the languages of the world. If they do, we should then ask, why shouldn't we find Indonesian-style partial *wh*-movement more frequently in more languages of the world than we do? There is nothing to prevent a *wh*-phrase in any language from being associated with the two-layered multi-criterial configuration. At the semantic/discourse level, at least, both focus- and *wh*-phrases contribute new information and create a structured representation consisting of a focus and a presupposition (see Jackendoff 1972; Chomsky 1976; Rochemont 1978, 1986; Culicover and Rochemont 1983; Horvath 1986; Bresnan and Mchombo 1987; and Kiparsky 1995, among many others). We have also seen that the focus feature is morphologically manifested in *wh*-phrases in Japanese, as in *nani-sae* 'what-SAE'. Adopting the view that *wh*-movement instantiates focus movement, suppose then, following a version of Sabel's (2000) theory of *wh*-movement, that if the [+wh] feature is realized in the matrix C, a [+focus] feature always co-occurs in all the lower embedded C heads, thereby triggering successive-cyclic focus movement, as schematically depicted in (50).

(50) [$_{CP1}$ *Wh*-phrase$_i$ C$_{1[+wh]}$ … [$_{CP2}$ t_i'' C$_{2[+foc]}$ … [$_{CP3}$ t_i' C$_{3[+foc]}$ [$_{IP}$ … t_i …]]]]

(adapted from Sabel 2000)

In this system, whether partial *wh*-movement is obtained in a language depends on the availability of the stranding of the *wh*-phrase in the intermediate CPs. This option, I hypothesize, is linked to the morphological decomposability of a *wh*-phrase into the interrogative operator and the *wh*-core. Languages such as Indonesian, Ancash Quechua (Cole 1982), German (McDaniel 1989), and Kikuyu (Sabel 2000) allow a *wh*-phrase to stop halfway thanks to their transparent *wh*-composition system, which makes it possible for the abstract *wh*-operator/*wh*-feature to undergo further movement to the matrix [Spec, CP] independently of its containing focused phrase. By contrast, many other languages, including English, do not allow

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this structure due to their opaque/fusional *wh*-paradigms, even though their *wh*-structure is in principle associated with the two-layered feature structure. This property will consequently force movement of the entire focus-/*wh*-complex, yielding the full *wh*-movement pattern to the matrix CP. The Serbo-Croatian case investigated in Bošković (2008) (see Table 1) in which focus movement cannot feed *wh*-movement can be analyzed along these lines: Since sub-extraction of the QP from the FocP is blocked in this language by an independent language-particular factor having to do with the morphological make-up of *wh*-words, the entire FocP must undergo focus movement and *wh*-movement, thereby resulting in a CF violation, unlike in the case of partial *wh*-movement in Indonesian, even though both constructions seemingly involve the identical sequence of two criterial movements. Nevertheless, the above is a mere speculation at this point, and I will leave a further exploration of the possible link between morphological transparency of *wh*-words and partial *wh*-movement for future research.

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