

A Short Note on Wh-in-situ in Colloquial Jakartan Indonesian

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ABSTRACT

The Journal of Studies in Language 39.4, 417-430. The main objective of this study is to investigate the properties of wh-in-situ constructions in Colloquial Jakartan Indonesian (CJI). In contrast to Standard Indonesian and Malay, where both wh-movement and partial wh-movement are observed, CJI content questions are obligatorily wh-in-situ. Our analysis centers on a notable asymmetry between nominal wh-phrases (e.g., “who,” “what”) and adverbial wh-phrases (e.g., “why,” “how”). The former are immune to islands, while the latter are sensitive to them. We review previous analyses of related linguistic varieties, fail to account for the properties of wh-constructions in CJI. Consequently, we propose an analysis incorporating unselective binding and covert movement. We end with some tentative remarks on why wh-movement is not observed in CJI, in light of the fact that feature strength is no longer a viable option as an explanatory framework. (Sogang University)

Keywords: colloquial grammar, unselective binding, covert movement, wh-in-situ, Indonesian



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본인이 투고한 논문은 다른 학술지에 게재된 적이 없으며 타인의 논문을 표절하지 않았음을 서약합니다. 추후 중복게재 혹은 표절된 것으로 밝혀질 시에는 논문게재 취소와 일정 기간 논문게출의 제한 조치를 받게 됨을 인지하고 있습니다.

1. Introduction

We examine the properties of *wh*-in-situ in Colloquial Jakartan Indonesian (CJI). The description hinges on the difference between nominal *wh*-questions (such as *who*, *what*, *where*, *when*) versus adverbial *wh*-questions (*why* and *how*). We show that CJI exclusively exhibits *wh*-in-situ. We also show that nominal *wh*-phrases are immune to island effects, while adverbial *wh*-phrases are sensitive to them. In addition to presenting a description of the CJI facts and how they differ from other varieties of Indonesian and Malay, this paper highlights the need for studying micro-syntactic variation among closely related dialects and varieties.

The gist of the proposal goes as follows. We show that CJI is obligatorily *wh*-in-situ, in contrast to the usual description of Malay. In particular, adverbial *wh*-questions in CJI are obligatorily in situ, while in Malay, they obligatorily raise overtly to SpecCP. After showing that the standard analysis for Malay (Cole and Hermon 1998; 2000) cannot account for the facts in CJI, we propose that nominal

wh-phrases are licensed by unselective binding and that adverbial *wh*-phrases undergo covert movement to SpecCP. As such, nominal *wh*-phrases are insensitive to islands, while adverbial *wh*-phrases are sensitive to them.

The remainder of this paper is organized as follows. Section 2 presents the background on this investigation, including a discussion of our theoretical background and previous research on *wh*-constructions on other varieties of Indonesian. Section 3 presents the relevant facts of *wh*-in-situ in CJI. Section 4 gives the core proposal, which involves the use of unselective binding and covert movement. Section 5 presents the analysis. Section 6 is a brief conclusion.

2. Background

We include a brief discussion of Indonesian, Colloquial Jakartan Indonesian and other related varieties to set the stage for our discussion. We then present the theoretical background in which our analysis is couched. In the final section, we discuss previous research on *wh*-constructions in other related varieties of Indonesian and Malay.

2.1 Indonesian and its varieties

Indonesian, sometimes called Bahasa Indonesian, is the standardized form of Malay, a member of the Malayo-Polynesian branch of the Austronesian family. Although the terms Malay and Indonesian both refer to the same language, the two names are used in Malaysia and Indonesia, respectively. When necessary below, we sometimes refer to both forms jointly as Indonesian/Malay. This is meant to encompass all forms of Indonesian and Malay, including standard forms and local colloquial varieties. Differences between Indonesian and Malay are due largely to borrowing based on differing foreign contacts between Malaysia and Indonesia (Sneddon, 2003). As Sneddon explains, the linguistic situation of Indonesia is quite complex. Although Indonesian is the official language of Indonesia, varieties of it are spoken natively by a small percentage of the population. Most Indonesians speak another related language natively and speak Indonesian as an L2. Colloquial Jakartan Indonesian is the variety of Indonesian spoken in non-formal situations in Jakarta. As Jakarta is the capital and is relatively influential in Indonesia, CJI enjoys relative prestige among the various colloquial varieties spoken in Indonesia (Sneddon, 2006).

Data from other sources are cited as is, with minor changes in the gloss to maintain consistency throughout the document. CJI examples with no citation are the judgements of the second author, which were confirmed with other speakers of CJI from Jakarta. Judgements were obtained using standard elicitation techniques (Chomsky, 1965) augmented by recent methodological practices in controlling semantic contexts (Bochnak and Matthewson, 2020; Davis et al., 2014). Specific contexts are discussed below with the relevant data. All speakers are approximately in their twenties. The second author of this paper is female speaker of CJI in her 20s raised in Jakarta and residing in Seoul. The other speakers consulted are personal contacts of the second author from earlier employment and school venues. The author's judgements (along with confirmations from other speakers) were obtained in early 2023. Glosses contain some unglossed abbreviations such as MEN-, which are of disputed function. They do not play a role in our discussion. See footnote 2 for further discussion.

2.2 Theoretical Background

Our analysis is developed within the Minimalist Program (Chomsky, 1995 *et seq.*). Crucially, it relies on the difference between overt movement and covert movement (also called LF movement following May, 1985). In current Minimalist theorizing, overt and covert movement can be understood as follows. Chomsky (1995) proposes a T-model of grammar in which syntax builds phrase structure from lexical items. At a point called Spell-Out, the structure built so far is sent to two interfaces: PF, which produces the spoken form of the sentence, and LF, which produces the meaning of the sentence. See Chomsky (1995; 2001) for more precise details. Crucially, any movement that takes place before Spell-Out, overt movement, will be visible to PF and hence will be reflected in the word order. Movement that takes place after Spell-Out on the LF branch of the grammar, covert movement, will not be visible to PF and hence will not be reflected in the word order. As a result, covert movement has the appearance of no movement taking place at all.

Huang (1982) was the first to propose that covert movement could be used to explain *wh*-in-situ in Mandarin Chinese. As is well known Mandarin Chinese is a *wh*-in-situ language. Huang proposed that the *wh*-phrase in Mandarin Chinese moves covertly to SpecCP. Since this happens after Spell-Out, PF only sees the *wh*-phrase in its base position, giving rise to *wh*-in-situ. An alternative explanation for *wh*-in-situ was proposed by Aoun and Li (1993a; 1993b) and Tsai (1994) based on unselective binding, following Pesetsky (1987). The mechanism is quite simple. There is an interrogative operator in C that searches for a [wh] feature in its c-command domain. The operator is unselective in that it can bind any [wh] feature in its c-command domain, not simply the closest one. The difference between these two mechanisms is that covert movement involves a movement operation, while unselective binding does not involve any movement. Movement, overt or covert, is dependent on phase boundaries in the sense of Chomsky (2001). See footnote 7. If a given phase does not have an escape hatch, it is an island for movement. As such covert movement is sensitive to islands. Unselective binding, involving no movement, is thought not to be sensitive to islands. We will exploit this difference in our analysis in section 5.

2.3 Previous Research

Wh-constructions have been studied on a number of Indonesian/Malay varieties (Cole et al., 2005; Cole and Hermon, 1998, 2000; Saddy, 1991; Sato and Yuliani, 2008).¹⁾ In most analyses, *wh*-constructions are described as optionally being *wh*-in-situ or having *wh*-movement (or partial *wh*-movement depending on the variety). We take the view here that CJI is strictly *wh*-in-situ, but we delay the discussion on the CJI facts until section 3.

We start with a discussion of *wh*-constructions in Malay (Cole and Hermon, 1998; 2000). It is reported that *wh*-movement is optional in Malay for nominal *wh*-phrases but that *wh*-movement is obligatory for adverbial *wh*-phrases. Consider the following examples. Observe that in (1d) the adverbial *wh*-phrase *kenapa* ('why') is not found in situ.²⁾

1) A number of other Indonesian varieties have also been described, including Madurese (Davies, 2003), Balinese (Kim et al., 2019), Sundanese (Davies and Kurniawan, 2013). A reviewer rightly asks about the differences between the data we present here that runs contrary to the observations from the other studies on Indonesian varieties. One difficulty in studying Indonesian is the incredible amount of dialect variation. In the few formal studies on CJI our data are largely in line with this previous work. We hope that future studies can tease apart the differences in more detail.

2) The following abbreviations are used: COMP - complementizer, DEM - demonstrative, FUT - future, PASS - passive, POSS -

(1) Malay, Austronesian (Cole and Hermon, 1998: 224, 226)

- a. Siapa_i (yang) Bill harap yang t_i akan membeli baju untuknya?
 who (COMP) Bill hope COMP will buy clothes for.him
 ‘Who does Bill hope will buy clothes for him?’
- b. Bill harap guru itu akan mendenda siapa?
 Bill hope teacher DEM will punish who
 ‘Who does Bill hope that teacher will punish?’
- c. Kenapa Fatimah menangis?
 why Fatima cry
 ‘Why did Fatima cry?’
- d. *Fatimah menangis kenapa?
 Fatima cry why
 (‘Why did Fatima cry?’)

Working within an early Minimalist framework (Chomsky, 1993; 1995) Cole and Hermon posit that an interrogative C head has a strong *wh*-feature in Malay, which must be satisfied by overt movement. The instances of apparent *wh*-in-situ, as in (1b), are the result of lexical differences between Malay and English. They propose that *wh*-words in English combine a *wh*-operator and a variable into a syntactically atomic unit that must raise as a whole to SpecCP. They further propose that adverbial *wh*-words in Malay are also an operator+variable atom, but that nominal *wh*-words in Malay are simply a variable that combine syntactically with a phonologically null *wh*-operator. Evidence for this claim comes from the observation that nominal *wh*-words can be used as a variable, but that adverbial *wh*-words cannot. Consider the following examples. Observe that *apa-apa* (‘what-what’) can be used as an indefinite variable but that **kenapa-kenapa* (‘why-why’) cannot.

(2) Malay, Austronesian (Cole and Hermon 1998: 239, 244)

- a. Dia tidak mem-beli apa-apa untuk saya.
 he not MENG-buy what-what for me
 ‘He did not buy anything for me.’
- b. *Siti tak pukul anaknya kenapa-kenapa.
 Siti not hit child why-why
 (‘Siti did not hit the child for any reason.’)

possessive, FUT - future. All other glosses are of unclear or variable function and are often unglossed in other works on Indonesian as we have done here.

They posit that the non-interrogative use of *apa* ('what') in (2a) lacks the phonologically null *wh*-operator. This is how it is able to exist in a non-interrogative environment. As mentioned above, the form *kenapa* ('why') is argued to lexically contain a *wh*-operator, which is inextricably linked to it. As such, it cannot appear in a non-interrogative context. See Cole and Hermon for more in depth details.

Furthermore, they propose that a null *wh*-operator exists in the Lexicon in Malay. This operator can unselectively bind a nominal *wh*-word in the sense of Heim (1982). Based on the contrast in (2), they assume that adverbial *wh*-phrases cannot serve as variables in the same way as nominal *wh*-phrases and thus must undergo overt movement to satisfy the strong *wh*-feature on C. To foreshadow the coming discussion on CJI, we note that the Malay facts and the CJI facts are quite different, underscoring at this point the need for more cross-dialectal comparative research in Indonesian (and in general). While *wh*-movement is obligatory for Malay adverbial *wh*-phrases, it is impossible for CJI adverbial *wh*-phrases.

Cole et al. (2005) specifically examine the difference between Standard Indonesian (SI) and CJI, noting that *wh*-in-situ is impossible in subject position in Standard Indonesian, but possible in CJI (and obligatory, as argued here). Consider the following examples. Although *wh*-movement or lack thereof is difficult to detect for subject questions (Cole *et al.* do not give examples of long-distance questions), the lack of a complementizer in (3a, b) indicates that the subject is in situ, and the presence of the complementizer in (3c) indicates the subject has raised to SpecCP.

(3) Standard Indonesian (Cole et al., 2005: ex (5a, d))

- a. * Siapa akan men-jadi wasit per-tanding-an itu?
 who FUT MEN-become referee PER-match-AN that
 'Who will be the referee of that match?'
- b. * Saya heran [apa mem-buat-mu demikian gembira hari ini].
 1SG surprised what MEN-make-2SG so happy day this
 'I wonder what makes you so happy today.'
- c. Siapa yang akan men-jadi wasit per-tanding-an itu?
 who COMP FUT MEN-become referee PER-match-AN DEM
 'Who will be the referee of that match?'

As the following CJI example shows, the subject is in situ.

(4) Colloquial Jakartan Indonesian (Cole et al., 2005: ex (48))

- Siapa belum makan?
 who not.yet eat
 'Who hasn't eaten, yet?'

- d. Bagus pikir [Putri di-pecat kenapa]?
 Bagus think Putri PASS-fired why
 ‘Why does Bagus think Putri was fired?’

CJI exhibits a common asymmetry in island contexts in which *wh*-adverbials are not licit inside islands. We examine relative clause islands and adjunct islands here. *Wh*-islands are not testable as multiple *wh*-questions are not attested in the variety of CJI the second author speaks, as the following examples show.⁴⁾

(7) Colloquial Jakartan Indonesian

- a. * Siapa beli apa?
 Who buy what
 (‘Who bought what?’)
- b. * Bagus kasih apa ke siapa?
 Bagus give what to who
 (‘What did Bagus give to who?’)

We discuss islands next, starting with relative clause islands and then moving on to adverbial islands (*because*-clauses and *after*-clauses). We make some methodological notes here concerning the elicitation of the data as some of the sentences below can seem rather complex. Consider example (8a). This question is designed to elicit a response such as, “I think Bagus likes the woman who lives in Jakarta.” The CJI question in (8a) is presented along with such a possible answer in Indonesian. Speakers are asked if such a question/answer pair is possible. Note that the potential answers are first checked for acceptability. If the question/answer pair is not possible, the speaker is asked if there is another way to ask the question to get the desired answer. The new question/answer pair is repeated for the speaker and compared to the test question/answer pair one more time.⁵⁾

The following CJI examples show that nominal *wh*-phrases are not sensitive to relative clause islands, (8), while adverbial *wh*-phrases are, (9). These facts are largely in line with what has been observed in Indonesian/Malay in general for *wh*-in-situ constructions (see references above). Note that the English translations are approximate. As noted in the discussion on methodology above, these data were considered in the form of a question/answer pair. (8a) was considered with the hypothetical answer, “I think Bagus likes the woman who lives in Jakarta.” (8b) was considered with the hypothetical answer, “Ali ate the apple that Siti bought yesterday, not the one she bought on Monday.”

4) A reviewer asks whether the ungrammaticality of (7a) is due to lack or presence of *wh*-in-situ. Indeed, it is difficult to tell in CJI whether the subject undergoes *wh*-movement in its own clause. Regardless of the word order in (7a) it is ungrammatical. Furthermore, example (7b) clearly shows that multiple *wh*-questions are not permitted in CJI.

5) Note that the methodology as described is geared towards working with non-linguist speakers. Bochnak and Matthewson (2020) do note, however, that the same techniques can be used by linguists investigating their own language to ensure the data are robust and reliable. This was the first step taken here as one of the authors is a native speaker of CJI. The same data were then tested again the same way with other speakers to test for replicability.

(8) Colloquial Jakartan Indonesian - nominal *wh*-phrases

- a. Kamu pikir [Bagus suka [perempuan yang tinggal di mana]]?
 You think Bagus like woman COMP live in where
 ‘Where do you think Bagus likes the woman who lives (there)?’

- b. Ali makan [apel yang Siti beli kapan] ?
 Ali eat apple COMP Siti bought when
 ‘When is the x such that Ali ate the apple that Siti bought at time x?’

The following examples show that adverbial *wh*-phrases are not felicitous inside relative clause islands. Care must be taken when evaluating ungrammatical sentences. First, two hypothetical answers were considered for example (9a): “I think Bagus helps the woman who fixes the car quickly (to help get the job done faster).” and “I think Bagus helps the woman who fixes the car with this wrench.” The first context is enriched with the following information. Bagus has a choice of whom to help fix cars, but he wants to get the job done quickly. So the speaker thinks that Bagus will help the woman who fixes cars quickly. To elicit such an answer in this context, the speaker considers question (9a). Likewise, for (9b), we consider if this question is possible to elicit an answer such as, “I think Bagus sees the woman who cries because her cat died.” Note interestingly that the meaning of (9a) can survive if the question is rephrased with a nominal *wh*-phrase as shown in (9c). This shows that the ungrammaticality of (9a) is not due to the meaning, but to the difference between nominal and adverbial *wh*-questions. On a methodological note, (9a) and (9c) create a good minimal pair to test the question/answer pairs as described above.

(9) Colloquial Jakartan Indonesian - adverbial *wh*-phrases

- a. * Kamu pikir [Bagus bantuin [perempuan yang benerin mobilnya gimana]]?
 You think Bagus help woman COMP fix car.the how
 (‘How do you think Bagus helps the woman who fixes the car?’)

- b. * Kamu pikir [Bagus liat [perempuan yang nangis kenapa]]
 You think Bagus see woman COMP cry why
 (‘Why do you think Bagus sees the woman who cries?’)

- c. Kamu pikir [Bagus liat [perempuan yang benerin mobilnya pake cara apa]]?
 You think Bagus see woman COMP fix car.the with method what
 ‘With what method, x, do you think Bagus helps the woman who fixes the car with method x?’

Adjunct islands show the same behaviour as relative clause islands, again, largely in line with earlier observations on Indonesian/Malay. Observe that adverbial questions (such as ‘how’) have nominal counterparts (such as ‘in what manner’), which are immune to island effects, as expected. Again, question/answer pairs were used to test these data.

Example (10a) was tested with an answer such as, “Bagus was fired because Sari think he stole an office computer.”

(10) Colloquial Jakartan Indonesian - nominal *wh*-phrases

- a. Bagus di-pecat [karena Sari pikir [dia curi apa]]?
 Bagus PASS-fired because Sari think he steal what
 ‘What is the x such that Bagus was fired because Sari thinks he stole x?’
- b. Sari pergi dari pesta [sebelum Bagus nangis gara-gara apa]?
 Sari leave from party before Bagus cry because.of what
 ‘For what reason x did Bagus cry after Sari left the party because of x?’
- c. Sari nangis [karena Bagus benerin mobil-nya pake cara apa]?
 Sari cry because Bagus fix car-POSS with method what
 ‘In what way x did Bagus fix the car that Sari cried because of x?’

Consider next the following adverbial *wh*-phrases inside an adverbial clausal island. We briefly mention one final methodological note, again as these sentences are somewhat complex. In example (11a) various possible answers are considered, such as “Sari left the party before Bagus cried because his cat died.” and “Sari left the party before Bagus cried because Sari broke up with him.” The second hypothetical answer is considered more plausible. To avoid an awkward situation, Sari left the party before Bagus started crying because of their break-up. Once a rich enough context is generated, it become much easier to test the question/answer pairs.

(11) Colloquial Jakartan Indonesian - adverbial *wh*-phrases

- a. * Sari pergi dari pesta [sebelum [Bagus nangis kenapa]]?
 Sari leave from party before Bagus cry why
 (‘For what reason, x, did Bagus cry before Sari left the party for reason x?’)
- b. * Sari nangis [karena Bagus benerin mobil-nya gimana]?
 Sari cry because Bagus fix car-POSS how
 (‘How did Sari cry because Bagus fixed the car?’)
- c. * Sari pergi dari pesta [karena Bagus nangis kenapa]?
 Sari leave from party because Bagus cry why
 (‘For what reason, x, did Sari leave the party because Bagus cried for reason x?’)

To summarize this section, nominal *wh*-phrases are immune to island effects, while adverbial *wh*-phrases are sensitive to them. In all cases investigated here for CJI, *wh*-phrases are found only in-situ. No instances of

wh-movement are found in CJI. This contrasts with *wh*-questions in other varieties of Indonesian/Malay investigated by various authors elsewhere (as discussed above), in that *wh*-movement is either possible or sometimes obligatory.

4. Proposal

The obvious difference between CJI and the other varieties of Indonesian/Malay is that CJI is purely *wh*-in-situ. Cole and Hermon (1998) report for the educated variety of Malay spoken in Singapore that *wh*-movement and *wh*-in situ are both possible. More specifically for the discussion here, they report that *wh*-adverbials cannot remain in situ, in contrast to the CJI facts reported here.⁶⁾

(12) Malay, Austronesian (Cole and Hermon, 1998: 226)

- a. Kenapa Fatimah menangis?
 why Fatima cry
 ‘Why did Fatimah cry?’
- b. *Fatimah menangis kenapa?
 Fatima cry why
 (‘Why did Fatimah cry?’)

Recall that Cole and Hermon propose that Malay has a strong *wh*-feature in C, requiring overt movement for adjuncts. Nominal *wh*-phrases can remain in situ because a phonologically null *wh*-operator raises to SpecCP and satisfies the strong *wh*-feature.

Clearly, the same analysis cannot be carried over to CJI. First, while it has been debated whether covert movement is sensitive to islands, overt movement is uniformly considered to be constrained by them. Under Cole and Hermon’s analysis, we would lose the explanation for why nominal *wh*-phrases are not sensitive to island effects. Recall also that part of Cole and Hermon’s evidence relied on the fact that only nominal *wh*-words can be used as non-interrogative variables. The same does not hold true for CJI. Consider the following example. As was seen for Malay above, the *wh*-word *apa* (‘what’) can be used as a non-interrogative variable when reduplicated.

- (13) Bagus gak beli apa-apa
 Bagus not buy what-what
 ‘Bagus did not buy anything.’

The following example shows, however, that adverbial *wh*-words can also be used in non-interrogative contexts. We leave for future research whether the use of partial reduplication in (14) plays a role in the analysis.

6) Regarding footnote 1, the fact that adverbial *wh*-in-situ is ungrammatical in Standard Indonesian and obligatory in CJI suggests we are dealing with two separate grammatical systems.

- (14) Bagus gak kenapa-napa
 Bagus not why-why
 ‘Bagus is okay.’

Given the observations above, the analysis in Cole and Hermon that involves a strong *wh*-feature on C that must be satisfied by overt movement does not work for CJI. Furthermore, the difference in island effects shows that unselective binding cannot license the adverbial *wh*-phrases. In the next section we will pursue an analysis in which the adverbial *wh*-phrases undergo covert movement (aka LF movement in the sense of May, 1985).

5. Analysis

We follow Cole and Hermon and assume that the lack of island effects observed in section 3 indicates that nominal *wh*-phrases are not licensed by LF movement but rather by unselective binding.⁷⁾ Recall that movement (overt and covert) is sensitive to phase boundaries and hence sensitive to islands. Since unselective binding does not involve movement, it is not sensitive to phase boundaries. Positing that nominal *wh*-phrases are licensed by unselective binding explains the lack of island effects with nominal *wh*-phrases. Recall that CJI differs from Standard Indonesian in that adverbial *wh*-phrases remain in situ in CJI. As such Cole and Hermon’s analysis cannot be carried over to CJI as discussed above.

Given that adverbial *wh*-phrases are sensitive to islands, we propose that they undergo covert movement. Thus, we follow the analysis of Aoun and Li (1993a; 1993b) and Tsai (1994) and depart from Huang (1982) and Watanabe (1992), where it is argued that only overt movement is subject to Subjacency (hence the appearance of island effects). Rather, we assume that movement, both overt and covert, is sensitive to islands. The following examples schematize the two mechanisms involved. In (15a), the *wh*-operator, OP unselectively binds the nominal *wh*-phrase inside the island (exemplified by *what* for exposition). In (15b), the adverbial *wh*-phrase (*why*) moves covertly to SpecCP, which is illustrated with an embedded bridge clause, a clause which is not an island. In (15c), however, the adverbial *wh*-phrase is trapped inside an island and cannot raise to SpecCP, causing the derivation to crash.

- (15) a. [CP OP¹ C_{wh} ... [island ... what¹ ...]]
 b. [CP why_i C_{wh} ... [CP_{bridge} ... t_i ...]]
 c. * [CP Spec C_{wh} ... [CP_{island} ... why ...]]

We now have no answer as to what gives rise to the mechanism that controls whether *wh*-movement is overt or

7) As a reviewer notes, unselective binding as described here violates the Phase Impenetrability Condition (PIC) (Chomsky, 2001). The PIC is a constraint on *syntactic* operations. Unselective binding is purely an LF relation, by which time the *wh*-phrase from the lower phase is visible to the unselective binder. See also Keine (2020) for arguments that the PIC is too strong and that many syntactic operations, in fact, can see past the immediately closest phase boundary.

covert. Recall that Cole and Hermon relied on feature strength as developed in Chomsky (1993; 1995), which is no longer a theoretical desideratum as it is merely a restatement of the problem. We note, however, that this is a general problem in generative linguistics and not one specific to CJI or Indonesian/Malay specifically. Promising current research on the motivation for overt movement may be found in Contiguity Theory (Branan, 2018; Richards, 2016); however, this approach relies on an understanding of the prosodic facts of Indonesian. It may also turn out that differences in *wh*-movement (as in Malay for example) may be correlated to information structure, as adumbrated in Cole *et al.* (2005); however, this approach would require pinning down some meaning difference between in-situ questions and questions that involve *wh*-movement. We leave these questions to future research.

6. Conclusion

We have described and investigated the properties of *wh*-in-situ in Colloquial Jakartan Indonesian. The core properties to account for are the following. All *wh*-phrases in CJI are obligatorily in-situ. Interestingly, this includes adverbial *wh*-phrases, which cannot remain in-situ in Malay. Furthermore, nominal *wh*-phrases can appear inside islands, while adverbial *wh*-phrases cannot. We investigated two kinds of islands here: adverbial clauses (such as *because*-clauses) and relative clauses. *Wh*-islands could not be investigated as multiple *wh*-questions are not found in CJI. If an adverbial *wh*-phrase appears inside an island it results in ungrammaticality. We showed that Cole and Hermon's analysis of Malay cannot be carried over to CJI. Instead, we proposed an analysis along the lines of Aoun and Li (1993a; 1993b) and Tsai (1994), in which nominal *wh*-phrases are licensed by unselective binding and the adverbial *wh*-phrases undergo covert movement. This analysis assumes that all movement (both overt and covert) is sensitive to islands, thereby simplifying the architecture of grammar in our opinion.

This short investigation illustrates the diversity of *wh*-in-situ constructions, even within closely related dialects, thus highlighting the need for cross-linguistic research into as many dialects and languages as possible to uncover the range of variation in human language. There are still unanswered questions in this work. Most importantly, it was suggested that feature strength cannot be used to account for the facts here. One could argue that perhaps CJI has a weak *wh*-feature on C, but this does not explain the variation for other varieties that have both *wh*-movement and *wh*-in-situ (not to mention partial *wh*-movement). As the notion of feature strength has fallen out of favour due to its diacritic nature, a solution along these lines is not forthcoming. It was suggested above that perhaps some other property such as prosody or information structure may play a role. We leave these questions to future research.

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