An in-situ syntax of sluicing in Indonesian: Implications for interface economy conditions

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This paper proposes an in-situ analysis of sluicing proposed by Kimura (2010), as further articulated by Abe and Hornstein (2002), for Indonesian sluicing whereby deletion deletes all TP-internal materials except the in-situ wh-phrase as an alternative to the now conventional wh-movement +ellipsis analysis adopted in the field (Merchant 2001). The analysis not only provides a simple, unified explanation for otherwise recalcitrant properties of Indonesian sluicing, but also has a number of significant theoretical implications for elliptical repair and interface economy. Under the in-situ theory of sluicing, (1), for example, is analyzed as in (2). I assume, following Cole et al. (1999), that nominal wh-questions have the headless relative clause structure with optional wh-movement into [Spec, CP], an assumption which has been independently motivated.

(1) Esti mem-beli sesuatu yang mahal di sini, tapi saya tidak ingat apa.
Esti AV-buy something COMP expensive in here but I NEG remember what

‘Esti bought something expensive here, but I don’t remember what.’

(2) … tidak ingat [CP <apa> CQ [mem-beli tpi] DE apa ]]
Assume an economy condition at the syntax-phonology interface that the head of a chain cannot be pronounced unless it has PF effects. This condition requires that only the bottom copy in (2) be required for PF-interface conditions. TP-ellipsis then applies deleting everything except that copy.

The in-situ analysis provides a straightforward explanation for a wide range of properties of Indonesian sluicing. First, Fortin (2007, 2009) observes that the question particle –kah can occur with a moved wh-phrase, but not with an in-situ wh-phrase, as shown in (3). Given this observation, (4) indicates that the wh-slice remains in-situ, as predicted by our in-situ theory of syntax. The observed distribution of –kah would remain mysterious if the wh-phrase in (4) underwent wh-movement along the lines of Merchant’s (2001) analysis.

what-Q COMP Ali buy Ali AV-buy what-Q
‘What did Ali buy?’

‘What did Ali buy?’ (Fortin 2007a:56)

(4) Ada seseorang yang me-nelepon tadi … coba tebak siapa(*-kah)
exist someone COMP AV-phone just.now try guess who-Q
‘Someone phoned just now … try to guess who.’ (Fortin 2007a:207, 208)

Second, it is well known in the Indonesian literature (Cole and Hermon 1998, 2000) that nominal and locative wh-phrases such as apa ‘what’ and di mana ‘in which place’ can be interpreted in situ by unselective binding (Tsai 1994; Reinhart 1997), unlike adverbial wh-phrases such as kenapa ‘why’, which must undergo syntactic movement to [Spec, CP] for interrogative interpretation. Given this observation, the analysis predicts that the former should not exhibit island effects under sluicing whereas the latter should do so. The contrast between (5) and (6) shows that this prediction is indeed borne out.

(5) David mau bertemu peneliti yang berkerja di negara tertentu tapi saya sudah lupa {di negara mana/negara mana}.
David want meet researcher COMP work in country certain but I already forget in country which country
‘David wants to meet the researcher who works in a certain country, but I already forgot which country.’

(6)* David mau bertemu peneliti yang bekerja di Bali untuk alasan akademik,
David want meet researcher COMP work in Bali for reason academic
but I already forget why
‘David wants to meet the researcher who works in Bali for some academic reason, but I already forgot why.’
Third, as first noted by Fortin (2007), Indonesian prohibits P-stranding under wh-questions, but allows it under sluicing, as in (7), in violation of Merchant’s famous P-stranding Generalization. (7a) *Siapa yang kamu berdansa dengan? b. Dengan siapa kamu berdansa? 
   ‘Who did you dance with?’ ‘With whom did you dance?’
   c. Saya ingat Ali berdansa dengan seseorang, tapi saya tidak tahu (dengan) siapa. I remember Ali danced with someone, but I don’t know (with) who.’ (Sato 2011:343)

Let us assume, following Chomsky (1972), that P-stranding is implemented in terms of percolation of the focus- (or wh-) feature of the wh-phrase onto the PP: P-stranding obtains when percolation does not occur whereas pied-piping takes place when it does. Drawing on Fox and Pesetsky’s (2005) cyclic linearization, I suggest that the ordering instructions obtained at each Spell-Out domain (VP and TP) must be consistent for the derivation to converge. Under this theory, (8a), but not (8b), converges, thereby yielding the P-stranding ban under wh-questions. Now, (7c) shows that there is no ordering conflict in its derivation in (9b). The in-situ theory ensures this result since the wh-phrase remains in situ under sluicing due to the afore-mentioned interface economy condition.

(8) Pied-Piping and P-Stranding under Wh-Questions

(9) Pied-Piping and P-Stranding under Sluicing

I will further extend the in-situ syntax to multiple sluicing in Indonesian, a construction which has heretofore yet been described, much less analyzed, in the relevant literature. I will show that the analysis not only correctly predicts that this construction exhibits the same behavior as single sluicing with respect to island-sensitivity and P-stranding, but also allows us to uncover the new observation that two wh-remnants do not belong to the same clause. I will show that this observation, as well as the P-stranding possibility with the second wh-remnant, critically supports my analysis over Lasnik’s (2014) alternative analysis of multiple sluicing in English which involves leftward as well as additional rightward movement for the two wh-remnants.

The in-situ syntax of sluicing has important implications for sluicing and interface conditions. First, it affords the simplest possible account of island-sensitivity: there is no island effect because there is no movement (Chung et al. 1995). The analysis implies that no repair mechanism is warranted to accommodate island-insensitivity. Second, the in-situ analysis of sluicing is enforced by two interface conditions. One prohibits strong-vacuous movement whereas the other allows nominal, but not adverbial wh-phrases, to be interpreted in situ at LF. The beauty of the analysis is that the interaction of these conditions with Indonesian grammar provides a fully deterministic derivation for its sluicing. The analysis thus substantiates the minimalist guideline that syntactic computation takes place to meet legibility conditions imposed by language-external systems.