Towards A Minimalist LF-Copying Account of Sluicing

Background. It is well known (since Ross 1969) that wh-phrases of sluices (1) are not constrained by island effects in the same way as wh-phrases of non-elliptical forms (2). The PF Deletion approach to ellipsis (e.g. Ross 1969, Merchant 2001, Fox & Lasnik 2003), under which the derivation of a sluice is identical to that of the corresponding non-elliptical form (i.e., involving w-h movement), seeks to explain this divergence by positing islandhood to be a property of PF representations only. Subjacency is formulated as a hybrid condition: island-violating movements are registered as a property (e.g., a ‘*’) on the resulting PF representation, which can then be ‘repaired’ by deletion. Problematically, such a formulation is inconsistent with one of the pillars of Minimalism, Inclusiveness (3) (Kitahara 1999). Here, I further argue that it is impossible to formulate Subjacency as a purely representational condition which excludes binding/c-command (e.g. Chomsky 1986; see also ‘sidewards movement’ analyses of parasitic gaps, such as Nunes 1995) (4). Such a formulation fails to rule out e.g. the illformed (5), since the highest copy of who (β) is subjacent to both the intermediate and lowest copies (α) under (4), counterintuitively.

Problem. As a result, I argue, Subjacency cannot be formulated as a condition on (PF) representations, but rather must be formulated as a condition on derivations (e.g., that MLC (6) is built into Move (Chomsky 1995, ch. 4)), and moreover that the PF Deletion approach, resting squarely on the assumption that Subjacency is a condition on PF representations, cannot account for lack of island effects under sluicing. An alternate account of sluicing that is consistent with a derivational formulation of Subjacency is the LF Copying approach (e.g. Chung Ladusaw and McCloskey (CLM) 1995, 2006). However, the two sluicing-specific operations proposed by CLM, whereby the sluiced wh-phrase becomes linked with a position in the TP which it scopes over, are not implementable within Minimalism: (i) ‘CLM-Merger’, which occurs when the wh-phrase has an overt correlate in the antecedent (8), was formulated as a semantic co-indexing operation, and is thus inconsistent with Inclusiveness; (ii) ‘Sprouting’, which occurs when the wh-phrase lacks an overt correlate (9), was formulated as a countercyclic structure-building operation.

Proposal: CLM-Merger as Long-Distance Agree. To overcome these difficulties, I propose a Minimalist revision of CLM’s (1995) proposal. I suggest that Sprouting can, and must, be eliminated, arguing that sluiced wh-phrases lacking overt correlates possess null correlates (10), given that, as is well known, argument structure alternations are prohibited under ellipsis (11). Consequently, all sluicing involves CLM-Merger, which I propose to reformulate as long-distance Agree, constrained only by Relativized Minimality (Bošković 2007; pace Adger and Ramchand 2005). Sluices are derived in this way: (i) The wh-phrase and C⁰ (bearing an unvalued Q feature) Merge (12); (ii) Spell Out occurs; (iii) via sideways movement, an antecedent TP, from a separate derivational workspace, is copied into the sluiced clause, as a repair mechanism (to satisfy C⁰’s selectional feature); within the TP is the correlate to the wh-phrase, which bears a [-Q] feature (in the spirit of Chomsky 1963) (13); (iv) C⁰, still active, probes its c-command domain (the copied TP); (v) Agree obtains between C⁰ (the probe) and the correlate (the goal), valuing C⁰’s [uQ] feature (14) and providing a variable within the TP for the wh-phrase to bind. By hypothesis, the relationship between the wh-phrase and C⁰ limits the syntactic category of the goal, such that the goal must be of the same category as the wh-phrase (e.g., a DP). As in CLM’s original, the lack of island effects under sluicing is accounted for.

Additional Implications. This proposal accounts for languages which fail to obey the Preposition Stranding Generalization (15) (PSG) such as Indonesian (Fortin 2007) (16) and Brazilian Portuguese (Almeida and Yoshida 2007). Under PF Deletion, this divergence in behavior between sluicing and wh-movement is unexpected, since sluicing is hypothesized to involve wh-movement. Under my proposal, the licit omission of prepositions under sluicing is proposed to follow from (i) free percolation of the Q-feature from the wh-phrase to the PP containing it (Chomsky 1973) and (ii) the sameness-of-category restriction between the wh-phrase and the correlate. To generate (16b), the Q-feature remains on the correlate DP (17), which is of the same category as the wh-phrase. Languages, such as German, which do obey the PSG are argued to require, in contrast, percolation of the Q-feature.
Examples
(1) √ Irv and someone were dancing together, but I don’t know who. (=Ross 1969: 276)
(2) * Irv and someone were dancing together, but I don’t know who [DP Irv and who] were dancing
together. 
(3) Inclusiveness Condition: No new objects are added in the course of computation apart from
rearrangements of lexical properties (Chomsky 1995: 228).
(4) Subjacency: β is n-subjacent to α iff there are fewer than n+1 barriers for β that exclude α
(Chomsky 1986: 30, ex. 59).
(5) *[CP2 Who did [TP2 you hear [DP a rumor [CP1 who [TP1 Robin visited who]]]]
√ subjacent √ subjacent √ subjacent 
(6) Minimal Link Condition: K attracts α only if there is no β, β closer to K than α, such that K
attracts β (Chomsky 1995: 311).
(7) Er will jemandem schmeicheln, aber sie wissen nicht, √ wem / *wem.
He wants someone.DAT flatter, but 3PL know NEG who.DAT/who.ACC
‘He wants to flatter someone, but they don’t know who.’ (Ross 1969, Merchant 2001)
(8) I can see that Terry is eating something, but I can’t see what.
(9) I can see that Terry is eating, but I can’t see what. 
(10) I can see that Terry is eating [DP Ø][DP something], but I can’t see what. 
(11) a. √ She served the soup, but I don’t know to whom.
   b. * She served the soup, but I don’t know who.
   c. √ She served the students, but I don’t know what. (CLM 1995: 248, ex. 21) 
(12) [CP [wh-XP] C[ø[ø]])
(13) [CP [wh-XP] C[ø[ø]] [TP .... [XP[ø]] ... ]]
(14) [CP [wh-XP] C[ø[ø]] [TP .... [XP[ø]] ... ]]
(15) Preposition (P-)Stranding Generalization: A language L will allow P-stranding under sluicing if
and only if L allows P-stranding under regular wh-movement (Merchant 2001: 107, ex. 63).
(16) a. * Siapa (yang) Pak Guru sedang berbicara dengan?
   who (COMP) Mr. Teacher PROG INTR-speak with
   ‘Who is Pak Guru speaking with?’
   b. √ Pak Guru berbicara dengan seseorang, tapi saya tidak tahu siapa.
   Mr. Teacher INTR-speak with someone, but ISG NEG know who
   ‘Pak Guru spoke with someone, but I don’t know who.’
(17) [PP dengan [DP seseorang [ø]]] 

References
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