

## When a complement PP goes missing: a study on the licensing of Swiping

**Overview** One of the mysterious properties of the so-called Swiping construction ([1,2,3]) is that adjunct PPs, but not complement PPs, can license Swiping ([1]). Contrary to this observation, we show that complement PPs can, in fact, license swiping, but only when they have undergone Heavy Shift (HS). Based on this novel observation, we make the following two claims. First, following [4,5,6], we claim that there are two types of movement, one leaving a copy behind and the other not. We will show that HS falls into the second class. Second, Gapping and Pseudo-gapping (PG) are necessarily derived by “unreconstructing” movement: HS for Gapping ([7,8,9]; cf. [10,11]) and A-movement for PG ([12]).

**Observation** [1] shows that Swiping is licensed with no antecedent PP ((1a)) or an adjunct PP antecedent ((1b)), but not with a complement PP antecedent ((1c)). One prominent account of this paradigm is that Swiping is licensed when the PP is not “given” in the antecedent of IP-deletion ([2], based on “Avoid F” in (2) by [13]). According to [2], a VP that excludes the adjunct PP, which is a full proposition under the VP-internal subject hypothesis ([14,15,16]), can serve as an antecedent for IP-deletion. As a result, adjunct PPs are not “given” in the VP ((3)). On the other hand, complement PPs are necessarily dominated by the innermost VP and must be “given” in the VP. Thus, [2] concludes that complement PPs do not license Swiping. There are, however, cases where complement PPs license Swiping; according to our informants, Swiping with a complement PP is acceptable when it is heavy shifted ((4b)). As far as we know, such data has never been reported. This suggests that HS somehow makes the complement PP “not given” in the VP. Additionally, Swiping is also licensed by a complement PP that is a Gapping/PG remnant ((5b,c)), which indicates that Gapping /PG also makes complement PPs “not given”. This parallelism between HS and Gapping/PG suggests that, in both cases, complement PPs are excluded from the VP that licenses IP-deletion in Swiping. The fact that in-situ complement PPs do not license Swiping indicates that only an overt operation can make the complement PP “not given” and that there is no string-vacuous HS.

**Analysis** First, the asymmetry between in-situ and heavy shifted PPs is accounted for by the so-called reanalysis operation ([17]). If a complement PP stays in-situ, it undergoes reanalysis and the P and V are amalgamated as in (6). Assuming that Swiping is generated by adjoining a wh-head to P at PF ((7); [2]), the P melded with V should not be available for this adjunction operation. On the other hand, we assume that HS frees a P from the peril of reanalysis. Thus, the P in heavy shifted PP becomes available for the adjunction operation.

Our analysis implies that the movement that licenses Swiping with complement PPs (i.e. HS) must not leave a copy. If it does as in (8), the PP should still be “given”, assuming that the copy in the VP is used for the calculation of “given”ness; we would incorrectly predict no contrast in (4). (9) gives a strong support to this view; the PP containing a bound variable in (9b) cannot be interpreted below the QP *every book* when the QP remains in the scope of *someone*, which shows HS does not reconstruct. In contrast, a topicalized PP, which is presumably reconstructed, does not license Swiping ((10)). To capture this, we assume that rightward movement such as HS does not leave a copy, in accord with the line of argument offered by [4,5,6] for A-movement. In sum, there are two types of movement: the kind that leaves a copy (i.e. topicalization) and the kind that does not (i.e. HS and A-movement).

Our account has an implication for the analysis of Gapping and PG. Given the above argument that Swiping with a complement PP is licensed only by “unreconstructing” movement in the antecedent of IP-deletion, the contrast in (5a) versus (5b-c) suggests that Gapping/PG remnants also undergo such movement. Combined with [18]’s argument that Gapping is derived by ellipsis (based on island-repair phenomena), our analysis supports the “movement-and-deletion” type of analysis of Gapping ((11); [7,8,9]), where the gapping remnant (*Harry*) undergoes HS. On the other hand, [12] convincingly shows that A-movement, and not HS, underlies PG ((12)), based on the fact that PG allows P-stranding, while HS does not ((13)). Our analysis is compatible with these accounts, assuming neither HS nor A-movement leaves a copy. If we employ analyses where Gapping/PG remnants stay in-situ, the contrast in (5) would remain mysterious.

Finally, our analysis gains support from data involving P-stranding. Recall our claim that reanalysis blocks Swiping. Given that P-stranding in PG is possible in reanalysis configurations ([19]), we predict that P-stranding of PG and Swiping are incompatible. This prediction is borne out ((14), in contrast with (13a)), confirming our reanalysis hypothesis.

**Conclusions** This study provides novel data where Swiping is licensed with a complement PP when it undergoes “unreconstructing” movement. As an empirical consequence, we claim that Gapping/PG remnants undergo such movement. This study also has a significant implication for the theory of movement and reconstruction: some types of movement (HS and A-movement) do not leave a copy.

- (1) a. She fixed it, but I don't remember what with. (no antecedent PP; sprouting)  
 b. (?)She fixed it *with something*, but I don't remember what with. (adjunct PP)  
 c. She talked *to someone*, but I don't remember who (\*to). (complement PP)
- (2) *Avoid F*: "The content of the focused P should not be given."
- (3) *The lower VP segment serving as an antecedent of sluicing*  
 She [<sub>VP</sub> [<sub>VP</sub> **t<sub>she</sub> fixed it**] with something], but I don't remember [<sub>CP</sub> [<sub>PP</sub> what WITH] [<sub>IP</sub> **she fixed it t<sub>pp</sub>**]].
- (4) a. \*<sub>[IP</sub> John [<sub>VP</sub> **t<sub>John</sub> talked [<sub>PP</sub> to someone]**] yesterday], but I don't remember who to.  
 b. [<sub>IP</sub> John [<sub>VP</sub> **t<sub>John</sub> talked t<sub>pp</sub>**] yesterday] [<sub>PP</sub> to someone], but I don't remember who to. (HS)
- (5) a. \*John talked to Mary, and Bill talked to someone. I don't remember who to.  
 b. ?John talked to Mary, and Bill ~~talked~~ to someone. I don't remember who to. (Gapping)  
 c. ?John talked to Mary, and Bill did to someone. I don't remember who to. (PG)
- (6) John [<sub>VP</sub> talked<sub>v+toP</sub> Mary].
- (7) *X0-adjunction approach by Merchant (2002)*  
 [<sub>PP</sub> to<sub>P</sub> who<sub>D</sub>] -> [<sub>PP</sub> who<sub>D</sub>+to<sub>P</sub> t<sub>who</sub>]
- (8) [<sub>IP</sub> John [<sub>VP</sub> t<sub>John</sub> talked [<sub>PP</sub> to someone]] yesterday] [<sub>PP</sub> to someone], but ....
- (9) a. Someone gave every book<sub>1</sub> [<sub>PP</sub> to its<sub>1</sub> prize winning author]. (every>some, some>every)  
 b. Someone gave every book<sub>1</sub> t<sub>pp</sub> yesterday [<sub>PP</sub> to its<sub>1</sub> prize winning author].  
 (every>some, ??some>every)
- (10) \*<sub>[PP</sub> To someone in my department], John talked t<sub>pp</sub>. I don't remember who to. (Topicalization)
- (11) *The "movement-and-deletion" approach to Gapping*  
 Mary [<sub>VP</sub> [<sub>VP</sub> dated t<sub>1</sub>] **Bill<sub>1</sub>**] and Susan [<sub>VP</sub> [~~t<sub>VP</sub> dated t<sub>2</sub>~~] **Harry<sub>2</sub>**].
- (12) *The "A-movement and VP-deletion" approach to Pseudo-gapping*  
 Mary hasn't dated Bill, but she has [<sub>AgroP</sub> Harry<sub>1</sub> Agr<sub>o</sub> [~~t<sub>VP</sub> dated t<sub>1</sub>~~]].
- (13) a. John talked to Mary and Bill did **someone**. (Pseudogapping)  
 b. \*John talked to t<sub>1</sub> yesterday **someone<sub>1</sub>** from our department. (Heavy Shift)
- (14) \*John talked to Mary and Bill did **someone**. I don't remember who to.  
 (The judgment in (4), (5), (9), (10), (13), and (14) was obtained from our informants through p.c.)

## References

- [1] Rosen, C. (1976) "Guess what about," *NELS 6 Proceedings*, 205-211.
- [2] Merchant, J. (2002) "Swiping in Germanic," C.J.W. Zwart and W. Abraham (eds.), *Studies in Comparative Germanic Syntax*, John Benjamins, Amsterdam, 289-315.
- [3] Craenenbroeck, J. van (2004) *Ellipsis in Dutch dialects*, Ph.D diss., Leiden University.
- [4] Lasnik, H. (1998) "Some Reconstruction Riddles," *UPenn Working Papers in Linguistics 5*.
- [5] Lasnik, H. (1999a) "Chains of arguments," S. Epstein and N. Hornstein (eds.) *Working Minimalism*, MIT Press, 189-215.
- [6] Fox, D. (1999) "Reconstruction, binding theory and the interpretation of chains," *LI 30*, 157-196.
- [7] Jayaseelan, K.A. (1990) "Incomplete VP Deletion and Gapping," *Linguistic Analysis 20*, 64-81.
- [8] Lasnik, H. and M. Saito. (1991) "Curious correlations between configurations licensing (or failing to license) HNPSHift and those for Gapping," ms. UConn.
- [9] Yoshida, M. (2005) "The rightward movement analysis of gapping in NP and its structural implications," Paper presented at WCCFL 24.
- [10] Johnson, K. (1996) "Binding the Gap," ms. UMass, Amherst.
- [11] Lin, V. (2000) "Determiner Sharing," *WCCFL 19 Proceedings*.
- [12] Lasnik, H. (1999b) "Pseudogapping Puzzles," S. Lappin and E. Benmamoun (eds.), *Fragments: Studies in Ellipsis and Gapping*, Oxford University Press, Oxford, 141-174.
- [13] Schwarzschild, R. (1999) "GIVENness, AVOIDF and Other Constraints on the Placement of Accent," *Natural Language Semantics 7*, 141-177.
- [14] Kitagawa, Y. (1986) *Subjects in Japanese and English*, Ph.D. diss. UMass, Amherst.
- [15] Kuroda, S.-Y. (1988) "Whether we agree or not," *Linguisticae Investigationes 12*, 1-47.
- [16] Koopman, H. and D. Sportiche (1991) "The position of subjects," *Lingua 85*, 211-258.
- [17] Hornstein, N. and Weinberg, A. (1981) "Case theory and preposition stranding," *LI 12*, 55-91.
- [18] Coppock, E. (2001) "Gapping: In Defense of Deletion," *CLS 37 Proceedings*, 133-148.
- [19] Lasnik, H. (1999c) *Minimalist Analysis*, Blackwell, Oxford.