

Reconstructing the A/A'-distinction in reconstruction
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Synopsis This paper argues for the following claims: i) A-movement leaves a trace; ii) syntactic reconstruction is possible in A- and A'-movement (incl. scrambling) contexts; iii) the possibility/distribution of reconstruction with scrambling is not determined by the A/A' distinction, but instead by *Economy* considerations regulating interactions among LF, information structure, and PF.

The issue The state of the art characterization of scrambling is that only A' - (aka long or IP) scrambling can reconstruct ((1)a for German, (2)a for Japanese), whereas A- (or VP) scrambling does not reconstruct for binding ((1)b, (2)b), but only for scope ((1)b, (2)c). (1)b is particularly striking since, despite being scopally ambiguous, a bound variable interpretation of the pronoun embedded in the moved QP is impossible. The lack of reconstruction with A-scrambling is particularly puzzling when compared to A-movement in English (see Fox 1999, 2000, 2003, Wurmbrand & Bobaljik 1999). As shown in (3)a, a pronoun embedded in the subject can be bound by a lower quantified indirect argument. Since, in contrast to cases such as (3)b, where there is no trace of the subject below the indirect argument, no *weak cross-over* violation arises, this variable binding relation must be the result of reconstruction of the subject rather than QR of the universal QP across the subject. This paper provides a unified account of these properties.

Semantic reconstruction—A-movement leaves a trace Following Lechner (1996, 1998a, 1998b), the mismatch between reconstruction for scope vs. reconstruction for binding receives a straightforward account if two types of reconstruction are distinguished: syntactic reconstruction, which involves lowering or selection of the lower copy of a moved element at LF, vs. semantic reconstruction, which does not involve any syntactic operation but is the result of the semantic interpretation of the trace as a higher-type (Cresti 1995, Rullmann 1995, Sharvit 1999). Since semantic 'reconstruction' is only possible when there is a trace which can be interpreted as a higher type trace, the availability of semantic scope reconstruction entails the presence of a trace in A-movement contexts (contra, e.g., Lasnik 1999).

An economy approach Although the difference between syntactic and semantic reconstruction accounts for the mismatch between scope and binding in reconstruction contexts, it does not answer the question of why *syntactic* reconstruction is (apparently) only possible in A'-movement and not in A-movement contexts. Adopting Bobaljik and Wurmbrand (2008), I assume that the difference follows from *Economy* conditions, as stated in (4), which favor isomorphism between LF (scope) and PF (linear order), as well as I(information) S(structure) and PF (cf. Williams 2003). Furthermore, I assume that A'-scrambling typically (but not necessarily) involves a topic interpretation of the moved element (Neeleman 1994, Frey 2001), whereas A-scrambling typically (but not necessarily) does not involve a topic interpretation. In the typical context, then, only ScoT-LF will be relevant for A-movement. As shown in (5)a, this immediately accounts for the lack of syntactic reconstruction in (1)b/(2)b: ScoT will favor the isomorphic (i.e. base) order and rule out the non-isomorphic order. In A'-scrambling (see (5)b), on the other hand, when the moved element is a topic (which must be initial at IS), neither PF order is simultaneously isomorphic to both LF (NOM»ACC) and IS (ACC»NOM) in (1)a/(2)a). Since ScoT-LF and ScoT-IS are *soft* economy conditions, rather than hard syntactic constraints, neither PF option in (5)b is 'better' (or worse) than the other one, and hence both are licensed—thereby allowing syntactic reconstruction. Lastly, A-reconstruction (i.e., a PF-LF mismatch) is possible in (3)a in English, since English must respect (as a hard syntactic constraint) the EPP, which independently rules out the PF order **seem to every professor to be someone from his class a genius*. Since the ScoT violating order in (6) does not have a competitor, violation of the economy condition is sanctioned.

Against the A/A'-distinction Confirming evidence that it is the interaction among LF, IS, and PF, and not the A/A' distinction, that determines reconstruction properties, comes from (7) and (8). ScoT correctly predicts that i) reconstruction is possible whenever overt movement (whether A or A') yields a 'better' information structure; and ii) reconstruction is impossible when the moved element (whether via A or A') is not interpreted as a topic. i) is confirmed by (7)a, which minimally differs from (1)b in that it involves a special topic-focus intonation (Jacobs 1982, 1997, Krifka 1998), which has the effect that the ScoT-LF violation is balanced out by a ScoT-IS violation of the 'competing' PF, thereby licensing reconstruction again. ii) is confirmed by (8), in which, following Neeleman and van de Koot (2008), the context is set up to force a topic interpretation of the non-moved element. In this context (unless topic and focus are swapped), reconstruction is impossible, despite the ACC having undergone A'-movement.

Examples and selected references

- (1) a. *weil dieses Bild von sich_i der Hans_i seinen Freunden* t_{ACC} *schenken wollte*
 since this picture of himself the John his friends t_{ACC} give wanted
 ‘since John wanted to give this picture of himself to his friends’ [Lechner 1998b: 297]
- b. *weil sie [ein Bild von seinem_{*i} Auftritt] [jedem Kandidaten]_i* t_{ACC} *zeigte*
 since she [a.ACC picture of his appearance] [every.DAT candidate] t_{ACC} showed
 ‘since she showed a picture of his appearance to every candidate’ [Lechner 1998b:299]
 $\exists \gg \forall$; $\forall \gg \exists$; in both interpretations, variable binding of *his* by \forall is impossible.
- (2) a. *Otagai-o_i [Taroo-to Itiroo]_{i-ga} Mari-ni* t_{ACC} *syookaisita*
 each other-ACC Taro-and Ichiro-NOM Mari-DAT t_{ACC} introduced
 ‘Taro and Ichiro introduced each other to Mari.’ [Yamashita To appear]
- b. **Taroo-ga otagai-o_i [Mari-to Hanako]_{i-ni}* t_{ACC} *syookaisita*
 Taro-NOM each other-ACC Mari-and Hanako-DAT t_{ACC} introduced
 ‘lit. Taro introduced each other to Mari and Hanako.’ [Yamashita To appear]
- c. *Taroo-ga huta-ri-no otoko-o san-nin-no onna-ni* t_{ACC} *syookaisita*
 Taro-NOM 2-CL-GEN men-ACC 3-CL-GEN women-DAT t_{ACC} introduced
 ‘Taro introduced two men to three women.’ [Hoji 1985: 2>3/3>2]
- (3) a. *Someone from his_i class seems to every professor_i t_{SUBJ} to be a genius.* [Fox 1999:161]
 b. *??Someone from his_i class shouted to every professor_i to be careful.* “; QR \Rightarrow WCO
- (4) *Scope Transparency (ScoT):*
 LF: If the scopal order of two elements is A>B, the linear order at PF is A>B.
 IS: If the information structure of two elements is A_{TOP}>B_{FOC}, the linear order at PF is A>B.
- (5) a. LF: DAT>ACC = (1)b/(2)b
 PF: ✓ DAT>ACC *ACC>DAT (*ScoT-LF fatal)
- b. LF: NOM > ACC-TOP IS: ACC-TOP > NOM = (1)a/(2)a
 PF: ✓ NOM > ACC-TOP (*ScoT-IS) ✓ ACC-TOP > NOM (*ScoT-LF)
- (6) LF: DAT > NOM = (3)a
 PF: ~~DAT > NOM~~ ✓ NOM > DAT (*ScoT—irrelevant)
- (7) a. *weil sie [/EIN Bild von seinem_i Auftritt] [JEDem\ Kandidaten]_i* t_{TOP} *zeigte*
 since she [a picture of his appearance]_{TOP} [every candidate]_{FOC} t_{TOP} showed
 ‘since she showed every candidate a picture of his appearance’ ✓ bound variable
- b. LF: DAT > ACC-TOP = (7)a
 PF: ✓ DAT > ACC-TOP (*ScoT-IS) ✓ ACC-TOP > NOM (*ScoT-LF)
- (8) What about the mothers? Who do you think every mother loves? I don’t know, but I’m sure...
- a. *#dass [seinen_i Sohn] [jeder Vater]_i* t_{FOC} *liebt,*
 that [his.ACC son (FOC)] [every.NOM father] (TOP) t_{FOC} loves
 ‘that every father loves his son’ #bound variable
- b. LF: NOM-TOP > ACC IS: NOM-TOP > ACC = (8)a
 PF: ✓ NOM-TOP > ACC *ACC > NOM-TOP (*ScoT-LF/IS)

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