

Sign Languages: A puzzle for Successive Cyclic Linearization?

In this paper I will address a couple of issues concerning linearization of elements that overtly move to the right periphery of the sentence. I will show that the model of cyclic linearization proposed by Fox and Pesetsky (2004, F&P from now on) is not able to capture overt movement of *wh*-elements or N-words (like “nobody” and “nothing”) to the right periphery of the sentence in Italian Sign Language (LIS). For an analysis of these cases of rightward movement, see Cecchetto and Zucchi (2004) and Geraci (2005), respectively. The issue is not limited to LIS only, though, but clearly includes all the sign languages where overt movement place *wh*-elements at the right periphery of the clause. See for instance Pfau and Zeshan (2003) for Indo-Pakistani Sign Language and Neidle et al. (2000) for ASL *wh*-phrase movement to spec,CP on the right. For a different analysis of *wh*-sentences in ASL, see Petronio and Lillo-Martin (1997). The presentation will go along the following steps: a) I will briefly introduce some methodological issues concerning data collection; and b) some background information about LIS; c) I will show that F&P’s theory of linearization cannot account for rightward movement in sign language. The argument is based on the fact that neither vP or VP is a possible phase in LIS, under F&P; d) I will propose an alternative solution that is able to account for LIS facts; and e) I will show that my proposal extends to a similar derivation in spoken languages, namely rightward movement of the *wh*-elements followed by late merge of a relative clause and later leftward movement of the *wh*-element stranding the relative clause.

a) all LIS data are from four native-signers (fluent Deaf signers with Deaf signers parents) that regularly cooperate with the research project on Italian Sign Language. A relevant selection of the video-data will be available for the presentation and freely accessible on the internet at the conference time. All the data are glossed using SignStream, a software developed specifically for sign language research purposes (see Neidle et al. 2001).

b) LIS is an SOV language (1), modals and the aspectual marker appear postverbally (2-3), negation is postverbal too (4-5), N-words are moved to spec,NegP on the right (6), *wh*-elements are moved to spec,CP on the right (7). I assume Geraci (2005) for the analysis of movement of N-words in LIS. As for *wh*-movement to the right periphery of the sentence in sign languages, I refer to the analyses proposed by Cecchetto and Zucchi (2004) for LIS, Neidle et al. (2000) for ASL and Pfau and Zeshan (2003) for IPSL.

c) Given F&P’s approach, vP cannot be a phase in LIS: if vP were a phase, *wh*-elements in subject position are not expected to appear sentence finally as in (7a). The reason is that linearization of vP (WHO<BUY) would be in contradiction with linearization of CP (BUY<WHO). Following what has been proposed by F&P for Mainland Scandinavian, a possible alternative is to consider VP (and not vP) a phase in LIS. VP cannot be a phase in LIS either, though: if VP were a phase, *wh*-elements in object position are not expected to appear sentence finally (note that LIS is an SOV language) as in (7b). Linearization of VP (WHAT<BUY) would be in contradiction with linearization of CP (BUY<WHAT). Sentences (7c-d) are there to show that *wh*-elements are really generated in preverbal position in LIS.

d) To fix the problem with F&P maintaining that linearization is done at phase level, I will assume Chomsky’s theory of phases and take vP as a phase in LIS. In order to capture the facts from (7), I propose that at each phase all the elements are linearized (like F&P) apart from those that bear “peripheral features” (in this I depart from F&P). I will assume that peripheral features are those features that drive cyclical movements of an element through the edge of a phase. The solution proposed here resembles Chomsky’s Phase Impenetrability Condition (PIC) in that it establishes an escape hatch: the specifiers of a phase are not linearized. However it differs from PIC in that heads are not included in the escape hatch and subjects are included only if they bear “peripheral features”. If one assumes this, it is not necessary to take VP to be a phase. It is worth noting that this theory can capture overt cyclic rightward movement of the kind claimed for sign languages (*wh*-movements in IPSL and ASL).

e) In the final part of the talk I will show that my proposal can extend to those cases like (8) where rightward movement of the *wh*-phrase has been claimed (Lebeaux 1988) followed by late merge of the relative clause. Then the *wh*-phrase moves, stranding the relative clause *in situ*. (8b) shows rightward movement of the *wh*-phrase to spec,vP on the right (assuming “yesterday” merged at vP level). (8c) shows late merge of the relative clause and (8d) movement of the *wh*-element stranding the relative clause. (8e-f) are there to instantiate that the relative clause cannot merge in the position where the *wh*-element is base generated.

Sentences:

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|-------|---|--------------------------------|
| (1) | JOHN CONTRACT SIGN | John signed the contract |
| (2) | JOHN CONTRACT SIGN CAN | John can sign the contract |
| (3) | JOHN CONTRACT SIGN DONE | John signed the contract |
| (4) | JOHN CONTRACT SIGN NOT | John didn't sign the contract |
| (5) | JOHN CONTRACT SIGN CAN NOT | John cannot sign the contract |
| (6)a. | JOHN t _{NOTHING} SIGN NOTHING | John doesn't sign anything |
| b. | t _{NOBODY} CONTRACT SIGN NOBODY | nobody signed the contract |
| (7)a. | t _{WHO} CONTRACT SIGN WHO | who signed the contract? |
| b. | JOHN t _{WHAT} SIGN WHAT | what did John signed? |
| c. | BOY t _{WHO} CONTRACT SIGN WHO | which boy signed the contract? |
| d. | JOHN BOOK t _{WHICH} BUY WHICH | which book did John buy? |
| (8)a. | what did John eat yesterday that I bought two days ago | |
| b. | [_{VP} John eat t _{what} yesterday what] | |
| c. | [_{VP} John eat t _{what} yesterday what that I bought two days ago] | |
| d. | [_{CP} what did [_{TP} John [_{VP} t _{John} eat t _{what} yesterday t _{what} that I bought two days ago] | |
| e. | * what did John eat that I bought two days ago yesterday | |
| f. | * what will John eat that I bought tomorrow | |

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