Iconic Enrichments: Signs vs. Gestures*

Commentary on Goldin-Meadow and Brentari's
"Gesture, sign and language: The coming of age of sign language and gesture studies"

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Abstract: Semantic work on sign language iconicity suggests, as do Goldin-Meadow and Brentari (to appear), that "sign should be compared with speech-plus-gesture, not speech alone". One key question is whether speech-plus-gesture and sign-with-iconicity really display the same expressive resources. We suggest that this need not be the case, because enrichments contributed by co-speech (or 'post-speech') gestures are typically not-at-issue, whereas iconic enrichments in sign language can often be at-issue. Future research should thus focus on the 'projection' properties of different sorts of iconic enrichment in both modalities.

Word count: 999 words

Goldin-Meadow and Brentari write that "sign should be compared with speech-plus-gesture, not speech alone". We explain (i) why recent studies of sign language semantics converge on the same conclusion, and (ii) how semantic methods could offer a typology of iconic enrichments in both modalities (see Schlenker 2016).

An expression (in any modality) may be termed *iconic* if there exists a structure-preserving map between its form and its denotation. In (1)a, the length of the talk is an increasing function of the length of the vowel. In the ASL example in (1)b, the outcome of the growth is an increasing function of the maximal distance between the two hands realizing the verb *GROW*.

(1) a. The talk was long / looooooong. (cf. Okrent 2002)

b. POSS-1 GROUP GROW-  / GROW-  / GROW-  .
'My group has been growing a bit / a medium amount / a lot.' (ASL; 8, 263; see Schlenker et al. 2013)

Recent work in sign language semantics has argued for two claims (Schlenker, forthcoming). (i) **Logical Visibility:** When iconic phenomena are disregarded, speech and sign share the same 'logical spine', including in cases where sign language makes visible the 'Logical Forms' of spoken

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language sentences – for instance by making overt use of logical indices realized as 'loci', whereas indices are mostly covert in spoken languages (Lillo-Martin and Klima 1990).
(ii) **Iconicity:** Sign language makes use of rich iconic resources, including at its logical core. For instance, sign language loci were argued in recent research to be *both* logical variables and simplified representations of what they denote (see Schlenker et al. 2013, and Liddell 2003 and Kegl 1977/2004 for some sources).

This could lead to two conclusions.

• One is that spoken language semantics is (along some dimensions) a 'simplified', iconically defective version of sign language semantics – simply because the iconic potential of the vocal stream is so limited.

• Alternatively, it may be that (i) the 'standard' conception of spoken language semantics was insufficiently inclusive, and that (ii) when sign is compared with speech-plus-gesture rather than to speech alone, the two systems display similar expressive resources.

So does speech-plus-gesture really display the same expressive resources as sign? In order to adjudicate the debate, we need a better understanding of the *semantic status* of iconic enrichments. A distinction will prove fruitful: in 'internal enrichment', the form of an expression is iconically modulated to affect the meaning of that very expression, as in (1)a-b; in 'external enrichment', an expression is iconically enriched by an extraneous element, as in (2) (= enrichment of *punish* by a gesture).

(2) John  _punished his son.

Interesting differences between internal and external enrichment arise upon embedding. The internal enrichments in (1) behave like standard at-issue (= assertive) contributions and can take scope under logical operators – thus (3)a means something like 'If the talk is *very long*, I'll leave before the end'; and similarly (3)b means that if my group grows *a lot*, John will lead it.

(3) a. If the talk is looooooong, I'll leave before the end.
b. …IF POSS-1 GROUP GROW_broad, IX-b JOHN LEAD. (ASL, 33, 71; 2 trials)

Recent discussions suggest that internal enrichments can *also* have other types of contributions, for instance presuppositional ones (Schlenker et al. 2013).

External enrichments seem to be more constrained, as illustrated in (4).

(4) a. None of these 10 guys punished his son like  _this.
b. None of these 10 guys  _punished his son.
=> for each of these 10 guys, if he had punished his son, slapping would have been involved
c. None of these 10 guys punished **his son** / **regrets coming**
=> each of these 10 guys has a son / came

In the baseline in (4)a, *like this* is an at-issue modifier; what is denied is thus that any of the relevant individuals punished his son by slapping him – hence if any punished his son, it was in some other way. The target example in (4)b arguably triggers the opposite inference: for each of the relevant individuals, if he had punished his son, it would have been by slapping him. In this case, the iconic enrichment 'projects' (in universal form) beyond the negative expression *none*. Schlenker 2015a,b argues that this behavior is reminiscent of presuppositions, illustrated with the presupposition triggers *his son* and *regrets* in (4)c: these too yield universal inferences under *none*.

A similar behavior is obtained with the disgusted face *:-(* in (5)a: it too gives rise to a universal inference under *none*. Interestingly, this case of external enrichment can be extended to ASL, as in (5)b; while the latter is slightly degraded, it gives rise to a universal inference as well – and since the iconic enrichment of the manual sign is facial, it too counts as external.

(5) a. None of my friends goes :-(_[skiing with his parents]
=> for each of my friends, skiing with his parents is no fun

b. ? YOUNG NONE IX-arc-a **:-(**_[SPEND TIME WITH POSS-arc-a PARENTS]
=> spending time with one's parents is disgusting (ASL, 33, 0472, 2 trials)

Finally, the gestures in (6)a(i)-(6)b(i) *follow* rather than co-occur with the expression they modify, and they arguably behave like the appositives in (6)a(ii)-(6)b(ii) (Schlenker 2015b; but see Ebert and Ebert 2014). For instance, both constructions can modify *a bottle of beer* in the scope of *a philosopher,* but not of *no philosopher* – a standard property of appositives (Potts 2005, Nouwen 2007).

(6) a. A philosopher brought a bottle of beer (i) –  (ii) , which was  this large.

b. ??No philosopher brought a bottle of beer (i) –  / (ii) , which was  this large.

A generalization suggests itself: *internal enrichment may have any semantic status, and in particular it may be at-issue, whereas external enrichment is not normally at-issue*. If correct, this has an important consequence: since internal enrichments are so impoverished in spoken language, *even* when co-speech gestures are reintegrated into spoken language semantics, there will be far-reaching expressive differences between speech-plus-gesture and sign.

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