Strong Pronominals in ASL and LSF*

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Abstract: Theories of pronominal strength (e.g. Cardinaletti and Starke 1999) lead one to expect that sign language, just like spoken language, can have morphologically distinct strong pronominals. We suggest that ASL (American Sign Language) and LSF (French Sign Language) have such pronominals, characterized here by the fact that they may associate with *ONLY* even in the absence of prosodically marked focus.

Keywords: sign language, strong pronouns, pointing, focus

Many spoken languages display a morphological distinction between strong and weak pronouns. For instance, French distinguishes in the second person between the weak (clitic) object form tu, which comes in pre-verbal position as in (1)a, and the strong form toi, which has diverse uses, including in conjoined noun phrases as in (1)b, and in association with the focus particle *only* ('seulement') as in (1)c.

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(1) a.
       Je
                                                                        déteste.
         I
                  you-sg-object-clitic
                                                      you-sg-strong
                                                                        hate
         'I hate you.'
         Je
                  déteste Paul
                                                                        *te.
   b.
                                    et
                                             toi
                           Paul
                                             you-sg-strong
                                                                        you-sg-object-clitic.
                  hate
                                    and
         'I hate Paul and you.'
         Je
                  ne
                           déteste que
                                                                         *te.
   c.
                                             toi
                  NE
                                                                        you-sg-object-clitic.
                           hate
                                             you-sg-strong
         I
                                    only
         'I only hate you.'
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Theories of pronominal strength such as Cardinaletti and Starke 1999 are stated in a modality-neutral fashion. Since there are morphologically strong pronouns in spoken language, one would expect that such pronouns could exist in sign language as well, but to our knowledge none have been described. While Bertone and Cardinaletti 2011 argue that strong pronouns in LIS (Italian Sign Language) display longer-than-normal duration, they treat this as a *prosodic* fact. Filling the typological gap, we suggest that ASL (American Sign Language) and LSF (French Sign Language) have *morphologically distinct* strong pronominals. While Cardinaletti and Starke have described a rich array of phonological, morphosyntactic and semantic facts that correlate with strength, in this squib we solely focus on one property: strong behavior is diagnosed semantically by the fact that these pronominals associate with *ONLY* even in the absence of prosodically marked focus. For comparison, association of a French strong pronoun with *only* is illustrated in (2)a, with *F* marking focus in the translation: the strong pronoun *toi* ('you') naturally associates with *only*, while the clitic pronoun *la* ('her') does not. No such association asymmetry is found if both pronouns are clitics (without special intonation, association is with the verb or the VP, but not with one of the arguments to the exclusion of the other).¹

rong.
résenter.

¹ We do not make strong claims about the prosodic realization of \dot{a} toi in (2)a: it can definitely be realized with prosodic focus, but the sentence need not be impossible without it. Our point is that even in the latter case, an interpretive asymmetry naturally arises between the strong and the weak pronoun (see Cardinaletti and Starke 1999 for further discussion of the interaction between prosody and strong pronouns). In our ASL and LSF data, acceptability judgments given below do not suggest that strong pronominals *obligatorily* come with eyebrow raising, although the latter does mark focus on normal pronouns (strong pronominals *allow* for eyebrow raising, although it does not seem to affect inferential judgments).

I am-going-to only to-you-clitic her-clitic introduce. 'I will only [introduce]_E her to you.' or 'I will only [introduce her to you]_E.'

=> likely inference: I will not do anything else involving her and you than introduce her to you, or: I won't do anything but introduce her to you.

Our sign language data were elicited from one native Deaf ASL and one native LSF signer, each the child of Deaf, signing parents. We used the playback method and transcription conventions described in Schlenke 2017, Schlenker et al. 2016, involving minimal paradigms signed on a video and then assessed with quantitative acceptability judgments (7 = best, average score at the beginning of each example), detailed inferential questions, and a separate question about a possible English or French influence. Judgments were entered in a computer and (redundantly) signed on a video. The reference of each video and the number of judgments obtained (on different days) are found after each example, and raw data (including the signers' own description of means of focus marking) can be found in the Supplementary Materials.² (For clarity, we also provide below videos of the manual part of the relevant signs in LSF, as still pictures do not suffice to make the distinctions clear. Full videos are not included to respect the signers' privacy.)

We start with the ASL paradigm in (3), where the subscript $_F$ is used in ASL to indicate that prosodic focus was marked on the relevant pronoun, and in the English translations to indicate which element associates with only. Prosodic focus in ASL was marked very clearly by means involving in particular forward body shift, longer hold time, and eyebrow raising (see the Supplementary Materials for details); we do not transcribe prosodic focus more precisely because it is merely a control in the present squib: our point is that strong pronouns can associate with ONLY in the absence of prosodic focus.

(3) *Context:* The speaker is the director of the school. He tells a group of teachers what they are allowed to say or to put in writing after the students took an exam.

IX-1 RECENTLY CONVERSATION JOHN $_a$ MARY $_b$. IX-1 ONLY ALLOW ___ TELL IX-b BILL FAIL. I recently had a conversation with John and Mary . I only allowed __ to tell her that Bill failed.'



a. 7 __ = IX-a_

him (ASL, 24, 76a, 3 judgments)

b. $^{6.7}$ __ = IX- a_F

him_F (ASL, <u>24, 75</u>c, 3 judgments)

=> what is not allowed is for someone other than John to tell Mary that Bill failed



 $c.^7 = CL-IX-a$

him_E (ASL, 24, 76b; 3 judgments)

=> what is not allowed is for someone other than John to tell Mary that Bill failed

 $d.^{6.7} = CL-IX-a_F$

² As seen in the Supplementary Materials, consultants were asked to describe differences of realization among the sentences. Our ASL consultant has considerable experience annotating videos, and thus his responses were particularly detailed.

Inferences:

a. => only the following is allowed: John will tell Mary that Bill failed (alternative individuals are disallowed, and similarly *writing* rather than *telling* is disallowed)

b., c., d. => what is not allowed is for someone other than John to tell Mary that Bill failed

When two pronouns are in the scope of *ONLY* as in (3)a, no association asymmetry is found, and the reading obtained suggests that the entire embedded proposition *IX-a TELL IX-b BILL FAIL* is in focus (or possibly that each of its component parts is in focus, i.e. that each triggers alternatives of its own). This was determined by asking whether any of the following was disallowed: (i) that someone other than John will tell Mary that Bill failed; (ii) that John will tell Mary that someone other than Bill failed (iv) that John will write to Mary that Bill failed. A uniform 'yes' was obtained on all questions, showing that each of these was understood to be disallowed. By contrast, in (3)b prosodic focus was marked on *IX-a*, and the inferential judgments changed: only for question (i) was 'yes' obtained.

(3)c,d both have a complex pronominal *CL-IX-a* in embedded subject position. *CL-IX-a* is realized by signing the person classifier *CL* with the non-dominant hand, while pointing towards it with the dominant hand, as shown by the picture in (3)c. On an interpretive level, *CL-IX-a* in (3)c yields the same meaning *as if* it were focused, but overt focus, realized in (3)d, is unnecessary to obtain this interpretation. The interpretive criteria are the very same we used in (3)b, involving the questions described in (i)-(iv) above about what is disallowed. The results suggest that *CL-IX-a* behaves as a strong pronominal which associates with *ONLY* even in the absence of prosodically marked focus. Importantly, while (3)a-d are highly acceptable (near the ceiling 7), the consultant discerns an English influence due to the presence of the word *ONLY* (as mentioned, the judgment task systematically include a question about possible English influence). Further paradigms should thus be investigated in the future.

In LSF, a *simplex* pronominal with a distinct manual morphology, and produced with the labialization *PI* (see the video in (4)c), displays this strong behavior as well (the same word also has uses as a relativizer, as is discussed in Hauser 2016, Hauser and Geraci 2017). Focusing on the normal pointing sign, (4)a (without focus marking) yields a reading on which *ONLY* associates with the verb, while focus marking on *IX-b* in (4)b primarily yields the expected reading, on which the speaker doesn't want other people than Marie to help Pierre (these judgments are from 3 distinct paradigms; here and throughout our LSF data, focus seems to be primarily, although not exclusively, marked by eyebrow raising and eyegaze changes; as in our ASL paradigm, prosodic details are not encoded because the focused elements merely serve as a control for the behavior of the strong pronominals). The interesting observation lies in (4)c,d: *ONLY* associates with *PI* irrespective of whether *PI* is prosodically focused. Throughout this paradigm, inferences were obtained by asking about what the signer does *not* want, with the following possibilities: (i) 'one doesn't know'; (ii) the signer 'doesn't want Marie to help someone other than Pierre'; (iii) the signer 'doesn't want someone other than Marie to help Pierre'; (iv) 'something else [say what]' (see the Supplementary Materials for raw data).

(4) YESTERDAY IX-1 1-MEET MARIE_b PIERRE_a. ONLY IX-1/IX-1 ONLY/ONLY³ WANT __ b-HELP-a IX-a. 'Yesterday I met Marie and Pierre. I only want(ed) __ to help him.'

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a. ^{6.7} _ = IX-b her (LSF, 57, 2482a; 2 judgments; LSF, 57, 2492a; 3 judgments; LSF, 57, 2498a, 3 judgments)

b. ^{7} _ = IX-b her (LSF, 57, 2482b; 2 judgments; LSF, 57, 2492b; 3 judgments; LSF, 57, 2498b, 3 judgments)

c. ^{7} _ = PI-b her (LSF, 57, 2482c; 2 judgments) video of PI-b: https://drive.google.com/filed/UBTMz-VKVeYNKVGNZZaVITZVNIUWMvices/busp-sharing

d ^{7} _ = PI-b (LSF, 57, 2482d; 2 judgments)
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³ The position of *ONLY* slightly varied from one example to the next, as did the presence of the first person pronoun, hence the summary transcription *ONLY IX-1/IX-1 ONLY/ONLY*.

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e. ^{6.3} _ = CL-IX-b her<sub>F</sub> (LSF, 57, 2492c; 3 judgments) video of CL-IX-b: https://drive.google.com/file/d/0B7Mz-VKVeYNKaFgSdHd3MjZzaUU/view/hssp-sharing}

f. ^{6.7} _ = CL-IX-b<sub>F</sub> her<sub>F</sub> (LSF, 57, 2492d; 3 judgments)

g. ^{7} _ = CL-PI-b her<sub>F</sub> (LSF, 57, 2498c; 3 judgments) video of CL-PI-b: https://drive.google.com/file/d/0B7Mz-VKVeYNKanBJRVIII.VhpZDO/view/hssp-sharing}

h. ^{6.7} _ = CL-PI-b<sub>F</sub> (LSF, 57, 2498d; 3 judgments)
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Inferences:

a. => the speaker doesn't want Mary to take any action other than helping in relation to Pierre

b., c., d., e., f., g., h. => the speaker doesn't want anyone other than Marie to help Pierre

(b. yielded conflicting inferences in LSF, 57, 2482b but not in LSF, 57, 2492b and LSF, 57, 2498b)⁴

(4)e-f shows that, for this consultant at least, the same semantic result can be obtained by using the ASL strategy in (3)c, with *CL-IX-b*, a person classifier simultaneously signed with a pointing sign (see the video in (4)e). Finally, (4)g,h shows that, using this strategy, we can replace the pointing sign *IX* with *PI* (thus yielding *CL-PI-b*, as in video in (4)g). The semantic result remains the same.

We conclude that a simple semantic test suggests that the ASL complex pronominal *CL-IX* displays a strong semantic behavior, and that the LSF simplex pronoun *PI* (as well as our LSF consultant's version of *CL-IX*) does too. On an empirical level, these data should be tested with further consultants in the future. On a theoretical level, they should be integrated with the prosodic study conducted by Bertone and Cardinaletti 2011, as part of a more general investigation of pronominal strength in sign language.

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⁴ As seen in the Supplementary Materials, the inference we indicate was obtained in 7 out of 8 judgments spread through 3 paradigms (the exception is found in LSF 57, 2782b, judgment of [LL 17.08.02]).

Supplementary Materials

Raw judgments on ASL and LSF videos can be found at:	https://drive.google.com/file/d/0B7Mz-
VKVeYNKXzFObXBoU0RteGs/view?usp=sharing	

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