# 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

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, they lead one to expect that such pronouns could exist in sign language too, but none have been described: Bertone and Cardinaletti 2011 argue that strong pronouns in LIS (Italian Sign Language) display longer-than-normal duration, but 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. These are characterized here by the fact that they associate with *ONLY* even in the absence of prosodically marked focus. For comparison, association of a French strong pronoun with *only* is illustrated in (1)a, with *F* marking focus in the translation: the strong pronoun *toi* ('you') naturally associates with *only*, while the clitic pronoun *la* ('her') doesn't. 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).<sup>1</sup>

(1) a. Je vais seulement la présenter à toi. her-clitic Ι am-going-to only introduce to you-strong. 'I will only introduce her to [you]<sub>E</sub>.' => likely inference: I will not introduce her to anybody but you b. Je vais seulement la présenter. introduce. am-going-to only to-you-clitic her-clitic 'I will only [introduce]<sub>E</sub> her to you.' or 'I will only [introduce her to you]<sub>E</sub>.'

=> 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) and detailed inferential questions. Judgments were entered in a computer and (redundantly) signed on a video. The reference of each video and the number of judgments obtained 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.<sup>2</sup> (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 (2).

 $<sup>^{1}</sup>$  We do not make strong claims about the prosodic realization of  $\dot{a}$  toi in (1)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).

<sup>&</sup>lt;sup>2</sup> 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.

(2) *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<sub>a</sub> MARY<sub>b</sub>. 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.'



b. 
$$^{6.7}$$
 \_ = IX-a<sub>F</sub>  
him<sub>F</sub> (ASL, 24, 75c, 3 judgments)

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



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

d. 
$$^{6.7}$$
 \_ = CL-IX- $a_F$   
him<sub>F</sub> (ASL, 24, 76c; 3 judgments)

#### **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 (2)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 each of its component parts). 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 someone other than Mary that Bill failed; (iii) 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. By contrast, in (2)b prosodic focus was marked on *IX-a*, and the inferential judgments changed: only for question (i) was 'yes' obtained. Prosodic focus was marked very clearly by means involving in particular forward body shift, longer hold time, and eyebrow raising. Here and throughout, the consultants were asked in each judgment task to describe the manual and non-manual means of focus realization, and these can be found in the Supplementary Materials. But since our goal is to describe inferences that can be obtained with strong pronominals in the *absence* of prosodic focus, we simply mark focused sign language words with *F*.

(2)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 (2)c. On an interpretive level, *CL-IX-a* in (2)c yields the same meaning *as if* it were focused, but overt focus as in (2)d is unnecessary to obtain this interpretation. The interpretive criteria are the very same we used in (2)b, involving the questions (i)-(iv) 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 (2)a-d are highly acceptable, the consultant discerns an English influence due to *ONLY* (our judgment 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 (3)c), displays this strong behavior too (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, (3)a (without focus marking) yields a reading on which *ONLY* associates with the verb, while focus marking on *IX-b* in (3)b primarily<sup>3</sup> 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). The interesting observation lies in (3)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).

(3) YESTERDAY IX-1 1-MEET MARIE<sub>b</sub> PIERRE<sub>a</sub>. ONLY IX-1/IX-1 ONLY/ONLY<sup>4</sup> 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)
                    IX-b_F
                                             (LSF, 57, 2482b; 2 judgments; LSF, 57, 2492b; 3 judgments; LSF, 57, 2498b, 3 judgments)
                    her<sub>F</sub>
                    PI-b
                                              (LSF, 57, 2482c; 2 judgments) video of PI-b: https://drive.google.com/file/d0B7Mz-VKVeYNKVGNZzzvITZVNUWM/view?usp=sharing
                    her<sub>F</sub>
                    PI-b_{F}
                    her<sub>F</sub>
                                              (LSF, 57, 2482d; 2 judgments)
e^{.6.3} =
                    CL-IX-b
                                              (LSF, 57, 2492c; 3 judgments) video of CL-IX-b: https://drive.google.com/file/d/OB7Mz-VKVeYNKaEg5dHd3MjZzaUU/view?usp=sharing
                    her<sub>F</sub>
f.^{6.7} =
                    CL-IX-b<sub>F</sub>
                    her<sub>F</sub>
                                              (LSF, 57, 2492d; 3 judgments)
                     CL-PI-b
                    her<sub>F</sub>
                                             (LSF, 57, 2498c; 3 judgments) video of CL-PI-b: https://drive.google.com/filedd/0B7Mz-VKVeYNKanBJRVIILVhpZDQ/view?usp=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 (a yielded conflicting inferences in LSF, 57, 2482b but not in LSF, 57, 2492b and LSF, 57, 2498b)

(3)e-f shows that, for this consultant at least, the same semantic result can be obtained by using the ASL strategy in (2)c, with *CL-IX-b*, a person classifier simultaneously signed with a pointing sign (see the video in (3)e). Finally, (3)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 (3)f). The semantic result remains the same.

<sup>&</sup>lt;sup>3</sup> As seen in the Supplementary Materials, this was the inference 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]).

<sup>&</sup>lt;sup>4</sup> 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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## Supplementary Materials

Raw ASL and LSF data can be found at: <a href="https://drive.google.com/file/d/0B7Mz-VKVeYNKXzFQbXBoU0RteGs/view?usp=sharing">https://drive.google.com/file/d/0B7Mz-VKVeYNKXzFQbXBoU0RteGs/view?usp=sharing</a>

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