Passing by the passive: ASL impersonal

Helen Koulidobrova (*elena.koulidobrova@ccsu.edu*)

Version: July 19, 2017

This paper examines impersonal reference in American Sign Language (ASL). The goal of the paper is two-fold: first, we will briefly review some of the agent-backgrounding devices used by the language. Then, focusing on one particular device, which *looks like* a passive voice construction, we will argue that this appearance is just that – an appearance. Further, we demonstrate that a careful examination of ASL impersonals offers new pathways for obtaining evidence for various theories within (A)SL.

Keywords: *impersonals, pronoun, null argument*

1 Introduction

Cabredo-Hoffher & Barberà (this volume) note that languages employ four types of agent-backgrounding strategies (1):

(1) a. Valency-reducing operations
  (i) passives
  (ii) middles
 b. Null subjects of non-finite predicates
  (i) infinitives
  (ii) gerunds
 c. Impersonal uses of personal pronouns
  (i) antecedentless 3pl
  (ii) non-deictic 2sg, 1pl
 d. Dedicated referentially deficient pronouns:
  (i) pronouns with a generic reading (Engl. one, German man),
  (ii) indefinite pronouns (someone)

Here, we will concern ourselves with (1c) – impersonal uses of personal pronouns. Consider, for instance, the English (2).

(2) They$_{\text{speaker excluded}}$ / we$_{\text{speaker included}}$ / people speak English here.

Both *they* the *we* are personal pronouns; however, in (2), these pronouns are not anaphoric or referential: they introduce no discourse antecedents or refer to any such referents, unlike *they* in (3), for instance.

(3) They$_{\text{specific group:Mary,Pedro,Ali}}$ speak English here.

Instead, such pronouns fill an argument slot of a predicate without a referential link to a discourse referent (Gast & Auweara 2013, Moltman 2006, i.a). Crucially, in such a construction, the agent is de-focused and the sentence can be paraphrased as (4):

(4) English is spoken here.

In the spirit of Siewierska (2011) then, the sentence in (2) 'triggers […] a reduction in referentiality. R-impersonals have the appearance of regular, personal constructions but feature a subject that is human and non-referential.'

This, of course, is English – a language that clearly distinguishes constructions like (2) and (4) from one another. It does so in two ways: (i) English is an overt argument language and, therefore, will supply the (im)personal pronoun irrespective of any other factors involved; (ii) English has particular, identifiable forms for valency-reducing operations (e.g. passive). Matters are arguably more complicated for ASL: first, as is well known, ASL is a null argument language (Lillo-Martin 1989, Bahan et al. 2000, Koulidobrova 2012, 2017, among others). Such languages have been known to behave differently with respect to encoding impersonals than languages requiring arguments to be overt, simply because the presence of the relevant features on T^0 (Roberts & Holmberg 2010, Holmberg & Roberts 2010, i.a.). Therefore, our goal here is this. In exploring the agent backgrounding devices in ASL along the lines of (1c), we ask the following questions:

(5) i. Does ASL employ personal pronouns (as in (3)) for impersonal use (as in (2))?
ii. Is there another construction that yields the same reading (as in (4))?

Foreshadowing what is to come, the answer to (5i) will be 'yes' but to (5ii) a 'no': what the field has labeled personal pronouns (but what may or may not actually be personal pronouns) do in fact participate in impersonal constructions; such constructions often look – but aren't –passive. The paper is structured as follows. Section 2 articulates the methodology. In section 3, we offer background on ASL pronouns as well as the other phenomena relevant to this inquiry. In section 4, we subject these expressions to the diagnostics for the impersonals – that is, we answer the question (5i.). In section 5, we focus on the answer to (5ii). Section 6 explores other possibilities and offers directions for future research. Section 7 concludes.

2 Methodology

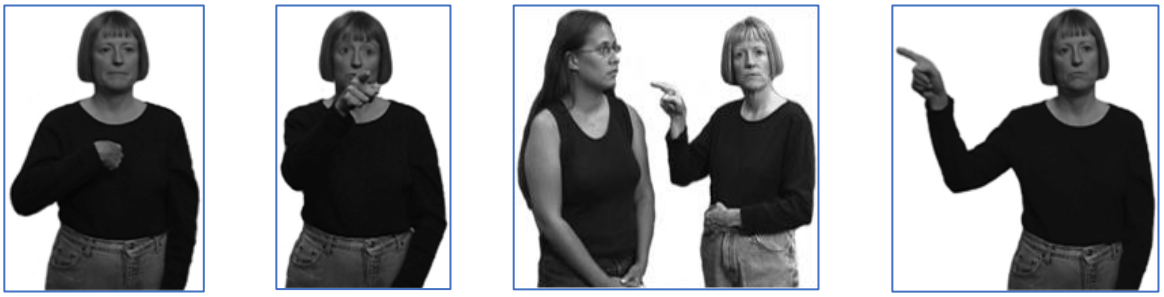
Two types of data were used in this paper from two different language consultants. Both consultants are Deaf: one deaf-of-deaf (20 years of language consulting), the other deaf-of-hearing (ASL acquisition prior to 1year old). Data collection occurred in three stages: elicitation with grammaticality judgment (sentences and individual signs), play-back (discard [wrong] /

keep [correct]), and context matching with over a month between separate sessions. In line with the general standard in linguistic research, all grammaticality judgements reported here are as follows: ACCEPT/FINE/NATIVE ASL (√), AWKWARD/L2 ASL (?/??), and BAD/NOT ASL (*). Recognizing the coarseness of the scale, but also for the sake of simplicity at this stage of the project, we have collapsed '?/??' and '*' cases. Finally, following the argumentation we have offered elsewhere (see Koulidobrova 2012, 2017; Koulidobrova & Lillo-Martin 2016), only plain verbs were being used in the data sample unless agreement paradigm was specifically targeted in order to avoid potential confounds (for complications associated with classifying agreement in ASL, see Meir & Lillo-Martin 2013, i.a.).

3 Background: ASL pronouns and related phenomena

Much research on syntax and semantics of ASL has been allocated to the question of ASL pronouns; the literature is large and much of it is orthogonal to the questions at hand (see the overviews from various angles in Lillo-Martin & Klima 1990, McBurney 2002, Schlenker 2009, 2010, Abner & Graff 2012, Kuhn 2014, Abner & Wilbur 2017, i.a.). Generally, it is widely accepted in the field that the language has two personal pronouns (1st- and non-1st person (Meir 1990)), which are identical in form in terms of handshape if not location[1] This is shown in Figure 1.

Figure 1. Signs typically glossed as personal pronouns in ASL (from Koulidobrova & Lillo-Martin 2016)



$_1$IX 'I/me' | $_2$IX 'you' | $_3$IX 'she/he/it,' present | $_3$IX 'she/he/it,' non-present

The sign IX, also glossed as INDEX, is not the only sign occurring in the classically 'pronominal' environments (see Abner & Wilbur 2017 for a discussion); here, however, we will limit our attention to it, noting that while the inquiry related to the ASL IX has been robust, this, to our knowledge, is the first step in examining its use in impersonal contexts (save the brief introduction in Koulidobrova 2012). Below, (6) shows that this is certainly a reasonable approach – like a typical run-of-the-mill pronoun, IX participates in quantificational and anaphoric relationships; it also directly refers.

(6) a. $_a$PETER THINK $_a$IX SMART
'Peter$_i$ thinks he$_{i/*j}$ is smart.'

b. BOY $_{a\text{-}c}$ALL THINK $_{a\text{-}c}$IX SMART
'All the boys$_i$ think they$_{i/*j}$ are smart.'

c. $_a$IX SMART
'She$_{Mary}$ is smart'

The question then is whether it also participates in *im*personal constructions like (2).

It turns out that the answer to this question is not always. For instance, on the one hand, IX in (7), originally from *Youtube.com* but also accepted by our consultants, does, but IX in (8) does not.

(7) $_3$IX$_{arc\text{-}up}$ TELL-STORY 1-IX ENTER COLLEGE GET JOB IMPOSSIBLE
'They say that it will be impossible for me to get into college and get a good job'
(https://www.youtube.com/watch?v=uyzgZ9qismU&feature=youtu.be)

In the spirit of (2), the IX in (7), uttered on the high plane (Barberà 2012, et seq.), refers to no particular individual, and the reading it induces at first glance most resembles the English 'expert *they*' (Cabredo-Hoffher 2003, 2006), though see section 6 for further discussion – our consultant reports a general intuition of disagreement with the holders of the experise.

On the other hand, in an environment replicating the impersonal context in (2), IX as represented in Figure 1 is not licit – when directed either at the speaker, addressee, or a group of referents assigned loci *a-c*, IX must refer to them. This is shown in (8).

(8) HERE $_3$IX$_{a\text{-}c}$ / $_1$IX / $_2$IX TEND SIGN
'Here they / we / you usually sign[=use sign language]'
= referring to particular people/deictic
≠ impersonal (speaker inclusive / speaker exclusive)

At this juncture one may ask whether the data in (8) are representative of the entire impersonal paradigm – i.e. is it the case that IX cannot occur in any context associated with the impersonal pronouns in (1c) and (7) is a fluke, or is it just the context provided by (8), and in some other context *IX* will be perfectly acceptable? Obviously, if the latter is the case, the next step here would be not only to isolate such contexts but also develop a theoretical account of the facts. We will return to this issue below.

The other question, of course, is this: how could we (minimally) amend (8) to achieve the impersonal reading? The answer promises to bring us closer to understanding the inventory of devices the language employs for agent backgrounding.

According to our consultants, the most natural amendment to (8) with the desired reading is (8).

(9) HERE Ø TEND SIGN
'Here ~~they$_{exclusive}$ / we$_{inclusive}$ / you$_{inclusive}$~~ usually sign[=use sign language]'

Note that following an antecedent, such as MARY in (10), the null subject of [TEND SIGN][2] may in fact refer anaphorically.

(10) A: WHY MARY VOICE-OFF?
'Why is Mary$_i$ not talking?'
B: HERE Ø TEND SIGN
'Here ~~she~~$_i$ usually signs'

However, without such an antecedent, as is the case in (9), the reading that arises is precisely the one we have been searching for – the impersonal, both speaker- inclusive and -exclusive. To paraphrase: since there was no entity previously introduced by the discourse for the null argument to refer to, the sentence can no longer be *solely* about Mary but rather about Mary *too.*[3]

Incidentally, the findings in (7)-(9) offer a path for further diagnostics as well as an analysis. Elsewhere, we have argued that, contrary to previous analyses, the account that approaches the null argument in ASL as a pronoun and a silent version of IX (as in, e.g. Lillo-Martin 1989 and Bahan et al. 2002) is incorrect in two ways. First, such an account does not explain the range of facts unique to the null argument which, upon close examination, behaves very differently from *pro*[4] (e.g. Rizzi 1986). Among such odd for *pro* behaviors is the lack of the otherwise necessary material for a clusivity reading (Roberts & Holmberg 2010). Consider, for instance, Italian – classically, a language with *pro* – in (11) vs. ASL in (9).

(11) Qui no *(si) può fumare [Italian]
Here not SI can smoke
'One/you$_{inclusive}$ can't smoke here'

Instead, the null argument (Ø) is best analyzed as an elided element that type-shifts between <e> and <et>, inducing a variety of readings one of which is generic (for an extended discussion, see Koulidobrova 2012, 2017). This is shown in (12).

(12) SUPPOSE COMPARE $_a$BUS $_b$CAR. $_1$IX HATE BUS. WHY^{q} ~~BUS~~ SLOW
'If I compare a bus and a car, I hate the bus. Why? Because the bus is slow.'
i. 'There is a certain bus such that it is slow.'
ii. 'Generally speaking, busses are slow.' (Koulidobrova 2017: 432)

Second, the hitherto accepted 'personal pronoun' view of IX has also been challenged. For instance, in Koulidobrova & Lillo-Martin (2016) we have argued for an approach to as a definite description contributing a demonstration, perhaps something along the lines of Roberts (2003) below.

(13) [...] The demonstrative […] carries a presupposition that the discourse referent which makes it familiar is anchored by information in the common ground to an individual in the world which is directly indicated by the speaker at the time of utterance of the demonstrative NP. (Roberts 2003: 130)

In other words, recent work has articulated a considerable difference in syntax and semantics of *IX* and Ø. For the purposes for this investigation, this difference offers a set of predictions, the first one of which is this: we should not expect impersonal constructions with a null argument to yield the same set of readings as impersonal constructions with *IX*. Specifically, the set of

contexts for *IX* is expected to be more limited. As the next section demonstrates, this is precisely what we obtain.

4 Findings: the checklist

In this section, we subject ASL to the R-impersonal (as in (1c)) diagnostics from Cabredo-Hoffher & Barberà (this volume).[5] The results of the diagnostics are recorded in Table 1.

4.1 What is not possible

Before discussing the results of the questionnaire, let us articulate a few general observations about the data. First, in our data, certain signs reported in the literature from other sign languages to be possible in impersonal constructions – and also independently robustly used by ASL, our consultants found illicit in every impersonal environment. For instance, following Barberà & Quer (2016) study of LSC, Costello (2015) on LSE, i.a., we had expected to observe the signs *ONE*, $_1$*IX*pl, and others. However, in no contexts associated with the questionnaire in Cabredo-Hoffher & Barberà (this volume) in Table 1 did our consultants use these signs or accepted the ASL specific variants of them as appropriate in a given context. Therefore, we simply do not report on them individually here at all.

Second, utterances containing $_1$IX$_{PL}$ and $_2$IX signs were always interpreted referentially and/or anaphorically; we therefore conclude that unlike English and a number of other languages, ASL does not allow an impersonal use of what has traditionally been assumed to be the 1st and 2nd personal pronouns. An example of such behavior of IX is shown in (14).

(14) *Context: A male friend of yours tells you that he saw a pregnant woman smoking. You tell your male friend…*

$_2$IX SHOULD NOT SMOKE PREGNANT
'You should not smoke if you are pregnant'

In the context provided, (14) is odd – according to our consultants it means that the male interlocutor is pregnant. No amount of word order alternation (Wilbur 1997, Janzen et al 2002) rescues the reading: to the degree that $_2$IX is present, it refers directly to the addressee. Therefore, in the remainder of the paper, when we report on the (im)possibility of IX in an impersonal environment, the claim is being made about $_3$*IX*, which was always uttered in the form of an arc (traditionally 'plural').[6] That said, $_3$*IXpresent* – i.e. pointing at a particular present referent, a deictic sign – was predicted to be illicit in an impersonal context; the prediction was confirmed.

4.2 What is possible: R-impersonals with IX and Ø

The first notable observation is the form of IX in the data. The sign can be uttered on a higher or lower planes. Figures 2-4 capture the fragment of the same utterance during different sessions.

Figure 2. $_3$IXhigh *Figure 3.* $_3$IXmid *Figure 4.* $_3$IXlow



This is typical of the paradigm.

Table 1. Checklist of diagnostic contexts for R-impersonals.

Context	**Sample utterance from the dataset**	**NP (context appropriate, generic)**	**IX**	**Ø**
Anchored existential	(15) a. ____ PRESS-BELL LIGHT FLASH 'Somebody pressed the doorbell' b. NEXT-DOOR _____ COOK #BBQ 'They are cooking BBQ next door'	✓ ✓	✓ ✓	✓ ✓
Vague existential	(16) __ BREAK INSIDE $_1$POSS HOUSE STEAL $_1$POSS TV 'They broke into my house and stole my TV'	✓	✓	*
Indirect evidential existentials	(17) a. PAH ___ FINISH FIX ELEVATOR 'Finally they fixed the elevator' b. ___ STILL WORK BELOW 'They are still working downstairs'	✓	* *	✓
Predicates with plu referents	(18) ___ FINISH MOVE+ PLAY CHESS HERE 'They must have played chess here'	✓	✓	✓
Existentials with hab. predication	(19) HERE ___ STEAL BIKE 'They steal bikes here'	✓	*	✓
Corporate (episodic)	(20) a. RECENTLY ___ RAISE TAX b. TAX ___ RECENTLY RAISE AGAIN 'Recently they raised taxes	✓	✓ *	* ✓
Corporate (generic)	(21) HERE __ DELIVER MAIL SEVEN 'Here they deliver mail at 7'	✓	*	✓
Loc. universals (generic)	(22) FRANCE __ EAT SNAIL 'In France they eat snails'	✓	*	✓

Loc. universals (episodic)	(23) CHINA __ CELEBRATE NEW YEAR LAST-WEEK 'In China they celebrated the New Year last week'	✓	✓	✓
Universal w/o a modal	(24) ___ SEE $_a$IX DRUNK 'Everyone sees he is a drunk'	✓	*	✓
Verbs of *saying*	(25) a. READ __ SAY SUNNY TOMORROW 'I read they say it will be sunny tomorrow b. __ SAY DRUNKARD 'They say he is a drunk' [about Bobby Fischer]	✓ ✓	✓ ✓	* *
Unrestricted universals	_____neg (26) SHOULD LIE 'One should not lie'	✓	*	✓
Conditionals	(27) a. $_a$[__ HAVE COLD] $_b$[__ DRINK #LIQUID] 'If one has a cold, one should drink liquid' b. $_a$[__ ANSWER WRONG] $_b$[__ ELIMINATE] 'If one gives a wrong answer, he is eliminated'	✓ * ✓ *	* * * *	✓ ✓ ✓ ✓

A brief glance at Table 1 shows that, as predicted, IX and Ø do not have identical distribution in impersonal constructions.[7] The two elements appear in (almost) complementary distribution, but in some cases, both are possible. We take this finding to corroborate our previous conclusions that IX and Ø do not instantiate the same element – it is not the case that the former is overt while the latter is simply a phonologically null version.

Another finding has to do with the contextually appropriate NP. In all of the cases in Table 1, except the second NP in the conditionals (27a-b), the generic PEOPLE could be used as an overt NP option; although the NP could then be further restricted while remaining necessarily generic (e.g. GOVERNMENT in (18) and TOWN-KID in (16)), this restriction was not necessary. Similarly, according to our consultants, reference capabilities of Ø matched that of the overt NP. Conversely, the reference of domains of IX and the NP/Ø did not always match. For instance, in (25b), there is a difference between the readings induced by PEOPLE and IX: with the former, Bobby Fischer's drinking habits are common knowledge; with the latter, it is the purview of the chess community (or the community of people in some other manner restricted to Bobby Fischer). The same is also true in (23): on the PEOPLE reading, all manner of folk currently residing in China celebrated the New Year last week; on the IX reading, only the Chinese in China did. Unsurprisingly, the null argument patterns with the overt NP and not the IX.

Let us revisit the goals. We began this inquiry with a question: does ASL use agent backgrounding mechanisms familiar from other languages (posed by (1))? The answer to that was a 'yes' (see also Kegl 1990, Jantzen et al. 2002, Wilbur 1997). The next step then was to examine the nature of the mechanisms: whether ASL utilizes the pronominal system for impersonal constructions, namely whether it uses personal pronouns (or what has traditionally been labeled as such) in such cases. The answer to that question was also a 'yes' but this time a less definitive one. This, we have suggested, is because a) what is typically assumed to be a

personal pronoun is not actually exactly an English-style personal pronoun (and may be better described as the German D-pronoun, Bosch 2006, et seq.), and b) ASL null 'pronoun' is also not a pronoun. In other words, the language allows both IX and Ø in impersonals but the distribution of the two elements is dependent on the context because in terms of both syntax and semantics the two elements are quite different. That said, we have now arrived at the answer to (5i) and find ourselves in the position to approach (5ii.).

Consider the corporate episodic context in (20b), repeated below as (28).

(28) TAX Ø RECENTLY RAISE AGAIN

There are in principle two ways of interpreting this sentence: one is, as suggested by the translation in Table 1, the impersonal active '*They*$_{government}$ *raised taxes again.'* The other option is the passive '*Taxes have been raised again'* – a construction of a very different sort, still an agent backgrounding strategy but not an R-impersonal. Converging on the right analysis here matters for the following reasons. Cases like (27) are in principle syntactically ambiguous (see Maling & Sigurjònsdòttir 2002, et seq.): for instance, on the common assumption, the object of the verb A-moves past it; the 'original subject' is truly empty (*e*). Conversely, in cases of impersonal constructions, the 'original subject' is present (receives theta-role – i.e. something that is impossible in unaccusative cases), and any movement that occurs is unrelated. Therefore, whatever the outcome, having diagnosed the passive vs. impersonal in (27), we will be in a better position to make other claims about clause-internal processes in agent-demoting constructions. Additionally, the finding may independently account for the difference in behavior between IX and Ø in Table 1 more generally.

5 Passive or impersonal?

5.1 Diagnostic

As seen in (29), (28) is not a fluke in our corpus. The agent is not specified, no agreement (manual or non-manual) is observed. Simply following the convenient English translations (see section 1), we can label the potential interpretations as follows.

(29) a. THREE SIGN LANGUAGE Ø USE HERE $_1$IX WOW
= 'They use three sign languages here; I am amazed' → impersonal
= 'Three sign languages are used here; I am amazed' → passive
b. CHURCH BUILD Ø TEN CENTURY
= 'They built the church in 10th century' → impersonal
= 'The church was built in 10th century' → passive

A complication arises, already articulated in section 1: ASL provides no convenient morphological cue to signal passive on par with (30).

(30) a. She$_{\mathbf{NOM}}$ passed him$_{\mathbf{ACC}}$ around
b. He$_{\mathbf{NOM}}$ was passed around (**by** her)

That is, there is no overt case marking to indicate a change associated with the object promotion; there is no overt copula that carries both tense and phi-features, nor is there anything like a preposition *by* or case marking to be applied to the backgrounded agent/demoted subject. But then again, such 'convenience' may be deceiving – only 44% of languages actually exhibit such cues (WALS ch. 107). Converging on the right analysis here matters for the following reasons: cases like (29)-(30) are in principle syntactically ambiguous; therefore, whatever the outcome, we will be in a position to make other claims about clause-internal processes in agent-demoting constructions.

Previous literature has suggested that ASL exhibits evidence of passive constructions with both spatially- (as in (31a) and person- (as in (31b)) agreeing predicates (Kegl 1990, Janzen et al. 2001, Rankin 2013 and references therein). However, researchers focused exclusively on the agreement paradigm and role-shift.

(31) a. POLICEMAN a-AT-HIT - spatially agreeing
'Policeman got hit'
b. GIVE$_1$ TROPHY - person agreeing
'We were given a trophy'

Yet, at least Catalan Sign Language (LSC) treats plain and agreeing verbs differently here (Barberà & Cabredo-Hoffher 2015). Thus, for the purposes of this paper, we focus on plain verbs.[8]

Following a rather robust literature (Maling & Sigurjónsdóttir 2002, Keenan & Dryer 2007, Cabredo-Hoffher 2003, 2015, Guitteny 2006, Siewierska 2011, Maling 2015, i.a), Table 2 captures characteristics of passives vs. impersonals.

Table 2. Passives vs. Impersonals

Passive	Impersonal
• Agent demotion/patient promotion (word order or morphology) • *by*-phrase • *object anaphor promotion • ±human • no agent control into some adjuncts • *with intransitives • √ with unaccusatives • ± referential interpretation • subject = *e*	• generic and episodic readings: 'expert' (*they*), generic (*people*), neutral (*one, man*), or variable/indefinite (*someone*), reflexive, ellipsis with non-specific interpretation • no new referents • +human • √ agent control into some adjuncts • *with unaccusatives • – referential interpretation • subject = arb

Setting aside the issue of nulls vs. overt elements (for the moment), we focus on the diagnostics in Table 2 directly.

Consider the context for (32), very much compatible with a situation in which the cat would chase a bird: *You see a bird taking off, feathers flying as if it were being chased.* This was precisely the context presented to our consultants. And yet, (32a-c) do not describe such a situation.

(32) a. BIRD CHASE CAT
‘A bird chased a cat’

___br
b. BIRD CHASE CAT
‘It was a bird that chased a cat’ ≠ ‘A bird was chased by a cat’

___br
c. BIRD CHASE
‘A bird chased someone’ ≠ ‘A bird was chased (by someone)’

Introduction into the discourse of the more pragmatically appropriate (32) did not change our consultants’ judgements – (32) and (33) simply represented different situations.

(33) CAT CHASE BIRD
‘A cat chased a bird’

We therefore conclude that the passive-style ‘object promotion’ of the post-verbal NP into the pre-verbal position for the agent-backgrounding reasons (commonly, via A-movement) is impossible. The issue, of course, is not about movement per se – as has been robustly documented in the literature (see Sandler & Lillo-Martin 2006 for an overview), as shown in (34), the object of OPEN can be moved to the left of the verb. However, the classic passive subject-object reversal remains impossible.

(34) ‘Mary opened the door’
a. MARY OPEN DOOR

____br
b. DOOR MARY OPEN

(35) a. DOOR OPEN
‘The door opened’

(____br)
b. *DOOR OPEN MARY
‘The door was opened by Mary’

Nor can the object anaphor be promoted: in (36b), the appearance of this promotion is once again simply an appearance, since the reference of SELF is necessarily disjoint.

(36) a. PETER IX$_a$ LOVE SELF$_a$
‘Peter$_i$ loves himself$_i$’
b. ?SELF$_a$ LOVE
= ‘He himself$_i$ loved [something$_j$]’
≠ ‘He$_i$ is loved (by himself$_i$)’

In other words, ASL ‘passive’ just failed two tests for passive.

Assuming, with the literature, that the empty subject of passives is syntactically ineffective, and the subject of the impersonal is actually syntactically present, we also expect

impossibility of agent control into adjuncts in passives (Maling & Sigurjónsdóttir 2002, et seq.). This explains the contrast in (37) in English.

(37) a. They$_{\text{referential /impersonal}}$ / People usually don't drive cars *cursing and swearing*
b. *Cars are usually not driven *cursing and swearing*

No such contrast is present in ASL – as (37) shows, agent control into such an adjunct is possible.

(38) a. Ø TEND WATCH PROMISE CRY
'People$_{\text{imp}}$/they$_{\text{referential}}$ usually watch vows, crying'
b. WEDDING PROMISE Ø TEND WATCH CRY
'Vows are watched, crying'

But also precisely because the subject of the impersonal is present (and a theta-role assigned), a construction should be illicit with an unaccusative, independently available in ASL (38).

(39) a. TRAIN ARRIVE
'The train arrived'
b. DOOR OPEN
'The door opened'

Compare then (38b) to (40) – minimally amended version of (39) which now includes an adjunct.

(40) a. *TRAIN ARRIVE SHAKING-FROM-COLD
'*The train arrived shaking from cold'
b. *DOOR OPEN CRY
'*The door opened crying'

We thus conclude that, even though the passive-like construction allows agent control into adjuncts – a characteristic of impersonals, – this changes in the presence of unaccusative predicates. In this, (40) serves as the other side of the argument for the impersonal analysis of the original (28), and, by implication, against the passive account.

The aforementioned findings lead to the following conclusion: we expect the passive-looking impersonal constructions to occur in the same contexts as impersonals are known for. Is (41) below demonstrate, this prediction is confirmed.

(41) a. WORRY NOTHING CAR Ø SEE+++ HERE = vague habitual
'Don't worry about anything, your car will be looked after/they$_{\text{imp}}$ will watch over it'

b. CHURCH Ø BUILD TEN CENTURY = corporal existential
'This church was built/they$_{\text{imp}}$ built this church in 10$^{\text{th}}$ century'

(42) MOTHER TELL-1 FOOD Ø MUST TRY MONDAY = corporal habitual

'Mother told me that {I/everyone} must try the food there on Mondays'

(43) *Looking at the door with a footprint on it:*
DOOR Ø KICK = inferred existential
'Someone (must have) kicked (the door)'

(44) IX QUESTION Ø ANSWER FINISH 10MIN AGO = temporally anchored
'This question they$_{imp}$ answered 10 min ago'

(45) SAY TAX Ø RAISE SOON = with speech act verbs
'They say they$_{imp}$ will raise taxes soon'

Moreover, as is well known, impersonal subjects have a +human restriction; such restriction does not exist with passives. All the predicates in (41)-(45) select for a +human agent. However, a minimal amendment should yield a test-case: if the change of a predicate to -human (such as RAISE to FAIL) causes the disappearance of 'passive' reading, this will have served a clear argument for an impersonal.

Compare then (45) to (46) (the paradigm holds throughout). We predict that the +human restriction will force the impersonal reading out. This prediction is borne out in (46): the impersonal *they* in the English translation – the original corporate reading – has disappeared.

(46) SAY TAX FAIL SOON
= 'They say they$_{imp}$ tax [system] will fail soon'
≠ 'They say they$_{imp}$ will fail tax [system] soon'

According to our consultants, the most natural paraphrase of (46) is (47); no +human restriction is observed.

(47) TAX SYSTEM COLLAPSE $\underline{\quad}_{q}$ WHY $\underline{\quad\quad\quad}_{neg}$ NOT-KNOW INSURANCE #LOBBY GOVERNMENT, ROAD, HOSPITAL, OIL, BUILDING
'Tax system collapsed. I don't know why… Insurance, lobby groups, government, oil, buildings[=construction]'

We take the data in (46)-(47) to serve as the final argument that the element that the null element found in (28) is better analyzed as impersonal.[9]

In other words, we have now also arrived at the answer to question (5ii): the passive-*like* construction, which surfaced in one of the R-impersonal contexts, is actually fairly robustly utilized by ASL (as has in fact been noticed by Rankin 2013 and Janzen et al. 2001). That said, one final piece of the puzzle must be solved that pertains directly to the cases with vs. without such movement.

5.2 To move or not to move… That is the question.

It turns out that the movement paradigm contributes to further understanding of the data in Table 1. The crucial observation there was that without fronting of the post-verbal material, the null

argument was ungrammatical (and some overt form was preferred), while with movement, the null option was fine. This is captured in (48) (=(20)).

Excerpt from Table 1.

(48)	a. RECENTLY ___ RAISE TAX	✓	✓	*
	b. TAX ___ RECENTLY RAISE AGAIN	✓	*	✓
	'Recently they raised taxes			

In particular, in all cases where Ø was ungrammatical, the sentence improved with movement[10] as in (49)-(51).[11]

(49) a. *Ø BREAK INSIDE $_1$POSS HOUSE STEAL $_1$POSS TV = (15)
b. $_1$POSS HOUSE Ø BREAK INSIDE ~~$_1$POSS HOUSE~~ STEAL $_1$POSS TV
'They broke into my house and stole my TV'

(50) a. *READ Ø SAY SUNNY TOMORROW = (24a)
b. SUNNY TOMORROW READ Ø SAY
'I read they say it will be sunny tomorrow'

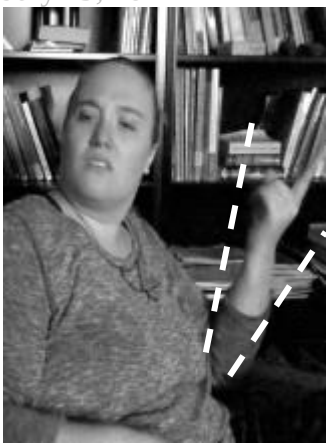
(51) a. *Ø SAY DRUNKARD $_a$IX = (24b)
b. DRUNKARD Ø SAY $_a$IX
'They say he is a drunk'

The data in (49)-(51) clearly require further testing. At the same time, they also serve as an additional argument against the passive account of the Ø in cases under examination. While the relationship between the NPs in (48)-(49) may be easily defined in the NOM-ACC/subject-object terms, it is not so in (50) or (51): in (50b), the moved element is not an NP, and in both (50) and (51) the movement occurs past the clause boundary. In short, an account along the lines of the passive/active alternation would simply not apply here.

6 Other strategies and directions

In addition to the overt NP, IX and the null argument, in some of the impersonal contexts, listed below, SOMEONE (Figure 5) was acceptable. The relevant contexts from Table 1 are documented in (52); no other environment in Table 1 allowed SOMEONE.[12]

Figure 5. SOMEONE



(52) a. SOMEONE PRESS-BELL LIGHT FLASH ≈ (14)
'Someone pressed the bell'
b. SOMEONE BREAK INSIDE $_1$POSS HOUSE STEAL $_1$POSS TV ≈ (15)
'Someone broke into my house and stole my TV'
c. PAH SOMEONE FINISH FIX ELEVATOR ≈ (16)
'Someone finally fixed the elevator'
d. SOMEONE FINISH MOVE PLAY CHESS HERE ≈ (17)
'Someone must have been playing chess here'
e. [SOMEONE HAVE COLD]$_a$ [*SOMEONE DRINK #LIQUID]$_b$ ≈ (26)
'If someone has a cold, s/he should drink liquid'

Additionally, in all generic, but not in episodic, contexts, TEND with an impersonal reading was possible. This was allowed with the null element but not with IX, further strengthening the claim that (i) IX is a definite description, and (ii) Ø is something else. Consider (53):

(53) 'Here they usually deliver mail at 7'
a. HERE Ø $_{refer/imp}$ / IX $_{refer/*imp}$ TEND DELIVER MAIL SEVEN
b. MAIL Ø $_{refer/imp}$ / IX $_{refer/*imp}$ TEND DELIVER SEVEN HERE
= specific people [Mary and Joe] deliver mail at 7
≠ mail delivery occurs at 7

Elsewhere (Koulidobrova 2012, 2017), we have motivated the use of TEND as a diagnostic tool of the Quantificational Variability Effects and indefinites in ASL (Lewis 1975, Malamud 2012, i.a). Application of this tool here has once again paid off: (53) is grammatical both with a null argument and with IX; however, with the latter, the impersonal reading is lost in both (a) and (b) (moved and in-situ cases). It is worth noting that there was no overlap between cases with TEND and cases with SOMEONE, creating further impetus for the syntax and semantics of SOMEONE to be worked out independently and compared to both its instantiations in other syntactic contexts (as in McLaughlin 1998) and other indefinite forms reported in the literature.

Another strategy of note is IX$_{arc\text{-}up}$ (see (7)), which accounts for 4% of our data sample. Barberà (2012, et seq.) has argued that in LSC, this sign encodes specific indefinites. According to our consultants, however, its counterpart in ASL may have a different function – an expert

reading of impersonal with a certain amount of sarcasm, undermining the 'expert' part of the expert reading. For instance, in (52), the signers' choice impersonal strategy – namely $IX_{arc\text{-}up}$ – results in the following response by one of our consultants: "They are supposed to be the experts, but they are making decisions that are not expert-like at all."

(54) $IX_{arc\text{-}up}$ TELL-STORY 1-IX ENTER COLLEGE GET JOB IMPOSSIBLE = (7)
'They say that it will be impossible for me to get into college and get a good job'

At this stage, the dataset is too sparse to make a generalization, but the observation deserves a careful examination: what exactly contributes this reading?

Throughout the paper we tried to remain faithful to the plain/neutral space contexts in an attempt to avoid the complications that arise with introduction of loci. Here we briefly outline the facts about locus assignment.

First, with conditionals, locus assignment was unavoidable: as shown in Table 1 (27), conditionals require spatial division with one clause being uttered ipsi- and other contralaterally. Here, overt arguments were possible but only in the first clause.[13]

Second, although we purposefully abstained from predicates with locus assignment in the data set, a few entered. Of a particular interest are cases like (55).

(55) *Context: My family and friends always design events in my life. I am now getting married.*
ALL FAMILY FRIEND $_{neu}$INVITE$_1$ $_1$POSS WEDDING
i. 'All family friends invited me to my wedding' = personal active
ii. 'I invited all family and friends to the wedding' = passive
iii. 'Someone [not me] invited all family and friends to the wedding'
= impersonal (signer exclusive)

Since INVITE is 'backwards verb' (Padden 1989, Quadros & Quer 2008), the agreement path is expected from object (*me*) to subject (*all my family and friends*). This means that (55i) is out and leaves us with two options, one of which is (ii) 'I invited all family and friends to the wedding.' If licit, (55ii) would qualify as a classic case of subject demotion. It offers the following prediction: it should be odd in the case of someone other than the 1st person issuing the invitation – illicit in a signer-excluded context. Finally, if there is a null *someone* (as in (55iii)), the sentence should allow a follow-up 'by I don't know who.'

It turns out that (56) is an acceptable iteration + follow-up of (55).

(56) ALL FAMILY FRIEND Ø $_{neu}$INVITE$_1$ $_1$POSS WEDDING WHO $_1$IX NOT-KNOW
'Someone invited all family and friends to the wedding but I don't know who'

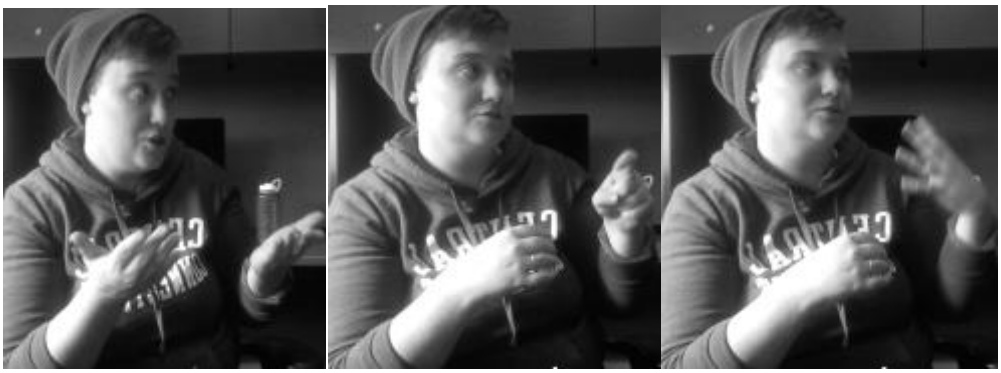
By the same token, the tools developed here now allow us to entertain an additional level of complexity – role-shift (57), the use of which in agent-backgrounding constructions was previously documented in Janzen et al. (2001).

lean back lean forward
(57) $_a$KISS$_1$ $_a$JOE. $_a$JOE$_1$KISS$_a$ MARIE $_1$KISS$_a$. $_1$SHIFT-PERSPECTIVE$_a$+++ HAPPEN […]
'Joe got kissed, Marie got kissed by Joe… there is a change of characters here…'

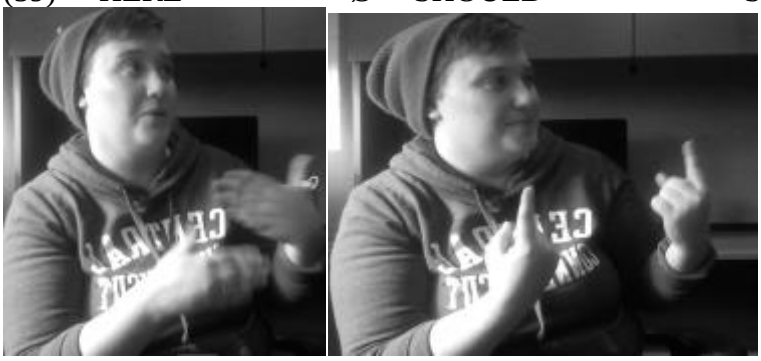
We leave the agreement paradigm for future research, noting in passing that the previous literature has not examined it using the tools that have been employed here.
Among the many questions that will have potential to advance the general field of impersonals, and that remain to be worked out here, are those posed by the data in (58)-(59): the edge effect (Sigurðsson 2011, Sigurðsson & Maling 2010) created by the adverbial modifiers of the null impersonals, as in (58), are well-known in the impersonals literature (Siewierska 2011).

(58) 'Here they/we speak Spanish
a. HERE Ø SPEAK SPANISH
b. *Ø SPEAK SPANISH

However, what makes ASL different is that the impersonal reading remains even with the modal. as in (59) (note, the English translation, as is also reported cross-linguistically, does not retain the impersonal reading).



(59) HERE Ø SHOULD SHOWER



BEFORE COME
'Here one should shower before coming [to work].'

Lastly, all of the findings obtained in Table 1, which we have suggested have the potential to be accommodated under the theory of demonstrative pronouns, must be examined more carefully: in order to account for the distribution of IX vs. Ø, do we need to appeal to the modality-specific model of demonstration, as in Davidson (2015), e.g.? Or will the general theory of personal vs. demonstrative pronouns do the job?

7 Conclusion

In an attempt to fill a gap in the literature on ASL, we started this investigation with the following questions: considering the vast literature on ASL IX, typically assumed to be a personal pronoun, and a few works on the null argument, often used by signers in lieu of the overt nominal or pronominal forms, we asked whether the language uses both *IX* and Ø in the cases of reduced referentiality – R-impersonals. We discovered that not only does it do so but also the R-impersonal paradigm has potential to lead the field to better understanding of both elements. Summarizing the general findings: in a few agent-backgrounding environments, IX, Ø, and overt NPs overlapped. Overt NPs were possible everywhere, Ø in the vast majority of cases, especially if the postverbal element could move preverbally. In such cases, all the evidence still pointed to the impersonal analysis. IX, as long it was in a form of an arc (full or reduced), could be uttered anywhere along the vertical plane. This is unexpected from the point of view of the previous literature on other sign languages but not entirely surprising for ASL: if referential linking cannot be obtained, then quantification is in fact essentially vacuous (for a discussion of relevant formalism, see Gast & Auweara 2013). This also suggests that for impersonalization at least, previous models which have relied on vertical space as representation of quantificational domain widening (such as Davidson & Gagne 2014) may not apply. In other words, while this paper has answered a few questions with regards to the impersonals toolbox of ASL, many more questions sprouted.

Acknowledgements

We gratefully acknowledge the contribution of our language consultants: Emily Crawford, Doreen Simons, and Jeffrey L. Palmer, without whom this work would not have been possible. For helpful feedback, we also thank the audiences of the Workshop on Impersonals at Paris VIII (2015) and Penn Linguistics Colloquium 40. Funding for this project was provided by CSU AAUP Research Grant #ARKOUK.

References

Abner, Natasha and Thomas Graf. 2012. Binding complexity and the status of pronouns in English and American Sign Language. Presented at Formal and Experimental Advances in Sign Language Theory (FEAST) 2012. Warsaw, Poland, May 2012.

Abner, Natasha and Ronnie Wilbur. 2017. Quantification in American Sign Language. In Edward Keenan and Denis Paperno (eds.) *Handbook of Quantifiers in Natural Language, Volume 2*, pp. 21-59. Springer.

AnderBois, S. (2011). *Issues and Alternatives.* Ph.D. dissertation, University of California, Santa Cruz.

Bahan, B., Kegl, J., Lee, R. G., MacLaughlin, D., & Neidle, C. (2000). The licensing of null arguments in American Sign Language. *Linguistic Inquiry 31*(1), 1-27.

Barberà, Gemma. 2012. The meaning of space in Catalan Sign Language (LSC). Reference, specificity and structure in signed discourse. Doctoral dissertation, Universitat Pompeu Fabra. Published as a revised version in 2015 at Berlin/Boston: De Gruyter Mouton and Ishara Press.

Braze, David. 2004. Aspectual inflection, verb raising and object fronting in American Sign Language. Lingua 114: 29-58.

Cabredo Hofherr, Patricia, 2003. Arbitrary readings of third person plural pronominals. In Proceedings of the Conference Sinn und Bedeutung 7, pp. 81–94. Universität Konstanz, FB Linguistik: Arbeitspapiere des Fachbereichs Sprachwissenschaften Vol 114. Http://www.ub.uni-konstanz.de/serials/fb-sprach.htm.

Cabredo Hofherr, Patricia, 2006. 'Arbitrary' pro and the theory of pro-drop. In Ackema, Peter, Patrick Brandt, Maaike Schoorlemmer, and Fred Weerman (eds.), Arguments and agreement, pp. 230–258. Oxford: Oxford University Press.

Costello, Brendan, 2015. Getting (more) impersonal in lse. Talk at Workshop on Impersonals and Passive in Sign Languages, U. Pompeu Fabra, Barcelona.

Gast, Volker and Johan van der Auwera. 2013. Towards a typology of human impersonal pronouns, based on data from European languages. *Languages Across Boundaries: Studies in Memory of Anna Siewierska*, ed. by Dik Bakker and Martin Haspelmath, 119-58. Berlin: de Gruyter Mouton.

https://www.youtube.com/watch?v=uyzgZ9qismU&feature=youtu.be. Accessed on January 17, 2015.

Holmberg, Anders. 2010. Null Subject Parameters. In T. Biberauer, A. Holmberg, I. Roberts & M. Sheehan (eds.), Parametric Variation: Null Subjects in Minimalist Theory, 88–124. Cambridge, MA: Cambridge University Press.

Janzen, Terry, Barbara O'dea; and Barbara Schaffer. 2001. The Construal of Events: Passives in American Sign Language. *Sign Language Studies*1 (3): 281-310

Keenan, Ed and Matthew Dryer. 2007. Passive in the world's languages. *Clause structure, language typology and syntactic description*, ed. by Timothy Shopen, Vol. 1, 325–361. Cambridge: Cambridge University Press.

Kegl, Judy. 1990. Predicate Argument Structure and Verb-Class Organization in the ASL Lexicon. *Sign Language Research: Theoretical Issues*, ed. by Ceil Lucas, 149-175. Washington, DC: Gallaudet University Press.

Koulidobrova, Elena. 2009. SELF: Intensifier and 'long distance' effects in ASL. European Summer School of Language, Logic and Information (ESSLI) 2009, Bordeaux, France, July 2009.

Koulidobrova, Elena. 2012a. When the quiet surfaces: 'Transfer' of Argument Omission in the Speech of ASL-English Bilinguals. Doctoral dissertation. University of Connecticut.

Koulidobrova, Elena. 2012b. Parallelism revisited: The nature of the null argument in ASL as compared to the Romance-style *pro*. Sign Language & Linguistics 15(2): 259–270. doi 10.1075/sll.15.2.07

Koulidobrova, Elena. 2015. Searching for the person in ASL impersonals. Paper presented at the Workshop Langues des signes et R-Impersonnels, Université Paris 8, February 6.

Koulidobrova, Elena. and Diane Lillo-Martin. 2016. A 'point' of inquiry: The case of the (non-)pronominal IX in ASL. In P. Grosz & P. Patel-Grosz (eds.), The Impact of Pronominal Form on Interpretation (Studies in Generative Grammar, 125), 221-250. Berlin, Germany: Mouton De Gruyuter.

Koulidobrova, Elena. 2017. Elide me bare: Null arguments in ASL. Natural Language and Linguistic Theory 35:397–446

Kuhn, Jeremy. 2014. ASL Loci: Variables or features? Journal of Semantics.

Lillo-Martin, Diane. 1986. Two kinds of null arguments in American Sign Language. Natural Language and Linguistic Theory 4 (4), 415-444.

Lillo-Martin, Diane and Edward Klima. 1990. Pointing out difference: ASL pronouns in syntactic theory. In S. Fischer & P. Siple (eds.) Theoretical issues in sign language research 1: Linguistics, 191-210. Chicago: University of Chicago Press.

Lillo-Martin, Diane and Richard Meier. 2011. On the linguistic status of 'agreement' in sign languages. Theoretical Linguistics 37 (3): 91-141.

Malamud, Sofia. 2012a. Impersonal indexicals: one, you, man, and du. Journal of Comparative Germanic Linguistics, 15(1): 1-48.

MacLaughlin, Dawn. 1997. The structure of determiner phrases: Evidence from American Sign Language. Doctoral dissertation, Boston University.
Maling, Joan and S. Sigurjónsdóttir, 2002. The New Iimpersonal construction inIcelandic. Journal of Comparative Germanic Linguistics, 5:97–142.
Meier, Richard. 1990. Person deixis in American Sign Language. In S. Fischer and P. Siple (eds.) Theoretical Issues in Sign Language Research, 175-190. Chicago, IL: University of Chicago Press.
Padden, Carole. 1989[1983]. Interaction of Morphology and Syntax in American Sign Language. Doctoral dissertation, University of California, San Diego.
Quadros, Ronice and Quer, Josep. 2008. Back to backwards and moving on: on agreement, auxiliaries and verb classes in sign languages. In Ronice Müller de Quadros (ed.), Sign Languages: spinning and unraveling the past, present and future (TISLR9), 530-51. Petrópolis/RJ. Brazil: Editora Arara Azul.
Rizzi, Luigi. 1986. Null objects in Italian and the theory of pro. Linguistic Inquiry 17 (3): 501-55.
Roberts, Ian and Andres Holmberg. 2010. Parameters in Minimalist Theory. In T. Biberauer, A., Holmberg, I., Roberts, and M. Sheehan (eds.). Parametric Variation: Null Subjects in Minimalist Theory. Cambridge, UK: Cambridge University Press.
Sandler, Wendy and Diane Lillo-Martin. 2006. Sign Language and Linguistic Universals. Cambridge, UK: Cambridge University Press.
Schlenker, Philippe. 2009. Donkey Anaphora in Sign Language II: The Presuppositions of Pronouns**.** Proceedings of the NELS 2009, Special Session on Pronouns.
Schlenker, Philippe. 2011. Quantifiers and Variables: Insights from Sign Language (ASL and LSF). In B. Partee, M. Glanzberg and J. Skilters (eds.), Formal Semantics and Pragmatics: Discourse, Context, and Models. The Baltic International Yearbook of Cognition, Logic and Communication 6, 2011.
Siewierska, Anna, 2011. Overlap and complementarity in reference impersonals: Man-constructions vs. third person plural-impersonals in the languages of Europe. In A. Malchukov and A. Siewierska (eds.), Impersonal Constructions. A cross-linguistic perspective, pp. 57–90. Amsterdam/Philadelphia: John Benjamins.
Siewierska, Anna and Maria Papastathi, 2011. Towards a typology of third person plural impersonals. Linguistics, 49:575–610.
Sigurðsson, Halldòr & Maling, Joan. 2010. The empty left edge condition. In M. Putnam (ed.) *Exploring Crash-Proof Grammars*, 59–86. Amsterdam: John Benjamins.
Sigurðsson, Halldòr. 2011. Conditions on argument drop. *Linguistic Inquiry 42*, 267-394.

[1] Although see Koulidobrova & Lillo-Martin (2016) for arguments against the 'personal' pronoun account.
[2] See Kouldobrova (2012) for arguments that TEND is best analyzed along the lines of the temporal adverbial *usually*.
[3] One way of modeling such a reading is (i) (see Moltman 2006, i.a.):
(i) $\forall$ x (x SIGN)
[4] We take *pro* to be the classic phonologically null pronoun (Roberts & Holmberg 2010).
[5] Grammaticality judgements recorded here indicate readings of interest. E.g., IX may be licit in a particular sentence but not on the impersonal reading; in such a case, IX is indicated with '*'.
[6] One of our consultants reports an intuition that 'the more impersonal the pronoun is, the shorter the arc.' This intuition is not immediately compatible with the analysis offered in the literature and in this paper in particular, nor have we seen a clear generalization in the data, despite the fact that some forms of $_3IX_{arc}$ clearly appear reduced in comparison with others. However, this comment does suggest that a careful examination of IX should continue, not only from the point of view of syntax, semantics, and pragmatics (as in the previous literature) but also in phonology/phonetics.
[7] Note, overt NPs are always possible except in the second clause of the conditional. This, of course, is not entirely surprising – such a configuration induces Condition C violation.

[8] Additionally, as mentioned in section 2 and discussed at length elsewhere, abstaining from the complexities associated with agreement has the potential to reveal the special properties of the language. In fact, by exposing what the language actually does without intervention of loci, we should be able to converge on the contribution of the loci themselves (Schlenker 2013, et seq.; Kunh 2015, et seq.). To that end, to the best of our ability, the data contained in this section represent predicates either uttered in neutral space or on the body of the signer.

[9] At this stage of cross-linguistic inquiry into sign languages, we eagerly expect both similarities and differences: after all, spoken language research has shown that even closely related languages *appear* to behave similarly in this domain but, upon thorough examination, they do not. An example of the sort is recorded in (i).

(i) 'The church was built in 1640'

a. Świątynię zbudowa**no** w 1640 roku. = *impersonal* [Polish]
church-f.ACC *build*-**no** *in 1640 year*

b. Cerkvu (bulo) zbudova**no** v 1640 roc'i. = *passive* [Ukranian]
church-f.ACC (*was*) *build*-**no** *in 1640 year*

(Maling & Sigurjónsdóttir 2002, et seq.)

[10] Note, however, that we have been using the term 'movement' by assumption, having provided no evidence for it at this stage.

[11] The manipulation did not affect the IX paradigm.

[12] Using the diagnostic tool advocated for elsewhere (see, e.g., AnderBois 2011 the references therein), each of the cases with SOMEONE vs. without was doubly tested with a sluice follow-up to ensure the availability of relevant readings.

[13] See the discussion against the overt argument in the second clause of a conditional in Koulidobrova & Lillo-Martin (2016).