

SELF: Intensifier and ‘long distance’ effects in American Sign Language (ASL)

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ABSTRACT:

I argue for a unified account of ASL reflexive *SELF*: a) the apparent long distance anaphor (LDA) in ASL is just that—apparent, and anaphors are strictly local; and b) the properties previously ascribed to *SELF* as a non-local anaphor are collateral to its being an adnominal intensifier. I claim that the LDA effect arises because the lexical item *SELF* is homophonous between a true local anaphor (*him-/herself*) and an adnominal intensifier, which can adjoin to *pro*. That the account of the reflexive along the lines of [*pro* + intensifier] is plausible is supported by a) the theory of intensifiers (Eckardt 2002); b) the theory of ASL pronouns (Lillo-Martin & Klima 1990); and c) the theory of null arguments in ASL (Lillo-Martin 1986, 1991). The account also independently captures otherwise “ill-behaved” “anaphoric” constructions in other *pro*-drop languages, such as Japanese.

Keywords: ASL, intensifier, long distance anaphor

1 Introduction¹

¹ The following conventions for ASL sentences are employed:

- ASL lexical items are glossed in all caps: LOVE
- Fingerspelling is indicated by dashes between capital letters: J-E-F-F
- Although there is quite a bit of variability in the literature, overt pronoun is often glossed in ASL as *IX*, with other glosses being *PT*, *PRONOUN*, etc. However, *IX* is not always pronominal in nature (cf. MacLaughlin 1997). In the data original to the paper, *PRONOUN* is reserved only for the clearly pronominal uses of *IX*, though data from the literature are replicated in their original form. There, I assume, with the authors, that in clearly pronominal contexts, *IX*=*PRONOUN*.
- The location of the sign in space (locus) is shown in small letters, connected to the lexical item by a dash: a-*SELF*; the interpretational index is given in subscript in italics: *SELF_i*
- In terms of provision of interpretational indices and loci, data from published works have been replicated in their original form; traditionally, the two are treated as the same but differentiated here.
- If the sign is reported to be obligatorily two-handed (and might, in principle, involve more than one lexical items), *DH*: and *NDH*: stand for the dominant and the non-dominant hands, respectively:
DH: POSS
NDH: IX
'This is yours'
- *ICL* is the sign for a “person” classifier.
- Non-manual markers (particular facial expressions associated with particular grammatical constructions) are indicated by a line above the lexical item(s) involved ending with the abbreviation for the type of constriction, e.g.
————^tfor topicalization and —————^a for a polar interrogative:

- (i) $\overline{\text{MARY}}^t$
'As for Mary...'

In the 1980-1990's, some ink was spilled in ASL linguistics over the precise account of *SELF*. The sign is executed with the A-dot handshake, generally² uttered in the location associated with and facing the referent (see *Figure 1*).



Figure 1

The construction is usually glossed/translated as a reflexive (i.e. anaphoric) item, but it also occurs in contexts not immediately predictable from the point of view of an anaphor. For instance, Fischer & Johnson (1982) call it a “definiteness marker”; Wilbur (1996) analyzes it as a “specificity/focus marker”; Mathur (1996) labels the lexical item a “presuppositionality marker”, relying largely on Diesing (1992). Contrary to all these approaches, I argue that these non-reflexive aspects of the behavior of *SELF* can all be subsumed under one analysis—that of the adnominal intensifier *a là* Eckardt (2002). In this respect, the approach appeals to the original suggestion in Lee et al. (1997)—that *SELF* serves an emphatic function. To be more precise, once we allow for a possibility of adnominal intensification of an empty category the account proposed in Eckardt extends to cover the otherwise puzzling data of ASL *SELF*. The paper is structured as follows: in section 1, I provide a quick overview of the data in question and the analyses it evoked in the field, as well as an independent syntactic puzzle; section 2 offers the solution I argue to be correct; in section 3, the solution is defended on the basis of other languages and extended to cover the original data from section 1; section 4 concludes the paper.

1.1 The puzzle of *SELF* #1: A variety of non-reflexive readings/uses

Much research has been done to account for the distribution of *SELF* in ASL, but all of the approaches face the same problem—subsuming all instances of the usage of *SELF* under one

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- (ii) $\frac{\text{YOU KNOW JEFF}}{\text{‘Do you know Jeff?’}}$ ^q

² In section 3.4 I will capitalize on the exception: in some contexts, *SELF* can be uttered in a space in front of the signer not associated with any particular referent (*neu-SELF*).

analysis without additional stipulations. In this respect, I intend to unify previous observations by advocating an analysis that promises to cover all the data thus far noted in the literature.

ASL *SELF* is generally considered to be a reflexive and is translated as the English *x-self*:

- (1) a. a-J-O-H-N THINK ABOUT a-SELF
 ‘John is thinking about himself’ (Liddell 1980: 171)
- b. $\overset{t}{\text{LAUREL}_i}$ a-IX_i LOVE a-SELF_i
 ‘As for Laurel, she loves herself’

But *SELF* also appears in other contexts, typically not related to anaphors. For example, it has been claimed that *SELF* (italicized in the relevant examples for exposition purposes) can function as/appears in contexts consistent with a relative pronoun:

- (2) a. LONG-AGO KING, a-*SELF* LOVE PIE, DECIDE TAKE-UP PIE CONTEST
 ‘Long ago, a king, who loved pies, decided to hold a pie contest.’
 (Liddell 1980: 171)
- b. DH: ME WANT PERSON_i *SELF*_i MUST GOOD CONVERSATION,
 NDH: ICL
 ‘I want a person who is a good conversationalist,
- DH: CLEAN HOUSE UNDERSTAND OK ME OUTSIDE MOW-LAWN.
 cleans the house, understands that it is okay for me to mow the lawn.’
 (Fischer 1987: 79)

Fischer & Johnson (1982) review other-than-reflexive uses of *SELF* and argue that the lexical item is used to mark definiteness; Wilbur (1996) looks more closely at their data and establishes that what *SELF* marks is not definiteness, but, rather, specificity. Her arguments involve the use of *SELF* to mark indefinite specific referents and the association of *SELF* with contrastive focus. The illustration of the former is provided in (3) and of the latter in (4)-(5).

- (3) SO-FAR BEAR *SELF* KILL ONE MAN *SELF* CAMP INNOCENT
 ‘So far, the bear killed the man, who was an innocent camper’
- (4) A: Who was driving the car?
 B: KAY *SELF* [context where other driver(s) are available from discourse]
 B: KAY THAT / **SELF* [no previous mention of drivers in discourse]
 ‘Kay was’ (Wilbur 1996 [13], [9])
- (5) a. *JOHN a-*SELF* MAKE 3 PIE, NOT-YET CLEAN KITCHEN
 ‘John, who made three pies, hasn’t yet cleaned the kitchen’ (Liddell 1980: 172)
- b. JOHN a-*SELF* FALL-DOWN LAST-NIGHT, NOT JOIN SKI

‘John, who fell down last night (in contrast to other people), did not join for skiing.’
(Wilbur 1996 cited in Mathur 1996 [15b])

Mathur (1996) extends the proposal and argues that *SELF* is a presuppositionality marker. He follows Diesing (1992) in the assumption that the subject of individual-level predicates is base-generated in Spec,IP. He further argues that *SELF* can only be attached to NPs in Spec,IP, and, thus, only the subjects of an individual-level predicate can be marked by *SELF*. He provides evidence that this prediction is borne out: in (6), *pro* (coreferential with MAN) is the subject of an individual-level predicate, and on the neutral reading ((i.)), (6b) is impossible. The only available interpretation is (6b)ii.—“presuppositional”

- (6) a. LAST NIGHT MEET MAN *pro* a-*SELF* GROW-UP TEXAS
i. ‘Last night I met a man who grew up in Texas.’
ii. ‘Last night I met a man who (out of a presupposed group) grew up in Texas.’
- b. LAST NIGHT MEET MAN *pro* a-*SELF* FALL DOWN
i. *‘Last night I met a man who fell down.’
ii. ‘Last night I met a man who (out of the presupposed group) fell down’
(Mathur 1996 [12])

I will return to the specifics of Mathur’s analysis in section 3.3.2 where I will demonstrate that although both Mathur’s and my accounts overlap at the core cases (both successfully accounting for the basic facts of ASL *SELF*), the analysis I advocate goes further in capturing facts that are not necessarily (or, at least, not immediately) covered by the view of *SELF* as a presuppositionality marker.

1.2 The puzzle of *SELF* #2: *SELF* as a long-distance anaphor.

Apart from the semantically-related questions about the meaning of *SELF* (or, more faithfully to the history of the inquiry, how *SELF* marks the NP / VP it is associated with), a syntactic puzzle has been observed in literature as well: in the subject position, *SELF* appears to act as a long-distance anaphor (henceforth LDA), of, say, the Scandinavian or Chinese type.

- (7) a-LOWEL_i FEEL a-*SELF*_i / a-PRONOUN_i INTELLIGENT³
‘Lowel thinks that he/self is intelligent.’ (Lillo-Martin 1995: 166)
- (8) a. Guðrun_i skilti at Martin hevði skrivað eitt bræv til sin_i
Gudrun understood that Martin had written a letter to self

³ Loci (the actual locations in space where the sign is uttered) do not appear in the published example (the index “i” is meant to show reference here (Lillo-Martin & Klima 1990)), but it is crucial that the sentence is only grammatical if *LOWEL*, *SELF*, and the *PRONOUN* are all signed in the same locus “a”. This becomes relevant in section 3.4, where the NP does not bear locus and the facts change.

‘Gudrun_i understood that Martin had written a letter to her_i.’

[Faroese](Hellan 1991: 55)

- b. Zhangsan_i renwei Lisi_j hai-le ziji_{ij}
Zhangsan think Lisi hurt-ASP self
 ‘Zhangsan_i thought that Lisi_j hurt himself_{ij}.’

[Chinese](C.-T. J. Huang & Tang 1991)

However, compared to other LDAs discussed in the binding literature, ASL *SELF* has a few markedly different characteristics: a) ASL *SELF* allows non-subject antecedents while other LDAs typically must be bound by a subject⁴ ((9a) vs. (9b)), the antecedent of ASL *SELF* can appear only one clause up while true LDAs can have more remote antecedents ((10) vs. (9b)), and c) ASL *SELF* in the object position cannot be bound long-distance while other LDAs remain long-distance in the object position ((11a) vs. (11b)).

- (9) a. SENATE_i PERSUADE WORKER_j SELF_{ij} WILL PAY TAX HIGH

‘Senate persuaded the worker that it/he_j pays high taxes.’

(adapted from Lillo-Martin 1995: 167)

- b. Wangwu_i shuo Zhangsan_j zengsong gei Lisi_k yipian guanyu ziji_{ij,*k} de wenzang.
Wangwu says Zhangsan give to Lisi one about self DE article
 ‘Wangwu_i says that Zhangsan_j gave an article about him/himself to Lisi_k.’

[Chinese](Cole et al. 2006 [41])

- (10) LOWEL_i THINK WORKER_j FEEL SELF_{*ij} RIGHT.

‘Lowel_i thinks that the worker_j feels *he_i / he_j right.’

(Lillo-Martin 1995: 166)

- (11) a. MARY_i THINK JOHN_j KNOW PEDRO_k LIKE SELF_{*i,*j,k}.

‘Mary_i thinks that John_j knows that Pedro_k likes himself_{*i,*j,k}.’

- b. Zhangsan_i zhidao Lisi_j renwei Wangwu_k zui xihuan ziji_{ij,k}.

Zhangsan know Lisi think Wangwu most like self

‘Zhangsan_i knows that Lisi_j thinks that Wangwu_k likes himself_k/him_{ij} most.’

[Chinese](Cole et al. 2006 [11])

We could, in principle, propose a new type of LDA, but obviously, such a move would be undesirable. Instead, I will argue that ASL *SELF* fits well into the standard classification of anaphoric elements, and the appearance of the long-distance effects is just that—appearance. In what follows I show that the apparent long distance behavior of the reflexive can be accounted for by treating *SELF* as being ambiguous between a true, *himself*-type, local anaphor and a complex

⁴ Exceptions to subject orientation have been noted in the literature; however, the non-subject orientation of such cases are argued by the authors to be outside the domain of Binding Theory, i.e. they are logophoric in nature (cf. Yu 2000 and references therein).

pronominal element⁵, namely $[pro + SELF]$ ⁶ where *SELF* is an intensifier (in the sense of Eckardt 2002) modifying a phonologically null pronoun. Hence, the latter will be a pronominal, rather than an anaphoric element. Along this line of argumentation, the “LDA” *SELF* is the ASL counterpart of the German *selbst*—an adnominal intensifier adjoined to a (pro)nominal element.

The analysis of *SELF* as an adnominal intensifier will force me to return to the observation originally made by all of the aforementioned researchers in that *SELF* is associated with definiteness, specificity/focus, “presuppositionality,” and contrastiveness. However, contrary to the other analyses, I will argue that such contexts are not the primary functions of *SELF*; rather, they are a corollary to its denotation as an ID(entity) function. In the following sections, I show that an analysis of *SELF* as an ID (Moravcsik 1972) predicts the properties observed in the literature and also accounts for a syntactic puzzle noted in Lillo-Martin (1995). Thus, the account of ASL *SELF* I propose pays homage to the original suggestion in Lee et al. (1997)—that *SELF* in LDA contexts is “emphatic” (Lee et al. 1997). The contribution of this paper, then, is a) formalizing this intuition along the lines of adnominal intensification (Eckardt 2002) and b) deriving the phenomena noted in the literature on *SELF* from the account.

2. Contribution of the adnominal intensifier analysis (Eckardt 2002)

Following Moravcsik (1972), Eckardt (2002) argues that intensifiers like the German *selbst* denote an identity function from the domain of individuals to itself:

- (12) a. ID: $De \rightarrow De$
 $ID(a) = a$ for all $a \in De$
- b. $[[[Otto]_{EN} \text{ selbst}]] = ID ([[Otto]]) = [[Otto]]$ (Eckardt 2002: 380)

⁵ A possibility has been suggested by a few researchers and cashed out by Bergeton (2004) for Danish that a local anaphor is always comprised of a REFLEXIVE (something like a SE-anaphor item) and an adnominal intensifier. That is, on his account, there is only one *SELF*—the intensifier. Such an approach leads to a few predictions associated with ASL *SELF*. However, I leave the issue for future research.

⁶ Mathur (1996) and Lee et al (1997) both propose $[pro + SELF]$ as well. However, Mathur’s analysis does not involve an adnominal intensifier; rather, he analyzes *SELF* as a presuppositionality marker. On the other hand, Lee et al. state that it is plausible to analyze (8) as involving $[pro + SELF]$ where *SELF* is used “emphatically”. From the example they provide, one infers that by “emphasis” they mean “adnominal intensification”—consistent with the argumentation in this paper

- (i) LOWELL FEEL $pro, SELF, INTELLIGENT$
 Lowell feels that (he) himself is intelligent. (Lee et al 1997[57])

However, the authors stop there—they neither offer a formal account of this “emphatic” expression nor derive any potential consequences for the structure of ASL (and other languages which might have similar items in their lexicon), apart from the lack of LDA.

That is, applied to an individual, ID will give back the individual—i.e. the intensifier by itself contributes no truth-conditional meaning to the sentence. It will, however, become meaningful exactly when it is in focus; this occurs not because of the semantic meaning of the intensifier but, rather, because of the involvement of focus:

- (13) a. Let f be a function on D_e . Then $\text{Lift}_1(f) := f: D_{((e, t), t)} \rightarrow D_{((e, t), t)}$ is defined as follows:
If $Q \sqsubseteq D_{((e, t), t)}$ is a principal ultrafilter, i.e. of the form $Q = \lambda P(P(a))$ for some $a \sqsubseteq D_e$, then $f(Q) := \lambda P(P(f(a)))$. Else, f is undefined.
- b. $[[\text{selbst}]]_f = \{\text{Lift}_n(f) \mid f \text{ is a contextually salient alternative to ID}\}$ for appropriate lift Lift_1 – Lift_4 .
- c. Let a be the referent of the NP linked to *selbst* and let $\{f_1, f_2, f_3, \dots, f_k\}$ be salient alternatives to ID in the given context. $\text{Alt}^*(a) = \{f_1(a), f_2(a), f_3(a), \dots, f_k(a)\}$ will be called the induced set of alternatives to a in D_e .

(Ibid.: 382)

In essence, (13) states that *selbst* adjoined to an individual results in the meaning of that individual being contrasted with some other potential individuals in the set (of alternatives). Thus, the different readings usually associated with the intensifier construction (cf. Siemund 2000, König & Siemund 2008) arise from *selbst* being focused and, hence, part of a focus construction⁷. This approach to adnominal intensification is fairly standardly assumed in the literature.⁸

⁷ For instance, (i) demonstrates how one of the interpretations generally associated with *selbst*—centrality—is derived:

- (i) Nur der König SELBST warf einen Groschen in die Büchse.
only the king himself threw a coin into the box
'Only the king himself threw a coin into the box.'
- i. $[[\text{selbst}_f]]^f = \{g \mid g \text{ maps king onto person in king's periphery}\}$
ii. $[[\text{der König selbst}_f]]^0 = \text{king}$
iii. $[[\text{der König selbst}_f]]^f = \{x \mid x = g(\text{king}) \text{ for some } g \sqsubseteq [[\text{selbst}_f]]^f\}$
iv. $[[\text{der König selbst}_f \text{ warf einen Groschen in die Büchse}]]^0 = \$y\$z(\text{Coin}(y) \ \& \ z = \text{box} \ \& \ \text{Throw-in}(\text{king}, y, z))$
v. $[[\text{der König selbst}_f \text{ warf einen Groschen in die Büchse}]]^f$
 $= \$y\$z(\text{Coin}(y) \ \& \ z = \text{box} \ \& \ \text{Throw-in}(g(\text{king}), y, z) \mid g \sqsubseteq [[\text{selbst}_f]]^f)$
vi. $[[\text{nur der König selbst}_f \text{ warf einen Groschen in die Büchse}]]^0$
Assertion:
 $\forall p (p \in [[\text{der König selbst}_f \text{ warf einen Groschen in die Büchse}]]^f \ \& \ p \neq [[\text{der König selbst}_f \text{ warf einen Groschen in die Büchse}]]^0 \rightarrow \neg p)$
Presupposition:
 $[[\text{der König selbst}_f \text{ warf einen Groschen in die Büchse}]]^0$
 $= \$y\$z(\text{Coin}(y) \ \& \ z = \text{box} \ \& \ \text{Throw-in}(\text{king}, y, z))$
vii. Paraphrase of (vi):
Nobody in the periphery of the king threw a coin into the box.

A few consequences fall out from the semantics argued for by Eckardt: the definition in (13) predicts exactly a) what the intensifier can combine with—adnominal intensifiers must modify definite expressions; and b) why the set of salient alternatives to the intensifier’s associate in a given context arises. That is, when the intensifier is in focus, traditional focus semantics (Rooth 1985) provides the previously noticed multitude of readings “contributed” by the intensifier: bringing the individual from the periphery to the center, the (lack of) surprise, additive vs. exclusive reading, and others⁹.

Relating the aforementioned to the main point of inquiry in this paper, I will argue that ASL *SELF* has the meaning of the German *selbst* above—an identity function which can combine with individuals (definites and specific indefinites) and which adds nothing to the meaning of the sentence truth-conditionally. The aforementioned implies that the account of the puzzling properties of *SELF* outlined above will be identical to the account of *SELF* in (15)—adjoined to a pronominal, the adnominal intensifier *SELF* induces the reading contrasting the original associates of the intensifier with the possible alternatives.

- (14) b. JOHN_i FEEL IX_{i,j} BECOME HUMAN WILL [UNDERSTAND] IX_{i,j} KISS PRINCESS
 ‘John_i thinks that he_{i,j} will become human...if he_{i,j} (*himself_{i,j}, out of the people just mentioned) kisses the princess.’
- a. JOHN_i FEEL IX_{i,j} BECOME HUMAN WILL [UNDERSTAND] IX_{i,j} SELF_{i,j} KISS PRINCESS
 ‘John_i thinks that he_{i,j} will become human... if he_{i,j} *(himself_{i,j}, out of the people just mentioned) kisses the princess.’
- (Mathur 1996 [9])

This is achieved not by adjunction of *SELF*, however; rather, it is the involvement of the focus semantics that contributes the “emphatic” and “contrastive”/“presuppositional” interpretations of the associate of *SELF*. On this view, then, all of the ASL examples above,

Presupposed: The king did throw a coin into the box.

(Eckardt 2002: 385)

⁸ There have been arguments in literature against the precise implementation of the involvement of focus in intensification (cf. Hole 2002, Bergeton 2004, Cunningham 2009). I remain agnostic in terms of details. Any analysis that exploits the notion of an identity function and participation of focus in providing a set of alternatives to the associate will be compatible with the analysis of ASL *SELF* I am pursuing.

⁹ A number of languages (English included) exhibit a construction in which the adnominal intensifier is used instead of an overt pronominal, and which, admittedly, surfaces as identical to [*pro* + intensifier] but denotes a *prominent role*, i.e. “the master/lady of the house” (König & Siemund 2006):

(i) Herself is not too good again.

(König & Siemund 2006: 104)

Although the construction in (i) is most likely historically related to the adnominal intensifier as defined in (13), I put the issue aside, since pursuing the analysis will involve making claims about notions orthogonal to the main argument in this paper, such as the existence of *pro* in a language like English. Thus, I put contexts like (i) aside.

except for (1), (2), and (11), where *SELF* is a local anaphor, contain instances of an adnominal intensifier adjoined to a null element.

In what follows, I will first show that the intensifier-based analysis of certain anaphoric phenomena is a plausible track to take. Having thus set the context for the approach, I will then demonstrate that a wide variety of observations about the distribution of the ASL *SELF* can all be subsumed under the analysis advocated here.

3. Account: [*pro* + adnominal intensifier] = “LDA”

3.1 Context: [*pro* + *zisin*] = “LDA” in Japanese

In this section, I will show that employing an intensifier analysis in the account of unexpected long distance reference proves fruitful in explaining otherwise puzzling data.

In many languages, intensifiers are morphologically related to reflexives¹⁰. See, for instance (15) and (16):

- (15) a. She hit *herself*.
 b. She loves the island *itself* (rather than the people or the culture).
- (16) a. Zhangsan_i zhidao Lisi_j renwei Wangwu_k zui xihuan *ziji*_{i,j,k}. = (11b)
Zhangsan know Lisi think Wangwu most like self
 ‘Zhangsan_i knows that Lisi_j thinks that Wangwu_k likes himself_k/him_{i,j} the most.’
 [Chinese](Cole et al. 2006 [11])
- b. bùzhāng zìjǐ huì lái huānyíng wǒmen
minister INT will come welcome us
 ‘The minister himself will welcome us.’ [Chinese](Gast & König 2006: 235)

In some languages, the distinction between the intensifier and the anaphor is difficult to see on the surface, since there is only one form of each. However, other languages illustrate the point. Here, Japanese—a language that allows null elements and has a rich inventory of anaphoric expressions—serves as an illustration of the fact that the intensifier analysis can potentially derive data that are otherwise problematic in terms of anaphoric dependencies. Along these lines, I argue in this section that an intensifier analysis as proposed here captures some “ill-behaved” data in Japanese.

Japanese has three different types of anaphor: *zibun*, *zibun-zisin*, and *kare-zisin*.

¹⁰ See Gast et al. (2003), Bergeton (2004), and Gast & König (2006) and references therein on the expansion of this idea.

Zibun is subject oriented and can be bound non-locally (examples in (17)-(20) are adapted from Katada 1991, cited in Richards 1996):

- (17) Daremo_i -ga [John-ga zibun_i-o semeta to] itta.
Everyone-NOM John-NOM self-ACC blamed that said
 ‘Everyone_i said that John blamed him_i.’

Zibun-zisin is also subject-oriented but must be bound locally:

- (18) John_i-ga [Bill_j-ga Mike_k-n zibun-zisin_{*i,j,*k}-no koto -o hanasita to] itta.
John-NOM Bill-NOM Mike-DAT self- GEN matter-ACC told that said
 ‘John_i said that Bill_j told Mike_k about himself_{*i,j,*k}.’

And *kare-zisin* must also be bound locally but can be bound by non-subjects:

- (19) John_i-ga [Bill_j-ga Mike_k-ni kare-zisin_{*i,j,k}-no koto -o hanasita to] itta.
John-NOM Bill-NOM Mike-DAT him-self- GEN matter-ACC told that said
 ‘John_i said that Bill_j told Mike_k about himself_{*i,j,k}.’

Now consider (20):

- (20) Taroo_i-ga [zibun_i- / zibun-zisin_i- / kare-zisin_i-ga soko-no itta to] itta.
Taroo- NOM self- NOM there went that said
 ‘Taroo_i said that he_i went there.’

Having taken into consideration (17)-(19), and the theoretical explanations thereof, parts of (20) are surprising: assuming that binding into a finite clause is non-local, only the long-distance *zibun* should be allowed in this context. However, (20) is judged grammatical in its entirety.

On the other hand, the possibility of (20) is predicted without any further assumptions if *zisin* in (20) is an intensifier adjoining to the long distance anaphor *zibun* or a true pronoun *kare*. As such, it is expected to obligatorily induce a set of alternatives that arise from the focus semantics (as suggested by Eckardt, see (12)-(14)). This would mean that *kare zisin* in (20) can, at least in principal, but need not, refer to Taroo¹¹. *Zibun*, however, must be bound by a subject, namely, Taroo. This is precisely what we obtain: according to my informants, the best translation of the relevant parts of (20) is captured in (20’).

- (20’) Taroo_i-ga [zibun_i-zisin- / kare_i-zisin-ga soko-no itta to] itta.
 ‘Taroo said that he himself (rather than his friends) went there.’

Let me add one more piece of evidence that the analysis is on the right track. It is well-known that Japanese has null arguments:

¹¹ But see section 3.2 on how far up the reference can go in an unmarked context.

- (21) Taroo-wa Hanako-ni kare-ga / e ¹² sono syoku-ni kanozyo-o / e suinsensuru to itta
T-TOP H-DAT he-NOM / e that position-to her-ACC / e recommend that said
 ‘Taroo said to Hanako that he would recommend her for that position.’

If *zisin* in (20) is actually an intensifier, then adjunction of *zisin* to a (covert) element of type < e > will result in the interpretation that forces a set of alternatives to the aforementioned element. That is, the contribution of *zisin* in (20) is expected to be only the alternatives to the individual it modifies, not binding. In that respect, (22) confirms the prediction:

- (22) Taroo_i-wa [e_i -zisin-ga soko-no itta to] itta
T-TOP self-NOM there went that said
 ‘Taroo said that he *(himself rather than his friends) went there.’

In sum, in Japanese, on a par with some 94 out of 168 languages reported by König & Siemund (2008), a reflexive can be ambiguous between an anaphoric expression and an adnominal intensifier. Further, if treated as the intensifier, the problem of long-distance binding of otherwise local anaphors in Japanese disappears. Moreover, the [e + intensifier] scenario, at least in the subject position, creates a surface effect of LDA. That is, Japanese *zisin* contributes to the ambiguity between the local anaphor and an adnominal intensifier¹³. In that respect, I will argue, it works analogously to the ASL *SELF*.

3.2 Predictions of the adnominal intensifier account of *SELF*

Once we allow for a possibility of the adnominal intensification of a null element and adopt the adnominal intensifier analysis for ASL *SELF*, a few predictions immediately arise:

- a) the intensifier *SELF* will combine only with individuals—i.e. the “LDA” *SELF* will occur only in contexts that allow definites;
- b) the “LDA” *SELF* will be possible only in context that allow a phonologically null argument of type < e > and impossible otherwise;

¹² It is not a trivial matter whether the empty element e in (21) is *pro* or an *elided argument* (cf. Oku 1998, Saito 2007, Takahashi 2008a). However, nothing in the analysis I am proposing hinges on what the element is; either one is of type < e >.

¹³ Turkish, for instance, is a language that also patterns with ASL and Japanese—the Turkish reflexive *kendisi* acts as an LDA in the (embedded) subject position and as a local anaphor in the object position (Kornfilt 1984). Moreover, the interpretation of the “LDA” *kendisi* obligatorily induces a set of alternatives to the original referent (Kubus, p.c.) — precisely what I have been claiming to be occurring in ASL. More research on Turkish data is needed, however (cf. Kornfilt 2001, Sener & Takahashi 2009). Moreover, Hole (2008) independently argues for an intensifier analysis to certain cases of the Chinese *ziji*. Although a larger-scale empirical study is necessary to determine whether all unexpected LDA effects can be reduced to a pronominal intensifier structure, the sample of languages considered here is sufficient to provide additional support for the plausibility of the intensifier analysis pursued in this paper.

- c) there will always be a semantic difference (to the degree that adjoining the intensifier to an X makes a difference) between two otherwise identical sentences—one with and the other without *SELF*; this difference will be contributed by the focus semantics;
- d) complementary distribution of a pronoun and the “LDA” *SELF* (Binding Conditions A vs. B (Chomsky 1981)) is not expected;
- e) the reference of [*e*(mpty category) + *SELF*] should not be restricted to subject antecedents;
- f) ASL-type “LDA” *SELF* is expected to occur in other *pro*-drop languages that also have an intensifier that can combine with a pronominal;
- g) in positions in which the intensifier is disallowed, the “LDA” *SELF* will be disallowed as well.

As will be seen below, not only are the predictions confirmed by empirical evidence, the account also derives some data which would otherwise be puzzling, and requiring an independent explanation.

3.3 The intensifier *SELF* will combine only with individual-denoting expressions.

This section addresses possible associates of *SELF* as an adnominal intensifier. One consequence of the Eckardt-style account of the construction is that *SELF* is predicted to be able to adjoin to elements of type <*e*> (or anything that can become <*e*>, once the principal ultrafilter is applied, see (13)); adjunction of *SELF* will give rise to a new shade of meaning—a set of possible alternatives. In section 3.1, I claimed that the Japanese adnominal intensifier *zisin*, much like its ASL counterpart *SELF*, can modify a null pronominal thereby creating a construction which, in turn, can masquerade as LDA. Semantically, this analysis is consistent with the original definition in (13): the (phonologically null) pronominal is of type <*e*>. However, the ASL data below demonstrate that *SELF* can also modify a quantifier phrase and an indefinite, which, at least on the surface, is not immediately extendable from the theory of adnominal intensification in Eckardt (2002). In the following sections I show that this too is resolvable: the solution is contingent on a) the denotation of the quantifier in question, and b) the type of indefinite allowed as the associate of the intensifier. Overall, this section covers the “non-reflexive” uses of *SELF* reviewed in section 1.1: as a definiteness marker (cf. Fischer & Johnson 1982), a specificity/presuppositionality marker (cf. Wilbur 1996, Mathur 1996), and a relative pronoun (cf. Liddell 1980 and Fischer & Johnson 1982). I will argue that the observations expressed in the literature,

though ultimately correct, no longer require separate accounts for some of the phenomena—the aforementioned interpretations of *SELF* arise from its being an adnominal intensifier.

3.3.1 Quantifiers as associates of *SELF*

One prediction of the adnominal-intensifier account concerns the kinds of “associates” the adnominal *SELF* will modify: the semantics of the intensifier will allow only definite NPs and their pronominal counterparts. This statement is supported by the following data from English:

- (23) a. He himself opened the office.
 b. John himself opened the office.
 c. *A woman herself opened the office.

The analysis also excludes a quantifier phrase modified by the intensifier:

- (24) a. *Jede Mutter SELBST schaltete den Fernseher ab.
 ‘Each mother herself switched off the TV.’
 b. *Die meisten Mütter SELBST schalteten den Fernseher ab.
 ‘Most mothers themselves switched off the TV.’

[German](Eckardt 2002: 379)

Turning to ASL, notice that in (25a), the prediction expressed by the definition in (13)—that a [QP + intensifier] should be impossible—holds up, but (25b) appears to contradict the analysis. Here, *SELF* is adjoined to a quantifier phrase *EACH MOTHER*—traditionally not a type-⟨e⟩ element.

- (25) a. \overline{t}
 *TV SOME-ONE MOTHER SELF TURN-OFF
 ‘A/Some mother herself turned off the TV.’
 b. \overline{t}
 TV EACH MOTHER SELF TURN-OFF¹⁴
 ‘All mothers themselves / each mother herself turned off the TV.’

However, in the remainder of this section I argue that the problem is only apparent and does not constitute a counter-argument to the intensifier analysis of *SELF*. In short, I will offer two venues

¹⁴ The utterance is obligatorily two-handed:

(i) \overline{t}
 DH: TV EACH MOTHER SELF TURN OFF
 NDH: ICL

This point, however, is immaterial for the discussion at hand (though explored at length in Author in prep. in view of claims in Chang et al 2010).

for accounting for (25b), both of which are contingent on a denotation of the quantifier itself, thus shifting the burden of proof into a different domain. In that, neither Eckardt's approach to adnominal intensification nor its application to ASL *SELF* will suffer.

According to Eckardt, (23c) and (24a-b) are accounted for in the same manner; there is no difference between these examples in German. However, according to my informants, a sharp difference between the two is reported for other languages. Particularly, in the scenario below, universal quantifiers are judged grammatical by native speakers of English¹⁵:

- (26) Every month, a small town holds numerous gallery openings. The artists whose work is being shown during that month hardly ever come; rather, they send representatives. This month however, the town celebrates its 100th anniversary of Women in the Arts, and the town requests that all artists whose work is being exhibited come for the openings in person.

Each artist herself (...and not her representative...) will show up this month.

In the remainder of this section I present two alternative directions for an analysis, each of which is independently plausible but also requires further support.

The problem of an intensifier adjoined to a quantifier (a non-type <e> element) disappears if one assumes that the aforementioned examples involve QR. That is, although the quantifier phrase in (26) is clearly not type <e>, its trace is. This would mean that for the relevant readings to arise, the quantifier must bind a variable in the contextual set of alternatives (C):

- (26)' Each artist 1[[t1 herself(C1)] will show up this month]

Although this guarantees that we have a relevant set of alternatives for each artist in (18), the question remaining would be why QR is impossible in (23c) and (25a)¹⁶. Although this question does not appear insurmountable, I would like to present a different option, namely to appeal to a special semantics of the universal quantifiers in (25b) and (26).

The paradigm in (25) poses a question: why should existential (cf. (25a)) be disallowed while universal ((cf. (25b))) is fine? In fact, the English sentence in (26) provides a clue: the paraphrase of *each artist* here is *all the artists* and, crucially, not *all artists*:

- (26)'' All *(the) artists themselves will show up this month.

¹⁵ In principle, it is plausible that the intensifier in (25b) and (26) is not adnominal; rather, it adjoins to I', for instance. However, this would then leave open the question why the intensifiers in (23c) and (25a) cannot be adverbial. Thus, something else would have had to be said about the semantics of the intensifier, at least in conjunction with a quantifier. This is not the route pursued here.

¹⁶ It is, in fact, possible that the reason quantifiers are often odd with intensifiers is the difficulty of coming up with such a set for every alternative. I thank Jon Gajewski for bringing this point to my attention.

Brisson (1998, 2003) argues that in such contexts, *all* is not a determiner but an adverbial modifier¹⁷. Her analysis is contingent on the inherent plurality of *all* as well as its association with a definite subject. Here, ASL parallels English: the only available interpretation of (25b) is that of a previously defined set of mothers—something akin to a partitive construction.

So, a question arises how, precisely, does *each* turn into *all the* in contexts like (26)¹⁸. This question, however, is now directed at Brisson's account of *all*, not the intensifier account of *SELF*. Suffice it to say that the problematic (25) patterns with [*all the* NP.PL] in Brisson, where the quantifier-looking element combines with a plural definite.

On that note, we are faced with two possible lines of inquiry awaiting further evidence: it is either a) QR of certain universal quantifiers, or b) a particular semantics of quantifiers expressed as *each* that allow for the possibility of an intensifier to be associated with certain quantified expressions. Note that the (im)possibility of intensifier adjunction creates an independent testing ground for each of the analyses in terms of both semantics and syntax. I leave the precise disambiguation of the two alternatives for future research, bringing forth only the fact that I have now reconciled the distribution of [QP + intensifier] along the lines of Eckardt (2002). That is, the crucial point here is that the seemingly problematic (25) has been accounted for under the auspices of the adnominal intensifier's adjunction to a definite expression. In other words, *SELF* does not mark definiteness, per se (contra Fischer & Johnson 1982); rather, the intensifier adjoins to definites.

By the same token, the analysis I am pursuing here immediately explains another puzzle, namely why *SELF* can appear in contexts which otherwise only allow relative pronouns (i.e. that *SELF* seems to be able to head a relative clause):

- (27) a. FUNNY WHAT IX MAN *SELF* HUNTER IX REALLY WANT THAT BEAR
FOR HIMSELF
'It was funny how this man, who [himself] was a hunter, wanted the bear for himself.'
(Wilbur 1996 [13])
- b. ME LOOK-FOR *e SELF_i* WORK HARD, NEXT-ON-LIST *SELF_i* SOCIAL
WORK MAJOR POSSIBLE, THAT MORE *i-j* SAME JOIN RESEARCH

¹⁷ A new issue arises, however, should we adopt Brisson's account. The account of the adverbial *all* crucially rests on two observations: that *all* a) must be plural (like the NP it modifies), and b) is clearly different from *each* and *every*, which, unlike *all*, do not allow for a collective interpretation. The ASL data in (25) confirm the former: *EACH* is, in fact, inherently plural in its form; however, the latter observation is, obviously not satisfied. The problem here is contingent on the fact that *all* is compatible with a collective interpretation while *each/every* is usually not. But before abandoning this line of reasoning all together, I submit (26)—namely that even in English, [*every* NP.SG] can behave like [*all the* NP.PL]. Further, (26) is compatible with a collective reading where all the artists were showing their work at the same gallery.

¹⁸ In that respect, the sharp dividing line between *every/each* and *all* (Brisson 1998, 2003) may have to be abandoned.

‘I am looking for someone who [himself/herself] works hard, possibly a social work major [himself/herself], more of this type of things, so that we could do some research together.’

(Fischer 1987: 80)

If the sentences above manifest relative clauses,¹⁹ then *SELF* is adjoined to the trace of a silent relative pronoun, both of which are type <e>. Again, yet another puzzling characteristic of *SELF* has been subsumed under the intensifier analysis.

3.3.2 Indefinites as associates of *SELF*

By adopting the intensifier analysis for ASL *SELF*, I have essentially suggested that the characteristics of *SELF* that have been recorded in the literature (i.e. definiteness-, focus-, presuppositionality-marking, and LDA effects) are all a corollary of its function as the ID. In the discussion in the previous sections, a conclusion arose—though implicitly—that definiteness (Fischer 1987) is in the picture because intensifiers only combine with definites. What has not been accounted for, at least in any straightforward manner, is the set of observations concerning the fact that *SELF* can appear with indefinites. However, in the remainder of this section I will argue that this too is subsumed under the Eckardt-style analysis: the problematic indefinites are specific indefinites, and the account Eckardt offers covers specific indefinites.

Let us take a look closer at the indefinites in question:

- (28) ONE MAN SELF FALL-DOWN
 ‘A/one man fell’

Since I claim—somewhat following the line of argumentation provided by Mathur—that (in the “problematic” examples) *SELF* adjoins to *specific* indefinites only and to definites otherwise, it should first prove fruitful to define what is meant here by *specific indefinites*. In that, I follow Enç (1991): specific indefinites are NPs whose existence is presupposed.

¹⁹ Note that this particular suggestion carries its own consequences that await further testing: thus far, there has been no evidence in the literature that ASL has a relative pronoun (and that relative clause structure in ASL mirrors that of English), although it seems clear that both head-external and head-internal relative clauses exist (see Pfau & Steinbach 2004 for overview). This, however, does not preclude the existence of a relative pronoun in a covert form, considering the possibility of null pronouns in ASL. In fact, a number of researchers have advanced analyses arguing for the existence of a null relative pronoun in what, on the surface, appears to be a head-internal relative clause (cf. Coltier 1983, Fontana 1990, Miller 1990)

(29) *Bahçe-de bazı çocuk-lar var
garden-loc some child-PL exist
 'There are some of the children in the garden.'

- On that note, Mathur (1996) records the following readings of (28) (repeated here as (31)):

- ²⁰ Enç (1991) draws a parallel between specific determiners that optionally take accusative in Turkish and the class of determiners allowed in *there*-insertion in English. The two classes happen to coincide, but the difference lies in the interpretation: *there* sentences assert existence; specific indefinites presuppose it. For the Turkish cases, what this means is that the class of determiners that takes accusative (i.e. partitives) will not be allowed in existential constructions.

MAN], both the specific and non-specific interpretations are possible. Thus, to the degree that this “presuppositionality” marks specificity, the indefinite that *SELF* combines with in (31) is specific.

One approach—pursued in Wilbur (1996) and extended in Mathur—is to say that *SELF* adjoined to a(n indefinite) NP renders the (indefinite) NP specific, i.e. *SELF* itself is the specificity / presuppositionality marker. This approach, however, relies on a particular syntactic position of the marker²¹. To clarify, on Mathur’s account, *SELF* marks the NP in Spec, IP—that is, it is “associated with” the “outer” subject position (Diesing 1992).

However, combining this argument with the line of reasoning offered in Enç, if *SELF* marks presuppositionality in Spec,IP, then we expect existential contexts (argued to be associated with the “inner” subject position (Diesing 1992)) to be ungrammatical with *SELF* in the environment where lowering to the nuclear scope is unavailable—namely, with an *individual*-level predicate. To that extent, the data below show this to be incorrect: in (32), *SELF* (or, as argued here, [*pro* + *SELF*]) is the subject of an *individual*-level predicate *INTELLIGENT*; the existential reading is unexpected to be available.

- (32) DH: HAVE ONE MAN SELF INTELLIGENT
 NDH: 1CL
 ‘There is a man here who is intelligent’

Thus, the theory Mathur pursues needs to account for cases in (32) independently.

Alternatively, we can adopt Schwarzschild’s (2001) view: specific indefinites are singleton indefinites, i.e. existentials whose domain has a singleton extension. Since quantifiers have restrictors, specific indefinites are implicitly restricted as well. Schwartzchild argues that this restriction is contextual along the lines of (33):

- (33) Privacy Principle
 It is possible for a felicitous utterance to contain an implicitly restricted quantifier even though members of the audience are incapable of delimiting the extension of the implicit restriction without somehow making reference to the utterance itself²².
 (Schwarzschild 2002: 16)

²¹ See Mathur (1996) for the deduction of the facts.

²² Such an approach also accounts for an observation that (28) has a flavor of the English indefinite use of *this*:
 (28’) There is *this* / a / *the guy that I know...He is damn smart.

Note that although it is not immediately clear how to derive the relevant reading considering the semantics of the demonstrative (Gajewski, p.c.), this is an independent problem that I leave for future research. Intuitively, however, we are still dealing with an instance of an individual captured in Schwarzschild (2002)—namely that [this man] seems to denote an individual that the speaker (but not the hearer) has in mind.

On this theory, then, specific indefinites denote individuals the speaker (but not necessarily the hearer) has in mind. This would mean that *SELF* does not do any marking in (31); it merely reflects the difference between the individual in (31a) and (31b).

Let me put the two pieces together: specific indefinites denote generalized quantifiers with the property that there is exactly one individual that is a member of every set in the generalized quantifier—i.e. individual with some contextual restrictions—and *SELF* combines with that individual; we can safely assume that the original analysis argued for by Eckardt (2002) for the German *selbst* a) will hold and b) can be extended to the ASL *SELF*.

To briefly summarize what has been accomplished in this section: I have pointed out that what might, at first glance, be construed as counter-evidence against an Eckardt (2002)-account of ASL *SELF* (its being able to combine with a quantifier and an indefinite), is subsumed under the analysis. In this, I offered different venues for solving the “problems” while remaining faithful to the original proposal. From this point on, I will deem the analysis of the adnominal intensifier argued by Eckardt correct in its basic components.

Moreover, the view of *SELF* advocated here derives some of the observations about the non-reflexive uses of the lexical item noted in the literature: i.e. effects of definiteness (since intensifiers combine with definites), “presuppositionality,” (since there must exist a context for alternatives to arise) and specificity (since the associate of the intensifier must be picked out in order to be contrasted with others in the set). I have argued that all these, as well as the association of *SELF* with focus (Wilbur 1996), arise because of the set of alternatives to the original referent normally “contributed” by the intensifier.

That being the case, then, I argue that the distribution of *SELF* in ASL a) follows the general guidelines for the distribution of adnominal intensifiers²³, and b) tracks the distribution of *pro*. In the following sections I elaborate on this line of argumentation.

3.4 The “LDA” *SELF* is possible only in contexts that allow *pro* and impossible otherwise

The prediction of the claim that ASL *SELF* is a silent element of type <e> modified by an adnominal intensifier is that in the contexts where *e* is possible, so should be [*e* + *SELF*]. Such contexts include a pronominal *e* as well as a (trace of a) topic. In principle, the distinction is immaterial for the account of *SELF* pursued here: either way, the element is of type <e> and

²³ But see also Cunningham (2009) for some more objections to the precise Eckardt-style formulation in regards to the “associate problem.”

should allow adjunction of the adnominal intensifier. For the purposes of this paper, however, I focus on the pronominal *e* (i.e. *pro*) and modify the original prediction (b) from section 3.2: where *pro* is possible, [*pro* + *SELF*] should be allowed (provided the context is compatible with the intensifier semantics); by the same token, where *pro* is impossible, so should be the “long distance” *SELF*. Thus, the main claim of this section is that the distribution of “LDA” *SELF* tracks the distribution of *pro*.

ASL allows null arguments occurring in a variety of contexts, in both subject and object positions (Padden 1988). Lillo-Martin (1986, 1991) argues that the theory of null arguments arises from the theory of agreement, or, rather, from differentiation between the non-agreeing (plain) vs. agreeing verbs (Padden 1988; see Quadros 1999 and Quadros & Quer 2008 for a two-way differentiation).

(34) a. Agreeing for person:

a-JOHN b-MARY a-HELP-b
‘John helps Mary’

b. Agreeing for location:

BOOK a-IX a-MOVE-b FINISH
‘I moved the book (to that place)’

c. Plain:

ME LOVE FISH
‘I love fish!’

In short, Lillo-Martin, appealing to Huang (1984), distinguishes two types of null arguments existing in ASL (for the sake of exposition, I will label the empty element “*e*”): the null argument identified by agreement (akin to the Italian/Spanish-type *pro*) and the null element that is not agreement-identified and known in the literature as the *radical pro* (*discourse pro* in the original analysis), which, in turn, is ambiguous between being a true, free pronominal and a deleted topic bound somewhere else in the context (cf. Huang 1984 for the specifics of the account). Huang’s analysis of the *discourse pro* has since been debated, and a new account of the phenomenon has been defended in the East Asian literature: namely that the *discourse pro* is actually not pronominal in nature, nor is it a deleted topic (cf. Oku 1998, Tomioka 2003, Saito 2007, Sener & Takahashi 2009). At this stage, I abstain the detailed analysis, as well as the licensing requirements, of the aforementioned element (see Author in prep.). What is important for the

discussion here is that on Lillo-Martin's account, there are two types of *pro*—the type identified by locus agreement and the type that isn't (something like *pro*_{Agr} and *pro*_{¬Agr}, respectively).

(35) a. Agreeing (*pro*_{Agr}): SEND

- A. Did John send Mary the paper? (*John is established at a and Mary at b*)
 B. YES, a-SEND-b.
 'Yes, (he) sent (it) to (her).'

b. Plain (*pro*_{¬Agr}): EAT

- A. Did you eat my candy?
 B. YES, EAT-UP
 'Yes, (I) ate (it) up.'

Lillo-Martin (1986a: 421)

This approach lays out consequences for the analysis of *SELF* pursued here: a) a [pronominal + adnominal intensifier] construction where only the *SELF* is overt—thus, surfacing as a [*e* + *SELF*]_i—is fully expected to be grammatical; and b) a particular difference, tied to morphological agreement, might be expected between the two utterances—one containing [*pro*_{Agr} + *SELF*]_i, the other containing [*pro*_{¬Agr} + *SELF*]_i.²⁴

To that effect, (36)-(38) confirm the predictions. In (36)-(37), agreeing verbs are used (agreeing for location and person, respectively). According to Lillo-Martin (1986), we expect *pro*_{Agr} here; in (38), non-agreeing verbs are used; this means that the empty element is *pro*_{¬Agr}. The difference between the two types of [*pro* + *SELF*]_i constructions is reflected in the morphological realization of agreement.

(36) Agreeing (for location): COME

- JOHN_i a-IX_i THINK *e*_i / a-[*e*_i + *SELF*]_i / neu-[*e*_i + *SELF*]_i a-COME-1
 'John thinks he himself will come [to my party].'

(37) Agreeing for (person): ASK

²⁴ Bahan et al. (2000) propose an alternative account of null arguments as well as their connection to manual agreement in ASL. They argue that *pro* is always licensed by agreement (*pro*_{Agr}), but it is the types of agreement marking that distinguishes the two: the null arguments occurring with plain verbs are licensed via non-manual markings (head-tilt, eye-gaze, etc.) while the null arguments occurring with agreeing verbs are licensed by both manual and non-manual agreement. Note that Lillo-Martin (1991) and Bahan et al. (2000) make different predictions for a variety of phenomena (including the clausal structure and the theory of agreement in signed languages). However, both capture the difference between a) verb classes and b) contexts allowing null arguments (in terms of the availability of manual agreement). In this respect, the claims made in this paper are consistent with either account of *e* in ASL: Lillo-Martin's approach differentiates between what I have labeled, for exposition purposes, *pro*_{Agr} and *pro*_{¬Agr}, where *Agr* stands for agreement, while on Bahan et al.'s view, the remainder of this section records *pro*_{Agr} only (as it surfaces in contexts with and without manual agreement). Either way, [*e* + *SELF*]_i tracks the distribution of *pro* with agreeing vs. plain verbs.

JOHN_i a-IX_i THINK e_i / a- $[e_i + SELF]_i$ / **neu**- $[e_i + SELF]_i$ a-ASK-b
 ‘John thinks he himself will ask.’

(38) Plain:

a. LOVE

JEFF_i a-IX_i TELL-ME e_i / a- $[e_i + SELF]_i$ / ***neu**- $[e_i + SELF]_i$ LOVE FISH
 ‘Jeff tells me he himself loves fish.’

b. SICK

JEFF_i a-IX_i TELL-ME e_i / a- $[e_i + SELF]_i$ / ***neu**- $[e_i + SELF]_i$ SICK
 ‘Jeff told me he himself was sick.’

Two observations arising from the data above deserve a special mention: as predicted, $[e + SELF]$ is possible in both *pro*_{Aggr} (see (36)-(37)) and *pro*-_{Aggr} (38) contexts²⁵. Moreover, the manner (or, more accurately, the location in space) in which *SELF* is uttered in each of the contexts tracks the difference between the two: with agreeing verbs, *SELF* is allowed in neutral space (**neu**-, in front of the signer), not associated with any referent; with plain verbs, **neu**-*SELF* is disallowed. The account of the phenomenon lies outside of the scope of this paper (but see Author, to appear). Here, I simply note that, as expected, the distribution of *SELF* tracks the difference between the two types of *pro*.

This line of argumentation—namely that *SELF* is predicted to be impossible precisely where *pro* is impossible—predicts another characteristic of *SELF* independently noted in the literature: that the reference of “LDA” *SELF* “can go up only one clause” (Lillo-Martin 1995):

(39) LOWEL_i THINK WORKER_j FEEL $[e_{i,j}, *k + SELF]$ RIGHT²⁶

²⁵ But see fn. 24

²⁶ Lee et al. (1997) argue the observation to be “incorrect” (and, thus, the generalization to be generally “invalid”) based on (i):

- (i) a-IX_i KNOW IX_{1p} THINK a- $[e_i + SELF]_i$ PEA-BRAIN
 He/she knows I think (he/she) himself/herself is an idiot (adapted from Lee et al. 1997[58])

However, according to my consultants, the judgments in both Lillo-Martin and Lee et al. are recorded correctly. In fact, grammaticality of *SELF* as referring to a higher-than-one-clause antecedent requires an account independent of the account of *SELF*, as it is contingent on the previous establishment of the locus of the antecedent in the discourse: the subject of the main clause in (39)—*LOWELL*—has not been assigned a locus prior to the morphological realization of *SELF*; the subject in (i)—a-IX_i—has. In that respect, note (ii)-(iii), different from (39)-(i) only in that the locus of the referent has been added to (39) and taken out of (i):

- (ii) a-LOWEL_i THINK WORKER_j FEEL $[e_{i,j} + SELF]$ RIGHT
 Lowel_i thinks that the worker_j feels he_i / he_j right.

- (iii) *JEFF_i KNOW IX_{1p} THINK a- $[e_i + SELF]_i$ PEA-BRAIN
 Jeff knows I think (he) himself/herself is an idiot.

Lowel_i thinks that the worker_j feels *he_i / he_j / *he_k is right.

(adapted from Lillo-Martin 1995: 167)

I leave the precise account of the facts—as well as its motivations as consequences—for further research²⁷. Here, I note the following: when the referent of the [*e* + *SELF*] has not been assigned a locus, (and, thus, the phonologically null anaphoric expression associated with that referent is a traditional *pro*-form, see Lillo-Martin & Klima 1990, Schlenker 2009), the ability of *SELF* to refer only one clause up mirrors the ability of *pro* to refer only one clause up:

- (40) Maria_i dijo que Susan_j contó sobre Juanita_k que ella_{i,j,k,m} / *e*_{*i,*j,*k,*m} estaba enojada
 ‘Maria said that Susan told about Juanita that she was angry.’ [Spanish]

That is, while any analysis of *SELF* as LDA or the marker of definiteness, presuppositionality, specificity or focus requires an independent explanation of (39), the treatment of *SELF* as an adnominal intensifier captures the data: reference of *SELF* is limited to one clause because reference of *pro* is limited to one clause, as the Spanish data in (40) show. Thus, whatever accounts for the restriction on what *pro* can take as a referent (and how far up the reference goes) will straightforwardly carry over to (39), explaining yet another puzzle regarding the distribution of ASL *SELF*.

3.5 A pronoun is as a pronoun does

This section addresses the nature of the [*pro* + *SELF*] construction. That is, if *pro* is a phonologically null version of an overt pronoun, then certain characteristics of the construction are predicted, namely non-complementarity with overt pronouns and lack of subject orientation. Should such non-complementarity surface, the difference in meaning between X and Y is expected to be attributable to focus/stress. On the other hand, if it is the case that certain contexts allow *pro* only and not its overt counterpart, the line of reasoning advocated in this paper predicts

In order to capture the facts in (39)-(i), I appeal to Schlenker (2009) who argue that the overt pronoun in ASL is a morphological (Schlenker) realization of the semantic index. Logically, once it has arisen in the context, any other argument bearing the same index will be uttered in the same locus (see also *Maximize Anaphoric Dependency*, Schlenker & Mathur in prep.). If the argument itself is phonologically null but overtly intensified, it is the intensifier that will be uttered in the locus associated with the semantic index. In effect, the aforementioned suggests is that only (39) and (iii) above—environments without a previously assigned locus of the referent for *SELF*—constitute true *pro*-form environments. Along the line of reasoning above, a-[*e* + *SELF*] is better viewed as [PRONOUN_i + *SELF*]. The issue is explored in Author (in prep).

²⁷ The one-clause up condition of the Chinese-type *pro* can be accounted straightforwardly by the Generalized Control Rule (GCR, Huang 1984). However, the account he provides still does not exclude another possible referent for the empty pronominal. In that respect, GCR is insufficient to cover the data.

environments where *pro* and [*pro* + *SELF*] are allowed but not *PRONOUN*. The sections below address the aforementioned predictions.

3.5.1 Non-complementarity with pronouns and lack of subject orientation

In contrast to the intensifier *SELF*, true local anaphors show the familiar complementarity with pronouns in ASL. This is shown in (41), which involves a true reflexive predicate, and, as expected, the pronoun is excluded.

- (41) MARY_i IX_i NOT LIKE CRITICIZE SELF_i / *PRONOUN_i
 ‘Mary doesn’t want to criticize herself’

However, if the long-distance *SELF* is a construction involving a pronoun (albeit covert) and an adnominal intensifier and not an anaphor, we have no reason to expect either subject-orientation or complementarity with pronouns (a hallmark of anaphors)—both are pronominal, and, all things being equal, both should be able to occur in the same context. The examples in (42) show this to be correct: in (42a), the “LDA” *SELF* (i.e. [*pro* + *SELF*]_i) is anteceded by an object; in (42b), it is allowed on a par with an overt pronominal:

- (42) a. SENATE_i PERSUADE WORKER_j [*pro* + *SELF*]_i / [*pro* + *SELF*]_j WILL PAY TAX HIGH
 ‘Senate persuaded the worker that it_i/he_j pays high taxes.’ ≈ (9a)
 (adapted from Lillo-Martin 1995: 167)
- b. ME HEAR a-PRONOUN_i DECIDE a-[*pro* + *SELF*]_i / neu-[*pro* + *SELF*]_i / a-PRONOUN_i WILL a-COME-1
 ‘I heard that she_i decided that she_i will come [to my party]’

The non-complementarity between the *SELF* element and the pronoun in (42b), in contrast to (41) (Conditions A vs. B), lends further support for the intensifier analysis as suggested. Furthermore, the distribution of *SELF* in (42) follows exactly the distribution of intensifiers as argued for by Eckardt (2002): in order for the relevant meaning (i.e. one out of the set of possible alternatives) to arise, focus must be involved. That is, *SELF* is expected to be obligatorily stressed. This is precisely what we obtain: in all the instances with the “LDA” *SELF*, the reflexive itself is accompanied by classical non-manual markers of stress in signed languages—a lean forward and pressing of lips (Wilbur 1996)—which, in turn, induces an interpretation involving a set of alternatives to the individual (*pro*, in this case) it is adjoined to.

Moreover, the account suggests that these two options—PRONOUN and [*pro* + *SELF*—should yield a difference in meaning attributable to focus. This is borne out: according to my consultants, the only difference between the *SELF* and the pronoun in all the “LDA” sentences above is a “the sense of centrality”—namely, “self rather than the others that might have otherwise been involved” (see fn. 7), which is lacking in the case of unintensified expressions. A similar point is made by Mathur (1996; p.c.) who shows that “the absence of *SELF* leaves open the possibility of an existential reading (where there is no contrastive reading)...but such a reading clashes with the context that forces a contrastive interpretation”:

- (43) a. JOHN FEEL IX BECOME HUMAN WILL [UNDERSTAND] (IX) *SELF* KISS PRINCESS ≈ (14)
 ‘John thinks that he will become human... if he *(himself, out of the people just mentioned) kisses the princess.’
- b. JOHN FEEL IX BECOME HUMAN WILL [UNDERSTAND] (IX) KISS PRINCESS
 ‘John thinks that he will become human...if he (*himself, out of the people just mentioned) kisses the princess.’
- (Mathur 1996 [9])

Notice that (43) suggests that regardless of whether *SELF* is added to an overt (*IX*) or covert pronominal, the interpretation remains the same—namely the “presupposition” (in Mathur’s 1996 terms) that there are alternatives to the associate available in the context. Crucially, such an interpretation disappears without the *SELF*.²⁸ In sum, the facts presented in this section support the claim that “LDA” *SELF* is not anaphoric²⁹; rather, it is a pronominal construction with an intensifier adjoined—of the form [*pro* + *SELF*]. In this respect, the ASL data in (42b)-(43) mirror the Japanese data in (20).

3.5.2 Cases of complementarity: *pro* vs. PRONOUN

From the analysis presented so far, we should expect that overt pronouns and [*pro* + adnominal intensifier] (e.g. the ASL “LDA”*SELF*) should always be able to co-occur. But this is not always the case: in certain constructions, the “LDA” *SELF* and overt pronouns exhibit complementary distribution: (45) appears to record a judgment directly opposite to (7) and (37), repeated here as

²⁸ The (*) in (43b) is, perhaps, too strong. What, in fact, the judgment records is an availability but non-centrality of such interpretation. That is, consistent with the analysis pursued in this paper, unless *IX* is adjoined by *SELF* or stressed (i.e. focused), the set of alternatives to the referent expected with focus will not arise.

²⁹ Also independently noted in Mathur (1996).

(44a-b), as well as (42b) above. That is, while in (44), *PRONOUN* and [*pro* + *SELF*] do not exhibit complementary distribution (since there is no competition between the pronoun and anaphor), in (45), the pronoun, as referring to *JEFF*, is ruled out.

(44) a. a-LOWEL_i FEEL a-SELF_i / a-PRONOUN_i INTELLIGENT = (7)
 ‘Lowel thinks that he/self is intelligent.’

b. JOHN_i a-IX_i THINK *e_i* / a-[*e_i* + SELF]_i / neu-[*e_i* + SELF]_i b-ASK-a = (37)
 ‘John thinks he himself will ask.’

(45) JEFF_i THINK a-PRONOUN*_i / neu-SELF_i / *e_i* WILL a-COME-1.
 ‘Jeff thinks he himself will come [to my party].’

Once again, I will argue that the contradiction is only apparent: upon a closer examination, the problem disappears, or, at least, the burden of explanation shifts into a different domain. In this section, I demonstrate that certain configurations only allow a null pronominal element (hence *pro* and [*pro* + *SELF*] are possible), but not an overt pronoun. In short, I claim that the aforementioned complementarity can be independently accounted for by other factors—namely, the nature of the pronominal system in ASL (and its binding requirements) and principles of grammar guiding the choice of anaphoric elements. In what follows, I argue that whatever the ultimate account of (45) is, it a) is not unique to ASL, and b) relies on pragmatic factors.

The non-complementarity of *pro* and an overt pronoun in certain environments is not unique to ASL; it has been frequently noted in the literature for other languages. For instance, Dimitriadis (1996) shows that Greek exhibits similar effects: that is, in some contexts, only *pro* is allowed, and not its overt counterpart. In the sequence below, both of the possible antecedents of the pronoun are 3rd person masculine; however, the null pronoun must pick out the subject of the preceding sentence, while the overt pronoun refers to the object.

(46) a. O Aris_i diplose tin efimerida_j.
Def.art. Aris folded def.art.ACC newspaper
 ‘Aris_i folded the newspaper_j.’

b. *e_i* Tin_j efere sto Giani_k.
Def. art. ACC bring to John
 ‘(He_i) brought it_j to John_k.’

c. *e_{i/#k}* den milise.
not speak
 ‘(He_{i/#k}) did not speak.’

- c'. Aftos_{k/#i} den milise.
He not speak
 'He_{k/#i} did not speak.'
 [Greek] (Dimitriadis 1996 [1])

Dimitriadis argues, using the framework of Centering Theory (Grosz et al. 1986, 1995), that overt pronouns are almost never used to refer to the highest accessible antecedent; instead, the null pronoun is preferred (see also Miltsakaki 2001 for corpus-based evidence). Turkish shows a similar restriction: while the subject of the subordinate clause must be null to be co-indexed with the matrix subject, the overt pronoun in that position is necessarily disjoint in reference from the matrix subject (Kornfilt 1984 and Erguvanli-Taylan 1986 as cited in Turan 1995).

- (47) a. Orhan_i [*e_i* çalışırken] müzik dinler
Orhan work.WHEN music listen.AOR
 b. Orhan_i [*o*_{i/k}* çalışırken] müzik dinler
Orhan he work.WHEN music listen.AOR
 'Orhan listens to music when he works.'
 [Turkish] (Turan 1995: 8)

The literature on the phenomenon—though in a number of different types of implementation—in both Greek and Turkish point to the fact that the distribution of the null vs. overt pronoun in the subject position is guided by discourse requirements,³⁰ and not syntax, *per se*.

Now, recall that the crucial difference between (44) and (45) is the presence/absence of locus on the NP serving as the antecedent of PRONOUN / *pro* / [*pro* + *SELF*]. That is, to the degree that the locus of the referent has already been established, both the overt and covert versions of the pronoun are acceptable; however, if the locus has not been assigned, only a covert variety is allowed, intensified or unintensified. This observation (see also fn. 26) seems to play an important role in capturing the pronoun-antecedent relations which, as is standardly assumed for ASL, largely depend on discourse (cf. Lillo-Martin & Klima 1990, Emmorey & Falgier 2004, Sandler & Lillo-Martin 2006; alternatively Schlenker & Mathur in prep. for the *Maximize Anaphoric Dependency* principle). Thus, the account of (44)-(45) in ASL is plausibly contingent on the same set of phenomena as that of (46)-(47) in Greek and Turkish, respectively—both appealing to pragmatic factors. I will skip over the details and pragmatic motivations of the current accounts (“centering” as in Turan 1995 and Dimitriadis 1996, “change of topic” as in Enç 1986, Frascarelli 2007, “accessibility” as in Hara 2002, “transfer-of-possession” as in Rhode et al.

³⁰ Although see Kornfilt (1984) on the relationship with the identification by Agr; this option is also explored in Author (in prep.).

2006, etc.), bringing forth only the outcome: the overt pronominal identifies the less “prominent”/accessible (cf. Ariel 1991) antecedent in the hierarchy, and, while pragmatically speaking, the null subject signals *Continue*, the overt one says *Shift*. With respect to Greek in (46), this means that the subject identifies with *pro* while the object is with *aftos*. With respect to Turkish in (47), this means that the overt pronoun cannot be co-indexed with the matrix subject (though a null pronoun can be co-indexed with either the subject or the object, see Turan 1995). With respect to ASL in (45), we expect the antecedent without an assigned locus to be compatible with *pro* only, and the overt pronoun to be referring to someone else. This is precisely what we obtain. That is, (45) is a regular case—as in Greek and Turkish, we expect a *pro*, rather than *PRONOUN*, when the antecedent is the matrix subject (the most prominent antecedent).³¹ This observation provides a pragmatic addition to the *Avoid Pronoun Principle* in contexts where the traditional syntactic identification is incomplete³² (cf. Rohde 2008). Considering the fact that binding in ASL heavily relies on discourse, it is not at all unexpected for the aforementioned phenomena to take place.

A potentially fruitful formalization of the pragmatic influence in question can also be stated in terms of implicature raising: the use of overt pronouns implies reference to other than most prominent antecedents³³. I leave precise disambiguation of the facts for future research, however.

Let me now recap what I have argued: *SELF* is allowed whenever *pro* is allowed; however, it is not the case that whenever *pro* is allowed, *PRONOUN* is also allowed as *pro*’s

³¹ This view echoes Cardinaletti & Starke’s (1999) typology of pronominal expressions.

³² Note that the original observation about the *Avoid Pronoun Principle* opens the door for interaction between pragmatic and syntactic factors:

“[The Principle] might be regarded as a subcase of [...] not saying more than is required, or it might be related to a principle of deletion-by-recoverability, but there is some reason to believe that it functions as a principle of grammar.” (Chomsky 1981: 65)

³³ Note, however, that the observation above has reversed the problem: originally, (45) was accounted for under the auspices of discourse binding but (44) required an explanation. Now, with (45) analyzed on a par with Greek and Turkish cases as a pragmatic constraint on coreference, something else must be said about (44a)—a paraphrase of (44a).

(44a’) LOWEL_i a-IX_i FEEL a-SELF_i / a-PRONOUN_i INTELLIGENT
‘Lowel think that he/self is intelligent.’

The problem here is the following: it appears that the primary locus assignment (a-LOWELL in (44a) and LOWELL a-IX in (44a’)) has the effect that *PRONOUN* in the embedded clause can be used for the most prominent antecedent. The solution, as was mentioned above, can be stated either in terms of the *Maximize Anaphoric Dependencies* in Schlenker & Mathur (in prep.) or discourse-binding in Lillo-Martin & Klima (1990). Alternatively, the effect can be captured via the implicature-based account: *PRONOUN* comes with the implicature ‘not the most prominent antecedent’; however, a-*PRONOUN* can’t carry that implicature, since the syntax says “a”—the locus of the *PRONOUN*—is, in fact, the locus of the most prominent antecedent (as in a-LOWELL in (44a)).

What remains unclear, however, is how the original “a” on a-IX becomes associated with the antecedent. I leave this use of *IX* (labeled as IX_{Adverbial} by MacLaughlin 1997) for further research, since it is not at all clear that it is pronominal in nature.

overt counterpart. The distribution of PRONOUN is constrained by the notion of discourse binding and obeys the *Avoid Pronoun Principle*, while the distribution of *pro* follows the general observations about *pro* in languages, dating back to the GB tradition³⁴ (Rizzi 1986). An interesting consequence of the discussion in this section emerges: *PRONOUN* cannot serve as a bound variable unless its binder has already received a locus assignment. I reserve implications of this generalization for further research. For the purposes of this paper, however, the aforementioned is to say that the “problematic” sentence in (44) can be accounted for on independent grounds, and the analysis of LDA *SELF* as an intensifier adjoined to *pro* still holds. Moreover, from the discussion in this section, a property of *SELF*, vs. *pro*, contributing “centrality” and “contrastiveness” effects (Mathur 1996), as well as accompanying phonology traditionally associated with focus (Wilbur 1996) have been captured.

3.6 If an intensifier is disallowed, then so is the “LDA” *SELF*

In the preceding sections, I have argued that the “LDA” *SELF* in ASL is an instance of [*pro* + intensifier]. On this view, the “LDA” *SELF* ought to track the distribution of *pro* (see section 3.4) as well as be restricted to the environments in which an intensifier is allowed. That is, the intensification-based account predicts the “LDA” *SELF* to be impossible precisely where an adnominal intensifier is impossible. One such environment, I will argue, is the object position. This line of argumentation offers an account of why only two types of *SELF* are found in the object position: an adverbial intensifier and a local anaphor, but not $[[SELF]]_{ID}$.

3.6.1 $*[[SELF]]_{ID}$ in the object position

Padden (1988) states that only underlying subjects can serve as antecedents for what she calls “SELF pronouns” (Padden 1988: 161). Note that Padden does not differentiate between different functions of the reflexive. However, equipped with the analysis of “SELF pronouns” as ambiguous between the local anaphor and the adnominal intensifier (i.e. $[[SELF]]_{ID}$), we are now in a position to re-formulate Padden’s generalization:

- (48) a. Only underlying subjects can serve as antecedents of the local anaphor
 b. $[[SELF]]_{ID}$ can only adjoin to an underlying subject.

³⁴ Although see section fn. 24 for some issues.

For a moment, I put (48a) aside and focus on (48b)—whether adnominal intensification of something other than a subject is possible.

In terms of the semantics advocated in Eckardt (2002), intensifiers are expected to be grammatical in any structural position, including the object:

- (49) The woman_i (herself_i) took care of the girl_j (herself_{i,j})

However, the following data from ASL suggest otherwise:

- (50) MARY_i a-IX_i a-ASK-b TEACHER_j SELF_{i,*j}³⁵
 ‘Mary_i asked the teacher_j herself_{i,*j}’

That is, (50) illustrates that the desired intensifier meaning (parallel to that in (49)) is impossible in ASL. In what follows, I demonstrate that the account of (50) rests on a cross-linguistic restriction—that in many languages adnominal intensifiers (*SELF* included) are partial to underlying subjects.

In fact, a deeper examination reveals this generalization to hold in other languages. For instance, (51) shows that intensification of an object NP marked for Accusative is ungrammatical.

- (51) a. *Taroo-ga Hanako-zisin(-o) tataita
Taroo-Nom Hanako-self (-Acc) hit
 ‘Taroo hit Hanako (and not her sister).’ [Japanese](Othaki, p.c.)

Bickerton (1987) argues that the problem is case, and that intensifiers tend to adjoin to nominative, rather than non-nominative (which includes accusative), elements. However, such an approach is defied by the rest of the Japanese paradigm below:

- (52) a. *Taroo-ga Hanako-zisin(-o) tataita
Taroo-Nom Hanako-self (-Acc) hit
 ‘Taroo hit Hanako (and not her sister).’
 b. *Taroo-ga Hanako-zisin-ni kisueta
Taroo-Nom Hanako-self-Dat kissed
 ‘Taroo kissed Hanako herself(and not her sister).’
 c. Taroo-wa Hanako-zisin-ni zibun-no-e-o kakasete

³⁵ As discussed in this section, my consultants find *SELF* as intensifying an object ungrammatical. However, a reviewer points out that his/her informants treat (i)—a parallel of (50)—as grammatical:

(i) JOHN SEE OBAMA_i SELF_i
 ‘John saw Obama himself’

This is not a problem for my analysis; rather, it suggests that the dialect of ASL s/he is referring to patterns with English in this respect (i.e. allowing adnominal intensification of a full non-pronominal NP), while the dialect of my consultants patterns with Japanese and many other languages disallowing adnominal intensification of the object all together. In both cases, adnominal intensification of a pronominal object is out.

Taroo-Top Hanako-self-Dat self – Gen-picture-Acc made.draw
 ‘Taroo made Hanako (not her sister) draw self’s picture.’

Both in (52b) and (52c), the intensifier is adjoined to a dative. However, in (52b), the dative element is an object, and the sentence is ungrammatical. In (52c), on the other hand, the dative element it is a subject (subjects in causative constructions appear in dative in Japanese), and the sentence is grammatical. This leads to a conclusion that since, in this context, intensifiers modifying a dative argument are fine, the real ban here is not case- but, rather, grammatical function-related. Thus, case cannot be the distinguishing criterion for whether the modification by an intensifier is possible or not. Rather, these data suggest that in Japanese (as in many other languages, see König & Siemund 2008 on the list of languages exhibiting a similar restriction), intensifiers can only adjoin to subjects, and adjunction to objects is banned. Phrased differently, intensifiers are partial to subjects.

Let me add another piece of empirical support here: even in languages like English which permit intensification of objects, such a restriction arises, though not with full NPs but only with pronominals.

(53) The woman_i (herself_i) took care of her_j (herself_{i,*j})

Data like (53), as compared to (49), have in the past been accounted for based on haplology – a surface restriction against a string of two identical syllables (cf. Zribi-Hertz 1995 for French). However, (53) is fully grammatical, but has only one interpretation, unexpected on the phonology-based account.³⁶ Furthermore, (54) serves as evidence that even in contexts where haplology is not an issue,³⁷ the problem persists:

- (54) a. *It’s me myself/us ourselves (and not anybody else)! Open the door already!
 b. *I now recall the student giving the report to me myself, and not to my assistant.

The restriction against adnominal intensification of objects rules out the intensifier reading in (50): [[SELF]]_{ID} (i.e. *SELF*) cannot adjoin to an object; thus the *SELF* in (50) must either adjoin to a subject or have a different denotation. In fact, the only possible interpretations of (50) are given in (55):

- (55) MARY_i a-IX_i a-ASK-b TEACHER_j SELF_{i,*j}
 i. ‘Mary_i (who has always needed help to ask questions) asked the teacher_j all by herself_i’

³⁶ Note that if the intensified pronominal is in the subject position, the sentence is grammatical:
 (i) Stop blaming others! You yourself did it!

³⁷ See also Siemund (2000, 2002) for additional arguments against the haplology account.

- ii. ‘Mary_i herself_i (and not Mary’s best friend) asked the teacher_j

The reading in (55ii.) is the $[[SELF]]_{ID}$, but *SELF* here is adjoined to *MARY*. In contrast, the meaning of the reflexive in (55ii.) appears to be adverbial in nature, argued by Eckardt (2002) to be something else and, crucially, not $[[SELF]]_{ID}$. The denotation of adverbial *SELF* being outside of the scope of this paper (though see section 3.7.3), I now focus on the additional outcome of the restriction against the adnominal intensification of objects.

3.6.2 The loss of LDA effects

The restriction against intensifiers in the object position results in the unavailability of $[pro + SELF]$ there and, as a consequence, the unavailability of the long distance reference of *SELF*: “LDA” *SELF* is disallowed because the adnominal intensifier *SELF* is disallowed. Thus, we now have an account of (55): $*[pro + intensifier]$, and the local anaphor remains the only available option in the object position³⁸.

- (56) a. MARY_i THINK JOHN_j KNOW PEDRO_k LIKE $[pro + SELF]_{*i, *j} / SELF_k$. $\approx(11)$
 ‘Mary_i thinks that John_j knows that Pedro_k likes himself_{*i, *j, k}’.
- b. LOWEL_i WANT WORKER_j RESPECT SELF_{*i, j}
 ‘Lowel_i wants the worker_j to respect $*[him\ himself]_i / himself_j$ ’.
- (Sandler & Lillo-Martin 2006: 385)

Any LDA account of *SELF* needs an independent motivation for this fact; any account of *SELF* as a definiteness/focus/specificity/presuppositionality marker requires a number of additional assumptions in order to accommodate the data above. However, the account pursued here appeals to a cross-linguistic property of intensifiers, the outcome of which allows only a local anaphor in this position:

- (57) Hanako-ga kanojo zisin-ni kiskusita. [Japanese]
 Hanako-NOM her self-DAT kissed.
 ‘Hanako kissed her self.’
 i. ^Vact of self-kissing
 ii. $*\{not\ her\ sister, not\ her\ aunt, not\ her\ boyfriend\}$
- (58) Aileli kanjian zijì / [ta zijì].
 Ellery see self/ he self

³⁸ $[pro + SELF]_{*k}$ is independently ruled out by the Binding Conditions A-B.

‘Ellery saw himself.’

i. ^Vact of self-seeing

ii. * {not his boss, not his colleagues, etc.}

[Chinese] (Kuo 2006)

Although at present, I have no explanation for why the ban against intensifiers in object position is only in effect for pronouns in English, but for any kind of object in ASL and Japanese, these data nevertheless show that the restriction is real. Whatever the ultimate explanation, the restriction itself allows us to provide one further piece of evidence for the account of ASL *SELF* proposed in this paper: “LDA” *SELF* is unavailable precisely in contexts where the intensifier is unavailable—in the object position.³⁹

Let me add another note here: recall that from the semantic point of view, nothing in principle is wrong with intensification of the object. In fact, that the ban on intensification of the object is not semantic in nature—and, thus, Eckardt’s (2002) account does not suffer any losses here—can be illustrated with both English in (49) (a language that allows the intensifier to adjoin only to a full, non-pronominal, object NP) and Russian in (59) (a language that allows the intensifier to adjoin to any object but whose lexical item for the intensifier is different from that of the anaphor):

- (59) Vanya_i sovral chto ego_{i,j} /Petyu_j samogo_i kto-to perviy udaril.
Vanya lied that him / Peter himself somebody first hit
 ‘Vanya_i lied that somebody hit him_{i,j} / Peter_j himself_{i,j}’ [Russian]

Further empirical investigation is necessary to determine the nature of the phenomenon. Suffice it to say, however, that though many languages may differ on the point of object intensification, the restriction appears real and can serve as a test for the intensifier. In this respect, the restriction against adjunction to anything other than the subject, observed about *SELF* in previous literature (Padden 1988, Mathur 1996), reflects a general property of intensifiers in many languages (see also Gast & König 2006 for a suggestion about how languages might “cut the pie” in terms of *actor orientation* and its consequences for adnominal intensifier adjunction to objects).

With an understanding that further inquiry into the set of issues outlined in this section is warranted, I leave the exploration of the case/grammatical function relations in ASL and other

³⁹ A plausible account of the impossibility of intensifiers adjoining to objects—based on the fact that local anaphors are comprised of [reflexive + intensifiers]—is offered by Bergeton (2004), who, in turn, appeals to a large body of literature following McKay (1990), Baker (1991), etc. This type of account will straightforwardly explain why in languages like Russian and German, intensification of the object is possible while it is impossible in ASL, English (in certain contexts) and Chinese, for instance. However, Bergeton’s assumptions about the syntax and semantics of both anaphoricity and intensification cannot be straightforwardly applied to this analysis. Thus, I leave this option for future research.

similarly behaving languages for further research, noting only in passing that the issues discussed in this section once again point to the lack of LDA characteristics of *SELF* as well as to its intensifier-like distribution.

3.7 Directions for future research

Much has been accomplished applying the account of *selbst* as spelled out by Eckardt (2002) to *SELF* in ASL; however, not all the issues have been resolved. In the following subsections, I provide a brief overview of other possible directions for future research illuminated by the line of argumentation in this paper.

3.7.1 *pro*-related issues

Note that I have thus far been arguing for an independent issue: that [*pro* + intensifier] is a possibility (contra Burzio 1986 and in line with cross-linguistic observations made in König & Siemund 2008). The question arises then: why is this combination possible with some languages and impossible with others? For instance, (60) records judgments from Spanish—a language with *pro* (60b), but whose adnominal intensifier *mismo* (Pederson 2004) is allowed to adjoin to an overt pronoun (60a) but not *pro* (60c).

- (60) a. Podemos preguntar a Maria, porque ella misma vió el accidente
We.can ask OBJ Maria because she INT.SG.FEM saw the accident
 ‘We can ask Maria because she saw the accident herself.’
 [Spanish] (König & Siemund 2008)
- b. Podemos preguntar a Maria, porque *pro* vió el accidente
We.can ask OBJ Maria because saw the accident
 ‘We can ask Maria because she saw the accident.’
- c. * Podemos preguntar a Maria, porque *pro* misma vió el accidente
We.can ask OBJ Maria because INT.SG.FEM saw the accident
 ‘We can ask Maria because she herself saw the accident.’

From a brief survey I have conducted, it seems that languages that disallow [*pro* + intensifier] are precisely the languages that are argued to have a Agr.-identified *pro* (Rizzi 1986), i.e. Spanish, Italian, Portuguese and Hebrew, while languages that allow the combination fall into the group of the radical *pro*-drop, such as Chinese, Japanese and ASL. More research is needed, but from the first glance, the lack of [*pro* + intensifier] possibility in the former languages is

In other words, the present inquiry promises to shed light into the nature of the pronominal system of ASL as well as the issues surrounding the theory of agreement in signed languages (see Lillo-Martin & Meier 2009 for overview). Moreover, the topics under examination in this paper promise to aid in general understanding of *pro* cross-linguistically (cf. Holmberg 2005, Saito 2007, Neeleman & Szendrői 2007).

One other issue deserving further inquiry remains on the table: an observation that *SELF* seems to correspond to *generally*⁴⁰:

- ⁴¹ Throughout the paper, I have purposefully excluded from the analysis data like (59)—where *SELF* is associated with a non-animate referent. Instead, I have focused on the dialect represented by my 4 informants, all of whom consistently reject this part of the paradigm. However, neither does the dialect split affect the main part of the analysis (the proposal advocated here covers both dialects) nor is such property of intensifiers unique to the dialect of ASL recorded here. It appears that the rejection has to do with the inanimacy and/or agency of the referent, i.e. in the dialects of ASL represented by my informants, the intensifier appears to have an inanimacy and/or agency restriction. The restriction is far from inordinary, however: König & Siemund (2008) show that adnominal intensifiers in many languages exhibit such a restriction.

In these constructions, however, we still see the same effects. According to Mathur (1996), (65a) can be used with *SELF* only if one wishes to contrast *MY CAR* with other cars available in the context (see also Wilbur 1996); (61b) has an overt alternative—*GOAT MILK*. I argue that this is still an instantiation of the same phenomenon: (62) is well-formed.

(62) *To a waitress:*

What is this? Last time I looked, coffee itself was black, but this stuff you brought me is light-brown!

Note that (62) is grammatical; it's just that there is a better way of expressing the idea—namely via *generally* or some version thereof. I leave this issue for further research, merely speculating here the following: applying the ID function (a.k.a. adnominal intensifier) to *coffee* is possible and will give rise to a set of alternatives—a hallmark of the intensifier. However, languages like English do not employ this strategy freely; there is another lexical item devoted to *generally* (i.e. to the quantifier *Gen_x*). It seems that in English, *generally* wins, but in ASL, *SELF* wins the competition:

(63) ME SURPRISE IX SELF /?? GENERALLY/ TEND SMART TODAY STUPID
'I am surprised. Generally she is smart, but today she is being stupid.'

I leave this issue for future research, at this point only speculating that the ASL data may provide useful insights into the analysis of adverbials serving as quantifiers in other languages, especially when it comes to the interplay between quantification and focus (cf. Rooth 1995 and Krifka 1995).

3.7.3 ID vs. ASSIST readings of *SELF*

One other issue deserving attention is the non-ID interpretation of *SELF*, also known as a “do-it-yourself” reading. Recall that on Eckardt's view, different readings commonly associated with *selbst_{ID}* arise because of focus semantics. There is one reading, however, the focus semantics does not capture: the assistive/ “do-it-yourself” reading (see (55i.)).

- (64) He himself made the cake.
 i. He, and not his wife, made the cake = intensifier reading
 ii. He, without any help from anyone, made the cake = assistive reading

$$(63) \quad [[selbst_{\text{assistive}}]] = \lambda e \neg \exists x (\text{ASSIST}(x, e)) \quad (\text{Eckardt 2002: 402})$$

In ASL, like in English and German, the two types of *SELF* are homophonous.

- Only $[[\text{SELF}]]_{\text{ID}}$ is adnominal, however— $[[\text{SELF}]]_{\text{ASSIST}}$ is an adverbial modifier that can only adjoin to a verbal projection. Evidence for this claim for German is provided in (65): due to the verb second nature of German, the string $[\text{Maria SELF}]$ forms a constituent, and hence SELF can only be the adnominal SELF. In that context, in contrast to (66), the ASSIST reading disappears, and only the intensifier reading is possible:

- In this respect, ASL *SELF* is expected to show a behavior consistent with its German counterpart—namely that *SELF*_{ASSIST}, in contrast to *SELF*_{ID}, will reveal its adverbial characteristics.

The support for the conjecture that *SELF* of the sort captured in (64a-b)ii. is not adnominal comes from the fact that it can be uttered in different places:

- (67) a. JOHN MAKE PIE SELF
 i. *‘John himself (and not his room-mate) made the pie.’ = ID
 ii. ‘John made the pie by himself (without anyone’s assistance).’ = ASSIST
- b. JOHN FEEL IX SELF FINISH MEET BILL SELF⁴²
 i. *‘John thinks he himself (and not his secretary) met Bill.’ = ID
 ii. ‘John thinks that he met Bill by himself (without assistance).’ = ASSIST
- (68) a. HOUSE_i SELF_i BLOW-UP
 i. The house itself blew-up = ID
 ii. The house blew-up by itself = ASSIST (Padden 1988: 154)
- b. SELF_i HOUSE_i BLOW-UP
 i. * The house itself blew-up = ID
 ii. The house blew-up by itself = ASSIST (Ibid.: 172 fn. 9)

This observation (along with the semantics of ASSIST) leads to the conclusion that *SELF*_{ASSIST} is adjoined to something which includes the verbal domain—VP, vP or TP—even though on the surface it appears to occupy the same position as its adnominal counterpart (hence the terms *adverbial-exclusive* given to this instantiation of the intensifier in previous literature; see König & Siemund 2008 for overview).

However, the test for the structural position of *SELF*_{ASSIST} in (64) vs. (67) brings forth a puzzling finding: when *SELF* is adjoined to an overt (pro)nominal, both the ASSIST and the ID interpretations are available (as in (64)); but as soon as the element becomes covert, one of the interpretations disappears.

- (69) JOHN FEEL *pro* SELF FINISH MEET BILL
 i. ‘John thinks he (and not his brother) met Bill.’ = ID
 ii. *‘John thinks he met his brother by himself’ = ASSIST

Furthermore, *SELF* in (70)—i.e. *SELF* adjoined to *pro*—fails the “different position” test:

- (70) *JOHN FEEL *pro* SELF FINISH MEET BILL SELF

Thus, the data in (67b) vs. (69)-(70) suggest that *SELF* in (69)-(70) can only involve an adnominal structure, i.e. if a covert element is present, the vP adjunction of *SELF* is disallowed, and, hence, ID is the only interpretation of *SELF* possible in this context. One possible direction to pursue here is to assume that *SELF*_{ASSIST} must take scope over the subject and that it originates

⁴² According to my informants, (67b) is ungrammatical without the first *SELF*. While this fact opens a new area of research, it lies outside of the scope of this paper. What it does suggest, however, that the subsequent testing for *SELF*_{ASSIST} will need to take this fact into consideration. Thus, the “doubled” *SELF* appears in (67).

in vP-adjoined position. These assumptions will then entail that *SELF*_{ASSIST} is impossible with subjects that stay in Spec, vP (e.g. *pro*). This line of inquiry deserves further research. Whatever the eventual outcome here turns out to be, the account of the differences between the various meanings of *SELF* as adjoined to (c)overt elements should shed light on both the syntactic and semantic characteristics of the lexical item in other languages (for more complications, see König & Siemund 2008) as well as that of *pro*.

Last but not least, one may inquire whether the analysis of *SELF* pursued here (in particular, its contribution to the description of the anaphoric dependencies in ASL) can be extended to other signed languages. In fact, preliminary data suggest that the relevant item in Catalan Sign Language (*MATEIX*) exhibits a strikingly similar behavior to its ASL counterpart (Barberà, p.c.). More research is needed here as well.

4 Conclusions

With the aforementioned questions awaiting further attention, let me summarize what I **have** done here. I have offered a rather simple solution to a syntactic puzzle—a “peculiar long distance anaphor”—by appealing to an analysis of the item that is generally considered to be a reflexive as an adnominal intensifier. I was then able to cash out the analysis by showing that the problematic cases in ASL and other languages can still be subsumed by the theory of intensifiers; thus, the analysis covers the “odd” uses of the reflexive without the use of any novel mechanisms. The intensifier approach to certain cases of *SELF* predicts that it will be able to combine with definites and specific indefinites, and to induce a set of alternatives to the original referent *SELF* is adjoined to. This implies that the account I am pursuing here captures the previous claims in the literature: that *SELF* acts as a “definiteness marker” (Fischer & Johnson 1982), a “specificity marker” (Wilbur 1996) and a “presuppositionality marker” (Mathur 1996). I argue that all three observations are collateral to the intensifier analysis. Thus, the original theory in Eckardt (2002) predicts the “LDA” distribution of *SELF* in ASL. Moreover, if the account is on the right track, we are in possession of yet another tool to peak into the nature of *pro* cross-linguistically as well as the nature of agreement in signed languages.

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