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

Elena ‘Helen’ Koukidobrova

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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 Introduction

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
- 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’
- JCL 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. ________ for topicalization and ________ for a polar interrogative:
It has been known for quite some time that Sign Languages, on par with spoken languages, offer to a linguist various puzzles the solution to which ultimately promises to shed light on the nature of language in general (for an overview, see Sandler & Lillo-Martin 2006). Among such puzzles is the distribution of SELF – a lexical item occurring in anaphoric context and typically considered a reflexive. However, as Sandler & Lillo-Martin (2006) point out, SELF in ASL differs from its English counterpart *him/herself* – an anaphoric expression obeying the Condition A of the Binding Theory (Chomsky 1981). The goal of this paper is to examine SELF closely. I show that the SELF behaves well as a Condition A anaphor, and the ‘odd’ cases of SELF are derivable in an alternative manner. The proposal offers a path of analysis of similar phenomena in other (spoken) languages.

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 handshape, generally uttered in the location associated with and facing the referent (see Figure 1).

**Figure 1**

The lexical item is usually glossed as a reflexive (i.e. anaphoric), 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, 2011) 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 à là Moravcsik (1972) and 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 and, plausibly, similar ‘ill-behaving’ lexical items in other languages. 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 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.

<table>
<thead>
<tr>
<th>(i)</th>
<th>MARY</th>
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<td>‘As for Mary…’</td>
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<th>(ii)</th>
<th>YOU KNOW JEFF</th>
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<td></td>
<td>‘Do you know Jeff?’</td>
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\(^2\) 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).
ASL *SELF* (italicized in the relevant examples for exposition purposes) 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. LAUREL a-IX LOVE a-SELF  
   ‘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 it can function as/appears in contexts consistent with a relative pronoun (2), co-occurring with an indefinite (3), and signaling contrastive focus (4) or a presupposition (more accurately, a presupposed group (5) or a proposition (6), roughly corresponding to the English ‘*the fact that*…’):

(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. *JOHN a-SELF MAKE 3 PIE, NOT-YET CLEAN KITCHEN  
   ‘John, who made three pies, hasn’t yet cleaned the kitchen’ (Liddell 1980: 172)
   
   c. DH: ME WANT PERSON, SELF; MUST GOOD CONVERSATION…  
   NDH: 1CL  
   ‘I want a person who is a good conversationalist…’ (Fischer 1987: 79)

(3) SO-FAR BEAR SELF KILL ONE MAN SELF CAMP INNOCENT  
   ‘So far, a bear killed an innocent camper…’ (Wilbur 1996 [13])

(4) a. A: Who was driving the car?  
   B: KAY SELF  
   ‘Kay was’  
   = OK in context where other driver(s) are available from discourse  
   = * if no previous mention of drivers in discourse (adpt. Wilbur 1996 [9])
   
   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])

(5) a. LAST NIGHT a-MEET MAN 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 a-MEET MAN a-SELF a-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’  
      (adpt. Mathur 1996 [12])

(6) DH: YOU DON’T KNOW LAW? IDEA SELF NONE EXCUSE  
   NDH: 1CL  
   ‘[The fact that] you are ignorant of the law is no excuse’ (Fischer & Johnson 1982 [14])
Various accounts have been proposed. Fischer & Johnson (1982) review other-than-reflexive uses of \textit{SELF} and argue that the lexical item is used to mark definiteness; Wilbur (1996), (2011) looks more closely at their data and claims that what \textit{SELF} marks not definiteness, but, rather, specificity and contrastive focus. Mathur (1996) extends the proposal and labels \textit{SELF} a presuppositionality marker in SpecIP – a view that predicts \textit{SELF} to occur with individual-level predicates exclusively (Diesing 1992). This paper argues that all the aforementioned observations can be subsumed under one analysis. But before I introduce the account, another important characteristic of \textit{SELF} must be revealed – one that I capitalize on in the discussion of cross-linguistic facts.

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

1.2 The puzzle of \textit{SELF} #2: \textit{SELF} as a long-distance anaphor.

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

(7) \[ \text{a-LOWEL} \text{ FEEL a-SELF WILL BECOME INTELLIGENT WILL} \]
\[ \text{‘Lowel thinks he/self will become intelligent (if he studies hard).’} \]
\[ \text{(adpt. Lillo-Martin 1995: 166)} \]

(8) a. Guðrun skilti at Martin hevði skrivað eitt bræv til \textit{sin} \]
\[ \text{Gudrun understood that Martin had written a letter to self} \]
\[ \text{‘Gudrun understood that Martin had written a letter to her.’} \]
\[ \text{(Hellan 1991: 55)} \]

b. Zhangsan renwei Lisi hai-le \textit{ziji} \]
\[ \text{Zhangsan think Lisi hurt-ASP self} \]
\[ \text{‘Zhangsan, thought that Lisi hurt himself.’} \]
\[ \text{(C.-T. J. Huang & Tang 1991)} \]

In (7), \textit{SELF} is a non-local reflexive – it is anteceded by the NP \textit{LOWEL} located in a different clause, just as the Faroese \textit{sin} and Chinese \textit{ziji} in (8a-b), respectively, are anteceded by an NP in a different clause. This is a classic definition of a long-distance anaphor, as opposed to the ‘local’ one, the binding domain of which is typically assumed to be one tensed clause (Chomsky 1981, 1986; see Cole et al. 2006 for an overview). In fact, Fischer (2012) openly states:

(9) ‘It is now clear that one of the functions of \textit{SELF} [...] is a long distance anaphor [...] that is, it can be the subject of a new sentence with an antecedent elsewhere in discourse.’ \[ \text{(Fischer 2012)} \]

\footnote{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 \textit{LOWEL}, \textit{SELF}, and the \textit{PRONOUN} are all signed in the same locus “a”. This becomes relevant in section 3.4, where the NP does not bear locus and facts change.}
However, compared to other LDAs discussed in the binding literature, ASL \textit{SELF} has a few markedly different characteristics. Cole et al. (2006) offer the following typological observations about LDAs cross-linguistically:

(10) Apparent typological characteristics of long-distance reflexives:
   a. Long-distance reflexives are monomorphemic.
   b. They take subject antecedents.
   c. Their occurrence is, in many languages, restricted to environments in which the antecedent and reflexive are found in specific domains (i.e., specific types of IPs such as infinitival or subjunctive).

(11) a. Wangwu shuo Zhangsan, zengsong gei Lisi yipian guanyu ziji de wenzang. 
   \textit{Wangwu says Zhangsan give to Lisi one about self DE article}
   ‘Wangwu says that Zhangsan gave an article about him/himself to Lisi.’ 
   [Chinese](Cole et al. 2006 [41])

b. \textit{DH: SENATE i PERSUADE WORKER j SELF i,j WILL PAY TAX HIGH}
   \textit{NDH: 1CL}
   ‘Senate persuaded the worker that \{it/he\} will pay high taxes.’
   (adptd. Lillo-Martin 1995: 167)

Other properties of \textit{SELF} make it difficult to place in the class of LDA expressions. For instance, \textit{SELF} can be anteceded by an NP only one clause up while true LDAs can have more remote antecedents ((12) vs. (11a)); in the object position, \textit{SELF} cannot be bound long-distance while other LDAs can ((13a) vs. (13b)).

(12) \textit{LOWEL i THINK WORKER j FEEL SELF i,j,k RIGHT.}
   ‘Lowel thinks that the worker feels \{*he/he\} right.’
   (Lillo-Martin 1995: 166)

(13) a. \textit{MARY i THINK JOHN j KNOW PEDRO k LIKE SELF i,j,k}
   ‘Mary thinks that John knows that Pedro likes himself\{i,j,k\}.’

b. Zhangsan zhida Lisi renwei Wangwu de jia
   \textit{Zhangsan know Lisi ENTH compareTo Wangwu most like self}
   ‘Zhangsan, knows that Lisi thinks that Wangwu likes himself\{i,j,k\} most.’

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4 Exceptions to subject orientation have been noted in the literature (cf. Kuroda 1965, O’Grady 1987, i.a.). For instance, preverbal objects can antecede \textit{ziji} in Mandarin Chinese, as in (i):

(i) Zhangsan, yiwei Lisi hui ba Xiaoming, dai hui ziji de jia
   \textit{Zhangsan thought Lisi will BA Xiaoming take self’s DE home}
   ‘Zhangsan thought Lisi would take Xiao Ming back to his home.’
   (Cole et al. 2006 [42])

However, the non-subject orientation of such cases have been reduced to structural configurations mimicking subject-orientation (Cole & Wang 1996); others have been argued non-subject-oriented LDAs to be logophoric in nature (cf. Yu 2000 and references therein) – i.e. they lie outside the domain of Binding Theory.
To say that the class of LDA expression cross-linguistically is uniform would be misleading, of course. Cole et al. (2006) point out that certain cases of apparent LDAs do not fit neatly into the generalizations above either. However, the ‘ill-behaving’ long-distance reflexives have been argued to be logophoric – i.e. have an obligatory de se interpretation, licensed only under attitude predicates (cf. Schlenker 2003, Anand 2006, i.a.). This generalization cannot be easily applied to the ASL SELF: it can (as in (11b)) but does not (as in (5), repeated here as (14)) need to occur with an attitude predicate while being anteceded by an object:

(14) LAST NIGHT a-MEET MAN a-SELF GROW-UP TEXAS = (5)
    ‘Last night I met a man who grew up in Texas’.

We could, in principle, propose a new type of LDA and, thus, add to the typological observations in the literature. After all, Cole et al. (2006), e.g., note that ‘there appear to be at least the following types of ‘long-distance reflexives’:

• long distance bound anaphors, which show the distribution of bound variables (illustrated by Chechen/Ingush, Chinese, Hindi-Urdu, Kannada);
• forms which are used as reflexives locally and as pronouns non-locally (illustrated by Turkish and Malay);
• forms that are ‘primarily’ bound anaphor reflexives, but which can be used non-locally in specific syntactic and discourse contexts (Chinese ‘free anaphors’, Icelandic subjunctives, and long-distance uses of English reflexives […]).

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 – an 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, English himself-type, local anaphor and a complex nominal element where SELF is semantically an identity function (ID) and syntactically an adnominal intensifier modifying a phonologically null (pro)nominal. Hence, to the degree that the Binding Theory holds in ASL (see Schlenker 2011, et seq.), SELF is expected to obey the Condition A within the local domain, and its otherwise ‘odd’ behavior lies outside the Binding Theory entirely.

This account of the ‘ill-behaving’ SELF will force me to return to the observation originally made by all of the aforementioned researchers in that SELF is associated with

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 is it 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.
definiteness, specificity, ‘presuppositionality,’ and contrastive focus. However, contrary to the other analyses, I argue that such contexts are not the primary functions of SELF; rather, they are a corollary to its denotation. Thus, 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). Therefore, 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 and b) deriving the phenomena noted in the literature on SELF from the account. Finally, I draw parallels between ASL and other languages exhibiting a similar phenomenon. For instance, as has been noted in the literature on LDA, reflexives often behave like anaphors locally like pronominals long-distance (as in Turkish in Malay). If the analysis outlined here is on the right track, it may be extended to such languages as well.

2. Proposal
2.1 Contribution 1: Adnominal intensification

In the account of the ASL facts, I turn to German. Following Moravcsik (1972), Eckardt (2002) argues that intensifiers like the German selbst denote an identity function from the domain of individuals to itself:

(15) a. ID: De → De
ID(a) = a for all a ∈ De

b. [[ [Otto]EN selbst]] = ID ([[Otto]]) = [[Otto]]

(Eckardt 2002: 380)

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:

(16) a. Let f be a function on De. Then Lift1(f) := f: D((e, 0, t)) → D((e, 0, t)) is defined as follows:
If Q ∈ D((e, 0, t)) is a principal ultrafilter, i.e. of the form Q = λP(P(a)) for some a ∈ De, then f(Q) := λP(P(f(a))). Else, f is undefined.

b. [[selbst]] = {Liftn(f)|f is a contextually salient alternative to ID} for appropriate lift Lift1–Lift4.

c. Let a be the referent of the NP linked to selbst and let{f₁, f₂, f₃, . . . , fₖ} be salient alternatives to ID in the given context. Alt*(a) = {f₁(a), f₂(a), f₃(a), . . . , fₖ(a)} will be called the induced set of alternatives to a in De.

(Ibid.: 382)

In essence, (16) 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, a part of a focus.
construction⁷. An approach to adnominal intensification along these lines is fairly standardly assumed in the literature.⁸

The semantics above has a few consequences: the definition in (16) predicts exactly a) what the intensifier can combine with; and b) why the set of salient alternatives to the intensifier’s associate in a given context arises. That is, adnominal intensifiers must modify definite expressions, and when 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, essentially, 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 (17)—adjoined to a pronoun IX, the adnominal intensifier SELF induces the reading contrasting the original referent with the possible alternatives.

(17) a. JOHNᵢ, FEEL IXᵢ,ⱼ BECOME HUMAN WILL UNDERSTAND IXᵢ,ⱼ KISS PRINCESS

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⁷ E.g., (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. [selbstᵢ] = {g | g maps king onto person in king’s periphery}
ii. [der König selbstᵢ] = king
iii. [(der König selbstᵢ)| = {x | x = g (king) for some g ∈ [selbstᵢ]}
iv. [(der König selbstᵢ warf einen Groschen in die Büchse)] = y z(Coin(y) & z = box & Throw-in(king, y, z))

v. [(der König selbstᵢ warf einen Groschen in die Büchse)] = y z(Coin(y) & z = box & Throw-in(g(king), y, z) | g ∈ [selbstᵢ])
vi. [(nur der König selbstᵢ warf einen Groschen in die Büchse)]
Assertion:
\[ \forall p (p ∈ [(der König selbstᵢ warf einen Groschen in die Büchse)] & p ≠ [(der König selbstᵢ warf einen Groschen in die Büchse)] ⇒ ¬p) \]
Presupposition:
[(der König selbstᵢ warf einen Groschen in die Büchse)]
= y z(Coin(y) & z = box & Throw-in(king, y, z))

vii. Paraphrase of (vi):
Nobody in the periphery of the king threw a coin into the box.

Presupposed: The king did throw a coin into the box. (Eckardt 2002: 385)

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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, admittely, 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 set 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.
’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 SELF KISS PRINCESS

’John, thinks that he will become human… if he *(himself, out of the people just mentioned) kisses the princess.’

(Mathur 1996 [9])

Without any additional stress on IX in (17a), the reading in which John is compared with other people is unavailable; in (17b), this reading surfaces. This is achieved not by adjunction of SELF per se, however; rather, it is the involvement of the focus semantics that contributes the “emphatic” and “contrastive”/“presuppositional” interpretations of the associate of SELF. To maintain such a view, however, what we now need is a way of ‘removing’ the overt associate of the intensifier: an independent, perhaps, property of the language that will allow [IX SELF] in (17b) to be uttered as SELF alone – namely a possibility of arguments to be phonologically null.

2.2 Contribution 2: Null arguments

American Sign Language (ASL) differentiates between two classes of verbs: agreeing (for person/number and location/manner of movement) and non-agreeing (a.k.a. plain, Padden 1988[1983]). Both types of verbs allow omission of subjects and objects. Following the widely adopted terminology, I mark their position with ‘Ø’ and, for the sake of uniformity, amend data from the literature accordingly.

(18) a. A: Did John send Mary the paper?
   B: YES, Ø a-EMAIL-b Ø.
      ‘Yes, (he) e-mailed (it) to (her).’

   y/n?

b. A: Ø FINISH SEE 1-POSS CANDY
   ‘Have (you) seen my candy?’

   B: YES, Ø EAT-UP Ø
      ‘Yes, (I) ate (it) up.’

(adpt. Lillo-Martin 1991)

Various accounts of (18) have been proposed in the literature; that Ø is an agreement licensed/identified silent pronoun pro (Lillo-Martin 1991, Bahan et al. 2000) or a topic-bound variable (1984) (Lillo-Martin 1991). At this point, the exact nature of this element is orthogonal to the discussion. Suffice it to say, for now, that since subject and object omission is independently available in ASL (18), and SELF can independently serve as adnominal intensifier (17b), nothing in principle precludes the two from co-occurring, resulting in a complex element [Ø + SELF]. Thus, I argue that SELF is homophonous between a local anaphor (as in (1)) and an intensifier adjoined to a null (pro)nominal. 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: [Ø + adnominal intensifier] = “LDA”
3. ‘LDA’ in Japanese: [Ø + zisin]
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 reflexives. 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, zhidaolisi, renwei Wangwu k zui xihuan zijijik.

   = (11b)
   ‘Zhangsan knows that Lisi thinks that Wangwu likes himself/himself the most.’
   [Chinese] (Cole et al. 2006 [11])
   b. bùzhāng  zìji huì lái huanying women

   minister INT will come welcome us

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


   Everyone-NOM John-NOM self-ACC blamed that said
   ‘Everyone, said that John blamed him.’

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

(18) John, -ga [Bill-ga Mike-ga 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, said that Bill told Mike about himself.’

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

(19) John, -ga [Bill-ga Mike-ga ni kare-zisin-i,j,k-no koto-o hanasita to] itta.

   John-NOM Bill-NOM Mike-NOM him-self-GEN matter-ACC told that said
   ‘John, said that Bill told Mike about himself.’

Now consider (20):

(20) Taroo, -ga [zibun-t/ zibun-zisin-t/ kare-zisin-t ga soko-no itta to] itta.

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11 See Gast et al. (2003), Bergeton (2004), and Gast & König (2006) and references therein on the expansion of this idea.
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 principle, but need not, refer to Taroo. 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’).

‘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:

(21)  Taroo-wa Hanako-ni kare-ga / e₁³ 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-wa [e₁-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 [Ø + 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 intensifier¹⁴. In that respect, I will argue, it works analogously to the ASL SELF.

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¹² But see section 3.2 on how far up the reference can go in an unmarked context.

¹³ 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>.

¹⁴ 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.
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;

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 [Ø + 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.  *TV SOMEONE MOTHER SELF TURN-OFF  
       ‘A/Some mother herself turned off the TV.’  
   b.  TV  EACH  MOTHER  SELF TURN-OFF\(^{15}\)  
       ‘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 for accounting for (25b), both of which are contingent on the 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 English\(^{16}\):

\(^{15}\) The utterance is obligatorily two-handed:

(i)  
   **DH:**  TV  EACH  MOTHER  SELF  TURN-OFF  
   **NDH:**  1CL

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).

\(^{16}\) 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,
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.

Option 1: 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 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). 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).

Option 2: 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.

Brisson (1998, 2003) argues that in such contexts, all is not a determiner but an adverbial modifier. 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). 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.

We are thus 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 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.

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.

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 altogether, 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.

In that respect, the sharp dividing line between every/each and all (Brisson 1998, 2003) may have to be abandoned.
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 Ø SELF, WORK HARD, NEXT-ON-LIST Ø SELF, SOCIAL WORK MAJOR POSSIBLE, THAT MORE SAME JOIN RESEARCH
   ‘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, 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:

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20 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)
(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.

In Turkish, the determiner some surfaces in two different forms: bazı and birkaç. The NPs following bazı (vs. birçok) are disallowed in existential constructions while being grammatical in non-existential locative contexts.

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

(30) Bazı çocuklar bahçede
‘Some of the children are in the garden.’ (Enç 1991: 15)

The fact that bazı NPs are excluded from existential constructions leads Enç to the conclusion that partitives are specific indefinites, as they presuppose, rather than assert, existence. Bypassing the full argumentation of Enç (1991)21, we can draw the following conclusion for SELF in ASL: if SELF is an intensifier as defined in Eckardt (2002), it can combine with a specific indefinite, in which case it will a) presuppose existence and b) be banned from existential contexts (which assert, rather than presuppose existence). On that note, Mathur (1996) records readings (i)-(ii) of (28) (repeated here as (31a)). Note the difference in judgement in (31) both (a) and (b) cases can make reference to a previously established referent/presupposed group, but in the case with SELF (31a), a reading without such presupposition is non-existent.

(31) a. ONE MAN SELF FALL-DOWN
   i. ‘One man (out of a presupposed group) fell down.’
   ii. * ‘There is a man who fell down (no presuppositions).’ (Mathur 1996 [23a])
   iii. ‘There is a /some man (out of a presupposed group) who fell down.’

b. ONE MAN FALL-DOWN
   i. ‘One man (out of a presupposed group) fell down’
   ii. ‘There is a man who fell down (no presuppositions)’
   iii. ‘There is a /some man (out of a presupposed group) who fell down.’
   (Mathur 1996 [23b])

In other words, the [ONE MAN SELF] in (31a) creates a reading in which a) the existence of a group is presupposed, and b) the true existential interpretation is banned. In Enç’s terms then, the resulting reading is specific. And as illustrated in (31b), without SELF being added to [ONE MAN], both the specific and non-specific interpretations are possible. Thus, to the degree that

21 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.
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 marker\textsuperscript{22}. To clarify, on Mathur’s account, SELF marks the NP in SpecIP—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 SpecIP, 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, \([Ø + SELF]\)) 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 Schwarzchild’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. Schwarzchild argues that this restriction is contextual along the lines of (33):

(33) \textbf{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 itself\textsuperscript{23}.

(Schwarzchild 2002: 16)

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

\textsuperscript{22} See Mathur (1996) for the deduction of the facts.

\textsuperscript{23} 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 Schwarzchild (2002)—namely that [this man] seems to denote an individual that the speaker (but not the hearer) has in mind.
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 intensifiers, 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 [Ø + SELF]. Such contexts include a pronominal 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 should allow adunction of the adnominal intensifier. For the purposes of this paper, however, I focus on the pronominal Ø (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-JOHNB-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

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24 But see also Cunningham (2009) for some more objections to the precise Eckardt-style formulation in regards to the “associate problem.”
‘I love fish!’

In short, Lillo-Martin, appealing to Huang (1984), distinguishes two types of \( \emptyset \) existing in ASL: one identified/licensed by agreement (akin to the Italian/Spanish-type \( \text{pro} \)) and the one known in the literature as the \textit{radical pro} (\textit{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 \textit{discourse pro} has since been debated, and a new account of the phenomenon has been defended in the East Asian literature: namely that the \textit{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. What is important for the discussion here is that on Lillo-Martin’s account, there are two types of \( \emptyset \) —the type identified by locus agreement and the type that isn’t (something like \( \text{pro}_{\text{Agr}} \) and \( \text{pro}_{\neg \text{Agr}} \), respectively).

(35) a. Agreeing (\( \text{pro}_{\text{Agr}} \)): SEND
   
   A. Did John send Mary the paper?  \textit{(John is established at a and Mary at b)}
   B. YES, a-SEND-b.
   ‘Yes, (he) sent (it) to (her).’

b. Plain (\( \text{pro}_{\neg \text{Agr}} \)): 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 \textit{SELF} pursued here: a) a [pronominal + adnominal intensifier] construction where only the \textit{SELF} is overt—thus, surfacing as a \([\emptyset + \text{SELF}]\)—is fully expected to be grammatical; and b) a particular difference, tied to morphological agreement, might be expected between the two utterances—one containing \([\text{pro}_{\text{Agr}} + \text{SELF}]\), the other containing \([\text{pro}_{\neg \text{Agr}} + \text{SELF}]\).

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 \( \text{pro}_{\text{Agr}} \) here; in (38), non-agreeing verbs are used; this means that the empty element is \( \text{pro}_{\neg \text{Agr}} \). The difference between the two types of \( [\text{pro} + \text{SELF}] \) constructions is reflected in the morphological realization of agreement.

(36) Agreeing (for location): COME

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25 Bahan et al. (2000) propose an alternative account of null arguments as well as their connection to manual agreement in ASL. They argue that \( \text{pro} \) is always licensed by agreement (\( \text{pro}_{\text{Agr}} \)), 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, \( \text{pro}_{\text{Agr}} \) and \( \text{pro}_{\neg \text{Agr}} \), where Agr stands for agreement, while on Bahan el al.’s view, the remainder of this section records \( \text{pro}_{\text{Agr}} \) only (as it surfaces in contexts with and without manual agreement). Either way, \([\text{e} + \text{SELF}]\) tracks the distribution of \( \text{pro} \) with agreeing vs. plain verbs.
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—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):

(i)  a-IX, KNOW IXp, THINK a-[ Øi + SELF]i PEA-BRAIN
    He/she knows I think (he/she) himself/herself is an idiot

(ii) a-LOWEL, THINK WORKER, FEEL [Øj + SELF]j RIGHT
    Lowel, thinks that the worker, feels he, / her, right.

(iii) *JEFF, KNOW IXp, THINK a-[ Øi + SELF]i PEA-BRAIN
    Jeff knows I think (he) himself/herself is an idiot.

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26 Lee et al. (1997) argue the observation to be “incorrect” (and, thus, the generalization to be generally “invalid”) based on (i):
Lowel, thinks that the worker feels *he / he / *he 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 research. Here, I note the following: when the referent of the [Ø + 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 dijo que Susan contó sobre Juanita que ella 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 [Ø + SELF] construction where, by assumption, Ø is pro. 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 (as has been observed elsewhere in the literature). 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, IX, NOT LIKE CRITICIZE SELF, / *PRONOUN, i

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; + SELF]. The issue is explored in Author (in prep).

28 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.
‘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]) is anteceded by an object; in (42b), it is allowed on a par with an overt pronominal:

(42)  a. SENATE; PERSUADE WORKER, [pro + SELF];/ [pro + SELF]; WILL PAY TAX HIGH

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

   (adapted from Lillo-Martin 1995: 167)

   b. ME HEAR a-PRONOUN, DECIDE a-[pro + SELF];/ neu-[pro + SELF];/ a-PRONOUN, WILL a-COME-1

   ‘I heard that she decided that she 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

   ‘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 \textit{SELF}.\footnote{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 \textit{IX} is adjoined by \textit{SELF} or stressed (i.e. focused), the set of alternatives to the referent expected with focus will not arise.} In sum, the facts presented in this section support the claim that “LDA” \textit{SELF} is not anaphoric\footnote{Also independently noted in Mathur (1996).}; rather, it is a pronominal construction with an intensifier adjoined—of the form [\textit{pro} + \textit{SELF}]. In this respect, the ASL data in (42b)-(43) mirror the Japanese data in (20).

### 3.5.2 Cases of complementarity: \textit{pro} vs. PRONOUN

From the analysis presented so far, we should expect that overt pronouns and [\textit{pro} + adnominal intensifier] (e.g. the “LDA” \textit{SELF}) should always be able to co-occur. But this is not always the case: in certain constructions, the “LDA” \textit{SELF} and overt pronouns exhibit complementary distribution: (45) appears to record a judgment directly opposite to (7) and (37), repeated here as (44a-b), as well as (42b) above. That is, while in (44), \textit{PRONOUN} and [\textit{pro} + \textit{SELF}] do not exhibit complementary distribution (since there is no competition between the pronoun and anaphor), in (45), the pronoun, as referring to \textit{JEFF}, is ruled out.

(44) \begin{align*}
\text{a. a-LOWEL}_{i} \text{ FEEL } & \{a-[\textit{pro}+\textit{SELF}]_{i} \}/ a-\textit{PRONOUN}_{i} \}\ \text{INTELLIGENT} = (7) \\
& \text{‘Lowel thinks that he/self is intelligent.’} \\
\text{b. JOHN}_{i} \text{ a-IX, THINK } & \{\textit{pro}, i} / a-[\textit{pro}+\textit{SELF}]_{i}/ \textit{PRONOUN}_{i}, b-\text{ASK}-a \quad = (37) \\
& \text{‘John thinks he himself will ask.’}
\end{align*}

(45) \begin{align*}
& \text{JEFF, THINK } \{\textit{a-PRONOUN}_{i}; neu-[\textit{pro}+\textit{SELF}]_{i}/ \textit{pro}_{i}\} \text{ WILL a-COME-1.} \\
& \text{‘Jeff thinks he himself will come [to my party].’}
\end{align*}

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 \textit{pro} and [\textit{pro} + \textit{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 \textit{pro} vs an overt pronoun in certain environments is not unique to ASL; it has been frequently noted in the literature for other languages (as in Cardinaletti and Starke 1999 typology, i.a.). (46) below records Greek (Dimitriadis 1996) which exhibits similar effects: in some contexts, only \textit{pro} is allowed, and not its overt counterpart. In the sequence below, both of the possible antecedents of the pronoun are 3\textsuperscript{rd} person masculine; however, the null pronoun must pick out the subject of the preceding sentence, while the overt pronoun refers to the object.

(46) \begin{align*}
\text{a. O } & \text{Aris}_{i} \text{ dipluse } \text{ tin } \text{ efimerida}_{j}. \\
& \text{Def.art. Aris \textit{folded} def.art.ACC \textit{newspaper}} \\
& \text{‘Aris \textit{folded the newspaper}’} \\
\text{b. } & \text{\textit{pro}_{i} Tin}_{j} \quad \text{efere sto Giani}_{k}. \\
\end{align*}
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, [pro, çalışırken] müzik dinler
   Orhan  work.WHEN  music  listen.AOR

b. Orhan, [o, çalışırken] müzik dinler
   Orhan  he  work.WHEN  music  listen.AOR
   ‘Orhan listens to music when he works.’

The literature on the phenomenon in both Greek and Turkish, as well as other languages, is robust—though in a number of different types of implementation—point to the fact that the distribution of the null vs. overt pronoun in the subject position is guided by discourse requirements, 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. 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

31 Although some (e.g. Kornfilt 1984) rely on the relationship with the identification by Agr.
(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). This observation provides a pragmatic addition to the Avoid Pronoun Principle in contexts where the traditional syntactic identification is incomplete (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 antecedents. 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 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 tradition (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

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)

34 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, a-IX FEEL a-SELF / a-PRONOUN, 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_cliental by MacLaughlin 1997) for further research, since it is not at all clear that it is pronominal in nature.

Although see section fn. 24 for some issues.
In the preceding sections, I have argued that the “LDA” \textit{SELF} in ASL is an instance of \([\text{pro} + \text{intensifier}]\). On this view, the “LDA” \textit{SELF} ought to track the distribution of \textit{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” \textit{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 \textit{SELF} are found in the object position: a adverbial intensifier and a local anaphor, but not \([\text{[SELF]}]_{\text{ID}}\).

3.6.1 \textit{*[\text{[SELF]}]_{\text{ID}}}, in the object position

Padden (1988) states that only underlying subjects can serve as antecedents for what she calls “\textit{SELF} pronouns” (Padden 1988: 161). Note that Padden does not differentiate between different functions of the reflexive. However, equipped with the analysis of “\textit{SELF} pronouns” as ambiguous between the local anaphor and the adnominal intensifier (i.e. \([\text{[SELF]}]_{\text{ID}}\)), 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. \([\text{[SELF]}]_{\text{ID}}\) can only adjoin to an underlying subject.

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, (herself\textsubscript{i}) took care of the girl\textsubscript{j} (herself\textsubscript{i,j})

However, the following data from ASL suggest otherwise:

(50) MARY\textsubscript{i} a-IX a-ASK-b TEACHER\textsubscript{i} SELF\textsubscript{i,*j} \textsuperscript{36}

‘Mary\textsubscript{i} asked the teacher\textsubscript{i}, herself\textsubscript{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 (\textit{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

\begin{tabular}{ll}
\textit{Taroo-Nom} & Hanako-self (-Acc) \textit{hit} \\
\end{tabular}

‘Taroo hit Hanako (and not her sister).’ \textsuperscript{[Japanese]}(Othaki, p.c.)

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\textsuperscript{36} As discussed in this section, my consultants find \textit{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\textsubscript{i} SELF\textsubscript{i} \textquotesingle{}John saw Obama himself\textquoteright

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.
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 kisuṣita
   TAROO-Nom HANAKO-self-Dat kissed
   ‘TAROO kissed HANAKO herself (and not her sister).’

c. TAROO-wa HANAKO-zisin-ni zibun-no-e-o kakaseta
   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, (herself,) took care of herj (herselfi,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. Furthermore, (54) serves as evidence that even in contexts where haplology is not an issue, 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]]_D (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) MARYi a-IX, a-ASK-b TEACHER, SELFi,j

37 Note that if the intensified pronominal is in the subject position, the sentence is grammatical:
   (i) Stop blaming others! You yourself did it!
38 See also Siemund (2000, 2002) for additional arguments against the haplology account.
i. ‘Mary, (who has always needed help to ask questions) asked the teacher, all by herself.’

ii. ‘Mary, herself, (and not Mary’s best friend) asked the teacher.

The reading in (55ii.) is the [[SELF]]_Ind, 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]]_Ind. 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 position.

(56) a. MARY, THINK JOHN, KNOW PEDRO, LIKE [pro + SELF]_n, j, k SELF, n, j, k ‘Mary, thinks that John, knows that Pedro, likes himself._n, j, k’.

b. LOWEL, WANT WORKER, RESPECT SELF, n, j ‘Lowel, wants the worker, to respect *[him himself]_n, j, k, k’.

(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 kisusita. [Japanese]
Hanako-NOM her self-DAT kissed.
‘Hanako kissed her self.’
  i. ‘act of self-kissing
  ii. *{not her sister, not her aunt, not her boyfriend}

(58) Aileli kanjian ziji / [ta ziji].
Ellery see self/ he self
‘Ellery saw himself.’
  i. ‘act 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

39 [pro + SELF]_n is independently ruled out by the Binding Conditions A-B.
proposed in this paper: “LDA” SELF is unavailable precisely in contexts where the intensifier is unavailable—in the object position.\footnote{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.}

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, sovral chto {ego\textsubscript{i,j} / Petyu\textsubscript{j}} samogo, kto-to perviy udaril.

Vanya lied that him / Peter himself somebody first hit

‘Vanya, lied that somebody hit him\textsubscript{i,j} / Peter, himself\textsubscript{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 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 vio el accidente
   We can ask OBJ Maria because she saw the accident
   ‘We can ask Maria because she saw the accident.’
   [Spanish] (König & Siemund 2008)

   b. Podemos preguntar a Maria, porque pro vio 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 vio 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 consistent with the line of inquiry advocated by Alexiadou & Anagnostopolou (1998), Barbosa, Duarte & Kato (2005) and others: that languages with “Agr.-identified pro” actually do not have pro at all, and the Agr. itself is responsible for feature-checking (for an overview and refinement of claims on both sides of this debate, see Barbosa 2009). This view is consistent with (60)—there is no pronominal for the adnominal intensifier to adjoin to. On the other hand, this option is available in languages like Japanese and Chinese—there is a true pro there, and, thus, [pro + adnominal intensifier] is possible. This observation, in turn, suggests that since ASL patterns with the Japanese/Chinese cases, then Agr.-identification (a la Lillo-Martin 1986, 1991 and Bahan et al. 2000) must be epiphenomenal (recall, however, that in section 3.4, we were able to cash out the differences between the two types of null arguments by making use of the existence of pro_Agr; this phenomenon will then need an alternative explanation, pursued in Author 2010).

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).

### 3.7.2 [pro + SELF] $\approx$ Gen$_x$

One other issue deserving further inquiry remains on the table: an observation that SELF seems to correspond to generally$^{41}$:

(61) a. MY CAR a-SELF TEND BREAK-DOWN
   ‘My car tends to break down (in contrast to other cars)’
   (Fischer & Johnson 1982 cited in Mathur 1996 [18b])

$^{41}$ The issue is addressed in Mathur (1996)
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). 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 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

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42 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.
Eckardt argues that the relation between the *he* and *himself* in (62) on the reading (ii.) is lacking all together; in fact, the assistive reading arises from the ASSIST relation between the person and the event in which s/he is (not) the driving agent but, instead, assists the agent in performing the task—i.e. “the human pendant to the well-known INSTRUMENT role.”

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

According to Eckardt, the homophony between the lexical items representing ID and ASSIST is historically-grounded, but that is the extent of it—the two expressions are not related otherwise. In fact, in many languages they are encoded by two different lexical items (Gast & Siemund 2006).

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

\[(64)\]

a. JOHN SELF MAKE PIE
   i. ‘John himself (and not his room-mate) made the pie’ = ID
   ii. ‘John made the pie by himself (without anyone’s assistance)’ = ASSIST
      (Liddell 1980: 171)

b. JOHN FEEL IX SELF FINISH MEET BILL
   i. ‘John thinks he himself (and not his secretary) met Bill’ = ID
   ii. ‘John thinks that he met Bill by himself (without assistance)’ = ASSIST
      (Mathur 1996 [3])

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 [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:

\[(65)\]

Maria SELBST hat die Aufgabe gelöst.
*Maria self has the problem solved*
*‘Maria solved the problem herself’ = ASSIST*  \(\text{(Eckardt 2002: 401)}\)

\[(66)\]

Maria hat die Aufgabe SELBST gelöst.
*Maria has the problem self solved*
   i. ‘Maria solved the problem itself.’ = ID
   ii. ‘Maria solved the problem by herself.’ = ASSIST  \(\text{(Eckardt 2002: 401)}\)

In this respect, ASL *SELF* is expected to show a behavior consistent with its German counterpart—namely that \(*SELF_{\text{ASSIST}}\) in contrast to \(*SELF_{\text{ID}}\), 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
(68) **a. HOUSE, SELF; BLOW-UP**
   i. The house itself blew-up = ID
   ii. The house blew-up by itself = ASSIST (Padden 1988: 154)

   **b. SELF; HOUSE, 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 in vP-adjointed 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)over 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.

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43 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).
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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