Taking a Strong Position on Strictly Read Reflexives*

Isabelle Charnavel* and Dominique Sportiche*

Abstract: Despite occasional claims to the contrary, English reflexives robustly give rise to strict readings in Ellipsis or Focus constructions. But as we argue, not always. We develop a proposal to predict when strict readings are available by using prosodic cues to distinguish between weak and strong reflexives by. In a nutshell, we will propose – in the spirit of Kayne's 2002 proposal – that Condition A derives from movement (remerging) of the antecedent from a position next to the reflexive (roughly as in the case of intensifiers) into a theta position. This will explain the link between reflexives and intensifiers, since under this hypothesis, they originate from the same underlying structure. This will also account for strict readings of reflexives since the trace of the antecedent (a copy of the antecedent) can be literally interpreted in the ellipsis site (or in the focus alternatives). Additionally, we will argue that reflexives must form covert self-predicates whenever syntactically and semantically possible. This constraint entails a restriction on strict readings that has previously not been (seriously) taken into consideration: as we will explain, only strong reflexives (not weak reflexives) can trigger strict readings.

1. Introduction

Traditionally, reflexives are claimed to trigger only sloppy readings in ellipsis and focus constructions (Williams 1977, Chomsky 1981, Reinhart 1983, i.a.) as illustrated in (1).

- (1) John shot himself and Bill did too.
 - a. Sloppy reading: \checkmark John_i shot himself_i and Bill_k shot himself_k too.
 - b. Strict reading: Solution John; shot himself; and Bill, shot him; too. (Williams 1977: 116)

But it has long been observed that reflexives can in fact trigger strict readings in some configurations such as (2), and as we will see, this observation has been confirmed by recent experimental findings (Frazier & Clifton 2006, McKillen 2016, i.a.).

(2) Betsy couldn't imagine herself dating Bernie, but Sandy could.

✓ ... but Sandy could imagine Betsy dating Bernie. (Sag 1976: 140)

Nevertheless, there is to date no empirically adequate analysis of strict readings of reflexives: as we will discuss, all existing proposals face problems of under-or over-generation.

Focusing on English here, our goal is to provide a descriptively adequate account for strict readings of reflexives, which also addresses two other crucial issues raised by reflexives. First, both the descriptive formulation and the derivation of the locality constraints on reflexives (Condition A) remain controversial (Reuland 2011, Charnavel & Sportiche 2016, i.a.). Second, although it is robustly

^{*} Isabelle Charnavel, Harvard University. Dominique Sportiche, University of California, Los Angeles. For helpful feedback, thanks to the audience of the Leipzig Institute of Linguistics and WCCFL 39, as well as Shannon Bryant, Travis Major, Richard Stockwell and Tim Stowell. We are also grateful to the participants in our pilot experimental study. This article is a slightly updated version of the same paper to appear in the WCCFL 39 proceedings.

documented, the empirical link between reflexives and so-called intensifiers – or emphatic reflexives, illustrated in (3) – remains to be explained (König & Siemund 2005, Gast 2006, i.a.).

(3) a. John himself signed the letter.

b. John signed the letter himself.

(Moravcsik 1972: 274-275)

In a nutshell, we will propose – in the spirit of Kayne's 2002 proposal – that Condition A derives from movement (remerging) of the antecedent from a position next to the reflexive (roughly as in the case of intensifiers) into a theta position. This will explain the link between reflexives and intensifiers, since under this hypothesis, they originate from the same underlying structure. This will also account for strict readings of reflexives since the trace of the antecedent (a copy of the antecedent) can be literally interpreted in the ellipsis site (or in the focus alternatives). Additionally, we will argue that reflexives must form covert *self*-predicates whenever syntactically and semantically possible. This constraint entails a restriction on strict readings that has previously not been (seriously) taken into consideration: as we will explain, only strong reflexives (not weak reflexives) – a distinction we will justify - can trigger strict readings.

We will specify this novel empirical restriction on strict readings by exploiting the prosody of reflexives in Section 3, after a brief review of the main previous proposals in Section 2. In Section 4, we will lay out our proposal based on antecedent movement, and we will show how it explains strict readings, Condition A and the link between reflexives and intensifiers. Section 5 will conclude the paper.

2. Issues with previous proposals

In standard Binding Theory, reflexives are assumed to be interpreted as bound variables only (Chomsky 1981, Reinhart 1983, i.a.), and this assumption is usually taken to correctly predict that reflexives only give rise to sloppy readings in VP-ellipsis and focus constructions (see (1) and aforementioned references). But even before the development of standard Binding Theory, it was noticed that reflexives can in fact be ambiguous in such constructions: strict readings are available both under ellipsis (see (2) above) and in other constructions involving focus alternatives (see (4) below).

(4) It was Spiro who voted for himself.

✓ The other people did not vote for Spiro.

(Dahl 1973: 81)

To account for such facts as well as other binding-related problems raised by ellipsis, Fiengo & May (1994) famously argue for a process called vehicle change: a nominal in the elided site can take any syntactic form as long as its index structure remains unchanged.² With respect to reflexives, vehicle change implies that *himself* can be construed with or without *self* in ellipsis as shown in (5).

(5) Max_i hit himself_i before Oscar_k did [hit himself_k / hit him_i]. (Fiengo & May 1994: 206)

Under this theory, strict readings of reflexives are thus always available in principle, and only discourse factors are responsible for the dispreference of strict readings in some cases like (1) above.³

-

¹ As is standard, we here assume that the identity conditions on ellipsis are regulated by focus conditions (Rooth 1992, Heim 1997, Merchant 2001, i.a.).

² Without entering into the details of their Dependency Theory, Fiengo & May (1994) basically assume that DPs can either be referential or bound variables, and vehicle change entails that a referential DP must remain referential and maintain the same index, while a bound DP must stay bound but need not maintain the same index. Furthermore, Fiengo & May (1994) assume that a reflexive can be interpreted as either co-referential or bound by its antecedent.

³ More specifically, the availability of strict readings often depends on whether the reflexive can be interpreted as co-referential (given the constraints specified in fn. 2), and Fiengo & May (1994: 211-213) argue that the availability of this interpretation is largely conditioned by discourse contexts.

Treating cases like (1) as ungrammatical rather than infelicitous, other theories instead introduce syntactic or semantic licensing conditions for strict readings of reflexives. As we explain below, they make different predictions about the distribution of strict readings, which all turn out to be incorrect.

First, Hestvik (1995) argues that a reflexive can trigger strict readings in subordination contexts like (5), but not in coordination contexts like (1), because its binder has scope over a subordinated ellipsis, but not over a coordinated ellipsis. Although it is based on discourse relations rather than syntactic configurations, Kehler's (2000, 2002) proposal makes similar predictions: strict readings are licensed under cause-effect relations because they only require semantic identity for ellipsis resolution; they are not licensed under resemblance relations, which require syntactic identity for ellipsis resolution. Thus, both theories correctly predict a contrast between (6)a and (6)b.

- (6) a. Bill defended himself because his lawyer couldn't.
 - ✓ ... because his lawyer couldn't defend Bill.
 - b. Bill defended himself, and John did too.
 - * ... and John defended Bill too.

(cf. Hestvik 1995: 213, Kehler 2002: 55, 58)

But recent experimental findings (Frazier & Clifton 2006, Kim & Runner 2009, Ong & Brasoveanu 2014, McKillen 2016, i.a.) reveal that in fact, strict readings can arise as naturally as sloppy readings both in coordination and under resemblance relations as shown by the absence of contrast in (7)a-b.

- (7) a. Doug blamed himself for the band's collapse because everyone else did.
 - b. Doug blamed himself for the band's collapse just like everyone else did.
 - ✓ ... {because/just like} everyone else blamed Doug. (Frazier & Clifton 2006: 326)

Second, another type of theory attributes the availability of strict readings not to the type of configuration in which the reflexive occurs, but to the type of reflexive: it is often assumed that only reflexives exempt from Condition A can trigger strict readings (Bouchard 1984, Lebeaux 1984, Reinhart & Reuland 1993, Kiparsky 2002, Runner et al. 2006, Charnavel 2019, 2020, i.a.). This hypothesis predicts a contrast between (8)a and (8)b.

- (8) a. John hit himself and Bill did too.
 - **★** ... and Bill hit John too.
 - b. John thought that there were some pictures of himself inside, and Bill did too.
 - ✓ ... and Bill thought that there were some pictures of John inside too. (Lebeaux 1984: 346)

Even if the conditions for exemption from Condition A are debated (see review in Charnavel 2019), we can show that just like Hestvik (1995) and Kehler (2000, 2002), this approach also undergenerates. Our argument relies on Charnavel & Sportiche's 2016 generalization: inanimate reflexives cannot be exempt because they cannot be logophoric (under any definition of logophoricity). The acceptability of (9)⁶ thus indicates that non-exempt reflexives can also trigger strict readings.⁷

⁴ As noted in Kehler (2002) and experimental studies mentioned later in the text, their predictions diverge in some cases (when subordination expresses resemblance relations, as in (5), or when coordination expresses cause-effect relations). The details do not matter here, since as we show (see (7)), both theories undergenerate anyway.

⁵ Both Hestvik (1995: 226-229) and Kehler (2002: 58) nevertheless note that examples like (i) are marginal rather than fully unacceptable and thus propose rescue mechanisms for such cases.

⁽i)Bill_i defended himself_i and [his lawyer]_k did [defend him_i] too.

⁶ This judgment, shared by several native speakers we consulted, was confirmed by a pilot experimental study we run involving 290 participants: in sentences like (9), the strict reading was even significantly more acceptable than the sloppy reading.

⁷ Charnavel (2020: 713) explicitly argues that inanimate reflexives cannot trigger strict readings based on the French counterpart of example (ii). But example (ii) contains a confound: as shown in Charnavel & Bryant (2019, 2020), noun phrases with a goal argument obligatorily contain a subject. Thus, the unacceptability of (ii) bears on the licensing conditions on this (silent) subject, not on those on strict readings of reflexives.

⁽ii) Your webpage contains more links toward itself than mine does [*contain links towards your webpage].

(9) Mercury attracts itself more than silver does.

✓ ... more than silver attracts mercury.

(cf. Charnavel & Bryant 2020: 11)

Finally, a third type of theory also locates the source of the availability of strict readings in the reflexive itself. But instead of relying on exemption, it relies on the nature of the contribution of the morpheme *-self*, which is argued to be presuppositional (Sauerland 2013, McKillen 2016, i.a.). Specifically, Sauerland (2013) proposes that just like *phi*-features, *self* is a purely presuppositional element, and that the presupposition of purely presuppositional elements can be ignored in focus alternatives. That's why (10) exhibits a strict reading and (11) a sloppy reading: the contributions of *self* and the first person feature, respectively, need not be interpreted in focus alternatives.

(10) Only Romney expected himself to win.

✓ The other people did not expect Romney to win.

(Sauerland 2013: 167)

(11) Only I did my homework.

✓ The other people did not do their homework.

(Heim 1991, Sauerland 2013: 157)

But this analysis faces problems of both under- and overgeneration because it requires creation of a covert *self*-predicate (see fn. 8) in the spirit of predicate-based theories (Reinhart & Reuland 1993, i.a.). First, *self*-predicates cannot generally be formed with exempt reflexives, which nevertheless do license strict readings (see e.g. (8)b). More problematically, overt *self*-predicates do not license strict readings as exemplified in (12). This analysis would thus have to stipulate that overt and covert *self*-predicates behave differently.

(12) Jane self-harms more often than her brother does.

* ... than her brother harm Jane.

In sum, this brief review of the main previous proposals indicates that what conditions the availability of strict vs. sloppy readings of reflexives remains to be found. We observed that the proposals restricting the distribution of strict readings of reflexives to specific syntactic or semantic configurations all undergenerate. At the same time, it remains the case that reflexives cannot systematically trigger strict readings, and deriving this observation from mere discursive issues (as suggested by Fiengo & May 1994) seems unsatisfactory. Instead, by exploiting prosody and the novel observation in (12), we will change perspective and look for what precludes strict readings rather than what licenses them.

3. A new empirical restriction on strict readings

Our proposal about the distribution of strict readings of reflexives relies on Ahn's (2015) observation (cf. Spathas 2010) that some reflexives are prosodically special. This can be shown in broad focus contexts such as (13), where in English, stress normally falls on the most embedded constituent.

(13) A: What happened in the kitchen?

(Ahn 2015: 42, 62)

B: a. Remy_i accidentally burned {Marie / #himself_i}.

b. Remy_i accidentally **burned** {#Marie / 'imself_i}.

c. Remy_i accidentally **burned** {Marie and **himself**_i / **#Marie** and 'imself_i}.

⁸ Specifically, Sauerland (2013) treats *self* as a partial identity function combining (via movement, vs. McKillen 2016) with a two-place predicate P and adding the presupposition that P's arguments are identical. See Sportiche (2022) for independent arguments against this view (based on e.g. (20)).

⁹ Sauerland claims that strict readings of reflexives only occur with ECM verbs. But based on experimental evidence, McKillen (2016) shows that strict readings are also available with simple transitive verbs. We therefore ignore the complication introduced by Sauerland (2013) to restrict strict readings to reflexives complementing ECM verbs.

¹⁰ Our pilot experimental study (see fn.6) strongly confirmed the unavailability of a strict reading in (12): the contrast with the sloppy reading (which is acceptable) was highly significant.

When it is the most embedded element as in (13)a-b, *Marie* must bear stress (noted in bold); the reflexive, however, must be extrametrical in (13)a-b: himself cannot bear stress even if it is also the rightmost element. Furthermore, (13)c reveals that not all reflexives are extrametrical: when it appears in a coordination, himself bears neutral phrasal stress. These contrasts indicate that we must distinguish between weak reflexives (which from now on we note 'imself as in (13)b) and strong reflexives (himself) in English.

This distinction, we argue, is crucially relevant to the availability of strict readings. It has been sporadically noted that stressing reflexives increases the availability of strict readings (Spathas 2010: 247, Reinhart & Reuland 1993: 674-675, i.a.) and the native speakers we have consulted have all confirmed this observation. On this basis, we make the hypothesis below in (14)a, which we propose to derive from our observation in (12) repeated in (14)b:

- a. Hypothesis: only strong reflexives can trigger strict readings
 - b. Explanation: a weak reflexive does not trigger strict readings because it behaves as if it was part of a self-predicate

The rest of the section specifies and motivates this double hypothesis.

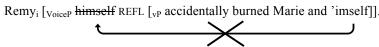
First, we need to specify the distinction between weak and strong reflexives. Ahn (2015) proposes that a weak reflexive undergoes (covert overt) movement to Reflexive Voice (REFL) as in (15):

 $Remy_i \left[_{VoiceP} \right. \\ \frac{himself}{k} \left[_{VP} \right. \\ accidentally burned 'imself']]. \\ \frac{1}{k} \left[_{VoiceP} \right] \\ \frac{1}{k}$ (15)

This hypothesis is inspired by the syntax of reflexive clitic constructions observed in languages like French (see Sportiche 2014, and references therein). As shown in (16), the French reflexive clitic se is required in configurations like (13)a-b (see (16)a-b), but precluded in configurations like (13)c where the strong reflexive lui-même is instead required (see (16)c-d). Weak 'imself and French se thus have a similar distribution.

- (16)a. Rémy_i se_i brûle. b. *Rémy_i brûle lui_i(-même). Remy_i is burning himself_i.'
- c. *Rémy_i se_i brûle Marie et .
- d. Rémy, brûle Marie et lui, (-même). 'Remy_i is burning Marie and himself_i.'

As Ahn argues, movement to Voice explains why himself does not bear stress in (15): even if himself is spelled out low, it is not the most embedded constituent after movement due to its simultaneously occurring in two positions (due to the copy theory of movement) one higher than the verb. This hypothesis also accounts for the difference between (13)a-b and (13)c (cf. (16)a-b vs. (16)c-d); as shown in (17), himself cannot move to Reflexive Voice (and thus be extrametrical) in (13)c because it sits in an island (coordinate structure).



More generally, the constraints on movement to Voice imply that only reflexives bound by a coargumental deep subject are weak reflexives. When movement is not possible, the reflexive is strong. Furthermore, Ahn (2015: 290) assumes that Reflexive Voice must be merged only if it does not change the interpretation. This assumption is mainly motivated by prosodic facts in ditransitive constructions:¹¹

¹¹ English is again similar to French in this respect:

a. Lise_i $\{se_i/*se_k\}$ assigne Daniel_k.

b. Lise; assigne Daniel_k à {lui-même_k / *elle-même_i}.

^{&#}x27;Lise assigns Daniel to {herself/himself}.'

(18) A: What happened at the meeting?

```
B: a. Liz<sub>i</sub> assigned Danny to {#hersélf<sub>i</sub> / 'erself<sub>i</sub>}.
b. Liz<sub>i</sub> assigned Danny<sub>k</sub> to {himsélf<sub>k</sub> / #'imself<sub>k</sub>.} (cf. Ahn 2015: 52, 63)
```

In (18)a, the reflexive is bound by the subject, so Reflexive Voice, which allows – in fact, requires – subject orientation (see details in Ahn 2015), must be merged, and 'erself' is therefore weak. But in (18)b, the reflexive is bound by the object, an interpretation that cannot arise with Reflexive Voice; thus, Reflexive Voice is not merged, and himself is strong.

In sum, Ahn's prosodic probe allows us to distinguish between two types of reflexives in English. We call them weak and strong reflexives because their difference is revealed by their weak or strong prosody, respectively, in broad focus contexts (and crucially only in these contexts). ¹² But as demonstrated by Ahn, their difference is in fact structural. We nevertheless diverge from Ahn (2015) on the type of structural difference we assume: instead of positing movement to REFL, we hypothesize that weak reflexives involve covert incorporation of the noun *self*. ¹³ This hypothesis is independently motivated by the fact that weak reflexives do not in fact parallel reflexive clitics (as shown in detail in Charnavel & Bryant 2020), but behave as involving (covert) *self*-predicates (as shown in detail in Sportiche 2022). For example, (19) shows that English *'imself*, unlike French clitic *se*, can be bound by the subject of a small clause, and (20) that *'imself*, like *self*-predicates, cannot give rise to *de re* readings.

- (19) A: What happened during the writer's meeting yesterday?
 - B: a. Jenna made Patrice_i proud of {#himsélf_i / 'imself_i b. Jenna a rendu Patrice_i (*se) fier de lui_k-même. (Ahn 2015: 120, Charnavel & Bryant 2020: 38)
- (20) Elie, the high priest wants to placate the gods by sacrificing a member of the community. He says: "I want to sacrifice the oldest member of the community!" He does not realize it's him, but I do. I report:
 - a. #Funny, Elie wants to self-immolate.
 - b. Funny, Elie wants to immolate {#'imself / himself}. (Sportiche 2022: 10)

Furthermore, Ahn (2015: 290) posits an ad hoc pragmatic rule to regulate the distribution of weak vs. strong reflexives: Reflexive Voice must be merged if its presence if grammatically possible and if it does not change the interpretation. Instead, we hypothesize that weak and strong reflexives stand in the general type of competition documented by Cardinaletti & Starke (1994/1999) (cf. Charnavel & Sportiche 2016, Charnavel & Bryant 2020): all else being equal, weak forms block strong forms. As argued in Charnavel & Bryant (2020), this hypothesis is supported by the fact that English strong reflexives (just like French strong reflexives) are not only blocked by weak reflexives, but also by weak pronouns. This is illustrated by the contrast between (21)a, where the weak reflexive does not yield the intended interpretation, but the weak pronoun does, and (21)b, where the weak pronoun is infelicitous in the intended broad focus context here.

(21) a. Max_i boasted that [the queen]_k invited {*himself_i / 'im_i / 'erself_k} for a drink. b. Max_i boasted that [the queen]_k invited Lucie and { himself_i / #'im_i / *'erself_k} for a drink. (Charnavel & Bryant 2020: 34, adapting Reinhart & Reuland 1993: 670)

Now that we have clarified the division of labor between weak and strong reflexives, we are in a position to derive the strict reading facts. Recall that *self*-predicates cannot trigger strict readings (see

Thus, being weak does not preclude being accented or focused elsewhere, e.g. in narrow focus contexts.

¹³ Self-incorporation has already been proposed by several authors (see most recently Lechner, 2012 or Sauerland 2013, and references therein), in order to derive Condition A. Our hypothesis crucially differs from all of them since for us, (i) self-incorporation only concerns a subset of the reflexives obeying Condition A (in fact, examples like (13)c, where self-incorporation is impossible but Condition A can be shown to apply, indicate that Condition A cannot derive from self-incorporation); and (ii) self is never a predicate reflexivizer.

(12)) and that reflexives are preferably stressed under strict readings. These two facts are intrinsically linked under our hypothesis: given that a weak reflexive involves covert *self*-incorporation, it behaves as if it was part of a *self*-predicate, and thus cannot trigger strict readings as shown in (22) (cf. (6)b).

(22) Bill_i self-defended 'imself_i, and John_k did [self-defend 'imself_k] too.

Given that the reflexive is bound by a coargumental deep subject here, it must be weak, that is, it forms a covert *self*-predicate. This induces obligatory sloppy reading because parallelism in ellipsis requires that a *self*-predicate be formed in the ellipsis site, which entails coreference with the local subject.

If weak reflexives cannot trigger strict readings, the corollary is that only strong reflexives can trigger strict readings. This immediately entails that strict readings are available in examples where the syntactic configuration forces the reflexive to be strong as in (8)b above (including an exempt reflexive). As for examples where the syntactic configuration should in principle force the reflexive to be weak in the antecedent of the ellipsis as in (22) just above, we appeal to the conditions of application of competition. According to Cardinaletti & Starke's generalization, 'imself blocks himself all else being equal, that is, in particular, if meaning does not change (see (18)). In ellipsis constructions, we thus hypothesize that weak reflexives do not block strong reflexives under strict readings, since weak reflexives only trigger sloppy readings: a strict reading can for instance arise in (23) with strong himself, because weak 'imself in (22) yields a different, sloppy, interpretation (cf. (20)b). In the conditions of application of competitions of application of competitions.

(23) Bill_i defended himself_i, and John_k did [defend himself_i] too.

In sum, we conclude that strict readings of reflexives are always in principle available (cf. Fiengo & May 1994). But the structural configuration is relevant: when a reflexive is bound by a deep coargumental subject, which **normally** entails that it must be weak, a strict reading can arise only if the reflexive is strong. This explains why stress is often reported to facilitate strict readings of reflexives, and may further account for why strict readings are generally perceived to be harder to obtain.¹⁵

4. Analysis

The goal of this section is to derive the generalization just obtained: English reflexives can always trigger strict readings in ellipsis if and only if they are strong. We have already indicated why weak reflexives, which form covert *self*-predicates, cannot trigger strict readings (see (22)). Now we are going to derive why strong reflexives can give rise to strict readings by hypothesizing antecedent movement. This hypothesis – described in greater detail in Charnavel & Sportiche (2022) – will simultaneously solve two other crucial problems raised by reflexives (i) how to derive Condition A and (ii) the link between reflexives and intensifiers – which we now describe.

Although the exact relevant definition of locality remains debated (see Charnavel & Sportiche 2016 for discussion), it is uncontroversial that reflexives must be locally and exhaustively bound. But it remains unclear how to derive these locality conditions (standardly stated by Condition A of Binding Theory) from existing, independently motivated mechanisms of the grammar. Two main types of approach have been proposed: Condition A is claimed to derive either from Agree (Hicks 2009, Reuland

¹⁴ French here differs from English: the reflexive clitic *se* can trigger strict readings (see Sportiche 2014, i.a.). This is not unexpected under our proposal since *se* is not a SELF-reflexive (in the sense of Reinhart & Reuland 1993) and thus cannot involve anything like *self*-incorporation. In fact, *se* is not intrinsically reflexive, as it appears in middle or anticausative constructions. *Se* is nevertheless (deep) subject oriented. See Sportiche 2014 for discussion.

¹⁵ But our proposal is only meant to capture the constraints on the availability of strict readings, not on their (dis)preference with respect to sloppy readings. Like Fiengo & May (1994) or Kehler (2000, 2002), we suspect that discursive considerations are responsible for this (but we do not have a specific proposal about the details).

¹⁶ As mentioned above (see discussion around (8)), it is often assumed that some reflexives are exempt from the locality conditions imposed by Condition A. We here follow Charnavel's (2019, 2020) proposal that reduces descriptively exempt reflexives to descriptively plain reflexives by positing silent logophoric binders.

2011, Rooryck & Vanden Wyngaerd 2011, i.a.) or from Movement (Hornstein 1995, 2001, Kayne 2002, i.a.). Charnavel & Sportiche's (2016: 65-71) arguments nevertheless show that the movement approach is the most promising. In particular, an Agree approach incorrectly predicts nonexistent intervention effects, and the definition of locality it entails is too permissive.

Another problem faced by any analysis of reflexives arises from the pervasive crosslinguistic link we observe between reflexives and intensifiers (König & Siemund 2005, Gast 2006, i.a.): in many languages from diverse languages families (e.g. French *lui-même*, Mandarin *ziji*), the forms used for reflexives (partially) overlap with the forms used for intensifiers, as we illustrated for English in (3). This correlation between reflexivity and intensification must be explained, but to our knowledge, no attempt has been successful so far (cf. Browning 1993, Bergeton 2004, Gast 2006, Charnavel 2012, i.a.).

Begin with points (24)a-b below, hardly controversial, with the consequence of (24)c.

- (24) a. self is a nominal (inflecting for number self/selves) (see e.g. Van Gelderen 2000);
 - b. self denotes the identity function, self(y) = y (see e.g. Eckardt 2001);
 - c. For unknown reasons, English disallows *self* surfacing with its argument as in *John's self*, or *the self of John*, unless *self* means "ego" (in which case there is no anaphoricity; see e.g. Ahn & Kalin 2018).

Now our solution to the three problems mentioned above combines a movement analysis with analytical intuitions found in Safir (1996). It is based on the idea that self is used as a predicate nominal, that is, as a two-place predicate of identity as in the small clause (25)a. As shown in (25)b, this small clause is turned into a DP – by predicate relativization – to occur in argument position yielding the meaning the same as α that he is.

(25) a.
$$[him\ (is)\ self\ \alpha] \rightarrow b. [[self\ \alpha]_k\ [him\ (is)\ t_k]]$$

This structure is (idiosyncratically) spelled out as *himself* (or *yourself* with *you* instead of *him*, etc...) with α silent (because of (24)c, it has to move).

This idea is consistent with historical observations (in Old and Middle English, *self* was an adjective meaning 'same', see Van Gelderen 2000, i.a.) and crosslinguistic considerations (for example, the German cognate *selb* means 'same', and the word for 'same' in French – *même* – is used in reflexives *lui-même*).

Crucially, the hypothesis that *self* is used as a predicate provides the key to unifying intensifier and reflexive uses: *self* does not only take the pronoun *him* as argument, but it also takes its antecedent α as second argument, which, must move because of (24)c to various positions as roughly shown in (26) with α = Remy (see Charnavel & Sportiche, 2022, for further details).¹⁷

a. Remy_i [himself_i Remy_i] came.
 b. Remy_i burned Marie and [himself_i Remy_i].
 c. Remy_i self-burned [himself_i Remy_i].

First, α = Remy can be relativized as in (26)a, which creates an intensifier construction. Second, α = Remy can move into a theta position – the subject of *burn* in (26)b – thus yielding a strong reflexive construction. Third, in addition to antecedent movement, *self* can incorporate into the verb – if, as we saw, the syntactic configuration allows it – which gives rise to a weak reflexive construction as in (26)c.¹⁸

¹⁷ French *lui-même* is derived from the small clause [*lui* [$m\hat{e}me\ \alpha$]; but where English self is a noun, whose relativization turns this small clause into a DP, the adjectival status of $m\hat{e}me$ prevents this derivation. Instead, the pronoun is relativized yielding lui [[t $m\hat{e}me\ \alpha$]] (= lui qui est le $m\hat{e}me$ que α / him who is the same as α).

Note that nothing precludes combining an intensified structure like (26)-a with (26)-b: in such a case we have a weak reflexive where the object is intensified. This could be an answer to the question *Did Remy identify Sue?*

Note that coreference between him and α is asserted in (25)a-b, hence does not run afoul of Condition B or C. Note also that the alternative structure, [self him [α is], would by (25)c, require him to move and remerge as argument of burn: this would violate Condition C (or Condition B with a pronoun instead of Remy) under the assumption (which space limitations prevents us to justify here) that covaluation between him qua argument of burn and Remy is not asserted. Further note that this excludes not using self in (25)a: starting with [him (is) α] or $[\alpha$ (is) him] instead would trigger a Condition C or Condition B violation upon Remerge (self protects from Condition B, as in Jayaseelan 1996).

This analysis provides a solution to the three problems we mentioned. First, intensifier and reflexive constructions have the same basic structure; it is thus expected that reflexives and intensifiers exhibit the same form in many languages.¹⁹

Second, movement of the antecedent into a theta position derives Condition A: movement precludes any non-exhaustive co-reference between the reflexive and its antecedent, and the constraints on this type of movement (A-movement) entail the appropriate locality conditions (see Charnavel & Sportiche 2016). Recall that we hypothesize antecedent movement for both strong and weak reflexives (e.g. (26)a-b); we thus predict the locality constraints on A-movement to obtain for both types of reflexives. But also recall that weak reflexives additionally involve *self*-movement, which is head movement; this correctly predicts that the distribution of weak reflexives is further constrained. In particular, *self*-incorporation is blocked in coordinate structures; that's why weak reflexives are disallowed in structures like (26)b. We are led to conclude, however, that A-movement to a theta position (unlike wh-movement, head movement or A-movement to a non theta position) is allowed out of a coordinate structure and more generally in a variety of other environments; that's why strong reflexives are acceptable in structures like (26)c. Some motivation for this conception of A-movement, which is not problematic and in fact independently desirable, can be found in Charnavel & Sportiche (2022).

Third, antecedent movement also explains the availability of strict readings as shown in (27).

(27) Bill_i defended [himself_i Bill_i], and John_k did [defend himself_i Bill_i] too.

Given the copy theory of traces and the hypothesis that *Bill* originates as the second argument of *himself* in the antecedent of the ellipsis, we predict that the reflexive can be interpreted as Bill in the ellipsis site. Recall that if weak reflexives, however, cannot trigger strict readings, it is because they additionally involve *self*-incorporation (see (22)), which implies coreference with the subject (however this is derived with *self*-predicates).

At the same time, we also correctly predict that strong reflexives can license sloppy readings. Given the competition between weak and strong forms we discussed in Section 3, strong reflexives do trigger sloppy readings in configurations where weak reflexives are unavailable (and thus cannot block them). This is for instance the case when the reflexive is part of a coordination structure as in (28).

(28) Bill_i defended [Mary and himself_i Bill_i], and John_k did [defend Mary and himself_k John_k] too.

Nothing specific must be assumed to derive sloppy readings here. Examples like (29) below independently indicate that focus can replace a whole A-chain.

(29) Mary_i seemed to be Mary_i happy, and Ann_k did [seem to be Ann_k happy] too.

When the same holds in (28), a sloppy reading arises. Focus cannot replace only one occurrence in an A-chain as in (29) – the result would be ill-formed with one argument without a theta role – unless the A-chain involves two theta positions: in such a case, focus can replace only one occurrence, yielding a strict reading as in (27). Finally note that the same derivation can be assumed for focus constructions

9

¹⁹ But we do not predict that intensifiers and reflexives **must** have the same form in every language: nothing prevents different lexical items to be used in the two structures.

²⁰ Note that whatever forces movement of the antecedent when it is overt, is irrelevant under ellipsis.

like (4) or (10). In sum, our hypothesis based on antecedent movement predicts that both sloppy and strict readings of reflexives can arise without having to relax Condition A or stipulate any specific condition on ellipsis or focus.

5. Conclusion

In this paper, we have concentrated on a specific puzzle: how can reflexives trigger strict readings? But tackling this issue has led us to reexamine the behavior of English reflexives more generally. In particular, we have argued that the explanation for strict readings is the same as that for Condition A itself: both result from movement of the antecedent. We have also discussed the role of *self* in English reflexives, which has allowed us to account both for the robust link between reflexives and intensifiers and for a novel empirical restriction on strict readings: only strong reflexives can trigger strict readings, because unlike weak reflexives, they do not involve *self*-incorporation. In future research, we hope to answer all remaining questions raised by our analysis – both within English and across languages – that the page limit of this paper did not allow us to address.

References

Ahn, Byron, 2015. Giving Reflexivity a Voice: Twin Reflexives in English. Ph.D. Dissertation. UCLA.

Ahn, Byron, and Laura Kalin, 2018. What's in a (English) reflexive? NELS 48 Proceedings, 1-14.

Bergeton, Uffe, 2004. The Independence of Binding and Intensification. Doctoral Dissertation, USC.

Bouchard, Denis, 1984. On the Content of Empty Categories. Dordrecht: Foris.

Browning, Maggie, 1993. Adverbial Reflexives, Proceedings of the North East Linguistics Society 23(1), 83–94.

Cardinaletti, Anna, and Michal Starke, 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In Henk van Riemsdijk (ed.), *Clitics in the languages of Europe*, 145–233. Berlin: Mouton de Gruyter.

Charnavel, Isabelle, 2020. Locality and logophoricity: A theory of exempt anaphora. Oxford: Oxford University Press.

Charnavel, Isabelle, 2020. Logophoricity and Locality: A View from French Anaphors. *Linguistic Inquiry* 51(4):671–723.

Charnavel, Isabelle, and Shannon Bryant, 2020. The whole picture: Disentangling locality, logophoricity and subjecthood in Picture Noun Anaphora. Harvard manuscript. lingbuzz/005620.

Charnavel, Isabelle, and Dominique Sportiche, 2016. Anaphor Binding – What French Inanimate Anaphors Show. *Linguistic Inquiry* 47(1): 35–87.

Charnavel, Isabelle, and Dominique Sportiche, 2022. *Unifying intensifiers ourselves*, NELS presentation to appear in the NELS 52 proceedings. Available on lingbuzz.

Chomsky, Noam, 1981. Lectures on Government and Binding. Dordrecht: Foris.

Dahl, Östen, 1973. On so-called 'sloppy identity'. Synthese 26:81-112.

Eckardt, Regine, 2001. Reanalysing Selbst. Natural Language Semantics 9(4): 371–412.

Fiengo, Robert, and Robert May, 1994. Indices and identity. Vol. 24. MIT press.

Frazier, Lyn, and Charles Clifton Jr., 2006. Ellipsis and Discourse Coherence. *Linguistics and Philosophy* 29:315–346.

Gast, Volker, 2006. The Grammar of Identity: Intensifiers and Reflexives in Germanic Languages. Routledge.

Heim, Irene, 1991. Classnotes from Seminar on Control. MIT Press. Cambridge.

Hestvik, Arild, 1995. Reflexives and ellipsis. Natural Language Semantics 3(2): 211–237.

Hicks, Glyn, 2009. The Derivation of Anaphoric Relations. Amsterdam: John Benjamins.

Hole, Daniel, 2002. Agentive *Selbst* in German. In Graham Katz, Sabine Reinhard, and Philip Reuter (eds.), *Proceedings of the Sixth Annual Meeting of Sinn und Bedeutung* 6, 133–150.

Hornstein, Norbert, 1995. Logical Form: From GB to Minimalism. Oxford: Blackwell.

Hornstein, Norbert, 2001. Move! A Minimalist theory of construal. Malden, MA: Blackwell.

Jayaseelan, K. A. 1996. Anaphors as pronouns. Studia Linguistica 50(3), 207-255.

Kayne, Richard, 2002. Pronouns and their antecedents. In Samuel David Epstein and T. Daniel Seely (eds.), Derivation and explanation in the Minimalist Program, 133–166. Oxford: Blackwell.

Kehler, Andrew, 2000. Coherence and the resolution of ellipsis. Linguistics and Philosophy 23, 533-575.

Kehler, Andrew, 2002. Coherence, reference, and the theory of grammar. CSLI Publications.

Kim, Christina, and Jeffrey Runner, 2009: Strict identity, coherence, and parallelism in VP ellipsis. In Ed Cormany, Satoshi Ito and David Lutz (eds.), *Proceedings of Semantics and Linguistic Theory 19*, 275–287. eLanguage.

Kiparsky, Paul, 2012. Greek Anaphora in Cross-linguistic Perspective. *Journal of Greek Linguistics* 12(1), 84–117. König, Ekkehard, and Peter Siemund, 2005. Intensifiers and Reflexives. In Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie (eds.), *The World Atlas of Language Structures*, 194–197.

Lebeaux, David, 1984. Locality and anaphoric binding. The Linguistic Review 4:343-363.

McKillen, Alanah, 2016. On the interpretation of reflexive pronouns. Doctoral dissertation, McGill University.

Moravcsik, Edith, 1972. Some Cross-linguistic Generalizations about Intensifier Constructions. *Proceedings of the 8th Annual Meeting of the Chicago Linguistic Society*, 271–277.

Ong, Matthew, and Adrian Brasoveanu, 2014. Strict and sloppy reflexives in VP ellipsis. In Christopher Piñón (ed.), Empirical Issues in Syntax and Semantics 10, 251–268.

Reinhart, Tanya, 1983. Anaphora and Semantic Interpretation. Chicago: University of Chicago Press.

Reinhart, Tanya, and Eric Reuland, 1993. Reflexivity. Linguistic Inquiry 24: 657–720.

Reuland, Eric J., 2011. Anaphora and language design. Cambridge, MA: MIT Press.

Rooryck, Johan, and Guido Vanden Wyngaerd, 2011. *Dissolving Binding Theory*. Oxford: Oxford University Press. Runner, Jeffrey, Rachel Sussman & Michael Tanenhaus, 2006. Processing Reflexives and Pronouns in Picture Noun Phrases. *Cognitive Science* 30, 193–241.

Safir, Kenneth, 1996. Semantic atoms of anaphora, Natural Language & Linguistic Theory 14 (3), 545-589 Sag, Ivan, 1976. *Deletion and Logical Form*. Doctoral dissertation, MIT.

Sauerland, Uli, 2013. Presuppositions and the alternative tier. In Todd Snider (ed.), *Proceedings of the 23rd Semantics and Linguistic Theory Conference 23*: 156–73.

Spathas, Giorgos, 2010. Focus on Anaphora: Accent Placement and the Syntax and Semantics of Anaphors. LOT Dissertation Series. Utrecht, The Netherlands.

Sportiche, Dominique, 2014. French reflexive se: Binding and merge locality. In Enoch Oladé Aboh, Maria Teresa Guasti, and Ian Roberts (eds.), Locality, 104–137. Oxford: Oxford University Press.

Sportiche, Dominique, 2022. Constraint on reflexivization. UCLA manuscript. lingbuzz/005488.

Van Gelderen, Elly, 2000. A history of English reflexive pronouns: Person, self, and interpretability. John Benjamins Publishing.

Williams, Edwin, 1977. Discourse and Logical Form. Linguistic Inquiry, 101-139.