

Unifying intensifiers ourselves^{*†}

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Abstract

Focusing on English *herself*, we propose a unified analysis of all its usages as intensifier, despite the different meaning contributions it displays, by exploiting the complex structure of VPs and the possibility for focus to project. We extend this analysis to *own* as in *his own book* which qua intensifier, displays the same range of meaning contributions. Furthermore, given that intensification and reflexivity triggers are often morphologically identical (e.g., reflexives), we briefly sketch how this analysis can also unify intensifiers with reflexives.

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1 Introduction

So-called intensifiers such as English *herself* can be used adnominally as in (1a) or adverbially as in (1b) (see Moravcsik 1972, Edmondson and Plank 1978, Browning 1993, Siemund 2003, Eckardt 2001, Hole 2002, Bergeton 2004, König and Siemund 2005, Gast 2006, Ahn 2010, i.a.).

- (1) a. The queen herself came.
- b. The queen wrote the letter herself.

The specificities of (some) adverbial readings have led previous studies to assume at least two different lexical entries for adverbial and adnominal intensifiers (Eckardt 2001, Hole 2002, Gast 2006, Ahn 2010, i.a.). But in most documented languages, the same element (e.g., English *herself*, German *selbst*, Mandarin *ziji*) is used for adnominal and adverbial intensification. Furthermore, adnominal and adverbial readings are also found with intranominal intensifiers such as English *own* or French *propre* (Charnavel 2011, Charnavel 2012).

To account for these observations, we propose a unified analysis of intensifiers by exploiting the complex structure of VPs and the possibility for focus to project. Furthermore, given that intensification and reflexivity triggers are often identical (e.g., reflexives), we sketch how our analysis can also unify intensifiers with reflexives.

1.1 Previous analyses

Intensifiers are claimed to exhibit a wide range of readings (see aforementioned references). For example, under the adnominal use illustrated in (1a), the intensifier, adjoined to the nominal it is associated with (*the queen* in (1a)), induces a contrast between its referent and other individuals in her entourage (e.g., the queen's subordinates), who can be understood as added or excluded alternatives (i.e., the queen came in addition to, or instead of, her subordinates). Under the adverbial use illustrated in (1b), the intensifier is adjoined to the VP (e.g., *write the letter* in (1b)), which induces different types of alternatives: under its prominent readings (1b) does not imply that the queen wrote the letter instead of, or in addition to, someone else, but that she did not delegate it to someone else, or she did it without help.

All previous studies converge on deriving some of these (and further) interpretive differences from contextual differences, although different studies group different readings together differently. But when trying to account to all the readings available, they all lexically distinguish between at least two or three types of intensifiers. Eckardt's 2001 influential analysis is representative: although her goal is to unify most readings of intensifiers under the same analysis, she identifies two extra readings that do not fall under her analysis of intensification as we now detail.

1.2 A representative account: Eckardt 2001

Mainly based on the uses of German *selbst*, Eckardt 2001 treats intensifiers as focused identity functions. For instance, translating her analysis of *selbst* to *herself* (but see section 3.2.1 for a finer analysis) in (2a) denotes the identity function on individuals (2b) and is

therefore semantically vacuous. But *herself* contributes meaning through focus (this is why it is obligatorily stressed) in contrasting this function with pragmatically relevant alternative functions on individuals such as secretary-of or minister-of ((2c)).

- (2) a. The queen HERSELF_F came.
b. $||\text{herself}|| = \lambda x.id(x)$
c. $||\text{herself}||^F = \{f_{\langle e,e \rangle} \mid f \text{ is a contextually salient alternative to id}\}$

This analysis can derive so-called centrality effects, that is, the observation that associates of intensifiers (e.g., *the queen* in (2a) are perceived as a center amidst an entourage. Given the semantic-pragmatic effects generally associated with focus, it can also capture exclusive (the queen instead of other people) and inclusive (the queen in addition to other people) readings, as well as other varieties of readings (e.g., surprise effects): depending on the context, the alternatives evoked by focus can be understood as true or false, and they can be ordered on various types of scales. Eckardt 2001 further unifies adnominal and (some) adverbial uses by appealing to type-lifting. For example, *herself* in (3a) is analyzed as in (3b), mapping Anna onto someone whose smoking Anna objected to.

- (3) a. Anna is a heavy smoker herself.
 b. $\text{Lift2}(\text{ID}) = \lambda P_{(e,t)}(\lambda x.P(\text{ID}(x)))$

But crucially, Eckardt 2001 argues that the readings illustrated in (4), which we call anti-delegative (because it is more transparent than the usual ‘agentive’) and anti-assistive respectively, require different analyses that she leaves for further research.

- (4) a. Tim baked the cake himself. [anti-delegative]
 b. Liz found the way herself. [anti-assistive]

According to Eckardt, a prominent reading in (4a) does not directly involve alternative creators of the cake, but rather alternative actions that Tim might have taken with respect to the cake: Tim baked the cake rather than delegating the baking to others.¹ Such anti-delegative readings are restricted to adverbial intensifiers modifying agentive verbs as shown in (5), and are most natural as answers to the kind of question indicated, a fact we will return to in more detail below.

- (5) Did Tim buy the cake? No, he baked the cake himself/~~#~~he himself baked the cake.

The second reading that Eckardt argues calls for a different lexical entry is illustrated in (4b), which implies – under its most natural reading – that Liz found the way without any help. Just like the anti-delegative reading, this anti-assistive reading does not evoke alternative individuals, i.e., someone else found her way, which would be pragmatically very odd with this example, and is unavailable with adnominal *herself*, cf. as shown in (6).

¹Note that the adnominal reading, Tim himself baked the cake, is available as well but as answer to a different question, namely: Did Tim's assistant bake the cake?

(6) #Liz herself found her way.

Like Eckardt 2001, other previous accounts of intensifiers (Hole 2002, Gast 2006, Ahn 2010, i.a.) propose at least two different lexical entries for adnominal and adverbial intensifiers and provide further arguments for the distinction between them. First, they identify sortal and semantic restrictions on the associate which depend on the reading: for example, Eckardt 2001 or Ahn 2010 claim that adnominal intensifiers cannot associate with a quantifier (e.g., (7)); and Hole 2002 that adverbial intensifiers cannot associate with an inanimate (e.g., (8)).

- (7) a. Spike /# No boy himself has smoked the whole pack. [adnominal]
 b. Spike / No boy has smoked the whole pack himself. [adverbial]
- (8) a. The people / the mountains themselves divide the country. [adnominal]
 b. The people /# the mountains divide the country themselves. [adverbial]

Concerning examples in (8), we agree that anti-delegative or anti-assistive readings are unavailable in (8b) but in agreement with Ahn 2010 we take it that the adnominal reading remains available, even with inanimates, although perhaps less accessible given that structure (8a) would convey the same meaning unambiguously.

Second, Ahn 2010 points out co-occurrence restrictions on intensifiers. First note that Gast 2006 and Ahn 2010 reanalyze Eckardt's type-lifting as syntactic stranding, a theoretically more parsimonious analysis which we adopt. Thus the following examples are analyzed as indicated:

- (9) a. Ray_k has [[t_k himself] cleaned the apartment]
 b. Anna_k is a smoker [t_k herself] (cf. (3a))

Now, according to Ahn 2010, adnominal and adverbial *himself* can only co-occur when one of them is a real adverbial intensifier as in (10a), not when it is a stranded adnominal intensifier as in (10b);

- (10) a. Ray himself has cleaned the apartment himself.
 b. *Ray himself has himself cleaned the apartment himself.

Thus, to the best of our knowledge, all previous accounts distinguish between at least two types of intensifiers to capture semantic and syntactic differences between them.

1.3 Issues with previous analyses

Two arrays of facts put in doubt a lexical distinction between intensifiers.

First, typological studies provide crosslinguistic evidence for unifying adnominal and ad-

verbal intensifiers (König and Siemund 2005, i.a.): as exemplified in (11) for Mandarin in Hole 2008), they are morphologically identical in most documented languages.²

- (11) a. Bùzhǎng zìjǐ huà lái huānyíng wǒmen.
 minister self will come welcome us
 ‘The minister himself will come to welcome us.’
 b. Tā zhǐhǎo zìjǐ zuò měi-jìàn shìqíng.
 he must self do every-CL matter
 ‘He must do everything himself.’

Second, the semantic differences between adnominal and adverbial intensification reported above are also found with intra-nominal, possessive intensifiers such as English *own* or French *propre* (Charnavel 2011, 2012, 2016) as illustrated in (12).

- (12) a. Claire took her own car. [adnominal, possessor reading]
 b. Medea killed her own children! [adnominal, possessum reading]
 c. Tim baked his own cake. [adverbial, anti-delegative reading]
 d. Carl tied his own shoes. [adverbial, anti-assistive reading]

In (12a) and (12b), the salient readings correspond to adnominal readings in the sense that *own* induces a contrast between its associate (the possessor *Claire* in (12a)), the possessum *Medea’s children* in (12b) and alternative individuals (note that the alternatives are furthermore higher on a scale of expectedness in (12b), see Charnavel 2016 for an analysis). However, examples (12c) and (12d) saliently display adverbial readings: rather than meaning that Tim baked his cake instead of, or in addition to, someone else’s cake, (12c) most naturally implies that Tim did not delegate the baking of his cake to someone else; similarly, (12d) most naturally means that Carl tied his shoes without any help. Thus, the same range of readings arises with *herself* and *own*, crucially without structural ambiguities regarding the level of attachment of the intensifier for the latter. This strongly suggests that a structural ambiguity is not at the source of the variety of readings observed and that the formal similarities between adnominal and adverbial intensifiers are not accidental: they reflect an analytic unity yielding the kind of readings observed in the same way for *herself* as it does for *own*.³

2 Our analysis: unifying all *self* intensifiers

These formal similarities, we claim, require a unified analysis for all intensifiers. To meet this objective, we adopt several ingredients from previous hypotheses, namely the hypothesis

²Some languages do lexically distinguish adnominal and adverbial intensifiers (see König and Siemund 2005) – a fact that must be (and could be were it not for space limitations) incorporated in the analysis. Fundamentally, the lexical realization of the intensifier can depend on its category, this is what distinguishes the DP *herself* from the A *own* but can also be made sensitive to the nature of the constituent with which it is merged, i.e., DP vs. VP, fundamentally a case of allomorphy.

³All these observations extend to the behavior of French adnominal/adverbial intensifier (/reflexive) *lui-même*, as well as to the intra nominal *propre*, counterpart of English *own*, strengthening the case for unification.

that intensifiers express identity and contribute meaning through focus, to which we add two new ingredients, namely the relevant hypotheses that:

- (13) a. VPs can be syntactically more complex than it seems.
- b. Focus can project beyond the stressed element.
- c. The alternatives evoked by the constituent up to which focus is projected keep constant all the material that it contains which is given (see Schwarzschild 1999, Büring 2006)

More specifically, we assume that all intensifiers have the same structure underlyingly. For now, assume *herself* is always adnominal, an assumption we will refine in section 3. The syntactic specificities of adverbial uses are due to generalized stranding (adopting the analysis in Gast 2006, Ahn 2010 mentioned earlier, which postulates stranding in some adverbial uses), and their semantic specificities arise from the interaction between complex VP structures and focus projection as shown in (14).

- (14) a. [_{VP₃} Tim DO [_{VP₂} ~~Tim~~ v [_{VP₁} [bake the cake][_{DP} ~~Tim~~ himself_F]]]] [anti-delegative]
- b. [_{VP₃} ~~Liz~~ DO [_{VP₂} ~~Liz~~ v [_{VP₁} [find her way][_{DP} ~~Liz~~ herself_F]]]] [anti-assistive]

As we detail in the rest of the section, both anti-delegative and anti-assistive readings involve an extra-agentive layer in the VP (noted as headed by DO), and focus can project to VP₂ or VP₃, with different given material. In the right contexts, when it projects to VP₂, alternatives to the causer (e.g., Tim in (4a)) are evoked, which triggers the anti-delegative reading (i.e., Tim made Tim, not someone else, bake the cake). When it projects to VP₃, alternatives to the doer (e.g., Liz in (4b)) are created, which gives rise to the anti-assistive reading (i.e., Liz, not someone else, made Liz find her way).

2.1 The anti-delegative reading

To derive the anti-delegative reading represented in (14a), we exploit the hypothesis that a VP can be embedded under a silent agentive head DO, presumably felicitously only when it is not redundant. This hypothesis is motivated by facts such as (15a), where the apparently non-agentive verb *arrive* can be modified by the agentive adverb *voluntarily*: the assumption here is that the licensing of such an adverb is syntactic, requiring an agentive layer for well formedness. The intuition is that the sentence means *John acted (voluntarily) to arrive early*.

- (15) a. Tim voluntarily arrived early.
- b. .. [_{VP₂} Tim DO [_{VP₁} ~~Tim~~ arrive ..]]

As shown in (15b) we assume that *Tim* reemerges into a theta position as allowed given Chomsky 1995, see e.g., Hornstein 1999). We further assume that *herself* originates in the same structure under adverbial and adnominal readings (see more details in section 3). As roughly represented in (16), *Tim himself* thus starts as adjoined to the resultative VP₁,

then remerges first as subject of the causative VP₂, and second as subject of the agentive VP₃.

$$(16) \quad \underbrace{[[VP_3 \text{ Tim DO } [VP_2 \text{ ~~Tim~~_F \vee [VP_1 [\text{bake the cake}] [DP \text{ Tim} \text{ HIMSELF}_F]]]]]_{FOC} \sim C]}$$

Note that this remerging is required: the DP $[DP [DP \text{ Tim}] [\text{himself}]]$ headed by *Tim* being merged in an adjunct position lacks a θ -role. It must acquire one somehow and this is what *Tim* remerging into a thematic position accomplishes.⁴

Now, we adopt Eckardt's hypothesis that here, *himself* is semantically vacuous but focused (capitalized in (16)), and complement it with the idea of focus projection proposed in e.g., Selkirk 1984, Selkirk 1996, Schwarzschild 1999, Büring 2006 on independent grounds. Specifically, we assume that anti-delegative readings arise when the content of the resultative VP₁ is given. In such a case, when focus projects from *himself* to VP₂, it generates alternatives to the causer only, since the content of the resultative VP₁ is, by hypothesis, given. The fact that Tim ended up with a baked cake is given in (16) is, for example, evidenced by the type of questions under discussion that can yield the relevant reading, e.g., *What did Tim do to get the baked cake?* (cf. (5)). Focus marking VP₂ thus induces alternatives to Tim as causer which is not given: Tim acted so that he (not someone else) was the baker of the cake. Note that this hypothesis relies on the following assumptions about focus.

1. First, the constituent to which focus projects (VP₂ in (16), noted FOC as in Büring 2006) corresponds to the wh-expression in the question under discussion (e.g., *What did Tim do to get the baked cake?*).
2. Second, within this constituent, only the elements that are not given (which we note as F-marked as in Schwarzschild 1999) vary in the focus alternatives; in (16), this crucially includes the trace of *Tim* in the subject of the causative VP. This difference between FOC- and F-marking is independently motivated by examples like (17) (cf. Büring 2006) .

$$(17) \quad \begin{array}{l} \text{I know that John drove Mary's red convertible. But what did Bill drive?} \\ [\text{He drove [a BLUE}_F \text{ convertible ([WITH GREEN STRIPES]}_F)]_{FOC} \sim C] \end{array}$$

Here, the whole object corresponds to the wh-element (i.e., *what*) in the question under discussion and is thus FOC-marked; but what varies in the relevant alternative (i.e., he drove her red convertible) is only the adjective (possibly discontinuously with the PP), which is(/are) therefore F-marked.

3. Finally, the focus domain, over which the focus alternatives are computed, is indicated with Rooth's 1992 squiggle operator (see also Büring 2006).

This analysis correctly derives the empirical generalizations described in section 1.2 that characterize the anti-delegative reading. First, it correctly predicts that the relevant alternatives are not alternative individuals as under the adnominal reading, but alternative

⁴In other words, this is the realization of a case made theoretically possible by Chomsky's 1995 framework: movement into a θ position is possible both from a thematic position and from a non thematic position.

delegative actions involving the agent to get the same result: this is captured by the hypotheses that the agent varies as causer, not as doer, in the alternatives, and that the result of the action is given. Second, it explains why the verb is usually agentive under this reading as argued by e.g., Eckardt 2001 and Hole 2002, but not always. This reading requires an agentive layer in the VP, but this layer can be added to non-agentive verbs in relevant circumstances (see e.g., (15)).⁵, the presence of this agentive layer accounts for the semantic restrictions on the associate: as subject of DO, it must be a volitional agent. Finally, the relevant reading requires a complex VP: remerging the associate in a simple VP structure would involve movement to a non c-commanding position as shown in (18).⁶

- (18) a. He slept (*himself).
 b. $*[_{VP_1} [_{VP_1} \text{he}_k \text{ sleep}] [_{DP} t_k \text{ himself}_F]]$
↑

2.2 Deriving the anti-assistive reading

The derivation of the anti-assistive reading involves the exact same ingredients, except that focus projects to VP₃ as shown in (19) (cf. (4b)).

- (19) $[\dots [_{VP_3} \text{Liz}_F \text{ DO } [_{VP_2} \text{Liz v } [_{VP_1} [\text{find her way}] [_{DP} \text{Liz HERSELF}_F]]]_{FOC} \sim C]$
↑ ↑

Just like *Tim* in (16), *Liz*, the associate of *herself*, originates within an adjunct to VP₁ in a structure similar to that of an adnominal intensifier, and then remerges into the subsequent subject positions of the VP layers. *Herself* is accented, thus focused. Focus projects to VP₃, which induces F-marking on the subject of DO and only there if the fact that Liz ended up finding her way is given. As a result, alternatives to Liz as doer are created: Liz, not someone else, acted so that she found the way. Once again, this reading is licensed in contexts such as answering the question: *How did Liz get there?* making it given that she somehow found her way. As in the case of the anti-delegative reading, this analysis correctly derives the empirical generalizations observed in the previous literature. First, it explains why this reading is anti-assistive (i.e., paraphrased using 'without help'): under this hypothesis, alternatives to the doer are induced and implicitly negated (and the result is given by hypothesis).⁷ Second, we can account for why this reading (just like the anti-delegative

⁵Pace Gast 2006, p.165 ex. (78), we take *he slipped/fell himself* to simply be a (stranded) adnominal case in object position of an unaccusative: $he_i [\text{slipped/fell } [t_i [\text{himself}]]]$, or an extraposed adnominal adjunct $[he t_k] [\text{slipped/fell}] [\text{himself}]_k$ (see section 3). As noted earlier, regarding Hole's 2002 examples, we take example (8b) to be fine but only with the adnominal reading of example (8a).

⁶Once again, we take sentence (18) to be well formed with an adnominal reading. In this case we take this to be a case of extraposition of the adjunct modifier, akin to relative clause extraposition, see section 3 for a brief description of the relevant structural analysis.

⁷One may wonder why the alternatives are implicitly negated, Liz and nobody else, rather than allowing as well an additive reading, Liz in addition to some other(s). The fact is that in such cases, it is hard to see what an additive reading would contribute felicitously. Indeed, in an adnominal case, *The king himself weighed more than 200 pounds*, can mean the king, in addition to other people weighed more than 200 pounds. But such a reading must be distributive: it means that each of these people weighed more than 200 pounds, and not that the king and some other people weighed more than 200 pounds together. An additive reading in the case of (19) would thus mean *Liz acted so that she found her way, and in addition other people*

reading) is unavailable with adnominal intensifiers (as seen earlier in e.g., (6)): it requires focus projection, and focus can project to the VP from a VP adjunct, but not from the subject or some principle to the same effect.⁸ Third, co-occurrence restrictions on adnominal and adverbial intensifiers, we argue, are not syntactically, but semantically driven: they can only co-occur when they are not redundant or contradictory, which is the case when the adverbial intensifier can induce focus projection to the VP (see (10a) vs. (10b)). As for the differences between adnominal and adverbial intensifiers regarding sortal restrictions, we argue that they are pragmatically driven: for adnominal (vs. adverbial) intensifiers, the context must be rich enough to supply accessible alternatives to each element quantified over. Making such alternatives explicit makes adnominal intensification compatible with quantifiers:

- (20) a. At the Oscars, no star himself wrote his speech; in every case, his publicist did it.
b. We expected the queens to each dispatch a representative to this minor celebration but surprisingly, every queen herself was present.

2.3 Extending the analysis

Crucially, our analysis extends to intra-nominal intensifiers such as possessive *own* (which also exhibit both adnominal and adverbial readings as seen in section 1.3) because *own* is also compatible with complex VP structure and focus projection. First, note that unlike *herself*, *own* can be meaningful in the absence of focus in cases in which *own* can specify that the possessive relation must be the most specific one: this is for instance the case in (21a) where Claire has both a personal and a professional car.

- (21) a. Claire took her own car. (not her professional car)
b. [Claire took [_Fher _FOWN _Fcar]_{FOC} ~ C]. (not her husband's)
c. (E) [Medea killed [_Fher _Fown _FCHILDREN_F]_{FOC} ~ C]. (not other individuals)

But in contexts such as (21b) and (21c)) in which only one relevant object is owned by the possessor, *own* behaves like *herself* in contributing meaning only through focus. In such cases, we propose (based on Charnavel 2012, 2016 about French *propre*) that focus on *own* can project to the DP. This can give rise to alternatives to the possessor if the noun is given

acting so that Liz found her way. Because of distributivity, the first conjunct expresses that Liz found her way alone. But cases can perhaps be constructed where the additive reading is possible. Thus imagine that Liz, a chef, regularly delegates her participation in a collective task, e.g. preparing a meal to her crew. But as a VIP is coming, I wonder if she cooked. To the question *How was the meal prepared?*, it is felicitous to answer *Liz did not delegate this time, she prepared the meal herself with the help of her crew.*

⁸A full discussion of this issue goes well beyond the scope of this article. Buring 2006 shows that an accented subject can lead to focus projection beyond a subject as shown below:

- (i) Why did Mary buy bananas?
(ii) Because [_{TP} JOHN bought bananas]

The issue for us is to prevent this from happening in the case of an adnominal intensifier, else it should give rise to readings only available with adverbial intensifiers.

as in (21b) (cf. adnominal possessor reading in (12a)), or alternatives to the possessum if the noun is not given as in (21c) (cf. adnominal possessum reading in (12b)).⁹ Crucially here, both cases of adnominal readings can thus be analyzed using focus projection (to DP).

This line of analysis, we argue, can be applied to derive adverbial readings. Just as in the case of *herself*, focus can also project to VP, which can yield anti-delegative and anti-assistive readings if the VP comprises the relevant layers shown in (22) (cf. (12)).

- (22) a. [Tim DO [_{VP₂} ~~Tim~~_F v [_{VP₁} [baked his **own**_F cake]]]_{FOC} ~ C]
 b. [... [_{VP₃} **Carl**_F DO [~~Carl~~ v [_{VP₁} [his **own**_F shoes] tied]]_{FOC} ~ C]

First, focus can project to the causative VP₂ as in (22a), in which case the causer is F-marked, thus yielding alternatives of the form *Tim made someone else bake his cake*; this is the anti-delegative reading (Tim did not delegate the baking of his cake). Second, focus can project to VP₃ as in (22b), in which case the doer is F-marked, thus yielding alternatives of the form *someone else made Carl tie his shoes*: this is the anti-assistive reading (Carl tied his shoes without help).

In sum, exploiting the possibility of complex VP structures and focus projection allows us to provide a unified analysis for all intensifiers (e.g., English *herself* and *own*) under all their readings (adnominal and adverbial) while deriving the differences between them. Under such a unified analysis, the widespread morphological identity between adnominal and adverbial intensifiers is fully expected. At the same time, morphological distinction between adnominal and adverbial intensifiers is possible (see footnote 2): much like *own* specializes as intra nominal, lexical specialization depending on the merge can occur.¹⁰

3 Towards a unification of *self* intensifiers and reflexives

Crosslinguistic and cross-categorical evidence supports a unified analysis not only for all intensifiers, but also for intensifiers and reflexives. Here, we briefly sketch why and how this can be done.

3.1 The motivation

While intensifiers are usually treated as identity functions (as seen in section 1.2), reflexives are most commonly analyzed either as pronominals (Chomsky 1986, i.a.) or as reflexivizing arity reducers, i.e., as functions taking a predicate as argument and returning a reflexive predicate (see Spathas 2010, Lechner 2012, i.a., and Sportiche 2022 for a review¹¹). But several facts challenge this dichotomic approach. First, intensifiers and reflexives are (at

⁹In this latter case, the scalarity effect we can observe (i.e., it is most unexpected that Medea would kill her children as compared to other individuals) is arguably triggered by the optional presence of a silent focus particle similar to *even* and noted E (see Charnavel 2016).

¹⁰How exactly to accomplish this as alluded to in (2) needs to be answered. A suggestion is that *self* is not just a two place predicate but a three place predicate, taking a third argument specifying in what respect the first two arguments are identical. Alternative realizations could thus be sensitive to the category of this third argument, VP vs DP.

¹¹Relevantly here, Sportiche 2022 concludes that direct predicate reflexivization such as with reflexivizing arity reducers or via *self* incorporation is not a viable option.

least partially) morphologically identical in many unrelated languages (e.g., French *elle-même*, Mandarin *zìjǐ*, Arabic *nals*, Dutch *zich(zelf)*, Malayalam (*taan*)*tanne*, Ancient Greek *auto*) as illustrated for English in (23) (see König and Siemund 2005, Gast and Siemund 2006, Gast 2006, Rooryck and van den Wyngaerd 2011, i.a.).

- (23) a. She herself came. [intensifier]
b. She heard herself. [reflexive]

Furthermore, this formal similarity extends to possessives such as English *her own* or French *son propre*, which also exhibit both reflexive/anaphoric and intensifier readings (see Bergeton 2004, Charnavel 2012, i.a.). Within English, bare *-self* can be reflexive as shown in (24) with an intensification flavor (anti assistive) as shown below:¹²

- (24) a. to self-identify as \approx to identify oneself as [reflexive]
b. a self-produced event \approx an event one has produced oneself [intensifier]

Second, intensifiers and reflexives can be historically strongly connected. For example, reflexives are claimed to have originated as intensifiers in English (see Faltz 2018, König and Siemund 2000, van Gelderen 2000, Keenan 2002, Bergeton and Pancheva 2012, i.a.). All these facts strongly suggest that reflexives and intensifiers share far more than their shape as we propose for English next.

3.2 A briefest sketch of the proposal

3.2.1 Identity of *self* reflexives and intensifiers

Our analysis unifying reflexives and intensifiers takes it that that *self* is a two-place predicate of identity (as in Browning 1993) much like *same*; in fact, this is clearly its historical meaning, the meaning of its German cognate *selb*, its French counterpart *même* – which means *same* – entering into the morphology of both intensifiers and complex reflexives (e.g., *elle-même*). In agreement with Eckart’s analysis, we take *self* (/selbst) to be a (near- due to proxy readings, a qualification partially ignored here) identity function: $self(x) = x$, an assumption going back at least to Saxon 1984). But in English (at least), we take $self(x)$ to have to be used predicatively in a (nominal in English) small clause: $[y [self\ x]]$ meaning $y = self(x) = x$. (Thus, *herself* is not an identity function as assumed so far, but spells out the underlying structure in (25) that we argue is common to reflexives and intensifiers.¹³

- (25) [X (is) self (of) her] \rightarrow [the [[self (of) her] [X (is) self (of) her]]]
 \uparrow
 $= [_{DP^*} \text{ the } [self\ (of)\ her]_s [X\ t_s]]$
 $= [_{DP^*} \text{ herself}_s [X\ t_s]]$

¹²This is discussed in Sportiche 2022 according to which incorporated *self* never is a pure intensifier (as it would have had to incorporate from inside an adjunct), but the intensifying flavor can arise as due to focal effects. Furthermore, an example like (24b) illustrates a logophoric use of the reflexive.

¹³The potential difference between German on the one hand and English on the other could be related to the fact that the anaphor in the latter is formed by using a pronoun *her/elle*, but using a ‘SE-anaphor’ in the former, viz. *sichselbst*.

Thus, *self* takes two arguments, *her* and X, X (mandatorily¹⁴) ending up either as the associate of the intensifier or the antecedent of the reflexive.¹⁵ Then, the predicate is relativized yielding a nominal (which reflects the fact that English *self* – vs. e.g., French *même* – is a noun, not an adjective¹⁶), *the self (of) her* being spelled out as *herself*.

Now two possible derivations can ensue depending on where X moves.

The first one is seen in cases of intensification. In the case of adnominal intensification like (23a), the associate X (e.g., *the queen*) is itself relativized (as roughly represented in (26)).¹⁷

$$(26) \quad \underbrace{[[\text{the queen}]_q \text{ [the [self (of) her]_s [t}_q \text{ (is) t}_s \text{]}]]}_{\uparrow} \approx [_{DP} [_{DP} \text{ the queen}] [\text{herself}]]$$

This structure, paraphrasable as *the queen_k, the self of her_k who she_k is*, is semantically redundant. In the spirit of Eckardt’s 2001 analysis, we assume that it contributes meaning through focus on *self* with focus projection to the DP deriving centrality effects.¹⁸ In adverbial readings of intensifiers: the associate *the queen* first forms an intensifying structure as in (26). The DP head *the queen* of this structure can strand its adjunct *herself* (as in Gast 2006 or Ahn 2010) and for example remerge in a thematic position (subject of *v*) in cases such as (27), acquiring a thematic role for the DP it heads that this DP would otherwise lack.

$$(27) \quad [_{VP_2} [\text{the queen}]_q \text{ v } [_{VP_1} [\text{bake the cake}] [_{DP} \text{t}_q \text{ herself}]]]_{\uparrow}$$

As mentioned earlier, stranding could also be due to extraposition of the adjunct, a subcase of relative clause extraposition.

The second derivation is seen in cases of reflexives. In the case of reflexive uses like (23b), DP* of (25) is merged in an argument position and the argument X of *self* (e.g., *the*

¹⁴This is stipulated: one argument of *self* must always move, an idiosyncratic property that could in classical terms be attributed to lack of Case, much like in many cases of A-movement where movement is mandatory.

¹⁵Note incidentally that neither condition B nor condition C of the Binding Theory is relevant to the coreference or covaluation of *her* and X: such conditions deal with presupposed coreference, but such coreference or covaluation is asserted by *self* here.

¹⁶French *elle-même* thus requires an analysis different from that of *self*, preserving the idea that *même* is a binary predicate of identity, where instead of the predicate being relativized as in (25), *elle* is relativized. The second argument of *même*, X, undergoes the same treatment as in English, namely itself relativized as in (26), or remerged in a theta position as in (27). Note incidentally that we would analyze German *selber/selbst* also as a binary (comparative or superlative of *self*?) predicate of identity with one silent argument.

¹⁷Note that this kind of movement out of a (small clause) relative is independently needed, and routinely allowed, for example in *the person you saw a picture of*, where *a picture of a person* is itself a small clause relative clause *picture_k [of [a person t_k]*, cf. Kayne 1994, or e.g., Sportiche 2016 for detailed supporting evidence.

¹⁸Specifically, while the whole DP is FOC-marked, only *the queen* and *self* are F-marked, yielding alternatives of the form: *the queen*, not other people that are not identical to her. Note that alternative projections to smaller constituents than the DP yield either trivial or non-sensical meanings.

queen) remerges into a theta position (e.g., as subject of *hear*), in effect acting as what is normally thought of as the antecedent of the reflexive.

$$\begin{aligned}
 (28) \quad & [\text{the queen}]_s \text{ [heard } [_{DP^*} \text{ the } [[\text{self (of) her}]_s \text{ [} t_q \text{ (is) } t_s \text{] }]]] \\
 & \quad \quad \quad \uparrow \\
 = & [\text{the queen}]_s \text{ [heard } [_{DP^*} \text{ herself}_s \text{ [} t_q \text{ } t_s \text{] }]] \\
 & \quad \quad \quad \uparrow
 \end{aligned}$$

As discussed in Charnavel and Sportiche 2021, such A-movement of the antecedent derives all syntactic properties of reflexives (especially local exhaustive binding).¹⁹

3.2.2 Further programmatic considerations

Although details must be left for further papers, a number of questions/challenges arise that we briefly touch upon.

First, our general point being that there is a unique lexical entry for *self*, bare *self* ‘incorporated into predicates must be treated as the same binary predicate of identity as other instances of *self*, and derivations must proceed so as to account for the empirical differences between *herself* and *-self* properties in *self*-predicates discussed in Sportiche 2022. The derivation we postulate is similar to that in (28) with a couple of differences: without further elaborating here, to license ‘incorporation’ in English, bare *self* can only have silent arguments. Licensing these silent arguments requires the first argument X of *self* to remerge as its second argument as in $[X_k \text{ [self } t_k]]$, with X moving and/or silent. Thus, we roughly get the derivation indicated below (see Sportiche 2022 for why *self* is not ‘incorporated’ into the verb):

$$\begin{aligned}
 (29) \quad & \text{X will self identify as ...} \\
 & \text{(by merge and remerge of X): self X} \rightarrow [X_k \text{ [self } t_k]] \rightarrow \\
 & \text{(by predicate relativization of self as in (25)): } [[\text{self } t_k]_m [X_k t_m]] \rightarrow \\
 & \text{(merge as object + move X: } X_k \text{ [identify } [[\text{self } t_k]_m [t_k t_m]]]) \rightarrow \\
 & \text{(move self to spine): } [[\text{self } t_k]_m [t_k t_m]]_q [X_k \text{ identify } t_q]] \rightarrow \\
 & \text{(move X: } X_k \text{ will } [[\text{self } t_k]_m [t_k t_m]]_q [t_k \text{ identify } t_q])
 \end{aligned}$$

Second, just like *herself*, (accented) *own* acts as an intensifier as well as an anaphorizer (under the right circumstances cf. Charnavel (2016)). The challenge is to develop an analysis of *own* which derives these properties rather than postulate them.

Third, we left undiscussed here is the scope of A-movement. If the approach we defend is on the right track, instances of A-movement relevantly involved here are much freer than (implicitly) assumed. The relevant cases involve A-movement into a theta position. Indeed, A movement from within (some) adjuncts or subjects for example under the stranding analysis of intensifiers is allowed. The fundamental idea is that such movement is not mediated by any licensing requirement, that is by anything like Agree or EPP, however

¹⁹Note that nothing prevents first merging an intensified structure such as (26) in a thematic position, and remerging the intensified DP (e.g., *the queen* in (26)) into a thematic position. This also gives rise to a reflexive construction but with the ‘reflexive part’ intensified. This is relevant for the weak/strong distinction among reflexives discussed in Charnavel and Sportiche 2021.

construed. (Re) merging into a theta position is freely available. As a result, the only locality conditions it is subject to are those induced by phase theory. Fleshing this out in detail is of course of crucial importance to our proposal, but is left here for a forthcoming article.

4 Conclusion

In sum, we have argued that adnominal and adverbial intensifiers, as well as reflexives, are analyzable as sharing the same lexical entry and underlying structure. The unified analysis we propose takes it that that they are built on a binary predicate of identity, which contributes to meaning either through focus (thus yielding a variety of intensifier readings as predicted by focus theory) or yields reflexive readings via movement under locality conditions consistent with movement theory.

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