

# What's in a (English) Reflexive?\*

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## 1. Introduction

It has been widely taken as a given that English nominals like *themselves* (henceforth “self-phrases”) distribute as reflexive anaphors due to some property inherent to anaphors (e.g., being [+anaphor] in the lexicon). This assumption has led to formal analyses of reflexivity that have been focused on the (external) distribution of reflexive anaphors in clauses/discourse.<sup>1</sup> At the same time, it has been known that a subset of self-phrases in English are able to distribute beyond reflexive contexts. In this paper, we investigate the *internal* structure of self-phrases to better understand both the distributional properties and the morphological forms of these expressions.<sup>2</sup> We probe this structure through two puzzles, which we call the CASE PUZZLE (§2) and the MODIFIER PUZZLE (§3).

Our investigations lead us to two major conclusions about English self-phrases. First, self-phrases are morphosyntactically complex (i.e., non-atomic) objects (minimally) composed of a possessive pronoun and a  $\sqrt{\text{SELF}}$  morpheme. Second, what governs whether or not a self-phrase distributes as a reflexive anaphor is an *emergent* property of the derivation of the nominal, resulting from nominal-internal morphosyntactic heads in a particular local configuration. In addition to these conclusions about self-phrases, this research furnishes an argument against a lexicalist view of morphology, and is a case study in using morphological evidence to constrain/inform hypotheses about syntactic representations.

## 2. Pronominal Form in Reflexives: The CASE PUZZLE

The pronoun in a reflexive self-phrase exhibits a case alternation across persons, (1). A more complete paradigm of reflexive self-phrases is provided in (2):

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\*We would like to thank Kaeli Ward for the observation that inspired this project: that *himself* alternates with *his-fucking-self*. We would also like to thank the audience and organizers of NELS48, as well as all those with whom we have had helpful conversations on this topic, including Jonathan Bobaljik, Yining Nie, Dominique Sportiche, and Tim Stowell.

<sup>1</sup>For an overview, see e.g., Reuland 2017 and references therein.

<sup>2</sup>For more discussion on these topics, see Iatridou 1988, Collins et al. 2008, and Patel-Grosz 2013.

- (1) a.  $\checkmark$ yourself ( $\checkmark$ GEN) vs. \*yourself (\*ACC)  
 b. \*hissself<sup>3</sup> (\*GEN) vs.  $\checkmark$ himself ( $\checkmark$ ACC)
- (2) a. 1st/2nd person: myself, ourselves, yourself, yourselves (= GEN + self/selves)  
 b. 3rd person: himself, herself, itself, oneself, themselves<sup>4</sup> (= ACC + self/selves)

The CASE PUZZLE raises the question: what triggers the case alternation across self-phrases?

## 2.1 Exploring Hypotheses

Below are three logically-possible explanations for the facts behind the CASE PUZZLE:

- (3) a. Hypothesis A: The pronoun inside a reflexive is underlyingly GEN, but appears exceptionally as ACC in 3rd person reflexives.  
 b. Hypothesis B: The pronoun inside a reflexive is underlyingly ACC, but appears exceptionally as GEN in non-3rd person reflexives.  
 c. Hypothesis C: Reflexives are simplex/idiomatic; the pronouns don't meaningfully display a case asymmetry.

Hypothesis A accords with these genitive-marked pronouns being possessors in a possessor plus body-part structure, which is very common for reflexive expressions crosslinguistically (e.g., Schladt 2000, Kiparsky 2008). Hypothesis B finds support from history, as the pronoun in reflexives was in fact accusative (syncretic with dative) at the inception of pronoun+*self* reflexives (Keenan 2002). Hypothesis C has been suggested in passing by a number of authors (e.g., Safir 2004:§6.2.3, Rooryck & Vanden Wyngaerd 2011:§2.5.1), and is also highly plausible, as reflexives appear to comprise a small, closed-class set.

However, not all the hypotheses in (3) are viable, and we can rule out two of them in light of reflexive self-phrases that contain a modifier. What we observe here is that the pronoun in the self-phrase is *genitive* in all persons when there is a modifier present, (4).

- (4) a. 1st/2nd person: GEN when modified (unchanged from unmodified GEN)  
 (i) myself → my own/damn self  
 (ii) ourselves → our own/damn selves  
 (iii) yourself → your own/damn self  
 (iv) yourselves → your own/damn selves
- b. 3rd person: GEN when modified (changed from unmodified ACC)  
 (i) himself → his own/damn self (\*him own/damn self)  
 (ii) themselves → their own/damn selves (\*them own/damn selves)

<sup>3</sup>There are varieties of English that allow e.g., "hissself" as the 3SG.M reflexive. There are also varieties of English that allow /miself/ as the 1SG reflexive. We will return to this important dialect variation in §4.1.

<sup>4</sup>We tentatively include the ambiguous *herself* and *itself* with the other 3rd persons, which are visibly accusative, but we leave them out of the case illustrations going forward.

### What's in a (English) Reflexive?

The patterns in (4) clearly show that the exceptional case form, which appears only in 3rd person *unmodified* reflexive self-phrases like (2b), is *accusative*; this immediately eliminates Hypothesis B. Further, (4) shows that reflexive self-phrases can be split apart into a pronominal part and a *self* part; thus, these expressions must not be simplex or fully idiomatic—Hypothesis C must not be correct.

Hypothesis A is the only one that survives in light of the additional data in (4). The pronominal component of reflexive self-phrases is underlyingly genitive, appearing in accusative case exceptionally in unmodified 3rd person reflexive self-phrases. Henceforth, we refer to this exceptional change from genitive to accusative as “GEN→ACC”.

A first attempt at explaining why GEN→ACC takes place in unmodified reflexives, (2), but not in modified reflexives, (4), might be to say that the pronoun must be adjacent to *self* for the exceptional (accusative) form to be triggered/conditioned. However, simple surface adjacency is both too restrictive and not restrictive enough in predicting where GEN→ACC occurs. Consider possessors of non-reflexive self-phrases:

- (5) a. After two years spent in meditation, { $\sqrt{\text{his}}/\text{*him}$ } self was fully realized.  
b. After two years spent in meditation, { $\sqrt{\text{their}}/\text{*them}$ } selves were fully realized.

Adjacency between a possessor and *self* in a non-reflexive self-phrase is not enough to trigger GEN→ACC. One might wonder whether this is even the same *self*—maybe there is a reflexive  $\sqrt{\text{SELF}}$  in the lexicon and a (*homophonous*) non-reflexive  $\sqrt{\text{SELF}}$ , with only the former conditioning GEN→ACC. However, this duplication in the lexicon is highly suspicious given that both  $\sqrt{\text{SELF}}$ s would have to independently undergo exceptional final-consonant voicing in the plural (*/sɛlvz/*). Moreover, such an analysis would require that there are two homophonous such body-part morphemes in *every* language where body-part (and other inalienably possessed) nouns appear in reflexives (e.g., reflexive  $\sqrt{\text{HEAD}}$  and non-reflexive  $\sqrt{\text{HEAD}}$ ). We therefore reject this possibility, and conclude that (5) is telling us something meaningful about abstract reflexivity being a precondition for GEN→ACC.<sup>5</sup> (For independent arguments for one  $\sqrt{\text{SELF}}$  in the lexicon, see Patel-Grosz 2013.)

Not only is simple adjacency with *self* not enough to trigger GEN→ACC, (5), but in addition we observe GEN→ACC taking place when there is surface *non*-adjacency, (6):

- (6) a. Batman { $\sqrt{\text{his}}/\sqrt{\text{him}}$ } fucking self couldn't catch the Riddler.  
b. Batman and Robin { $\sqrt{\text{their}}/\sqrt{\text{them}}$ } fucking selves couldn't catch the Riddler.

Surprisingly, both the genitive and exceptional accusative forms are possible here, despite the presence of a modifier. (We return to this important fact in §3.2 and §3.3.)

Surface adjacency between the pronoun and *self* is not adequate for predicting where we do and don't find GEN→ACC. The data in (5) makes it clear that reflexivity is impli-

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<sup>5</sup>In addition to case, *his self* and *himself* may also differ in terms of morphological wordhood. One may be tempted to explain the case alternation by exploiting wordhood; however, this difference in wordhood would still need to be conditioned by *something*, which seems to be whether or not the nominal is reflexive or not. As reflexivity is a trigger for our GEN→ACC, (7), the issue of wordhood is orthogonal to our analysis.

cated in GEN→ACC, above and beyond the presence of *self*, while (6) shows that this is not a purely surface phenomenon. We therefore formulate our revised hypothesis as in (7).

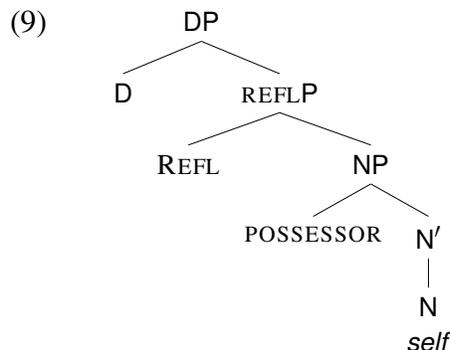
- (7) Hypothesis A (first revision): 3rd person pronouns in English self-phrases are underlying GEN and surface as ACC when they are in a local configuration with...
- a. ...something reflexive,
  - b. ...at a certain point in the derivation.

## 2.2 The Beginnings of an Analysis

We adopt the basic architecture of Distributed Morphology (Halle & Marantz 1993, 1994): (i) the syntax operates over abstract morphemes; (ii) the output of syntax feeds Logical Form (LF) on the one hand and Morphological Structure (MS) and Phonological Form (PF) on the other; (iii) only features that feed both LF and MS/PF originate in the syntax. We posit additionally that GEN→ACC takes place at MS, as it is a purely featural change, with no impact on LF/interpretation. Finally, since there is only one  $\sqrt{\text{SELF}}$  in the lexicon (as discussed above), reflexivity must be introduced in some other way. These points (both of which we return to with more empirical support in §3) motivate the revision in (8).

- (8) Hypothesis A (second revision): 3rd person pronouns in English self-phrases are underlying GEN and surface as ACC when they are in a local configuration with...
- a. ...an abstract reflexivizing head, REFL,
  - b. ...at Morphological Structure.

As a body-part noun, we treat  $\sqrt{\text{SELF}}$  as inalienably possessed; inalienable possessors merge lower than alienable possessors, e.g., in the specifier of NP (Español-Echevarria 1997, Alexiadou 2003, *i.a.*). As for REFL, which has implications both at LF (reflexive interpretation) and at MS (in the triggering environment for GEN→ACC), we propose that it is a functional head in the middlefield of the nominal structure in the narrow syntax, (9).



Under this proposal, the intuition that there are two different  $\sqrt{\text{SELF}}$  morphemes (one reflexive and one not) is recast as the presence or absence of REFL and a single  $\sqrt{\text{SELF}}$ .

The syntactic structure in (9) allows us to fully formalize our hypothesis, (10):

- (10) Hypothesis A (final revision): A post-syntactic rule  
GEN → ACC / REFL [ [CASE: \_\_, π:3]  
= “A GEN case feature changes to ACC when a third person pronoun is syntactically local to REFL.”<sup>6</sup>

This GEN→ACC rule alters the feature specifications that are visible to Vocabulary Insertion (the pairing of phonological forms with syntactic terminals). GEN→ACC must therefore apply *before* Vocabulary Insertion; applying afterwards could not influence the choice between Vocabulary Items such as *them* (3PL.ACC) and *their* (3PL.GEN).

The crucial component of our proposed rule is the environment for its application—namely, uninterrupted locality between the pronoun and REFL in the post-syntax. Open questions for the moment include the precise post-syntactic timing of the application of the rule, and how and why some modifiers disrupt REFL-pronoun adjacency. We turn now to our second puzzle to help answer these questions.

### 3. Adjectives and Reflexive Distribution: The MODIFIER PUZZLE

Some self-phrases distribute as reflexives, (11a), while others (just like simple pronouns) do not, (11b). This seems to be mediated at least in part by what sort of modifier appears.

- (11) a. ✓You better behave {yourself/your annoying self/your damn self}.  
b. \*You better behave {you/your tired self/your young self}.

The MODIFIER PUZZLE is thus: which modifiers allow for a reflexive distribution of self-phrases and why?

#### 3.1 Sharpening the Puzzle

To convincingly make claims about which self-phrases are able to distribute as reflexives, we first need diagnostics of reflexivity. We use the following three diagnostics as ways of telling whether self-phrases that contain a modifier are reflexive or not.

- (12) **Diagnostic 1:** Object of an inherent reflexive verb (Levin 1993) → *reflexive only*  
a. He perjured {✓himself/\*yourself/\*him/\*his daughter/\*you}.  
b. They behaved {✓themselves/\*ourselves/\*them/\*their friends/\*us}.

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<sup>6</sup>There may be some sort of Morphological Merger (Lowering, Embick & Noyer 2001) bringing together REFL and the possessor (which we assume is a simple head, D) before the rule applies. Nothing in our account hinges on this. Further, “GEN → ACC” in the rule stands in for a number of analytical possibilities, e.g., an impoverishment rule (taking accusative pronouns in English to spell out both abstract ACC case and default (lack of) case (Schütze 2001)), a feature-changing rule (adopting a featural analysis of case, like Calabrese 2008), or a retreat-to-the-less-marked (assuming a case hierarchy like that of Blake (1994), where accusative is one step down on the markedness hierarchy from GEN). We do not attempt to adjudicate among these possibilities here.

- (13) **Diagnostic 2:** Emphatic reflexive position<sup>7</sup> → *reflexive only*
- We assembled the IKEA table {✓ourselves/\*themselves/\*us/\*our friends/\*him}.
  - She {✓herself/\*himself/\*her/\*her son/\*you} solved a Millennium Problem.
- (14) **Diagnostic 3:** Matrix subject position → *non-reflexive only*
- {✓I/\*myself} devoured an entire apple pie.
  - {✓He/\*himself} arrived late.

Below we apply these diagnostics to self-phrases with various types of modifiers, to suss out any generalizations about which modifiers allow self-phrases to distribute as reflexives.

- (15) Expressives (e.g., expletives conveying not-at-issue content)
- He perjured his damn/goddamn/fucking self. (✓inherent refl)
  - She her damn/goddamn/fucking self said she wasn't punk. (✓emphatic refl)
  - Even after years of meditation, his damn/goddamn/fucking self was as elusive as ever. (✓matrix sbj)
- (16) Intensifier “Own”
- Don't worry about the others, just behave your own self. (✓inherent refl)
  - No one else would, so she her own self led the protest. (✓emphatic refl)
  - While others at the retreat were discovering their selves, his own self still remained elusive. (✓matrix sbj)
- (17) I(ndividual)-level adjectives
- The children behaved their sweet/easygoing selves all day. (✓inherent refl)
  - She her brilliant/brave self solved a Millennium Problem. (✓emphatic refl)
  - His lazy/directionally-challenged self arrived late. (✓matrix sbj)
- (18) S(tage)-level adjectives
- \*The children behaved their young/well-rested selves all day. (\*inherent refl)
  - \*She her caffeinated/temporarily-motivated self solved it. (\*emphatic refl)
  - His sleepy/overworked self arrived late to the meeting. (✓matrix sbj)

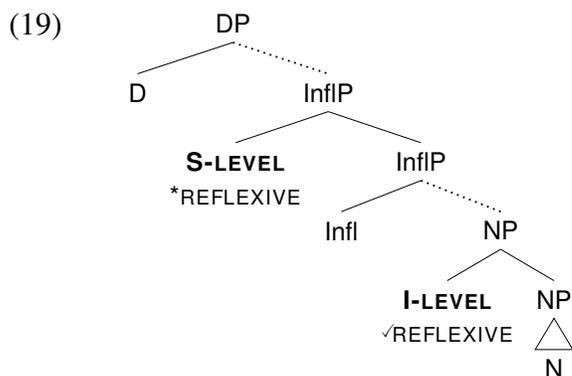
While expressives, “own”, and I-level modifiers occur in both reflexive and non-reflexive self-phrases, S-level modifiers appear only in self-phrases that are not reflexive. S-level modifiers are thus more restricted than others—only they are excluded from reflexive self-phrases—indicating that they interfere in some way with the reflexivity of a nominal.

While the S- vs. I-level modifier distinction may at first seem surprising, it has been established that S- and I-level modifiers occupy different syntactic positions (Larson 1998, Larson & Takahashi 2007, *i.a.*). S-level modifiers depend on an event variable and temporal anchoring (Balusu 2016); as such, we take them to be in a projection in the middlefield of

<sup>7</sup>*n.b.* Emphatic reflexives are not exempt anaphors or logophors: they require a (syntactically local) antecedent, and they do not alternate with non-anaphoric pronouns (Ahn 2010).

## What's in a (English) Reflexive?

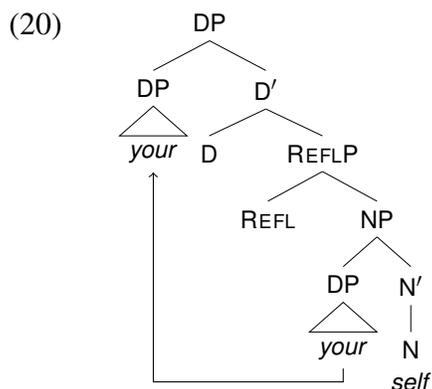
DP one might call “InflP”. On the other hand, I-level modifiers are closer to the N/NP, and are temporally independent (i.e., they have no relation to InflP).<sup>8</sup> Representing these positions visually along with the results of our diagnostics above (where “\*REFLEXIVE” means “cannot occur in a reflexive self-phrase”), we have:



A sharper version of the MODIFIER PUZZLE can now be seen as: why are S-level modifiers different from all other nominal modifiers in disallowing a reflexive interpretation? It is important to note that it cannot be that only structurally-low modifiers allow reflexive interpretations: expressives (merged above D; Potts 2007, Pfaff 2015<sup>9</sup>) are even higher in nominal structure than S-level modifiers are, and expressives are compatible with reflexivity. To proceed towards a solution, we must probe deeper into the structure of reflexive self-phrases.

### 3.2 The Structure of Reflexive Self-Phrases

Combining all our findings above, we hypothesize the basic structure of an unmodified reflexive to be as shown in (20), with movement of the inalienable possessor to spec-DP.

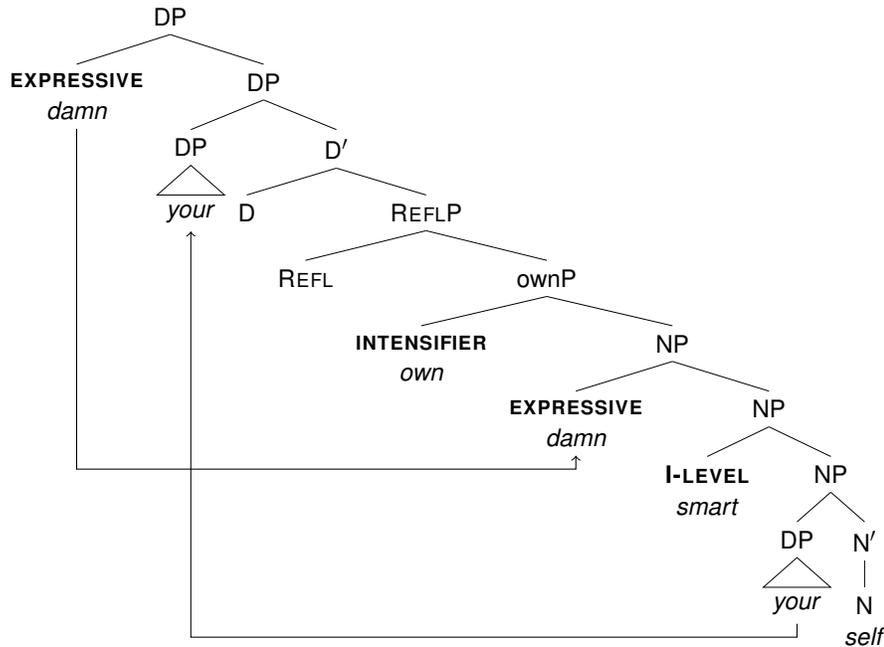


<sup>8</sup>Nothing hinges on these precise positions; only relative height with respect to functional heads matters.

<sup>9</sup>Expressives ultimately undergo some sort of reordering process to derive the surface word order, either by (post-)syntactic lowering, or by PF infixation. See the discussions around (21) and (29) below.

A reflexive self-phrase can also contain more than this, including expressive modifiers (e.g., *damn*), an intensifier *own*,<sup>10</sup> and I-level modifiers (e.g., *smart*); a more highly articulated structure with multiple modifiers (and with a reflexive interpretation) is given in (21).<sup>11</sup>

(21) You can do it *your own damn smart self*. (cf. Diagnostic 2)



Turning to S-level modifiers, we can now ask what it is about them such that they cannot be in a self-phrase that gets a reflexive interpretation (cf. (18)). The first component of our analysis is that REFL occurs closer to the N/NP than S-level modifiers. The position of REFLP in nominals, below InflP, is reminiscent of the position posited for reflexivity in the clausal domain. (Clausal reflexivity is marked at the edge of the verbal domain, below the inflectional middlefield: VoiceP for Labelle 2008 and Ahn 2015.) If REFL(P) and Infl(P) were to co-occur in a derivation like (20), then, Infl(P) would intervene between REFL and D. The second component of our analysis is that it is precisely this intervening syntactic head (between REFL and D) that blocks reflexivity of the DP as a whole.

More explicitly, we propose that a local relationship must hold between D and REFL in reflexive self-phrases, and that InflP would break this locality. The nature of this relationship between D and REFL merits deep investigation.<sup>12</sup> While we do not take on this investigation here, Déchaine & Wiltschko (2017), surveying varieties of reflexives crosslin-

<sup>10</sup>*Own* is different from other modifiers: it always precedes all other modifiers, and usage seems to be much more governed by discourse structure (seeming to require contrastive focus). We assume that it occurs in a distinct projection, “ownP”, for convenience.

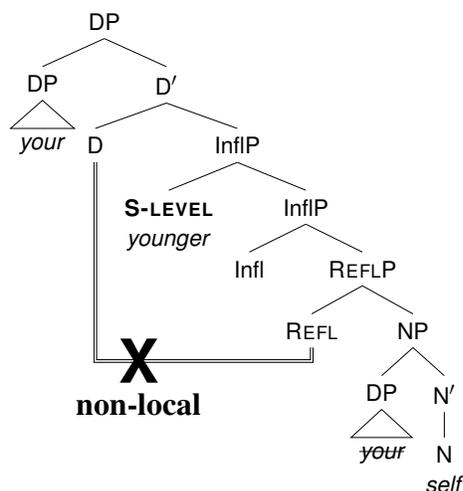
<sup>11</sup>The expressive lowering in (21) is (post-)syntactic, targeting the edge of the NP. This is a distinct operation from the PF infixation described in §3.3; not every expressive can undergo PF infixation.

<sup>12</sup>There are a number of ways to formally implement InflP’s blocking of the D-REFL locality that is necessary for reflexivity. We do not adjudicate among these, but only briefly mention some possibilities here. *Hypothesis A*: InflP and REFLP both require sisterhood with D, essentially causing complementary distribution. *Hypothesis B*: REFLP needs to be licensed by a formal relationship with the reflexive D (e.g., via

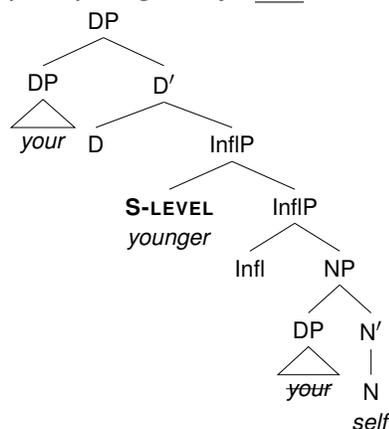
guistically, conclude that D is crucial for reflexivity in English.<sup>13</sup> Importantly, if reflexivity were the property of any individual head on its own (e.g., D, REFL, or  $\sqrt{\text{SELF}}$ ), we could *not* make sense of the MODIFIER PUZZLE.

Our proposed locality requirement is trivially satisfied in self-phrases without modifiers, (20). This locality requirement is also satisfied in self-phrases with I-level, intensifier, and expressive modifiers, which all occur below REFLP, as can be seen in (21). As discussed above (19), S-level modifiers require (occur in) a projection in the nominal middlefield, InflP. In this position, S-level modifiers would disrupt D-REFL locality, as shown in (22). As a result, the only well-formed representation is that in (23), which lacks REFL altogether, and therefore distributes as a non-reflexive (cf. (18)).

(22) \**your younger self* (reflexive)



(23) ✓*your younger self* (non-reflexive)



More generally speaking, we predict that any modifiers that require an XP between REFLP and DP will block a reflexive interpretation.<sup>14</sup> Modifiers that occur outside of this middlefield do not block a reflexive interpretation: I-level modifiers are too low (Larson 1998) and expressive modifiers are too high (Pfaff 2015) to interfere in this locality relation.

### 3.3 Revisiting the CASE PUZZLE

We return now to the CASE PUZZLE, as our proposal above can help us elucidate the exceptional accusative case found in unmodified reflexives. Recall the morphological rule that we posited in §2, repeated here:

(10) GEN  $\rightarrow$  ACC / REFL [ [CASE: \_\_,  $\pi$ :3]

AGREE), and InflP acts as an intervener. *Hypothesis C*: REFL must raise to D; Infl blocks this raising (HMC, Travis 1984). *Hypothesis D*: the D in reflexives must lower to REFL; Infl blocks this lowering.

<sup>13</sup>We differ from Déchaine and Wiltschko in having a unique REFL on the nominal spine.

<sup>14</sup>This is highly reminiscent of NegP blocking the T-V relationship for English main verbs, i.e., with a middlefield functional head blocking the relationship between something in the subject-region of the clause with something in the predicate-region of the clause. And when the modifier is missing (a stage-level adjective or Negation), there is no intervention (perhaps because the InflP/NegP is simply absent from the derivation).

This rule predicts that there are essentially two reasons a third person possessor will be realized as GEN (rather than becoming ACC). First, GEN→ACC should be blocked when something intervenes between the possessor and REFL at the relevant level of morphological representation, i.e., before Vocabulary Insertion. Indeed, GEN→ACC is blocked in such cases, as shown in the naturally-occurring data in (24).

- (24) a. Next time, he'll behave **his two-faced self**. (🐦/itsSinmi\_/status/591421294673006595)  
 b. He really better behave **his damn self**...<sup>15</sup> (🐦/the1kimjintae/status/653690311936356352)  
 c. You can save no one from **his own self**. (🐦/msekla/status/657856163116007424)

Second, GEN→ACC should be blocked when the expression is not a reflexive one, i.e., when there is no REFL. This will necessarily be the case with an S-level modifier, and may be the case even without one. (See §3.1.) This prediction is met, as exemplified in (25).

- (25) a. I know you're supposed to tell people to be themselves but sometimes **their selves** are garbage so what then (🐦/lauravslife/status/906852595414786048)  
 b. I wanna know what **his younger self** was like (🐦/annakartikeya/status/721868631248891904)

In contrast, GEN→ACC does apply when REFL is present and there are no modifiers:

- (26) a. Anthony behaved himself.  
 b. Anthony and Rebecca built the IKEA furniture themselves.

Notably, we predict that intervention between a pronoun and REFL should *not* prevent GEN→ACC just in case that intervention is entirely post-Vocabulary Insertion. This correctly predicts that we will find ACC-form pronouns that are not adjacent to *self* whenever this non-adjacency is the result of an operation like PF infixation. This is precisely the case with “expletive infixation”, as in (27), for which the infixation rule (which determines the expletive’s surface phonological placement) is given in (28):

- (27) a. #isitok to mention that it's not a bloody selfie coz he didn't take it **him-bloody-self**. We call those 'photos' (🐦/joe\_1183/status/716011036969721856)  
 b. @ScottCawthorn\_ everyone knows u are fake because **SCOTT HIM FREAKIN SELF SAID HE HAS NO TWITTER** (🐦/therealone515/status/550188426688217088)

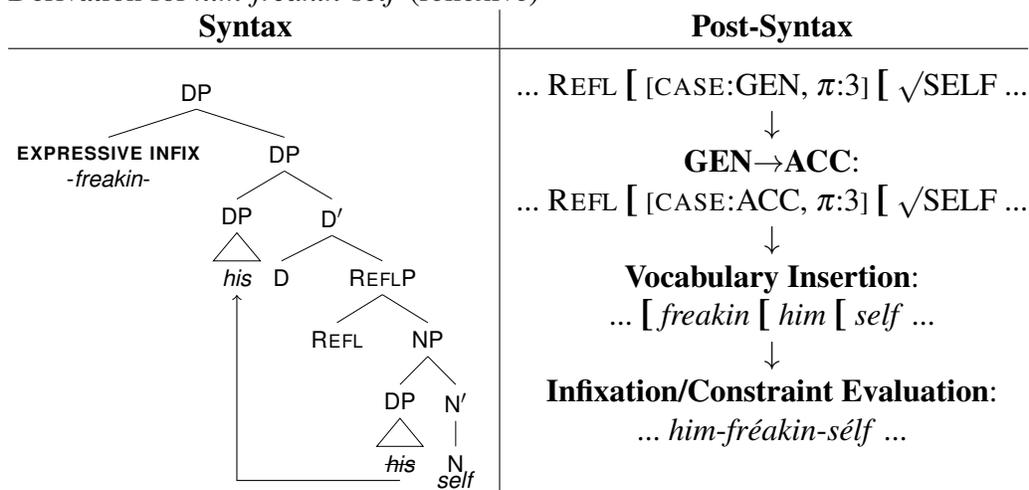
- (28) ALIGN(R, *-freakin-*, L, stressed foot) (cf. Yu 2003)

The derivation proceeds as laid out below, with GEN→ACC preceding Vocabulary Insertion and thus also the evaluation of constraints like (28):<sup>16</sup>

<sup>15</sup>Expressives like *damn* lower into a position where they intervene between REFL and the possessive pronoun in the surface string (cf. Potts 2007). This lowering operation, however it is formalized, must take place before GEN→ACC. See also fn. 11.

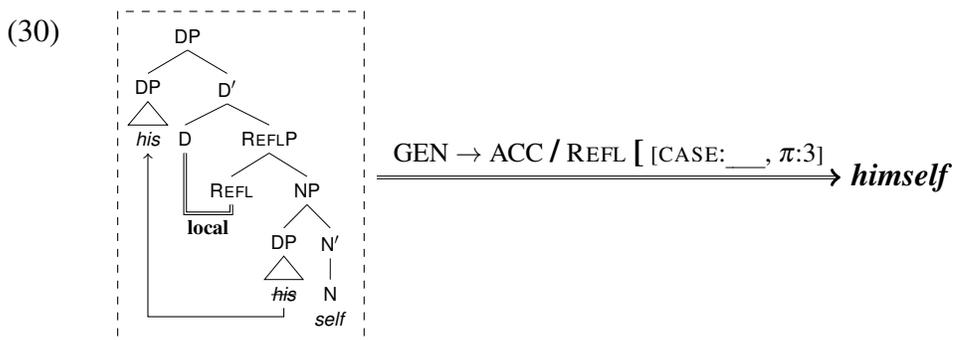
<sup>16</sup>Newell (2017) also notes that expletive infixation takes place very late: the host for the infix can have gone through Spell Out more than once (*ibid*:§2.4.2).

(29) Derivation for *him-freakin-self* (reflexive)



#### 4. Summary, Consequences, and Conclusion

In this paper, we have argued that, in order to solve both the CASE PUZZLE and MODIFIER PUZZLE, we need a more complex and nuanced view of the nominal syntax for self-phrases. In particular, the morphological form of the possessor and the interpretation of the self-phrase as a reflexive anaphor require locality between pieces of the structure. (And thus what makes the nominal reflexive is not the  $\sqrt$ SELF morpheme.) The syntactic structure we proposed is boxed in (30) below. This syntactic structure is then interpreted by MS to yield *himself*, (31), and by the conditions on binding to be a reflexive anaphor, (32).



(31) **Analysis of the CASE PUZZLE (for 3rd person pronouns)**

<i>GEN if there is/are:</i>	<i>Because:</i>
S-level Modifiers	There is no REFL to trigger GEN→ACC
I-level Modifiers	NP adjuncts intervene between possessor & REFL
Intensifier <i>own</i>	<i>ownP</i> intervenes between possessor and REFL
Lowered Expressives	Expressives lower before GEN→ACC & intervene
<i>ACC if there is/are:</i>	<i>Because:</i>
REFL + No Modifiers	REFL and the possessor are local
REFL + Infixed Expressives	PF infixation applies after the GEN→ACC rule

(32) **Analysis of the MODIFIER PUZZLE**

A self-phrase is treated as a reflexive anaphor if there is locality between D and REFL; this locality is disrupted by Infl (which is required for S-level modifiers).

Very broadly, this means that what gives a reflexive anaphor its form and distribution is not lexically pre-determined, before syntax. Instead, reflexive self-phrases have their unique properties *as a result of the derivation*.

#### 4.1 Further Consequences

We have argued that 3rd person pronouns in self-phrases are accusative only when the nominal contains REFL. This allows us to use the form of pronouns to diagnose the presence/absence of REFLP in various self-phrases. For example, according to this diagnostic, even exempt anaphors contain REFL:

(33) Kenneth<sub>1</sub> said that Liz<sub>2</sub> invited both himself<sub>1</sub>/\*hissself<sub>1</sub> and the boss to dinner.

This supports the findings of Charnavel & Sportiche 2016: even exempt anaphors are reflexive anaphors. By virtue of this kind of data (and data where a reflexive anaphor is anteceded by a non-subject), it must be that the REFLP in nominals does *not* depend on a reflexive syntactic head in clauses (such as the reflexive Voice posited in Labelle 2008, Ahn 2015). In this way, the nominal-internal REFLP that makes a self-phrase behave as a reflexive anaphor does so independently of what makes a clause reflexive.

Our analysis also allows us to make sense of variation within English with respect to pronominal form in reflexive anaphors. In many dialects (e.g., AAE varieties), “*hissself*” and “*theirselves*” are valid surface forms. Without probing deeply, we would analyze these dialects as identical to those described here, except that the GEN→ACC rule either is absent or optional. In this way, the underlying GEN case surfaces throughout the paradigm. We analyze further variation (e.g., /ðejself/ and /misself/) as stemming from variation in vocabulary items and/or phonology (i.e., /ðej/ and /mi/ are surface forms of genitive pronouns in these dialects). In this way, cross-dialectal variation can be understood as independently motivatable morphophonological forms and the applicability of the GEN→ACC rule.<sup>17</sup>

More broadly, our analysis allows English to fit neatly into the typologically-common pattern of inalienable possession plus body-part noun for reflexive-marking. Even though the English surface forms make it seem as though the pronominal is not a possessor (e.g., *hissself*), we have shown that a possessor analysis is both possible and desirable.<sup>18</sup> While inalienable possession is common in reflexive expressions across the world’s languages, Déchaine & Wiltschko (2017) find more structural variation within this category. Further work is thus necessary to investigate how REFLP fits in with crosslinguistic findings.

<sup>17</sup>But compare with Storoshenko 2013, which suggests that “hissself”/“theirselves” reflexives can be ambiguous between DP and  $\phi$ P reflexives (in Déchaine & Wiltschko 2017’s terms).

<sup>18</sup>Ironically our proposed reflexive structure is not a “self-type” reflexive syntax, in the terms of Kiparsky 2008, though older varieties of English were the “self-type” (Keenan 2002). See König & Siemund 2000 and Schladt 2000 for historical and typological analyses of different types of reflexive markers.

## 4.2 Conclusions

Our major finding is that reflexive self-phrases in English are not listed as static lexical items. The reflexivity of a particular expression (e.g., *yourself*) is not the property of any individual head on its own (e.g., D, REFL, or  $\sqrt{\text{SELF}}$ ), but depends on interactions within DP-internal structure, with a local syntactic relationship required between the reflexivizing element and D; the reflexivity of the nominal *emerges* from a derivation.

Further, fully-formed reflexives (pronoun+*self*) must not be the input to syntax; REFLP and other syntactic elements (namely, modifiers) condition the surface form of the pronoun. The empirical facts of the GEN/ACC alternation tells us that there must be some syntactic, highly local relationship between the pronoun and a reflexivizing element, and in this way, morphology is able to serve as a window into syntax.

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