

# Reflexive cartography

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Throughout his career, Jan Koster has advocated a representational model without movement operations. See, for instance, Koster (1978, 1986, 2004, and 2007). The crucial argument for movement being superfluous has been that constraints on movement operations (e.g. subjacency) are very similar to “say, the locality principles involved in the binding theory” (1986: 4). If binding is dealt with representationally, why can’t *wh*-relations and others be done in the same way? In Koster’s model, the most important “notion of the theory of grammar is the dependency relation” (1986: 8) where two elements share a property. These relations are then subject to locality constraints. The relationship between a DP and its trace (or copy) can be one of these dependency relations, as is binding theory.

Koster argues that, through trace theory, “deep structure information [i]s preserved instead of being lost as the result of movement transformations” and trace theory (and currently ‘copy-and-delete’) has “completely undermined the original idea of transformational grammar” (2007: 188). “This judgment extends to the successors of movement transformations, such as ‘move alpha’, Move, and more recently, internal Merge. All these residues of transformationalism are equally superfluous, blocking the formulation of syntax in a strictly local, variable-free manner and, most important of all, obscuring the perspective on the underlying unity of grammar” (2007: 188). Key to much of this thinking has been the Structure Preserving Hypothesis which “entails that for each output of movement rules, the same output is available on the basis of phrase structure rules only; hence the complete redundancy of movement rules” (2007: 5). His emphasis on Phrase Structure rules explains Koster’s interest in the cartographic approach of Rizzi (1997) and Cinque (1999) with very explicit phrase structure rules; the representational approach accounts for his continued interest in binding theory.

In this short contribution, I offer a possible cartography of the reflexive in the history of English. I argue that reflexives changed as a result of the pronoun reanalysing from N to D. This reanalysis was determined by Economy Principles. Reflexives have a lot of structure and I start by looking at the person split obvious in English reflexives.

## 1. Reflexives in Old English

It has been suggested (e.g. Rice & Saxon 2005) that first and second person pronouns occupy a different position in the tree. Poletto (2000) and Déchaine & Wiltschko’s (2002)

look at the internal structure of first and second versus third person pronouns. A person split is very obvious looking at reflexives as well. In English, the first and second person have a genitive pronoun attached (*myself*, *ourselves*, *yourself*, and *yourselves*) whereas third person ones have an accusative (*himself*, *herself*, and *themselves*). It is tempting, as in van Gelderen (2000), to ascribe this difference to different periods in which these pronouns grammaticalized: third person pronouns became attached to ‘self’ when the latter was still an adjective, but first and second person ones grammaticalized when ‘self’ had been reanalyzed as noun. There is evidence that ‘self’ can function as a noun by 1300, although it is unexpected for an adjective to be reanalyzed as noun. It is much more likely for nouns to be reanalyzed as adjectives.<sup>1</sup>

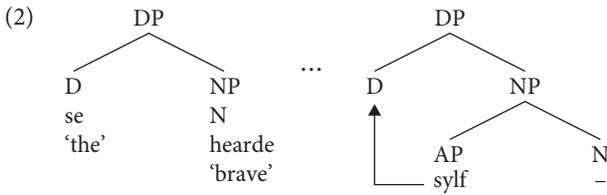
Therefore, instead of a reanalysis of the ‘self’ from adjective to noun inside one DP, I will argue that Old English sequences of a pronoun and ‘self’ are two DPs. Once the pronominal part of the reflexive reanalyzes from N to D, it becomes a probe looking for phi-features. The reflexive provides these third person phi-features for the third person but not for the first and second person. I relate the change from N to D to changes in the demonstrative system.

In accordance with Spamer’s (1979) and Fischer’s (2000) ideas, I argue that there is a nominal adjective (mainly pre-nominal in position and inflected as weak) and a verbal adjective (in both positions, inflected as strong). *Self* is most often inflected strong (Penning 1875: 14–5). Strong, verbal adjectives, *self* in (1) included, originate as reduced relative clauses in postnominal position, as in (2), and like all strong adjectives move to D. Using a Kosterian non-movement analysis, we could say they are in D and form a relationship with the lower ‘copy’.

- (1) *Gewat him ða se heard mid his hondscole sylf æfter*  
 made-ready him then the brave with his group self on  
*sande sæwong tredan*  
 sandy seashore tread

‘The brave one himself made himself ready with his followers to walk on the sandy shore.’ (*Beowulf* 1963–5)

1. Adamson (2000: 46) shows that the adjectives *rotten* and *dark* change over time to have more subjective meanings. For instance, the early meaning of *rotten* is ‘sense of decay’ and the later one is ‘worthless’. In Old English, it meant ‘loving’ and ‘amiable’; in Middle English, it had become ‘physically beautiful’ and that value judgment was extended past the physical in later stages. Adamson emphasizes the position of the adjectives. As they become more subjective, they move to the left (or ‘up the tree’). Breban (e.g. 2008) looks at adjectives of difference, namely *different*, *distinct*, *diverse*, *several*, *sundry*, and *various*. Like Adamson, she tests what she calls the leftward movement hypothesis and says that the adjectives of difference provide additional evidence for Adamson’s claim.



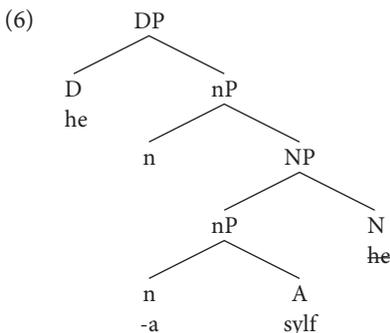
With the precursors of reflexives, as in (3), one could have the same structure: *hyne* moving to D in the first DP and picking up the case and *sylf* to the D of the second DP.

- (3) *þæt he hyne sylfne gewræc*  
 that he him-ACC self-ACC avenged  
 'He avenged himself.' (Beowulf 2875)

Because *self* constitutes a DP on its own in (2), it could be reanalyzed as an N inside the other DP, as long as the N was empty. This happens as third person pronouns are reanalyzed as D and as probes.

The pronominal weak adjectives have a different meaning, as in (4), and occur with demonstratives. Instances of *self* that have weak inflection are mainly nominative, e.g. *he sylfa* in (5), with a structure, as in (6). Since these aren't the source of reflexives, I ignore the weak inflection from now on.

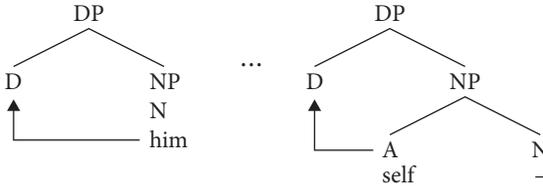
- (4) *se sylfa cynung*  
 'the same king.'
- (5) *forþon þe he ne uþe þæt ænig oðer man æfre mærdða*  
 therefore that he not wished that any other man ever fame  
*þon ma middangeardes gehedde under heofenum þonne he sylfa.*  
 than more world achieve under heavens than he himself  
 'Because he didn't want any other man on earth to win more glory in the world than he himself.' (Beowulf 503–5)



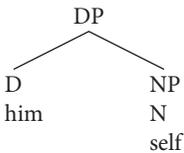
By early Middle English, third person reflexives are frequent and I suggest that a reanalysis of the pronoun in a higher position has occurred, i.e. from (7) to (8). I express

this by movement but, again using a Kosterian non-movement analysis, one could say that there was a relation between the D and N in Old but not in Middle English.

## (7) Old English



## (8) Middle and Modern English



Such a reanalysis fits a picture of language change as ‘up the tree’. Since the D and A are moving to D anyway (or were there in a non-movement analysis), they can be reanalyzed there. Let’s see what other things change in the determiner system.

## 2. Change in the determiner system

In Old English demonstrative pronouns are used on their own, as in (9), but have different qualities from third person pronouns, as we’ll see.

- (9) *se ðe his gereorde cuðe: se wæs Wine haten & se wæs in  
 he that his language knew he was Wine called and he was in  
 Gallia rice gehalgod.  
 Gaul kingdom consecrated*

‘The one who knew his language was called Wine and consecrated in Gaul.’

(Bede 170, 2–3)

Kiparsky (2002) argues that Old English personal pronouns are not used deictically, do not head restrictive relative clauses, and are not used as predicates. Pronouns, according to him and Traugott (1992: 171), express the discourse topic whereas demonstratives indicate a change of topic. They both quote (10) as evidence for the different roles of the demonstrative and personal pronouns. The first two pronouns *hi* and *him* continue previous topics but the demonstrative *se* changes the topic to the angel.

- (10) *Hi habbad mid him awyriedne engel, mancynnes feond,*  
 they have with them corrupt angel mankind's enemy  
*and se hæfd andweald...*  
 and he [the angel] has power over  
 (Ælfric, *Homilies* ii.488.14, from Traugott 1992: 171)

In terms of structure, I assume this means that demonstratives are either in the specifier or the head of the DP but that pronouns move there, or form a dependency relationship between D and a lower position.

At what point do third person pronouns change to being Ds? We know that third person pronouns cease to be used as reflexives by late Old English (van Gelderen 2000: 50) and start to be used predicatively during the fourteenth century (van Gelderen 2000: 115). Mustanoja (1960: 136) mentions the Middle English use of *s/he* and *they* with PPs and with relative clauses, as in (11) and (12).

- (11) *þat heo of Rome hit sculden iheren*  
 that they of Rome it should hear (Layamon 5890)
- (12) *if þou be he I luve sa wele*  
 if you are he I love so well  
 'If you are the person I love so well.' (Cursor Mundi, Cotton, 3693)

This shift is perhaps indicative of their reanalysis to D. First and second person pronouns are of course always possible topic shifters.

The demonstrative pronouns, as is well known, are the source of articles. They first appear in the twelfth century. So, it could be that the emptying so to speak of the deictic system resulted in personal pronouns changing too. Having provided a scenario for the change of the third person pronoun from N to D, I'll ask two questions. (a) What motivated the change, and (b) why did the person split arise in the reflexives? In terms of features, when the pronoun is reanalyzed as a D head it then becomes a probe for new phi-features and *self* is a perfect candidate and is reanalyzed as a noun, as in (13a). First and second person pronouns could not be reanalyzed as probes since their person features didn't match those of *self*. The personal forms were of course more referential during Old English. Therefore, their change is much later and had to be as specifiers with interpretable features, as in (13b).

- (13) a. 

DP	
D	NP
him	N
[u-phi]	self
	[3S]

 b. 

DP	
Spec	NP
my	N
[i-phi]	self
	[3S]

The reanalysis of (13b) is late. Sixteenth century sources continue to write them separately (cf. Farr 1905, van Gelderen 2000), as in (14) and (15).

(14) I dresse **my selfe** handsome. (Shakespeare, *2 Henry IV*, II, iv, 303)

(15) Thei wold confesse **them selves** to be there as commissioners.  
(from the OED 1502, *Lett. Rich. III & Hen. VII* (Rolls) II. (107)

Additionally, *self* starts to be used as a noun in the Middle English period, e.g. as in (16), and *self* attached to first and second person agrees in third person, as in (17a) from late Middle English, (17b) from Early Modern, and (17c) from Modern English.

(16) *Or elles godds selfes he*  
'Or otherwise he is God's self.' (Cursor Mundi, Cotton, 12248)

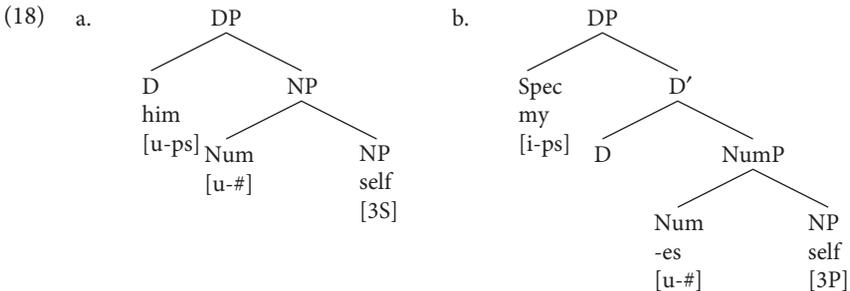
(17) a. **myself** have ben the whippe.  
'I have been the whip.' (Chaucer, *Wife of Bath's Prologue*, 175)

b. **My selfe** hath often heard them say (Shakespeare, *Titus IV*, iv, 74)

c. **Myself** wants more!/\***Myself** want more.

### 3. Modern English reflexives

Back to the cartography! I would like to argue that reflexives still have a structure as in (13) and that they are even more expanded, with number as well. So for Modern English, I'd like to suggest (18).



Some evidence for having the structure is provided by the headlines in (19) and (20). Headlines often leave the functional elements and just have the lexical ones. They show that the NP or NumP (or DP of course) can be spelled out.

(19) Bank robbery suspect kills **self** in store.

(20) a. Female coffee drinkers less likely to kill **selves**, study says.

b. Female coffee drinkers less likely to kill **self**, study says.<sup>2</sup>

2. Sentence (20a) was from an actual headline but, according to native speakers, (20b) is just as good.

The trees in (18) bring up a question on number features. Chomsky (1995: 231) makes a distinction between intrinsic and optional features. The intrinsic features on a noun are person and gender, “listed explicitly” in the lexicon, whereas number and Case are optional, “added as the LI enters the numeration”. Hence, the noun has interpretable number and the Num is a probe with uninterpretable features.

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