

Early Germanic preposition stranding revisited

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1. Introduction

1.1. *Outline of the talk*

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2. Contexts for stranding in Old English
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1.2. *Aims of the talk*

Two main questions:

- What is the distribution of preposition stranding in Old English?
- Is movement involved?
- Can these facts be captured under the recent analysis in Abels (2012)? Do they in fact support it?

1.3. *Preposition stranding: an overview*

Preposition stranding: when a preposition does not have an overt complement to its right.¹ English:

- 1) The man that I talked **to**
- 2) The man who(m) I talked **to**
- 3) Who(m) did you talk **to**?
- 4) John I talked **to**, but not Peter.
- 5) He was laughed **at**.

Few of the world's languages have stranding at all (van Riemsdijk 1978; Abels 2003, 2012; Truswell 2009). Those that do can be divided according to whether they allow stranding generally (i.e. equivalents of (1)-(5)) or only with A'-movement (i.e. do not permit 'pseudopassives' equivalent to (5)); see Abels (2003: 230–231). Old English patterns with neither group.

¹ We will explore more theory-dependent definitions later.

2. Contexts for stranding in Old English²

2.1. Relative clauses

Three main types of RC in OE (Traugott 1992: 224–8; Taylor 2014: 467–70):

a) Formed with a relative pronoun, an inflected form of the demonstrative *se* ‘the/that’ (case is taken from the relative clause; case attraction possible but rare):

- 6) þa twegen fet þa þeo sawul habban sceal
 the two feet which.MASC.PL.ACC the soul have shall
 ‘the two feet which the soul shall have’ (coadrian,Ad:26:1.61)

b) Formed with the invariant complementizer *þe* (this is the most common structure):

- 7) to his agenum æþele, þe he on geboren wæs
 to his own country COMP he in born was
 ‘to his own country which he was born in’ (coaelive, + ALS_[Basil]:85.506)

c) Formed with both of the above:

- 8) Se weig se þe læt to heofonrice
 the way which.MASC.SG.NOM COMP leads to heaven
 ‘the way which leads to heaven’ (cocathom1, + ACHom_I,10:264.169.1954)

Other, more minor types:

- Zero or contact RCs (Harbert 2007: 456: ‘virtually unattested’)
- RCs formed with invariant complementizer *þæt*
- Infinitival relative clauses with *to*

- 9) hi næfdon hlaf to etanne
 they NEG-had loaf to eat
 ‘they did not have bread to eat’ (cowsgosp,Mk_[WSCp]:3.20.2353)

Stranding is impossible in OE when a relative pronoun is present in SpecCP, and obligatory when it is not (see Traugott 1992: 230–231; Fischer 1992: 388–389; Taylor 2014: 444–445).

² References to OE examples are given as token IDs from the YCOE (Taylor et al. 2003).

- 10) *ðone eorðlican wisdom be þam þe þus awriten is*
 the earthly wisdom about which COMP thus written is
 ‘the earthly wisdom about which is written thus.’ (coelive, + ALS_[Christmas]:227.183)
- 11) *& þone dračan acwealde þe we on belyfdon*
 and the dragon killed COMP we in believed
 ‘and killed the dragon that we believed in’ (cocathom1, + ACHom_I,37:504.202.7459)

Minor types of RC (zero, invariant *þæt*, infinitival) also allow stranding.

2.2. R-stranding

R-stranding (term from Ponelis 1993) is ‘common to all West Germanic languages’ according to Harbert (2007: 453). Not specific to relative clauses.

- 12) *þonne gæþ þær swiðe mycel hwil to*
 then goes there very great while to
 ‘then it will take a great deal of time’ (OE; cocathom2, + ACHom_II,1:9.214.190)

In OE, it can also occur with personal pronouns:

- 13) *Lucia him cwæð to*
 Lucy him said to
 ‘Lucy said to him’ (OE; coelive, + ALS[Lucy]:70:2208; Taylor 2014: 446)

This is very rare (5–6%) in OE with first- and second-person pronouns, but quite common (45.4%) with third-person pronouns (Wende 1915; Alcorn 2009, 2011). There are a number of conditioning factors; see Alcorn (2011).

2.3. Stranding elsewhere

Non-R-stranding does not occur in interrogatives (Taylor 2014: 445), with topicalization (Fischer 1992; Taylor 2014: 446, *pace* Abels 2012: 262–3) or in (pseudo)passives, in OE.

Generalization: In languages that do not generally allow stranding under A- or A'-movement, stranding may occur in relative clauses *introduced by an invariant complementizer*. Not a new observation: cf. Romaine (1984: 451), Harbert (2007: 451) for Germanic more generally, and Allen (1980a, 1980b: 266–272), Mitchell (1985: §2232–2248), Kiparsky (1995: 150), Miller (2012: 141) among many others for OE.

But having an invariant relativizer is not a sufficient condition for stranding: cf. Yiddish *vos* (Allen 1980b: 313–314; Harbert 2007: 452), Gothic *ei* and *þei* (Harbert 2007: 439), Alemannic *wo* (Brandner & Bräuning 2013: 161). All these relativizers permit *neither* stranding *nor* pied-piping.

- 14) *des isch oaner wo de Peter mit g'schwätzt hot
 this is someone COMP the Peter with talked has
 'This is somebody that Peter talked to.' (Brandner & Bräuning 2013: 161)

3. Implications for an analysis

3.1. Movement vs. non-movement

The stranding facts play a key role here. Major debate in 1970s and 1980s:

- Movement-derived (involving a null operator or deletion of a moved element): Chomsky & Lasnik (1977); van Riemsdijk (1978: 286–297); Vat (1978); van Kemenade (1984, 1987)
- Non-movement-derived ('unbounded deletion'): Bresnan (1976); Allen (1977, 1980a, 1980b); Maling (1978); Kiparsky (1995); also Grimshaw (1975) on Middle English, Maling (1976) on Old Icelandic

Recently the debate has been revived by Brandner & Bräuning (2013), who explicitly propose a movement-free analysis for Alemannic RCs with invariant relativizers, apparently independently.

In modern terms, we can cast this as operator movement vs. resumption:³

- Movement: $[_{CP} Op_i [_{C'} be/er [_{TP} \dots [_{PP} [_{P'} P \Theta_{P_i}]]]]]$
- Non-movement: $[_{CP} [_{C'} be/er [_{TP} \dots [_{PP} [_{P'} P \emptyset]]]]]$

Key empirical prediction: the non-movement analysis predicts freedom from island effects, whereas the movement analysis does not.⁴ Allen (1980: 264) states that no island violations are found (see also van Kemenade 1987). Kiparsky (1995) claims that island violations occur in OE with *þe* but not with RPs, giving (15) as an example.

³ Assuming that resumption is not itself movement-derived (which is likely to be true at least for island-insensitive resumption: see Salzmann 2017: ch. 3 for extensive discussion).

⁴ This is generally true, but not for the non-movement account in Bresnan & Grimshaw (1978), who reformulate Subjacency. Locality also can't be taken to be diagnostic of movement in Minimalist syntax in general, given the availability of Agree, which by hypothesis is local (cf. Adger & Ramchand 2005: 162) – but I'll set the Agree possibility aside in what follows.

- 15) Ac for þæm he geneðde swiþost ofer þone munt þe
 but for that he ventured swiftly over the mount comp
 he wiste þæt Flaminius se consul wende that he buton
 he knew that Flaminius the consul thought that he without
 sorge mehte on þæm wintersetle gewunian
 worry might on the winter-quarters dwell
 ‘but because he ventured swiftly over the mountain that he knew that Flaminius the consul thought
 that he might dwell on in winter quarters without care’ (coorosiu, Or_4:8.100.12.2067; Kiparsky 1995:
 150–151)

But (15) doesn’t contain an island violation (the translation is perfectly grammatical), so still no evidence. Given the general rarity of long-distance extraction in OE in any case, how could we be sure even if we did find a convincing example? (Cf. Chomsky & Lasnik 1977: 498–499.)

Quick search of the YCOE corpus: there are 5 examples of apparent extraction from a PP across at least one finite clause boundary, and no obvious island violations among them.⁵

Abels (2003: 181–192; 2012: 226–231): resumptives are systematically incompatible with comparatives of inequality. His reasoning: resumptive pronouns can only have the denotations that normal pronouns can have (Sharvit 1999), and gaps in comparatives need the reading *x-many books* (see Abels 2012: 227–229).

Frisian, unlike Dutch (and German), allows stranding with comparatives. This means, according to Abels, that Frisian allows true stranding under A'-movement, *pace* Hoekstra (1995), who analyses such examples as involving a null resumptive.

- 16) *Jan heeft meer geld verdiend dan zijn vrouw op gerekend had.
 Jan has more money earned than his wife on counted had
 *intended: ‘Jan made more money than his wife had expected.’ (Dutch)
- 17) ✓Jan hat mear jild fertsjinne as dat syn frou op rekkene hie.
 Jan has more money earned than that his wife on counted had
 ‘Jan made more money than his wife had expected.’ (Frisian)

⁵ Though obviously this relies on the relevant examples being correctly annotated in the YCOE (the relative clause in (15) is annotated as an adverbial clause, for instance) and on my query catching all the examples.

OE also allows stranding with comparatives:

18) seo is bradre þonne ænig man ofer seon mæge
 she is broader than any man over see may
 ‘it is broader than any man can see across’
 (OE; Traugott 1992: 225; coorosiu,Or_1:1.16.9.286)

19) to beteran tidun þonne we nu on sint
 to better times than we now in are
 ‘in better times than we are in now’
 (OE; Goh 2004: 484; coorosiu,Or_2:5.48.36.938)

These examples are vanishingly rare: only 1 example of stranding found in the YCOE;⁶ (19) is tagged as a separable verb *oferseon* rather than as a stranded preposition. BUT if stranding involves a null operator in early Germanic, rather than a resumptive, then this pattern is predicted. If we take this pattern seriously then we have an argument for the movement analysis of OE invariant RCs.

3.2. Analyses of stranding

Two main approaches (cf. Truswell 2009); I’ll ignore the pseudopassive here:

- Reanalysis theory (Hornstein & Weinberg 1981)
 - Key idea: PP is an island. P⁰ gets ‘reanalysed’ as forming a constituent with V⁰, as part of the derivation. Complement of PP becomes complement of the verb.
 - Problems:
 - Relies on a questionable contrast between *Who did John speak to Harry about yesterday?* and *Who did John speak to Harry yesterday about?*
 - Conceptually: what is reanalysis? A separate operation in our theory
 - No evidence for the constituency of P⁰ and V⁰ (and some apparent counter-evidence, e.g. from gapping).
- Escape hatch theory (van Riemsdijk 1978; Abels 2003, 2012)
 - Key idea: PP is an island; what can escape is variable.
 - van Riemsdijk (1978): some languages can use SpecPP as an escape hatch, but others cannot.
 - Abels (2003): the phasehood of PP is parameterized.

⁶ There are also 5 examples involving comparatives of equality in the YCOE; Abels argues that comparatives of equality are irrelevant.

- Problems:
 - Conceptually: parameterization of islandhood adds complexity to our theory.
 - For van Riemsdijk (1978): extraction from PP is *always* possible, as shown by examples like (20) from German (Abels 2003: 211).

20) Über welches Thema hast du mich noch mal nach einem Buch gefragt?
 about which topic have you me again after a book asked
 ‘Which topic did you ask me about a book on again?’

More detail on the theory in Abels (2003: chapter 4, 2012: chapter 7), which I adopt:

- Key notion: *antilocality* (no Comp-to-Spec movement).
- If P⁰ is a phase head, everything that vacates PP must move via SpecPP. Whatever is the complement of P⁰ is therefore immobile. (Smaller constituents may vacate.)
- (Abels 2003: P⁰ is not a phase head in stranding languages, and the complement of P⁰ may move out of PP, just not via SpecPP.)
- Abels (2012): phasehood is not parameterized; instead, preposition stranding in languages that have it is the extraction of a phrase smaller than the complement of P.

Abels’s (2012: 231–245) approach to R-stranding in German and Dutch:⁷

- R-words ≠ DP pro-forms, since they interact for locality with locative elements but not pronouns.
- R-words are not complements of P⁰ (cf. Trissler 1993).
- R-words are base-generated as the complement of a lower head which he labels DR (cf. Gallmann 1997). Evidence: contrasts like (21) vs. (22).

21) Wo hast du **drin** geschlafen?
 where have you in slept
 ‘What did you sleep in?’

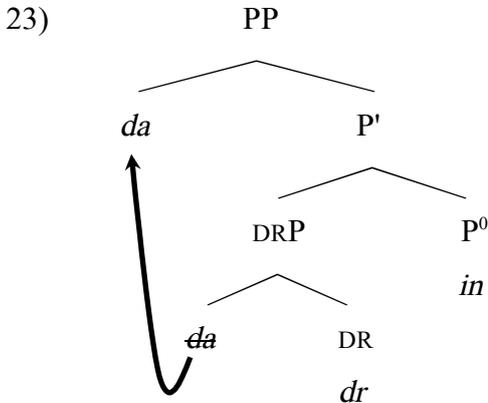
22) *Wo hast du **in** geschlafen?

⁷ Abels (2003: 192–209) instead assumes that R-stranding languages have a set of zero-place prepositions as a matter of lexical variation, and that these license certain elements in their specifier. This analysis is pretty difficult to falsify and Abels (2012) does not claim that it’s universally excluded. Vat (1978) anticipates the zero-place preposition analysis, and criticizes it on the grounds that it predicts the existence of examples like (i) (their hypothetical example (24)):

i) we wæron to gescæpene
 we were for created
 ‘we were created for (that)’

They state ‘we suspect [(i)] to be ungrammatical’ (1978: 702). But in fact examples like this are robustly attested in OE.

- The *dr-* in *drin*, *drüber* is in fact the head of the projection below P^0 which has been incorporated into it. ‘DR realizes the case assigned by P’ and it ‘selects R-words and nothing else’ (Abels 2012: 241).



R-stranding is then not movement of the complement of P^0 out of PP, and doesn't violate antilocality, nor does it require us to assume that PP is not a phase. Does this account extend to R-stranding in the early West Germanic varieties, and if so does it extend further to stranding in relative clauses and comparatives?

3.3. Analysing stranding in OE

Basic generalization: stranding is permitted in A'-movement constructions that do not involve movement of an overt case-marked full DP.

Observation: some pronouns may behave like R-words in R-stranding (cf. (13) above), so it can't generally be true that R-stranding only applies to non-pronominal elements if we want to adopt a unified account. However, Abels (2003: 202) correctly observes that this is irrelevant to whether they originate as the complement of P^0 or not.

Crucial evidence for an Abels-style account of OE R-stranding, not adduced in the 1970s–1980s debates, comes from differences in the form of stranded prepositions (Wende 1915; Alcorn 2011). Alcorn (2011: 166–191) on OE (data from the YCOE, Taylor et al. 2003):

- *be* 'by, concerning' never strands (N=271), but alternates with *bi*, *bie*, *big*, *bii*, *by*, which does strand (5/13; 38%).
- *for* 'before, because of' never strands (N=191; Wende 1915: 14), but alternates with *fore*, which does strand (25/29; 86%).
 - Two examples of *þærfore* 'therefore', with final vowel. **þærfor*.

- *betweonum* almost always strands (224/236; 95%), but other forms such as *betweoh* almost never do (20/139; 14%).

Further OE data:

- *in* ‘in’ is rarely stranded (25/128; 20%), whereas *inne* as P usually is (34/41; 83%), including 25 with *þær* as in (24), 8 with relative clauses as in (25), and one with a personal pronoun (26).
 - (NB: there are also some examples (mis)tagged as adverbs.)

24) Gif **þær** wyrms **inne** bið. Hyt þæt ut awyrpð.
if R worms in are it that out throws

‘If there are worms in it, it will drive them out’ (coquadru,Med_1.1_[de_Vriend]:7.17.297)

25) þæt hus **þe** hiora godas **inne** wæron
the house COMP their gods in were

‘the house that their gods were in’ (coorosiu,Or_6:14.142.1.2975)

26) hweþer ænig liflic oroð **him** þa gyt **inne** wære
whether any living breath him then still in were

‘whether any living breath could still be found in him’ (cogregdC,GDPref_and_4_[C]:12.276.14.4031)

- Other, rarer forms:
 - *ymb(e)* ‘about’ is almost always stranded (Alcorn: 121/129; 94%); *ym* is attested twice, neither stranded.
 - *mid* ‘with’ is rarely stranded (Alcorn: 126/1,252; 10%); *mide* is attested twice, both stranded.
 - *toward/toward/towerd* ‘toward’ are relatively rarely stranded (10/32, 31%); *towearde* is attested twice, both stranded.

The same facts hold of all types of stranding.

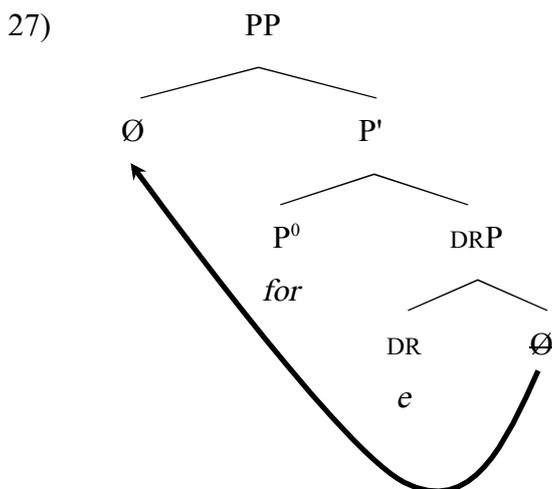
Table 1: Summary of variation in preposition form (simplified)

Non-stranded form	Stranded form
<i>be</i>	<i>bi, bie, big, bii, by</i>
<i>betweoh, betweox, betwux</i>	<i>betweonum</i>
<i>for</i>	<i>fore</i>
<i>in</i>	<i>inne</i>
<i>mid</i>	<i>mide</i>
<i>toward, toward, towerd</i>	<i>towearde</i>
<i>ym</i>	<i>ymbe</i>

Following traditional dictionary treatments, Alcorn argues that the variation in *be/bi* and *for/fore* is purely phonological, based on whether the P can cliticize onto a following object. BUT the two variants don't always seem to be phonologically predictable from one another, and this treatment doesn't carry over to *betweonum* (cf. Rossi 2012: 235–243).

Alternative proposal: the stranded forms contain an additional morpheme corresponding to Abels' DR. Direct supporting evidence: *-e* is the dat. sg. ending of strong nouns. (*-um* is the dat. pl. ending on all nouns.)⁸

All we then need to say to allow for stranding beyond R-words is that DR in OE, unlike in German, can select a null operator or a weak pronoun as well as R-words. I will also assume that the headedness of DRP is different in OE, at least, due to the morpheme order.



⁸ The presence of these endings presumably also has an etymological explanation – but this doesn't obviously account for their synchronic distribution.

3.4 Refining the account

The account of stranding presented in 3.3 is essentially lexical and selectional. Advantages:

- Makes correct predictions (AFAIK)
- Accounts for minor differences between closely-related languages with very similar properties
- No need to parameterize core grammatical properties such as phasehood

Disadvantages and open questions:

- ‘Stipulative’
- What is DR?
- How do we explain the split between first/second person and third person in OE?
- How do the early Germanic facts relate to the cartography of PPs as explored with some success in Cinque & Rizzi (2010)?
- Facts not captured: OE *þurh* ‘through’, an accusative-selecting pronoun, very rarely strands.

Detour to present-day English, which Abels (2012) claims has null structure below P and above DP. Not everything can strand: under certain prepositions and certain types of movement, axial parts (Svenonius 2006), temporal intervals (rather than events), and locations (rather than entities) (Stanton 2016) cannot be stranded.

28) *It was front of the car that the kangaroo was in.

29) *June, we swam in.

30) *10,000 feet is tough to fly to.

This might suggest the following:

- The DR head = AxPart (Svenonius 2006) = dative case.
- Semantics: identifies set of points in (geographical or temporal) space, based on Ground DP.
- Intervals and locations obligatorily lexicalize more structure, AxPartP.

Non-stranding contexts are also *antipronominalization* contexts in present-day English (Stanton 2016; NB: *not* a general property of intervals and locations), and the same holds for AxParts:

31) *John was in [front of the car]_i, and Mary was in it_i too.

32) *John went swimming in June_i, and Mary went swimming in it_i too.

33) *John flew to [10,000 feet]_i, and Mary flew to it_i too.

Suggests that pronouns *cannot* lexicalize as much structure as DR/AxPartP. Back to Old English:

- Dative-governing prepositions always select DR/AxPartP
 - Dative DPs are in fact DR/AxPartP
- Accusative-governing prepositions never select DR/AxPartP
 - (and hence don't strand; *þurh* is unusual in consistently selecting accusative)
- Pronouns are smaller than DR/AxPartP
 - (relies on assuming that dative pronouns don't have 'real' dative case)
 - NB: modified or co-ordinated pronouns don't strand (Wende 1915; Rossi 2012)
- Opens a door to interpreting differences between 1st and 2nd person pronouns and 3rd person pronouns in terms of structural size

Much less c-selection involved under this type of account; selection requirements for Ps are independently needed and likely to be rooted in semantics.

4. Conclusion

- OE exhibited stranding under A'-movement in operator-movement constructions, and also exhibits it more generally with R-words and (particularly third person) personal pronouns.
- Given the presence of stranding in comparatives, a resumption-based analysis is ruled out, if Abels' generalization is correct; this plus apparent island-sensitivity suggests movement.
- An antilocality-based analysis along the lines of Abels (2003, 2012), in which stranding may occur with a null operator selected by a piece of structure smaller than the complement of P, seems to account well for the data.
- This is supported by differences in the form of stranded prepositions in OE, which appear to be case-related.

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