Preposition stranding in early West Germanic

George Walkden

University of Konstanz

george.walkden@uni-konstanz.de · http://walkden.space/

1. Introduction

1.1. Outline of the talk

1. Introduction

2. Contexts for stranding in Old English (and Old Saxon)

3. Implications for an analysis: movement vs. non-movement

4. Analyses of stranding

5. Analysing stranding in OE (and OS)

6. Conclusion

1.2. Aims of the talk

Two main questions:

- What is the distribution of preposition stranding in Old English (and Old Saxon)?
- 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. 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 (OE) and Old Saxon (OS) pattern with neither group.

2. Contexts for stranding in Old English (and Old Saxon)[1]

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).

---

[1] References to OE examples are given as token IDs from the YCOE (Taylor et al. 2003). References to OS examples are from the HeliPaD (Walkden 2015, 2016).

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:' (coaelive, + ALS_[Christmas]:227.183)

11) &   þone dracan   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.

In OS, there is no stranding with relative pronouns (though only a handful of potentially relevant examples including (12), plus one *wh*-relative), but no examples of stranding in RCs at all. But in OS, type a) RCs are the norm.

12) libbendero   liobost: '**an**   **them** mi   licod   uuell …
    living.GEN.PL dearest   in   whom   me   likes   well
    'the dearest of living people, who pleases me well'
    (OSHeliandC.1757.3147-3149, OSHeliandC.1758.3149-3150)

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.

13) 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)

14) Thuo   quam **thar** oc   en   uuiduuua   **tuo**
    then   came there   also   a   widow   to
    'then a widow also came there' (OSHeliandC.2168.3764-3765)

In OE and OS, it can also occur with personal pronouns:

15) Lucia **him**   cwæð **to**
    Lucy   him   said to
    'Lucy said to him' (OE; coaelive, + ALS[Lucy]:70:2208; Taylor 2014: 446)

16) Thuo   gengun   **im**   is   iungron   **tuo**
    then   went   him   his   disciples   to
    'Then his disciples went to him' (OSHeliandC.2479.4285)

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); the same is true of OS (18% vs. 65%; Wende 1915). 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, or – as far as I can tell – in OS.

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.

17) *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: 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:[2]

- Movement: $[_{CP}$ Op$_i$ $[_{C'}$ *þe/er* $[_{TP}$ … $[_{PP}$ $[_{P'}$ P ~~Op$_i$~~ $]]]]]$
- Non-movement: $[_{CP}$ $[_{C'}$ *þe/er* $[_{TP}$ … $[_{PP}$ $[_{P'}$ P Ø $]]]]]$

Key empirical prediction: the non-movement analysis predicts freedom from island effects, whereas the movement analysis does not.[3] 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 (18) as an example.

18)
Ac	for	þæm	he	geneðde	swiþost	ofer	þone	munt	**þe**
but	for	that	he	ventured	swiftly	over	the	mount	comp
he	wiste	þæt	Flamineus	se	consul wende		that	he	buton
he	knew	that	Flamineus	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 Flamineus 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 (18) 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.[4]

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).

---

[2] 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).

[3] 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.

[4] Though obviously this relies on the relevant examples being correctly annotated in the YCOE (the relative clause in (18) is annotated as an adverbial clause, for instance) and on my query catching all the examples.

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.

19) *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)

20) ✓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)

OE also allows stranding with comparatives:

21) 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)

22) 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;[5] (22) 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.

---

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

4. 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. P^0 gets 'reanalysed' as forming a constituent with V^0, 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 (see Drummond & Kush 2015 for a reanalysis of reanalysis)
    - No evidence for the constituency of P^0 and V^0 (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.
  - 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 (23) from German (Abels 2003: 211).

23) 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 P^0 is a phase head, everything that vacates PP must move via SpecPP. Whatever is the complement of P^0 is therefore immobile. (Smaller constituents may vacate.)
- (Abels 2003: P^0 is not a phase head in stranding languages, and the complement of P^0 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:[6]

- R-words ≠ DP pro-forms, since they interact for locality with locative elements but not pronouns.
- R-words are not complements of P^0 (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 (24) vs. (25).
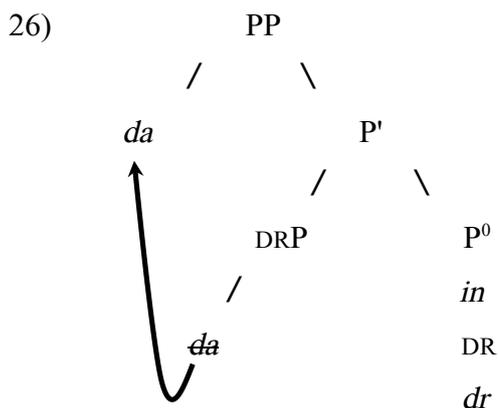
24) Wo   hast   du   **drin**   geschlafen?
    where have   you   in   slept
    'What did you sleep in?'

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

- 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).

26)

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?

---

[6] 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.

5. Analysing stranding in OE (and OS)

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. (15) 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 and OS 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 (27), 8 with relative clauses as in (28), and one with a personal pronoun (29).
    - (NB: there are also some examples (mis)tagged as adverbs.)

27) 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)
28) 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)
29) 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:
    o *ymb*(*e*) 'about' is almost always stranded (Alcorn: 121/129; 94%); *ym* is attested twice, neither stranded.
    o *mid* 'with' is rarely stranded (Alcorn: 126/1,252; 10%); *mide* is attested twice, both stranded.
    o *toward*/*toweard*/*towerd* 'toward' are relatively rarely stranded (10/32, 31%); *towearde* is attested twice, both stranded.

The same facts hold of all types of stranding.

In OS:
- *tuo* 'to' is stranded in 66/67 instances (99%); *to* in 1/6 instances (17%); *te* in 0/565 instances
- *fora* 'before' stranded in 1/1 instances (100%); *for* in 0/93 instances (0%)
- *midi* 'with' stranded in 1/11 instances (9%); *mid* in 1/428 instances (0%)

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

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

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.)[7]

---

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

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.

30)
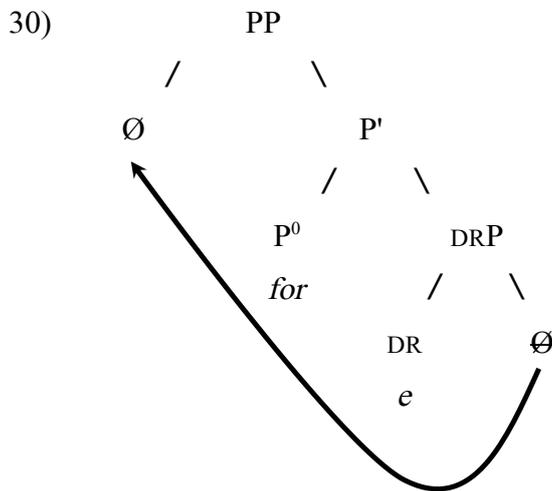
The account of stranding presented in this section is essentially lexical and selectional. Advantages:

- 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.

31) *It was front of the car that the kangaroo was in.
32) *June, we swam in.
33) *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:

34) *John was in [front of the car]$_i$, and Mary was in it$_i$ too.

35) *John went swimming in June$_i$, and Mary went swimming in it$_i$ too.

36) *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.

6. 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, as does OS.

- 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 and OS, which appear to be case-related.

References

Abels, Klaus. 2003. *Successive cyclicity, anti-locality and adposition stranding.* Ph.D. dissertation, University of Connecticut.

Abels, Klaus. 2012. *Phases: an essay on cyclicity in syntax.* Berlin: Mouton de Gruyter.

Adger, David, & Gillian Ramchand. 2005. Merge and Move: *wh*-dependencies revisited. *Linguistic Inquiry* 36, 161–193.

Alcorn, Rhona. 2009. Grammatical person and the variable syntax of Old English personal pronouns. *English Language and Linguistics* 13, 433–451.

Alcorn, Rhona. 2011. *Pronouns, prepositions and probabilities: a multivariate study of Old English word order.* Ph.D. dissertation, University of Edinburgh.

Allen, Cynthia L. 1977. *Topics in diachronic English syntax.* Ph.D. dissertation, UMass at Amherst.

Allen, Cynthia L. 1980a. *Topics in diachronic English syntax.* New York: Garland.

Allen, Cynthia L. 1980b. Movement and deletion in Old English. *Linguistic Inquiry* 11, 261–325.

Brandner, Ellen, & Iris Bräuning. 2013. Relative *wo* in Alemannic: only a complementizer? *Linguistische Berichte* 234, 131–169.

Bresnan, Joan. 1976. Evidence for a theory of unbounded transformations. *Linguistic Analysis* 2, 253–393.

Bresnan, Joan, & Jane Grimshaw. 1978. The syntax of free relatives in English. *Linguistic Inquiry* 9, 331–391.

Chomsky, Noam, & Howard Lasnik. 1977. Filters and control. *Linguistic Inquiry* 8, 425–504.

Cinque, Guglielmo, & Luigi Rizzi (eds.). 2010. *Mapping spatial PPs. The cartography of syntactic structures,* vol. 6. Oxford: Oxford University Press.

Drummond, Alex, & Dave Kush. 2015. "Reanalysis" is raising to object. *Syntax* 18, 425–463.

Fischer, Olga. 1992. Syntax. In Richard M. Hogg (ed.), *The Cambridge history of the English language,* vol. 2: *1066–1476,* 207–408. Cambridge: Cambridge University Press.

Gallmann, Peter. 1997. *Zu Morphosyntax und Lexik der w-Wörter*. Arbeitspapiere des Sonderforschungsbereichs 340, 107. Tübingen: Universität Tübingen.

Goh, Gwang-Yoon. 2004. The difficulty of preposition stranding and relative obliqueness in Old English. *English Studies* 85, 481–497.

Grimshaw, Jane. 1975. Evidence for relativization by deletion in Chaucerian Middle English. In Ellen Kaisse and Jorge Hankamer (eds.), *Proceedings of the Fifth Annual Meeting of the North Eastern Linguistic Society, Harvard University, Cambridge, Massachusetts.*

Harbert, Wayne E. 2007. *The Germanic languages*. Cambridge: Cambridge University Press.

Hoekstra, Jarich. 1995. Preposition Stranding and Resumptivity in West Germanic. In Hubert Haider, Susan Olsen & Sten Vikner (eds.), *Studies in Comparative Germanic Syntax*, 95–118. Dordrecht: Kluwer.

Heusler, Andreas. 1967. *Altisländisches Elementarbuch*. Heidelberg: Carl Winter.

Hornstein, Norbert, & Amy Weinberg. 1981. Case theory and preposition stranding. *Linguistic Inquiry* 12, 55–91.

Kiparsky, Paul. 1995. Indo-European origins of Germanic syntax. In Adrian Battye & Ian Roberts (eds.), *Clause structure and language change*, 140–170. Oxford: Oxford University Press.

Maling, Joan. 1976. Old Icelandic relative clauses: an unbounded deletion rule. *NELS* 7, 175–188.

Maling, Joan. 1978. An asymmetry with respect to *wh*-islands. *Linguistic Inquiry* 9, 75–89.

Miller, D. Gary. 2012. *External influences on English: from its beginnings to the Renaissance*. Oxford: Oxford University Press.

Mitchell, Bruce. 1985. *Old English syntax*. 2 vols. Oxford: Clarendon.

Ponelis, Fritz. 1993. *The development of Afrikaans*. Frankfurt am Main: Peter Lang.

Romaine, Suzanne. 1984. Towards a typology of relative-clause formation strategies in Germanic. In Jacek Fisiak (ed.), *Historical syntax*, 438–470. Berlin: Mouton.

Rossi, Silvia. 2012. *P in Old English: P-stranding, postpositions, and particles in a cartographic perspective*. Ph.D. dissertation, Università degli Studi di Padova.

Salzmann, Martin. 2017. *Reconstruction and resumption in indirect A'-dependencies: on the syntax of prolepsis and relativization in (Swiss) German and beyond*. Berlin: Mouton de Gruyter.

Sharvit, Yael. 1999. Resumptive pronouns in relative clauses. *Natural Language and Linguistic Theory* 17, 587–612.

Stanton, Juliet. 2016. Wholesale late merger in A'-movement: evidence from preposition stranding. *Linguistic Inquiry* 47, 89–126.

Svenonius, Peter. 2006. The emergence of axial parts. *Nordlyd* 33, 49–77.

Taylor, Ann, Anthony Warner, Susan Pintzuk, & Frank Beths. 2003. York-Toronto-Helsinki Parsed Corpus of Old English Prose.

Taylor, Ann. 2014. Old English syntax. In Don Ringe & Ann Taylor, *The Development of Old English*, 392–

509. Oxford: Oxford University Press.

Traugott, Elizabeth Closs. 1992. Syntax. In Richard M. Hogg (ed.), *The Cambridge history of the English language*, vol. 1: *The beginnings to 1066*, 168–289. Cambridge: Cambridge University Press.

Trissler, Susanne. 1993. P-Stranding im Deutschen. In Franz-Josef d' Avis, Sigrid Beck, Uli Lutz, Jürgen Pafel & Susanne Trissler (eds.), *Extraktion im Deutschen*, vol. 1, 248–291. Universität Tübingen, Universität Stuttgart.

Truswell, Robert. 2009. Preposition-stranding, passivisation, and extraction from adjuncts in Germanic. *Linguistic Variation Yearbook* 9, 131–177.

van Kemenade, Ans. 1984. Preposition stranding in Old English. In Germen de Haan, Mieke Trommelen & Wim Zonneveld (eds.), *Van periferie naar kern*, 129–141. Dordrecht: Foris.

van Kemenade, Ans. 1987. *Syntactic case and morphological case in the history of English.* Dordrecht: Foris.

van Riemsdijk, Henk. 1978. *A case study in syntactic markedness: the binding nature of prepositional phrases.* Dordrecht: Foris.

Vat, Jan. 1978. On footnote 2: evidence for the pronominal status of *þær* in Old English relatives. *Linguistic Inquiry* 9, 695–716.

Walkden, George. 2015. HeliPaD: the Heliand Parsed Database. Version 0.9. http://www.chlg.ac.uk/helipad/

Walkden, George. 2016. The HeliPaD: a parsed corpus of Old Saxon. *International Journal of Corpus Linguistics* 21, 559–571.

Wende, Fritz. 1915. *Über die nachgestellten Präpositionen im Angelsächsischen.* Berlin: Mayer & Müller.