The residue of syntactic change: Partial pro-drop in Old English

Emily Coppess (University of Chicago) and Acrisio Pires (University of Michigan)

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Outline

- Syntactic Change
- Partial pro-drop Languages
- Referential Null Subjects in OE
- Null and Overt Expletives in OE
- That-trace effect (and V-S inversion?)
- Loss of referential null subjects in OE

Syntactic Change

- The path of change between any two given stages in the syntax of a language reflects a principled shift between at least two fully structured grammatical systems, represented as I-grammars (mental grammars) of different individuals:

  Lg1 Grammar > Lg1 output > Acquisition/learning > Lg2 Grammar

A syntactic domain may undergo multiple shifts across generations, reflecting different levels of stability/instability along the way.

Null subject (NS) grammar > Non null-subject grammar (all or nothing?)

Null grammar > partial-NS grammar 1…> partial-NS grammar 2…>> non null-subject grammar

Null subject vs. Non-null subject languages

- Agreement (phi-features) on Tense are uninterpretable, and are assigned a value by a nominal argument (Chomsky 2001, Agree and phi-feature/Case valuation)

  Consistent NS language:
  - “Agreement-based” full null-subject languages: They require a D(eterminer)-feature in Inflection/Tense, to allow a null pronoun (phi-P) to be referential (Holmberg, 2005)
  - They only have null expletives (in Holmberg’s approach)

  Topic-drop full null-subject languages: a (null) provides reference to the null subject (Chinese long distance topics, Germanic (matrix) topics)

- Non-NS languages:
  - Lack of agreement and D-feature in Inflection/Tense head.
  - No topic binding of null subjects
  - No null subjects in finite clauses (except imperatives)
  - Overt expletives.

- Partial pro-drop languages:
  - No D-feature in T/Inf.
  - Null pronoun (phi-P) must be bound by higher DP (or be generic)
  - Presence of null subjects is restricted.
  - Overt expletives are allowed (sometimes required)

The Corpus: YCOE

York-Toronto-Helsinki Corpus of Parsed Old English (YCOE, Taylor et al. 2003).

Separation of texts into:
- Early Period → 300-950CE → 26 texts
- Middle Period → 950-1000CE → 34 texts
- Late Period → 1000-1100CE → 20 texts
- Unidentified → n/a → 20 texts

Notes on Corpus Searches (Coppess 2011):
- Searches done with Corpus Search (U Penn), and restricted to Early and Late Period
- Texts without a clear/consistent date were excluded from analysis (unidentified)

YCOE: corpus of approximately 1.5 million words, including 108 texts, with a total of 110,136 tokens (a token is a segment of parsed words)

Geldereren (2013)

1) “Old English is a genuine pro-drop language, although the system is in decline.” p. 271; (see also Mitchell 1985:628-634; Trask 1992, Gelderen 2000).
2) Elly van Gelderen argues that verbal agreement with subject is linked to licensing of pro-drop in Old English.
3) An aboutness-shift topic licenses the null subject (Frascarelli 2007, Sigurðsson 2011)

Our focus:
1) Evidence that an agreement based proposal faces problems:
   - Highly restricted referential null subjects appear mostly in subjunctive clauses.
   - Restriction also in main clauses (see Coppess 2011, also Walkden 2011, 2012).
2) Further loss in distribution of null subjects throughout the OE period.
3) Null-expletive distribution remains largely stable.
Conjoined subjects calculated over total number of overt subjects (% not relevant here).

Expletive null subjects are clearly very productive throughout the OE period, and even in contexts restricted to possible referential null subjects context, there is still over 1000 hits.

Late (<950) 187 90.8% 19 9.22% 87
Early (<950) 995 86.4% 156 13.6% 1151

Most of the referential null subjects appear in matrix clauses – they are not syntactically dependent on a higher syntactic antecedent (similar observations by Walkden 2011, Gelderen 2013). There is a slight shift from the Early period to the Late period where more of the null subjects are appearing in the matrix clause.
Distribution of Referential NS: subjunctive clauses

<table>
<thead>
<tr>
<th>Periods</th>
<th>Subjunctive Clauses</th>
<th>Non-Subjunctive Clauses</th>
<th>Total Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early (&lt;950)</td>
<td>830</td>
<td>321</td>
<td>1151</td>
</tr>
<tr>
<td>Late (&gt;1000)</td>
<td>178</td>
<td>28</td>
<td>206</td>
</tr>
</tbody>
</table>

- Referential null subjects seem to be found primarily in subjunctive clauses.
- The count could potentially be higher, since this chart only counts verbs explicitly marked as subjunctive (no ambiguous forms).
- The restriction to subjunctive clauses increases throughout the OE period.

Subjunctives (in main clauses) in OE

Faulkner 1902:42:

The subjunctive as the mood of desire occurs in [main] clauses to express a wish or a command.

“The 3rd person, singular and plural, of the present subjunctive is used regularly as the representative of the 3rd person of the imperative. The ME translation is ‘let’ with the infinitive.”

Distribution of Referential NS (in Subjunctive Clauses)

<table>
<thead>
<tr>
<th>Periods</th>
<th>Matrix Clause</th>
<th>Subordinate Clause</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early (&lt;950)</td>
<td>767</td>
<td>63</td>
<td>830</td>
</tr>
<tr>
<td>Late (&gt;1000)</td>
<td>167</td>
<td>11</td>
<td>178</td>
</tr>
</tbody>
</table>

- Null referential null subjects in subjunctive clauses occur mostly in matrix clauses.

Results: Loss of RefNSs in OE

- Referential null subjects are for the most part lost by end of OE period (overall distribution below 2.5%, with 15 out of 20 texts with distribution below 2%).
- Six out of twenty texts (less than 7% of total data set for Late Period) have a more conservative distribution of RefNSs, ranging between 7.9% and 49.6%.
- In fact, an analysis by text genre indicates that only four out of eighteen different genres show a distribution of RefNS above 3% over the entire OE period: Ecclesiastical laws, medical handbooks, laws and rules.
  - There are also text genres that tend to show more conservative grammatical features.

Expletive Subjects

- Old English has a quasi-argument hit/it which turns into the overt pure expletive seen in Middle English.
- This quasi-argument appears in constructions that use overt expletives in Modern English:
  - impersonal constructions
  - expressions of time, space, and distance
- Hit/it could be considered an overt expletive. They can appear in the same contexts as the null expletive subjects.
Distribution of Expletive Subjects

<table>
<thead>
<tr>
<th>Periods</th>
<th>Overt Expletive Subjects</th>
<th>Null Expletive Subjects</th>
<th>Total Expletive Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early (&lt;950)</td>
<td>455</td>
<td>1668</td>
<td>2123</td>
</tr>
<tr>
<td>Late (&gt;1000)</td>
<td>89</td>
<td>439</td>
<td>528</td>
</tr>
</tbody>
</table>

- Null expletive subjects are still the more preferred construction throughout OE.
- However, overt expletives have a robust presence.

Null subjects and That-trace Effect

- In a classical proposal for a null subject parameter, Rizzi (1982, 1986) argued that in Agreement-based null subject languages a cluster of properties followed:
  - Referential (and expletive) null subjects licensed by agreement;
  - Post-verbal subjects in overt syntax (VP-internally);
  - Lack of that-trace effects (subject wh-extraction possible over overt complementizers).
- The that-trace effect is argued not to be enforced at the beginning of Middle English (overt that is not entirely blocked in subject wh-extraction/relative structures).
- Old English shows signs of a lack of that-trace effect as well: Relative clauses allowed that+(subject) gap constructions.
- However, the change introducing the that-trace effect might have originated earlier in the Old English period: Zero+gap constructions allowed in OE.

Wh-extraction in the OE corpus

- Early Period:
  - Number of wh-questions: 1001
  - Number of subject extractions: 206
  - Non-relative subject extractions: 116
- Late Period:
  - Number of wh-questions: 274
  - Number of subject extractions: 68
  - Non-relative subject extractions: 32
- Of the non-relative subject extractions constructions (in questions) in these two periods, all of them use zero complementizer+gap construction.

S-V Inversion

<table>
<thead>
<tr>
<th>Inverted (XP-V-SU)</th>
<th>Non-inverted (XP-SU-V)</th>
<th>% uninverted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hits</td>
<td>Hits</td>
<td>Percentage</td>
</tr>
<tr>
<td>Early (&lt;950)</td>
<td>127</td>
<td>94</td>
</tr>
<tr>
<td>Middle+Late (&gt;950)</td>
<td>187</td>
<td>82</td>
</tr>
</tbody>
</table>

- Haebeli 2002: distribution of overt subject-verb order (this does not include all of the texts represented in previous tables).
- Inversion mainly happens with full DPs in Old English.
- In Haebeli's data, there is an increase in V-S inversion from the Early to Middle/Late period.
- At least during this period, there seems to be an independent development from the path of loss of RefNSs.

Results: Loss of Referential NSs in OE

1. Referential null subjects have very restricted overall distribution in Old English. They are for the most part lost by end of OE period (overall distribution below 2.7%).
2. Remaining occurrences of referential null subjects are further restricted by the fact that they appear mostly in subjunctive clauses (86.4% of occurrences by Late Period > 1000).
   - Lack of agreement: Subjunctives lack person distinction in OE (no person distinction; sg/pl. distinction only).
   - Contra Gelderen (2013): who argues that verbal agreement with subject is linked to licensing of pro-drop in Old English.
3. Null subjects are also mostly restricted to main clauses - 96.8% by Late Period (see also Wakley 2013, 2012).
   - Comparable with a topic drop analysis (see also Gelderen 2013), given (increasing) main clause restriction.
   - Matrix distribution is even more significant for subjunctive clauses (93.8% in matrix by Late period).
   - Restriction may be explained by matrix clause distribution of directive speech (if used e.g. as imperative) This is especially the case in a scenario in which Ref NSs are lost.

Results: Partial Null Subject Grammar of OE

4. Residue occurrence of RefNSs falls below 2.7% by Late Period in OE, with 13 out of 20 texts with distribution below 2%.
5. Six out of twenty texts (less than 7% of total data set for Late Period) still show some productive use of RefNSs to also correspond to more formulaic, conservative text genres.
6. The system remains mostly stable regarding expletive null subjects throughout OE (83.1% of total expletive subjects in Late Period).
7. OE shows a split behavior. Overall it is a partial null subject language only with respect to null expletives, at the end of the OE period.