Reconstructing the syntax of protolanguages: can syntactic theory inform philology?

George Walkden

*Department of Linguistics*  
*University of Cambridge*

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Outline of the talk

• The syntactic reconstruction debate
• A methodology for reconstructing syntax
• Case study: Old Norse -sk
• Case study: West Germanic topicalisation
Background to the debate (1)

• Comparative phonological reconstruction has had a long and successful history.

• However, *syntactic* reconstruction in the past has either been extremely tentative...
  – Delbrück (1900: 83): based largely on Sanskrit, suggests that Proto-Indo-European was normally verb-final, but makes few other claims about the syntax of the protolanguage
...or based on false or dubious premises

– Lehmann (1974): reconstruction of PIE as Subject-Object-Verb based on strong theory of typological consistency and change towards ‘harmony’. Circular argumentation

– Harris & Campbell (1995, ch. 12): reconstruction based on ‘cognate sentences’ - but sentences cannot really be cognate, in the sense of diachronic identity
Background to the debate (3)

• Two main steps in reconstruction:
  1. Find correspondences
  2. Decide what to reconstruct as the proto-value

• Lightfoot (2002) calls both steps of syntactic reconstruction into question:
  – Due to the nature of syntactic variation, it is impossible to establish correspondences in syntax (2002: 119-121)
  – We do not have a ‘rich theory of change’ to help us decide what to reconstruct as proto-form (2002: 126-7)
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Finding correspondences (1)

- Phonological theory views variation across items in phonological inventories as variation in features.

\[
/\text{t}/ \quad = \quad [+\text{coronal}, -\text{voice}, -\text{cont}, +\text{ant}, +\text{dist}]
\]
• The ‘Borer-Chomsky Conjecture’ approach to syntactic variation (cf. Borer 1984):
  – All parameters of variation are attributable to the features of particular items (e.g., the functional heads) in the lexicon. (Baker 2008)

\[ T = \begin{bmatrix}
\text{tense:past} \\
\text{uCase:nom} \\
\text{uNum:} \\
\text{uPers:}
\end{bmatrix} \]
Finding correspondences (3)

• If we adopt this approach for reconstruction purposes:
  – We know that lexical items are transmitted and can be cognate, so lexical items can be taken as the unit of correspondence for syntax
  – Isomorphism:
    • phonological reconstruction reconstructs sounds through their context of appearance in lexical items
    • syntactic reconstruction reconstructs lexical items through their context of appearance in sentences
Finding correspondences (4)

- **Problem**: Sounds are transmitted as items stored in an inventory, as are lexical items.
- But sentences are not. So we don’t have a ‘fossil record’ of changes in syntax as we do for phonological change.
- We can, however, look for distributional patterns of individual lexical items: if they are in complementary distribution, they may be derived via lexical split.
Reconstructing protoforms

• How do we decide what form to reconstruct?
  – **Synchronic typology**: we shouldn’t postulate a system that appears to violate absolute universals, e.g. a final complementiser in a VO language (cf. Dryer 1992: 102)
  – **Directionality**: *pace* Lightfoot, directionality does exist in morphosyntactic change, in the form of grammaticalisation (e.g. word > clitic > affix).
  – **Economy**: All else being equal, adopt the hypothesis which posits the minimal number of diachronic changes to get the attested data.
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The early Germanic languages

Proto-Germanic

Gothic

Proto-Northwest Germanic (Runic)

Old Norse

Proto-West Germanic

Old High German

Proto-Ingvaæonic

Old Saxon    Old English
• In Old Norse texts a ‘middle voice’ verbal ending can be found, with reflexive, reciprocal and passive functions:

<table>
<thead>
<tr>
<th></th>
<th>Active</th>
<th>Middle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sg. 1</td>
<td>kalla</td>
<td>kollumk</td>
</tr>
<tr>
<td>2</td>
<td>kallar</td>
<td>kallask</td>
</tr>
<tr>
<td>3</td>
<td>kallar</td>
<td>kallask</td>
</tr>
</tbody>
</table>

(from *kalla* ‘to call’)

Old Norse -sk (1)
Old Norse -sk (2)

- No such ending exists in other early Germanic languages.
- However, the other languages do have a reflexive pronoun with a phonologically similar shape, e.g.:
  - Gothic          sik
  - Old High German sik
  - Old Norse        sik

(3rd person singular forms)
Old Norse -sk (3)

- On the basis of phonological, semantic and distributional criteria we can posit that the Old Norse -sk ending is cognate with this pronoun.
- Since both items were retained, in formal terms we are dealing with a ‘lexical split’ analogous to the phonemic split often found in sound change.
- The syntactic context for the reanalysis as verbal ending is simply string-adjacency to the finite verb.
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The older West Germanic languages are predominantly V2 in root clauses.

But V3 is also found in Old English (OE):

*after his gebede he ahof þæt cild up* (AHTh II, 28)

*after his prayer he lifted the child up*

And in early Old High German (OHG):

*bidhiu  ih hepfu mina hant ubar  sie* (Isidor, 220)

*therefore I raise my hand above them*
In all such cases of V3, the second constituent seems to be a definite DP or a pronoun, i.e. discourse-given.

Walkden (2009) analyses this variation in terms of a split CP (Rizzi 1997), with verb-movement to $\text{Fin}^0$ and the second constituent inhabiting SpecTopP.
WGmc topicalisation (3)

\[
\begin{align*}
\text{ForceP} & \\
\text{Force}^0 & \rightarrow \text{TopP} \rightarrow \text{FocP} \rightarrow \text{FinP} \\
\text{Top}^0 & \\
\text{Foc}^0 & \\
\text{Fin}^0 & \\
\ldots & \\
\text{æfter his gebede} & \rightarrow \text{he} \rightarrow \text{ahof} \\
\text{after his prayer} & \rightarrow \text{he} \rightarrow \text{lifted}
\end{align*}
\]
Old Saxon (OS) does not exhibit this V3 pattern:

\textit{Thar fundun sea enna godan man} (Heliand 463)

there found they a good man

V3 must therefore either have been lost in OS or innovated in OHG and OE.

But we know that OHG and OE cannot have undergone a shared innovation without OS.

The alternative - parallel innovation - fails on the criterion of economy.

We should therefore reconstruct the availability of V3 for Proto-West Germanic.
More speculatively...

- The SOV runic inscription on the Golden Horn of Gallehus is classically analysed as evidence for lack of verb-movement in Proto-Germanic (Eythórsson 1995: 181):

  ek hleewagastiz holtijaz horna tawido
  I Hlewagastiz Holtijaz horn made

- But might it not in fact be a case of V3 with the horn in SpecTopP and verb-movement to Fin⁰?
Conclusions

• Syntactic reconstruction is qualitatively different from phonological reconstruction.

• This is because strings of sounds are transmitted, whereas strings of lexical items are not.

• However, it is possible to reconstruct syntax in a principled manner, at least to some extent.
Thank you for listening!

References