Germanic as a parametric anomaly within Indo-European

The Parametric Comparison Method developed in Longobardi et al. (2013, *i.a.*), consists of determining values of syntactic parameters across a set of languages, from which it is possible to computational derive phylogenies representing relationships between the languages. Baker & Roberts (2021) have generated phylogenies based on the values of 87 clausal parameters in 36 present-day languages. Whilst largely corresponding to the findings of the traditional comparative method, a significant issue concerns the placement of Germanic, which is placed outside Indo-European (IE), as shown in simplified form in (1):

(1) [Group A [Germanic [Group B [$_{IE}$ Romance Slavic Celtic Greek]]]

Group A consists of non-IE languages spoken at some distance from Europe (e.g. Mandarin, Japanese and Malagasy), whereas Group B consists of non-IE languages from the Semitic, Finno-Ugric and Turkic families that are spoken in Europe or neighbouring regions. As can be seen in (1), Germanic is placed further from the rest of IE than the Group B languages, though not further than those in Group A. The proposed paper investigates this anomaly by considering diachronic data.

Preliminary results suggest that substitution in the input data of Romance with Latin, and Germanic with a small representative sample of older Germanic languages, leads to considerable improvement in the overall placement of Germanic ((2)) – such that it places within IE as expected, although it remains in a peripheral position within the family:

(2) [Group A [Group B [$_{IE}$ Germanic [Latin Slavic Celtic Greek]]]

This in turn suggests that the unexpected positioning of modern Germanic is due in large part due to changes in Germanic and Romance in the historical period. However, the peripheral placement even of the older Germanic languages suggests some significant divergences may have taken place earlier than this. Direct comparison of parameter values shows that differences between the older Germanic languages and other old IE languages like Latin predominantly concern parameters related to the morphological realisation of features (e.g. the checking of Aspect and Voice on V). This suggests that the peripheral positioning of Germanic at the early stage is likely due to a significant trend toward increased analyticity in its verbal system that did not affect other branches of IE to the same extent.

Comparison of parametric distances involving these families at older and newer stages shows that over the last 1000-2000 years Germanic has tended to undergo a degree of convergence with the Group A languages whereas Romance has tended to converge instead with the Group B languages. To some extent this may reflect a tendency for the Germanic languages to continue to lose morphological expression of verbal categories (less prevalent in Group A) while these have tended to be retained in Romance (and Group B). Germanic and Romance have also become more distant from each other overall. These different directions of change have likely contributed to the scenario where Germanic has come to appear parametrically less "Indo-European" while the Group B languages have become more so, which combined with Germanic's pre-existing peripheral position have led Germanic and Group B to invert their relative positions within the phylogenies.

Taken together these findings suggest that the positioning of Germanic is due to largely to settings of parameters relating to morphological expression (the "checking" and "spreading" parameters), as Germanic has been subject to a very long-term drift toward analyticity to an extent not seen in much of the rest of IE. Methodologically, this raises questions about the inclusion of such parameters in databases intended for phylogenetic reconstruction; the inclusion of such parameters is already suspect given that they may be regarded as essentially "morphological" rather than "syntactic" in character.

References

Baker, J. & Roberts, I. (2021). Extending Parametric Comparison. Ms. [To be submitted to *Journal of Historical Syntax*.]

Longobardi, G., Guardiano, C., Silvestri, G., Boattini, A. & Ceolin, A. (2013). Toward a syntactic phylogeny of modern Indo-European languages. *Journal of Historical Linguistics* 3(1), 122-152.