Extending Parametric Comparison: A Preliminary Investigation of Celtic

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We report preliminary results from our work developing the Parameter Comparison Method (PCM) by constructing a database of clausal parameter values (connected to VP/vP, TP and CP) as a "parametric grid" as developed in research on nominals by Guardiano & Longobardi (2017), Longobardi & Guardiano (2009, 2017), etc. A parametric grid permits the calculation of the value δ, the parametric distance between two languages, calculated as the number of differences in parameter values divided by the sum of the differences and identities. These values can then be fed into phylogeny programs, producing visualisations of the relations as trees or networks. Furthermore, they can serve as a basis for syntactic reconstruction.

Baker & Roberts (2021) have determined the values of 87 clausal parameters in 36 languages from 6 families, plus Basque, Japanese and Korean. The current research is part of a larger project which extends this synchronic work into the diachronic domain, with the ultimate goal of reconstructing the relevant parameter values of Proto Indo-European. The languages examined here represent a subset of the Celtic languages: Middle Welsh, Modern Welsh, Old Irish and Modern Irish. Clearly the dataset is incomplete, but it represents a first step towards the reconstruction of the parameter settings relevant to the clausal syntax of Proto-Celtic.

We adopt Hale's (1996: 162) definition of a reconstructed proto-grammar as follows:

(1) A proto-grammar is a set of grammars which are non-distinct in their recoverable parameter values.

We look at changes in Goidelic (Old Irish to Modern Irish) and Brythonic (Middle to Modern Welsh), for example P55 (EPP on C), which regulates generalized XP-fronting to SpecCP and as such is one component of verb second, along with P53 (Strong C), regulating verb-movement to C. P55 has changed from positive to negative in Welsh but has remained negative throughout the history of Irish, while P53 has changed from positive to negative in Irish (see Carnie, Harley and Dooley 2000, Newton 2006) but remained negative throughout the attested history of Welsh. We will attempt a reconstruction of Proto Insular Celtic on the basis of the Old Irish and Middle Welsh results, fixing the parameters of the proto-grammar understood as in (1). We will further attempt to fix the parameter values for Continental Celtic, basing ourselves largely on Eska (2021). This will set the stage for comparison with the other older IE dialects with a view to reconstructing the parameter values of Proto Indo European.

For certain cases, the reconstruction is straightforward: it is all but certain that all the older languages, being genetically and typologically close to one another, will be uniform in their values of certain parameters since the overall set of parameters is designed to apply universally. For example P1 and P2 concern grammaticalisation of Person and Number in the verbal-agreement system. While these parameters are negative in Japanese, for example, we expect them to be uniformly positive in Celtic and IE, since all the older languages have rich verbal agreement-marking. However, there are other cases where the languages will diverge, e.g. in relation to movement to the left periphery as mentioned above. The most interesting cases, where careful qualitative judgements will have to be made based on typological, diachronic and theoretical considerations, will be those where 50-75% of the languages agree on a given parameter value. Clearly, in principle, the lower the level of agreement, the more difficult the judgement. However, a combination of factors (age of attestation, typological and diachronic plausibility) and theoretical knowledge (likelihood or even impossibility of certain combinations of parameter values) should make a decision possible in almost every

case. It is here that the recoverable values of Continental Celtic may be particularly relevant. There may nonetheless be a residue of non-recoverable values in the sense of (1).

The ultimate goal of the research reported here will be the largest ever dataset based on unified formal morphosyntactic properties of the older IE languages; moreover the dataset will be in principle open to further expansion, both in terms of the parameters and the languages.

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