Rationale

Ever since it was popularised by August Schleicher (1853, 1873), the family-tree model has been the dominant paradigm for representing the historical relations among the languages in a family.

The tree model is not without its strengths. Not only does it represent patterns of relatedness among languages, but it also commits itself to reconstructing the sequence of historical and social events that gave rise to these patterns. Further, the formal simplicity of cladistic representations makes it possible to apply powerful computational techniques from biology, which have become increasingly popular in recent years (Ringe et al. 2002, Gray et al. 2010, among many others).

However, the advantages of the tree model come at the cost of making a very restrictive assumption: namely, that language families evolve primarily by splitting, with subsequent loss of contact. Put another way, the tree model assumes that once two speech varieties have started to diverge, it is no longer possible for innovations to diffuse from one to the other. This assumption excludes the possibility of overlapping subgroups.

Yet it is well-known that in a dialect network, innovations can diffuse between speech varieties that have already diverged from each other (Bloomfield 1933). Furthermore, many language families are known to have arisen through the gradual breakup of a dialect network. In such language families—which Ross (1988: 8) calls linkages—inventions diffuse in intersecting patterns, leading naturally to the formation of overlapping subgroups. Under a tree model, such intersecting innovations would be explained away as instances of “(horizontal) contact”, to be contrasted with "genealogical change"; but this is unhelpful, as it fails to recognise that the same process of diffusion underlies all instances of language change, whether "genealogical" or "contact-induced" (Croft 2000).

In a linkage, the assumptions of the tree model are not satisfied, and any cladistic representation is necessarily inadequate (Heggarty et al. 2010, François 2014, Kalyan & François forthcoming). There is thus a great need for rigorous studies of linkages that follow the essential principles of the Comparative Method, yet do not presuppose the validity of cladistic approaches. Such work is indeed possible, and is capable of yielding insights about linguistic and social history; this has already been shown in several case studies of specific language families, such as Geraghty (1983) on Fijian, Ross (1988) on Western Oceanic, Toulmin (2009) on the Kamta branch of Indo-Aryan, Magidow (2013) on Arabic dialects, among many others.

We also need to develop new ways of representing language genealogy, which dispense with the shortcomings of the tree model, while preserving its strengths. Many proposals have been made in the literature (e.g. "tree envelopes": Southworth 1964; isogloss maps: Anttila 1972; "truncated octopus-like trees": Hock 1991; NeighborNet: Bryant et al. 2005; trees with "contact edges": Nakhleh et al. 2005; "glottometric diagrams": Kalyan & François f/c), yet so far there is no widely
accepted, satisfactory solution. More discussion would be welcome among historical linguists, to achieve consensus on the best methodology (or methodologies) to represent linguistic subgroups when they intersect.

Finally, any proposed non-cladistic representation of genealogy will raise the question of how to interpret it in historical terms. Addressing this requires theoretical discussion of the social conditions and mechanisms of language change that lead to the development of a linkage (see Ross 1997, François 2011, 2014).

Non-cladistic approaches to language genealogy are still in their infancy; we hope that this workshop serves to spur further research into this hitherto-neglected, but fundamentally important area.

**Scope of the workshop**

This workshop welcomes presentations which provide one or more of the following:

1. Data from a language family that poses problems for the family-tree model—in particular, a language family that exhibits extensive internal contact.
2. Application of existing non-cladistic computational methods (e.g. NeighborNet, multidimensional scaling, Structure [Pritchard et al. 2000], Historical Glottometry) to an existing dataset.
3. Innovative proposals for modeling or representing language genealogy in a non-cladistic way.
4. Discussion (either theoretical or with respect to a particular language family) of the social conditions and mechanisms of language change that are responsible for linkage-like vs. tree-like genealogies.

**References**


