Mandarin Typology: An Areal Perspective with a Quantitative Approach

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This study focuses on the typological features of Mandarin, the largest "dialect group" within the Sinitic branch. In particular, we attempt to make use of computational phylogenetic tools to test whether the North-South divide observed in the Sinitic branch (Hashimoto 1976, 1985) is also present in this single "dialect group", and investigate the interaction between areal and social factors in typological change.

Although sharing a number of pan-Chinese features, given that the Sinitic varieties have diverged for over 2 millennia (Branner 2000; Handel 2015), it comes as no surprise that significant variation exists within the branch. Such variation can be explained from the perspective of language contact – sandwiched between Altaic languages to their north and Tai languages to their south, Sinitic as a whole can be considered typologically intermediate between these two groups of languages (Matthews 2007; Comrie 2008). A North-South divide is evident in the Sinitic branch, where the northern varieties show signs of typological convergence towards Altaic languages and southern varieties towards Tai languages. For example, the northern varieties tend to have a smaller number of classifiers, tones and codas, as well as a stronger tendency to disyllabicity and head-final constructions.

Given that Mandarin covers extensive areas from northeastern to southwestern China, interacting with languages of various typological profiles, we ask how the different Mandarin dialects have evolved over the last few centuries under different types and degrees of language contact. Based on data provided in *The Great Dictionary of Modern Chinese Dialects* (Li 2002) and the *Linguistic Atlas of Chinese Dialects* (Cao 2008), we selected 18 typological features from different domains of grammar which show considerable variation within the Sinitic branch. We find that many of the differences between Northern and Southern Sinitic can also be observed among the Mandarin dialects, despite the fact that the Mandarin group has a relatively shallow historical depth, and is usually regarded as a highly homogeneous group.

Feeding the typological data of 40 dialects into phylogenetic tools, we visualize the results with network diagrams, where dialects within the Amdo Sprachbund (Janhunen 2012) cluster at one end and those in the far southern area cluster at the other end, highlighting the impact of language contact on the typological profiles of various Mandarin dialects. For example, the Marker-Standard-Adjective order of comparatives in Northern Mandarin correlates with OV languages (Dryer 1992), while the surpass comparatives in Southern Mandarin is an areal feature of the Mainland Southeast Asian region (Ansaldo 1999, 2010). The substantial diversity within the Mandarin group

would be even more intriguing if we take into account the fact that there have been strong pressures towards homogeneity in China, including the centuries of dominance of one written language, as well as the more recent but powerful standardization forces.

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