**Exploring the co-evolution of sound patterns and lexical items: a phylogenetic approach**

Languages vary widely in terms of the sound patterns they permit: a hypothetical word *\*bnick* would not be possible in English, but similar words are found in other languages. At the same time, a number of trends are found to recur across genetically diverse languages.

In this talk, I investigate the origins and maintenance of two of these quasi-universal phenomena: (1) the statistical under-representation of proximate consonants sharing a place of articulation within words (similar place avoidance; Frisch, Pierrehumbert, and Broe 2004; van de Weijer 2005; Pozdniakov and Segerer 2007; Wilson and Obdeyn 2009) and (2) robust sound-meaning correspondences (Dingemanse et al. 2015; Blasi et al. 2016; Johansson et al. 2020).

Both of these phenomena are plausibly rooted in cognitive and communicative preferences, and contribute to a communicatively optimized system. At the same time, not much is known regarding the specific diachronic mechanisms that bring about and foster these patterns, with the exception of some detailed studies limited to individual languages (Carling and Johansson 2014).

In this talk, I use phylogenetic methods to explore the evolutionary dynamics of these phenomena in a number of language families. The models I employ allow me to clarify whether similar place avoidance is largely an artifact of constraints on mutation (i.e., words violating this constraint are unlikely to be coined) or selection of word forms (i.e., words violating this constraint are likely to die out). Additionally, they help to quantify the stability of certain sound classes within concepts (e.g., +NASAL in NOSE) in a dynamic fashion, potentially shedding light on previously unnoticed sound-meaning associations.

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