

Categorical Segments, Probabilistic Models

In this talk, I will discuss the ways in which probabilistic models of phonology can handle the existence of categorical units such as segments. I will frame the discussion by briefly examining the duality of gradience and categoricity in phonology more generally, and then describe some of the ways that the two can co-exist in phonological models.

I will then give a concrete example of a probabilistic model of phonological relationships that relies on the existence of categorically distinct units, such as segments, that can be counted. This model (from Hall 2009) is designed to describe the exact degree to which two sounds (segments) are predictably distributed in a language, so as to more accurately account for cases of “marginal” contrasts.