

**Indo-European Workshop  
Harvard University Department of Linguistics**

**April 5, 2017 - 5:00 pm  
Boylston Hall Room 105**

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**Diachronic treatment of unnaturalness: A blurring process**

The long held position that sound change is obligatorily natural has recently been challenged by Blust (2005), who presents several instances of unnatural sound changes. This talk addresses the question of phonetic naturalness in historical phonology and proposes a new diachronic strategy for explaining unnatural phenomena. First, a new subdivision of natural processes is proposed: non-natural processes are divided into unmotivated and unnatural. The central topic of the paper are reported cases of unnatural sound changes that target the feature [voice]. I argue that in all reported cases, unnatural processes do not derive from a single unnatural sound change (as claimed in some individual accounts of the data), but rather from a combination of three sound changes, each of which is natural and motivated. By showing that most of the rare cases of unnatural sound change reported actually arises through a combination of natural sound changes, we can maintain the long-held position that any single instance of sound change has to be natural. Based on several discussed cases, I propose a new historical model for explaining unnatural phenomena: the “blurring process”. Additionally, I provide a proof establishing the minimal sound changes required (MSCR) for an unmotivated/unnatural process to arise. The blurring process and MSCR result in a model that probabilistically predicts typology within the Channel Bias approach. This paper also presents groundwork for calculating historical probabilities of synchronic alternations with the ultimate goal of quantifying influences of Channel Bias on phonological typology.