

## Voice and aspiration in historical phonology: implications for Indo-European reconstruction

Patrick Honeybone  
University of Edinburgh

The precise nature of the stops in Proto-Indo-European has long been contentious. If we assume three series, the traditional reconstruction gives /t, d, d<sup>h</sup>/ (illustrated at the coronal place of articulation). I refer to these series as Ts, Ms and MAs (from the traditional terms *tenues*, *mediae* and *mediae aspiratae*). Non-traditional reconstructions question the traditional specifications for voice and aspiration, arguing, for example, (in ‘Glottalic’ models) that Ms should be reconstructed as ejectives. I revisit these classic issues, focusing not on the ejective reconstruction of Ms, but on the status of voice and aspiration in all series of stops. I do this from the perspective of a historical phonologist, equally interested in theoretical phonology and in historical linguistics.

Phonological theory describes properties like voice and aspiration (and the glottal constriction in ejectives) as ‘laryngeal features’. It is widespread to assume that there are, fundamentally, three privative laryngeal features: [voice], [spread], and [constricted glottis] and that obstruents can be specified with any or none of these (unspecified segments are ‘plain’). My question is, therefore: what are the best reconstructions of the laryngeal features of PIE stops (and other obstruents), and of the IE daughter languages and language families (the latter being potential evidence for the former).

I focus on the issues raised by ‘Laryngeal Realism’ (LR), which argues that languages which are traditionally analysed using the same laryngeal specifications, in fact need to be analysed differently. For example, in traditional accounts, both Germanic languages like English, and Slavic languages like Russian, are analysed with two series of obstruents (e.g. /p, t, f, s/ vs /b, d, v, z/), with the contrast marked by [voice] in the lenis series. LR argues that the laryngeal phonology of the languages is, in fact, fundamentally different, and that, while Russian does indeed have /p, t, f, s/ vs /b, d, v, z/, with [voice], English in fact has underlying /p<sup>h</sup>, t<sup>h</sup>, f<sup>h</sup>, s<sup>h</sup>/ vs /p, t, f, s/, marked by [spread] in the fortis series. The arguments come both from surface facts (aspiration in fortis stops) and phonological patterning (different types of assimilation). On LR reasoning, each language with two obstruent series needs to be carefully analysed to determine what marks the contrast.

In this talk, I apply LR reasoning to PIE and the IE families. In previous work, Iverson & Salmons have argued that Proto-Germanic was like Present-Day English (and most PD GMC languages). Other work (e.g., by Iosad and Eska) implies that the situation in Celtic was like this, too. I argue that Slavic was like PD Russian (and other PD Slavic languages), marking a two-way contrast with [voice], and that the same applies to Italic/Romance. I attempt a broad (but necessarily limited) consideration of IE in the light of LR. I argue that this best argues in favour of one aspect of ‘non-traditional’ reconstructions of PIE: that the Ts were specified as [spread] (giving /t<sup>h</sup>/). This is inherited in Celtic and Armenian, for example, and lost in

Romance and Slavic. Gmc requires something else: the [spread] PIE Ts spirantise to fricatives in Grimm's Law, but new fortis stops became [spread] again. Iverson & Salmons argue that this is due to 'Germanic Enhancement'.

The title of this conference is: 'Linguistic change between nature and culture'. *Nature* can be understood as 'what is possible' and *culture* can be understood as 'the habits that characterise a society'. In terms of laryngeal phonology, nature allows three specifications for obstruents, while Germanic Enhancement can be seen as a firmly entrenched aspect of Germanic culture, lost only in those languages which had most cultural contact with [voice] languages: Dutch and Yiddish.