

## **Aspiration, fricatives and the multiple feature hypothesis in Icelandic**

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There is a growing recognition among phonologists that the representation of the laryngeal contrast in Germanic is determined on a language-specific basis. Some languages, like Dutch, use the feature [voice], making the lenis stop series marked and the fortis stop series unmarked. The stops in languages like English and German, on the other hand, are most appropriately characterised in terms of the feature [spread glottis], making the fortis series marked and the lenis series unmarked. Kager et al. (2007) refer to the representation of stops in terms of either [voice] or [spread glottis] as the ‘Multiple Feature Hypothesis’ (see also Iverson & Salmons 1995; for a similar approach, see Avery & Idsardi 2001).

More recently, the idea has been mooted that the Multiple Feature Hypothesis can be extended to the obstruent system of a *single* language. For instance, Van Oostendorp (2007) conjectures that while Dutch stops involve a voicing contrast, the laryngeal opposition in fricatives arguably involves [spread glottis]. (An earlier instantiation of this idea can be found in Rice (1994), who analyzes the obstruent contrast in Athapaskan languages in these terms.) This approach may not be immediately obvious from a phonetic point of view, since fricatives are only rarely realised with a positive VOT, the main correlate of aspiration in stops. (This may account for the fact that the UPSID database in Maddieson (1984) contains only one instance of an aspirated fricative, i.e. /s<sup>h</sup>/, which occurs in no more than three languages.) However, more recent phonetic work, e.g. Kingston (1990), shows that voiceless fricatives are generally produced with a spread glottis.

One question that is raised by the ‘language-internal’ Multiple Feature Hypothesis is whether there are languages with the reverse pattern, i.e. with an aspiration contrast in stops and a voicing contrast in fricatives. This is a big question to which I will give a small (and negative) answer, based only on the obstruent system of Icelandic. At first

sight, Icelandic would appear to be a language in which [spread glottis] is active in stops and [voice] in fricatives. The language has voicing contrast in fricatives on the phonetic level, and there are a number of phonological processes, such as intervocalic lenition, which could be taken to suggest that [voice] is also active in the phonology. However, closer inspection reveals that Icelandic fricatives, like stops, are best characterised in terms of [spread glottis].

In my talk I will review the status of aspiration in the Icelandic stop system (a topic of considerable debate; see e.g. Thráinsson 1978, Hermans 1985 and Ringen 1999), and examine how the phonological behaviour of stops interacts with that of fricatives. I will argue that the available phonological evidence – phenomena like laryngeal sharing, spirantisation and final fortition – indicates that both fricatives and stops are contrastively specified for [spread glottis].

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