

The phonetics and phonology of word-initial geminates

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This talk deals with the relationship between the production and the perception of gemination in word-initial stops and fricatives and what this tells us about the nature of this phonological contrast.

I will first review some of the most well known studies, by drawing on the body of literature accumulated over the thirty years or so. Then I will focus on a series of experimental studies based on Tashlhiyt Berber. Gemination in Tashlhiyt is primarily implemented through longer duration, even for utterance-initial voiceless stops. It will be shown that this timing information is sufficient for native listeners to identify geminate fricatives and voiced stops and distinguish them from their singleton counterparts. For voiceless stops, however, native listeners' identification and discrimination performance is only slightly above chance level.

These results show that a phonemic contrast can be clearly encoded articulatorily and at the same time cannot be perceived in the absence of clear acoustic correlates. Implications of the results on the general issue of the nature of speech targets and on the phonological representation of geminates will be discussed.