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## Towards an explanation of incomplete neutralization: Inhibited realizations of Kaifeng Mandarin sandhi tones

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Incomplete neutralization refers to the more or less systematic existence of small phonetic differences between words which phonological accounts characterize as having the same pronunciation as a result of the neutralization of an underlying phonological distinction (Port & O'Dell 1985). Generally, the phonetic differences, even if they are small, have appeared to be in the direction of what the underlying contrast would lead one to expect. There have been two approaches in theoretical discussions of the phenomenon that assume different surface representations. First, van Oostendorp (2008) proposed that the underlying representation is partially preserved in the output representation. Second, Yu (2007) argues that the effect is to be understood in terms of an exemplar-based conception of phonological representations.

The purpose of this investigation is to present two cases of incomplete neutralization in the tonal phonology of Kaifeng Mandarin which are not straightforwardly accounted for by the above approaches and to argue that they may instead be explained in terms of a difference between a 'confident' realization of the surface form and an 'inhibited' one. The inhibited pronunciation is attributed to the existence of various factors, the most important of which is a phonological rule creating the neutralized pronunciation, while the confident pronunciation either has no rule creating it (or, in terms of classical phonological theory, one that applied vacuously to it), or corresponds to the underlying form. The first type of evidence we call on is provided by the incomplete neutralization of a privative underlying contrast. The second type of evidence is based on the neutralization of multiple underlying forms, i.e. neutral tone.

**References:** • Port, R. & O'Dell, M. (1985): Neutralization of syllable-final voicing in German. *Journal of Phonetics* 13, 455–471. • Yu, A. (2007): Understanding near mergers: The case of morphological tone in Cantonese. *Phonology* 24, 187–214. • van Oostendorp, M. (2008): Incomplete devoicing in formal phonology. *Lingua* 118, 1362–1374.