

# Mirage of Gradience in !Xoon vowel raising\*

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The Khoisan language !Xoon, famous for its phonemic inventory, has complex assimilation phenomena where the degree of raising of a first-mora vowel depends on following vowel, preceding click, and consonants between click and vowel. Traditionally (Traill 1985) this is shown as two levels of raising ([ɑ] to [ɜ] to [i]). Lionnet (2018) argues that it is inherently gradient, with gradient phonology and ‘subphonemic teamwork.’ Contrariwise, we show via an element-theoretic analysis that there is no phonological gradience, nor even a phonological gang effect ‘teamwork.’ The mirage of gradience is produced by spreading conditions applying to two different features |I| and |A|. This happens C-to-C, V-to-V, with potential blocking. There is also a Plateau effect: C-to-C, where C2 assimilates to C1 affecting V1 between them.

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