

## An OT account of prosodically driven allophony of the English lateral.

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The present paper addresses the issue of prosodically driven allophony of the English lateral within the RP accent<sup>1</sup>. The goal of the analysis is to examine the old and familiar data from a novel perspective in order to see how a constraint-based phonological model of Optimality Theory (Prince & Smolensky 1993) will account for the complementary distribution of clear and dark lateral and the phenomenon of free variation of syllabic and vocalised variants of /l/.

The analysis opens with a brief discussion of the featural representation of the lateral. Basing on the fact that in terms of articulation and phonological behaviour the English lateral possesses vowel-like as well as consonantal properties and following the results of Sproat & Fujimura's (1993) experimental study in particular, which reveal that both the clear and the dark variant of the lateral are made up of two articulatory gestures, it is proposed here that the lateral is a complex segment consisting of two components: the vocalic one containing vowel features such as [-cons, +cont] and the consonantal one holding such features as [+cons, -cont]. The two different orderings of these components account for different surface realisations of /l/: the configuration in which consonantal features precede in time the vocalic ones corresponds to the clear variant while the reverse temporal ordering, namely the one with [-cons, +cont] before [+cons, -cont], characterises the dark allophone. It is argued that in RP, and other accents showing the clear/dark dichotomy, a high ranked syllable well-formedness constraint, dubbed SONCOND (=SONORITY CONDITION), requires a more sonorous [-cons, +cont] portion of the lateral to occur closer to the syllable nucleus. As a result the clear allophone will emerge in the syllable onset while the dark one will appear in the coda. Finally, Anttila's (1997) partial ranking of constraints is applied to account for free variation of the dark syllabic, dark non-syllabic and the vocalised allophone of /l/.

Contrary to some earlier approaches to allophony of /l/ (e.g. Halle & Mohanan 1985), the present analysis does not only offer an adequate distributional description of lateral allophones but it also attempts to provide an explanation of what motivates such allophonic variation in terms of cross-linguistic constraints. As noted in Hawkins (1984:35) in the accounts based on language-specific rules "*it is not clear why [ɫ] should occur in the particular postvocalic environments in which it does occur*"; "*[t]here seems to be no articulatory reasons for the particular distribution of /l/ which is found in RP*". Yet, the present paper demonstrates that when this issue is approached from a suprasegmental perspective and when a model relying on universal rather than language-specific generalisations is adopted, the observed distributional pattern of lateral allophones arises due to the interaction of universal syllable well-formedness constraints such as SONCOND, NUC (=syllables must have nuclei), \*CODA (=syllables must not have codas), \*NUC/CONS (=syllables must not have consonantal nuclei) and input-output faithfulness requirements.

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<sup>1</sup> As there are significant differences in the realisation of /l/ across various English dialects, occasional references are also made to accents other than RP.

## References

- Anttila, A. (1997) Deriving variation from grammar: A study of Finnish genitives. In F. Hinskens, R. van Hout & W.L. Wetzels (eds) *Variation, Change and Phonological Theory*. Amsterdam: Benjamins. 35-68. [ROA-63]
- Halle, M. and K. P. Mohanan (1985) Segmental phonology of modern English. *Linguistic Inquiry*, 16, 57-116.
- Hawkins, P. (1984) *Introducing Phonology*. London: Routledge.
- Prince, A. and P. Smolensky (1993) *Optimality Theory: Constraint Interaction in Generative Grammar*. RuCCS Technical Report 2. Rutgers University and the University of Colorado. [ROA-537].
- Sproat, R. and O. Fujimura (1993) Allophonic variation in English /l/ and its implications for phonetic implementation. *Journal of Phonetics* 21: 291-311.