

Abstract

The role of syllable structure in phonotactics is still a matter of dispute. One party attributes the range of contrasts in each environment to positions within the syllable;¹ an opposing camp argues that linear segmental sequence, not syllable position, determines phonotactics.² This paper evaluates the two approaches from a diachronic perspective with reference to the development of Latin. As the two accounts make different predictions regarding word-internal consonantal sequences, a language once rich in clusters provides a happy hunting ground. Our knowledge of Proto-Indo-European word-formation is sufficiently detailed to reconstruct many such sequences in prehistoric Latin, but their outcome in the familiar classical language is much altered.

Word-internal biconsonantal sequences in Latin (C_1C_2) underwent: (1) regular regressive voice assimilation,³ (2) regressive place assimilation according to a hierarchy whereby coronal C_1 regularly neutralized, labial C_1 neutralized before labial/dorsal C_2 , and dorsal C_1 neutralized before dorsal C_2 only,⁴ (3) regressive assimilation of continuance in stop + fricative, obeying the same hierarchy as for place,⁵ (4) assimilation in nasality in all C_1 s where C_2 was a nasal,⁶ except in the sequence dorsal stop + /m/ where C_1 surfaced as the voiced stop /g/, retaining its manner and (predictably per the hierarchy) place.⁷

Linear sequence alone accounts for these data in the most satisfactory manner; reference to specific features and the order of segments is necessary and sufficient to formulate an analysis, rendering syllable structure redundant. Furthermore, this approach accounts for progressive assimilation, found only where C_1 was /l/,⁸ resulting from C_1 's more robust cueing than C_2 : the non-contrastive distinction between clear and dark /l/s, though conditioned by the following segment, was cued primarily by the preceding vowel in Latin.⁹

However, syllable structure played an indirect role in phonotactics, by determining whether sonorants were specified or underspecified for voice. In stop + liquid onset sequences, the liquid was underspecified, but in other positions all sonorants became specified as voiced (in the liquids, this happened in /r/ earlier than in /l/, as evidence from stop epenthesis in /m/ + liquid sequences shows).¹⁰ Thus, whereas a voice contrast was found in the stop of tautosyllabic stop + liquid onset sequences,¹¹ it was neutralized elsewhere before a sonorant.¹²

Finally, morphology could directly override phonetic considerations, as demonstrated by the more thoroughgoing regressive assimilation in prefix + verbal root contacts,¹³ and indeed the more faithful retention of root shape elsewhere in verbal morphology. In addition, as some morpheme boundaries conditioned syllable boundaries, so in turn determining the voicing of sonorants,¹⁴ we see that morphology played both a direct role in phonotactics and a role two steps removed from the outcome, via syllable structure and linear ordering.

In between linear sequence and morpheme structure constraints, there is not much work left for syllable structure to do regarding phonotactic development.

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- ¹ E.g. Beckman, Jill. (1998). *Positional Faithfulness*. Doctoral dissertation. University of Massachusetts, Amherst.
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- . (2001). ‘Why place and voice are different: constraint-specific alternations in Optimality Theory’ in Linda Lombardi (ed.), *Segmental Phonology in Optimality Theory: constraints and representations*. Cambridge: Cambridge University Press, 13-45.
- ² E.g. Blevins, Juliette. (1993). ‘Klamath laryngeal phonology’, *International Journal of American Linguistics* 59 (3): 237-79.
- . (2003). ‘The independent nature of phonotactic constraints: an alternative to syllable-based approaches’ in Caroline Féry & Ruben van de Vijver (edd.), *The Syllable in Optimality Theory*, Cambridge: Cambridge University Press.
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- ³ E.g. **nu.ɸsi*: > *nu.ɸsi*: ‘I married’.
- ⁴ E.g. **quidpe* > *quippe* ‘for’ (coronal + labial); **hodke* > **hokke* > *hoc* ‘this (neut.)’ (coronal + dorsal); *optimus* ‘best’ (labial + coronal); **ob-kaido*: > *occido*: ‘I knock down’ (labial + dorsal); **agtos* > *actus* ‘done’ (dorsal + coronal).
- ⁵ E.g. **quatsi*: > *quassi*: ‘I shook’, but **nu.ɸsi*: > *nu.ɸsi*: ‘I married’, and **deiksi*: > *dixi*: [di:ksi:] ‘I said’.
- ⁶ E.g. **supmos* > *summus* ‘highest’, **swepnos* > *somnus* ‘sleep’, **atnos* > *annus* ‘year’, **deknos* > *dignus* [diɲnus] ‘worthy’.
- ⁷ E.g. **segmentom* > *segmentum* ‘piece’.
- ⁸ E.g. **saldo*: > *sallo*: ‘I salt’; **kolsos* > *collus* ‘neck’; **kolnis* > *collis* ‘hill’.
- ⁹ N.B. Conditioning of vowel preceding /l/: **welo*: > *volo*: [woło:] ‘I want’.
- ¹⁰ **exemlom* > *exemplum* ‘example’, but **g^heimrinos* > **heimbrinos* > *hi.ɸernus* ‘wintry’.
- ¹¹ E.g. *ca.pra* ‘she-goat’ versus *ez.brius* ‘drunk’, *az.cris* ‘sharp (gen.)’ versus *a.gri*: ‘field (gen.)’.
- ¹² E.g. **pop.li.kos* > *pu.bli.cus* ‘public’; syllabification determined by parsing of clear /l/ as onset.
- ¹³ E.g. **sub-rego*: > *surrigo*: ‘I rise’, but *e.brius* ‘drunk’.
- ¹⁴ E.g. **nek-lego*: > *neg.le.go*: ‘I neglect’.