

Repetition Avoidance and the Exceptional Reduplication Patterns of Indo-European
Sam Zukoff, MIT (szukoff@mit.edu)

THE DATA: Proto-Indo-European is reconstructed with C₁-copying prefixal reduplication: $\sqrt{C_1(C_2)V-} \rightarrow C_1V-C_1(C_2)V-$. This pattern is continued productively in Greek, Indic, and Anatolian, and is also well-attested although non-productive in Celtic, Germanic, and Italic. In many of the languages, however, there are “exceptional” patterns alongside this CV pattern. Many pertain to the behavior of *s+stop* roots (1); but other, archaic patterns can be identified as well (2).

(1)

- Sanskrit *sT*- roots:
 $\sqrt{st^h\bar{a}}$ ‘stand’ → perfect *ta-st^hāu* (not ^x*sa-st^hāu*)
- Ancient Greek *sT*- and non-rising-sonority roots:
 \sqrt{stel} ‘prepare’ → *e-stal-ka* (not ^x*se-stal-ka*)
- Gothic *sT*- roots:
 \sqrt{stald} ‘possess’ → preterite *stai-stald* (not ^x*sai-stald*)
- Latin *sT*- roots:
 \sqrt{spond} ‘promise’ → perfect *spo-pond-ī* (not ^x*so-spond-ī*)

(2)

- Sanskrit CaC roots:
 \sqrt{pat} ‘fly’ → perf. *pēt-ur* (beside older *pa-pt-ur*)
 \sqrt{sap} ‘serve’ → perf. *sēp-ur* (not ^x*sa-sp-ur*)
- Gothic Class IV-V preterites:
 \sqrt{gib} ‘give’ → preterite *gēb-um* (as if from **ge-gb-um*)
- Ancient Greek “Attic Reduplication”:
 \sqrt{ag} ‘lead’ → perfect *agēger-mai* (< **h₂age-h₂ger-mai*; see Zukoff 2014)

THE PROPOSAL: These patterns are all avoidance strategies for a single problem: **C₁-copying is blocked when it is *too difficult to perceive the presence of root-C₁***. This will be formalized as the interaction between the (non-)availability of phonetic cues (cf. Wright 2004) and the principle of *repetition avoidance* (cf. Walter 2007).

Each of these patterns applies to roots/bases with particular sorts of initial consonant clusters. Therefore, if default C₁-copying were observed, a sequence of $C_1V-C_1C_2$ would be created. The clusters which undergo these patterns are those in which root-C₁ lacks certain important *phonetic cues* to its presence, namely *release burst*, *intensity rise*, and *consonant-to-sonorant transitions*. The lack of robust cues makes these consonants vulnerable to the perceptual bias against local repetition. These patterns thus represent active avoidance strategies to prevent *poorly-cued consonant repetitions*.

The cued-based approach will be compared to previous sorts of analyses, e.g. Fleischhacker’s (2005) similarity-based framework, Keydana’s (2012) representational solution, and Zukoff’s (2014) syllable-based account, none of which can unite these patterns in such a thorough way.

References

- Fleischhacker, Heidi Anne. 2005. Similarity in Phonology: Evidence from Reduplication and Loan Adaptation. PhD Dissertation, UCLA.
- Keydana, Götz. 2012. Evidence for Non-Linear Phonological Structure in Indo-European: The Case of Fricative Clusters. In *The Sound of Indo-European: Phonetics, Phonemics, and Morphophonemics*, edited by Benedicte Nielsen Whitehead, Thomas Olander, and Birgit Anette Olsen, 99–117. Denmark: Museum Tusculanum Press.
- Walter, Mary Ann. 2007. Repetition Avoidance in Human Language. PhD Dissertation, MIT.
- Wright, Richard. 2004. A Review of Perceptual Cues and Cue Robustness. In *Phonetically Based Phonology*, edited by Bruce Hayes, Robert Kirchner, and Donca Steriade, 34–57. Cambridge: Cambridge University Press.
- Zukoff, Sam. 2014. On the Origins of Attic Reduplication. In *Proceedings of the 25th UCLA Indo-European Conference*. Bremen: Hempen.