Appendix C: Why does language change occur at a constant rate?

Appendix to “Deriving the Wug-shaped curve: A criterion for assessing formal theories of linguistic variation”

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The striking finding discussed in the main text, and due primarily to Kroch (1989) is that syntactic changes take place at a constant rate — provided we measure them according to Harmony rather than raw frequency. This is remarkable, since the speakers involved in a change can span several centuries. What would be a non-miraculous explanation of this fact?

Some useful and insightful work has been done in this area by Blythe and Croft (2012) and Stadler et al. (2016). A perhaps overly-concrete interpretation of this work is as follows: language changes that progress steadily are the work of adolescents, who are in the process of fixing their grammars into adult form. These crucial individuals take as their role model speakers somewhat older than themselves, but they exaggerate to some degree the ways in which the slightly-older speakers themselves differ from full-grown adults. Since all generations behave roughly alike in this respect, the rate of change tends to be constant. My restatement is qualitative in character, but the authors just cited back up their proposal with explicit mathematical modeling.

It is tempting to suggest that exaggeration takes place on a quantitative scale that employs the natural units of grammar, hypothesized here to be Harmony. Stadler et al. employ instead the Multiplicative-cum-Cutoff model described in xxx §Error! Reference source not found. of the main text, noting, however, that it doesn’t seem to matter much what particular imitation mechanism they employ in their model.