

Stress in the Family: Reconsidering Stress Preservation in English -ory Adjectives



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Stress preservation – the problem

Traditional accounts: Stress-preserving affixes preserve the stress from their bases.

Problem: This presupposes a framework which assumes unary base-derivative relations. This view has been challenged by work stressing the importance of paradigm structure or morphological families that go beyond such relations (e.g. Krott et al. 2001, Bonami & Strnadová 2019, Arndt-Lappe & Dabouis 2019) and the gradience of morphological structure (e.g. Hay 2001, 2003).

Test case in this paper: Stress in long derivatives ending in *-(at)ory*. There is clear evidence that stress in the verbal base plays a role, but there is also a large amount of unexplained variability in stress assignment (cf. Bauer et al. 2013, Arndt-Lappe & Sanz 2017).

Our questions

Which factors determine stress in *-(at)ory* adjectives?

Do we see effects of paradigm structure in *-(at)ory* adjectives?

Background: Stress and morphological structure in *-(at)ory* adjectives

Stress variability

Preante stress	Antepen stress	Penult stress	Final stress
	óscillat-ory	oscíllat-ory	oscillát-ory
	articulat-ory		articulát-ory
		explánat-ory	explanát-ory
jústificat-ory		justíficat-ory	justificát-ory

Stress in the family

Derivative	Verbal base	Related noun
oscillat-ory	óscillate, antepen stress	oscillát-ion, pen / 'final' stress
articulat-ory	artícuate, antepen stress	articulát-ion, pen / 'final' stress
explanat-ory	expláin, final / 'pen' stress	explanát-ion, pen / 'final' stress
justificat-ory	jústify, antepen / 'preante' stress	justificát-ion, pen / 'final' stress

Data - a reading study

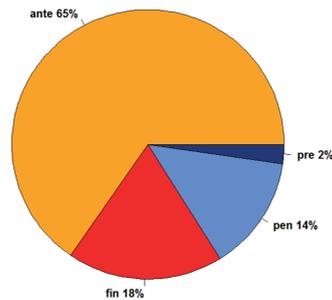
Recorded in Manchester in Oct. 2017, by Javier Sanz
 31 native speakers of British English

32 *-(at)ory* derivatives with at least two syllables preceding *-atory*, with different frequency constellations, embedded in naturalistic test sentences, ~ 200 filler items
 N = 1.289 tokens

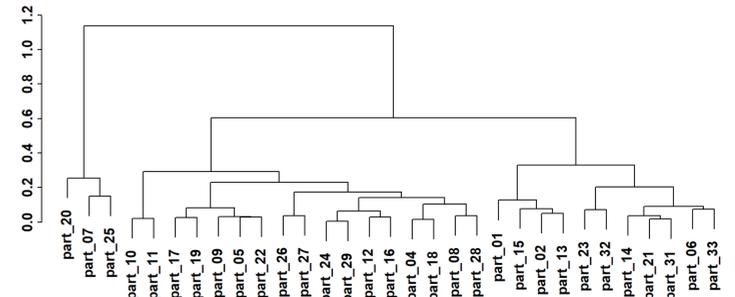
Examples

However, it would be better for him not to miss this important weekly *congregatory* prayer.
 Demonstrate your sportsmanship by posting *appreciatory* comments on other people's walls.

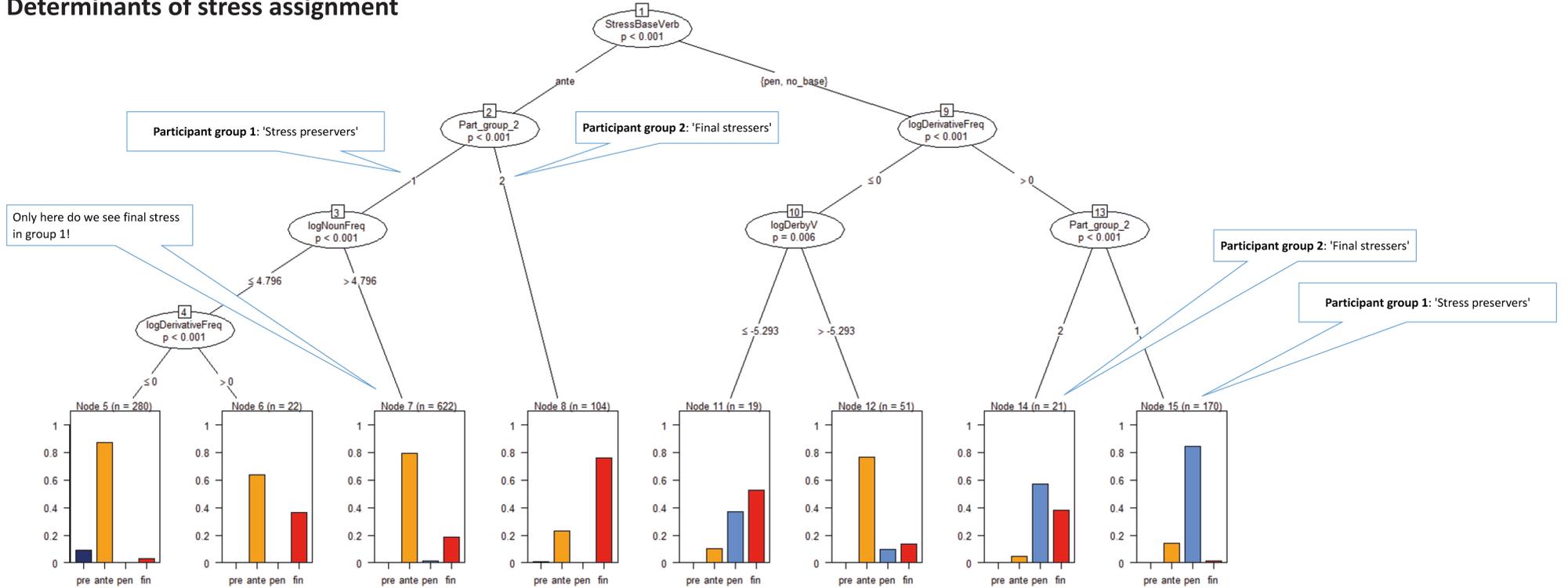
General distribution of stresses



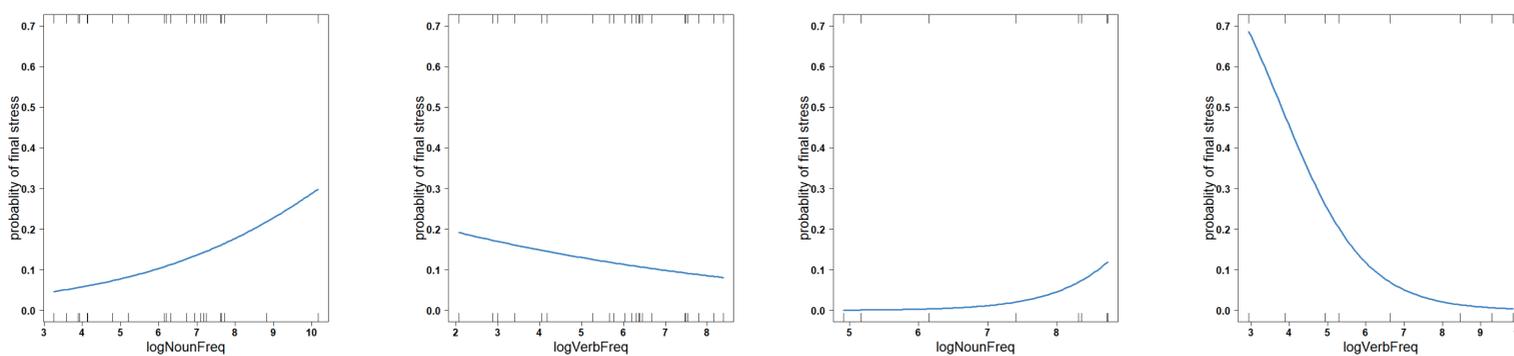
Groups of participants



Determinants of stress assignment



Closeup on frequency effects



Model 1: bases with antepenultimate stress (N = 988)

Model 2: bases with penultimate stress (N = 164)

Conclusions

-(at)ory is largely stress-preserving.

The observed frequency effects demonstrate that 'stress preservation' is faithfulness to stress in related forms, not to stress in a single base.

The empirical facts can be accounted for only in a theory that incorporates influence from paradigmatically related forms on stress assignment.

Method: Linear Mixed Effects Regression

(Bates et al. 2015)

dependent variable:

probability of final stress

predictor variables:

log noun frequency,

log verb frequency

random factor: participant

References: Arndt-Lappe, S. & J. Sanz. 2019. Stress variability in long -able and -ory adjectives in spoken British English. submitted. Arndt-Lappe, S. & Q. Dabouis. 2018. Secondary Stress and Morphological Structure. Paper presented at the 18th International Morphology Meeting, Budapest. Bates, D., M. Mächler, B. Bolker & S. Walker. 2015. Fitting Linear Mixed-Effects Models Using lme4. *Journal of Statistical Software* 67(1). Bauer, L., R. Lieber & I. Plag. 2013. *The Oxford Reference Guide to English Morphology*. Oxford: OUP. Bonami, O. & J. Strnadová. 2018. Paradigm structure and predictability in derivational morphology. *Morphology* 29(2), 167-197. Hay, J. 2001. Lexical frequency in morphology: Is everything relative? *Linguistics* 39(6), 1041-1070. Hay, J. 2003. *Causes and Consequences of Word Structure*. London: Routledge. Krott, A., H. R. Baayen & R. Schreuder. 2001. Analogy in morphology: Modeling the choice of linking morphemes in Dutch. *Linguistics* 39, 51-93.

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