

Predictable aspects of lexical stress in nouns

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Considering the insights from experimental research, this paper explores predictable aspects in Greek nominal stress which is arguably lexically determined (e.g., Drachman & Malikouti–Drachman 1999; Revithiadou 1999, 2007, etc.). Furthermore, it proposes a formal analysis of nominal stress within the framework of *Gradient Harmonic Grammar* (Smolensky & Goldrick 2016). It also discusses possible extensions of this model to nominal stress in Russian, which is another lexical stress system (Melvold 1989; Alderete 1999; Revithiadou 1999; Gouskova 2010; Lukyanchenko, Idsardi, & Jiang 2011).

The assumption that Greek stress is not predictable arises from the fact that any of the last three syllables in a phonological word can potentially serve as a stress location, e.g., [ˈpo.le.mos] ‘war,’ [zo.ˈɣra.fos] ‘painter,’ [o.ði.ˈɣos] ‘driver’. However, recent experimental studies (Apostolouda 2018; Revithiadou & Lengeris 2016; see also Apostolouda, Soukalopoulou & Revithiadou in prep.) have cast doubt on this unpredictability, revealing underlying regularities influenced by lexical frequency and the type of inflection. Specifically, experiments involving pseudo-nouns indicate that adult speakers generally exhibit a tendency towards penultimate stress. Nevertheless, there is a distinct preference for antepenultimate stress in pseudo-nouns ending in specific suffixes. Ultimate stress, in contrast, is the least favored option overall. Similarly, experimental studies on Russian nominal stress have also revealed regularities in how speakers assign stress to both familiar and unfamiliar nouns in this system (Nikolaeva, 1971; Crosswhite et al. 2003; Lavitskaya & Kabak 2014, etc.). For example, stress commonly falls on the penultimate syllable in vowel-ending nouns and on the ultimate syllable in consonant ending nouns.

In this paper, we construct a *Gradient Harmonic Grammar* (Smolensky & Goldrick 2016) analysis of Greek stress, which models the probability of each stress position to emerge, by formalizing the interplay between the intrinsic strength of lexical stress and the type of inflection. We also conclude with a proposal on how a slight modification of the Greek grammatical model can accommodate other lexical stress systems, such as Russian, where the controlling factor in stress assignment is the structure of the final syllable, rather than the inflection ending.

Selected references

- Alderete, J. D. 1999. *Morphologically-governed accent in Optimality Theory*. Amherst, MA: UMass, Amherst Ph.D. dissertation.
- Apostolouda, V. 2018. *Πειραματικές Διερευνήσεις στον Τονισμό της Ελληνικής*. Ph.D. dissertation, A.U.Th.

- Drachman, G. & A. Malikouti-Drachman. 1999. Greek word accent. In H. van der Hulst (ed.), *Word Prosodic Systems in the Languages of Europe*. 897–945. Berlin & New York: Mouton de Gruyter.
- Gouskova, M. 2010. The phonology of boundaries and secondary stress in Russian compounds. *The Linguistic Review*, 17(4), 387-448.
- Melvold, J. L. 1989. *Structure and stress in the phonology of Russian*. Cambridge, MA: MIT Ph.D. dissertation.
- Moćzanow, J., Iskra, E., Dragoy, O., Wiese, R. & U. Domahs. 2019. Default stress assignment in Russian: Evidence from acquired surface dyslexia. *Phonology*, 36(1), 61-90.
- Revithiadou, A. 1999. *Headmost Accent Wins: Head Dominance and Ideal Prosodic Form in Lexical Accent Systems* (LOT Dissertation Series 15, HIL / Leiden University). The Hague: HAG.
- Revithiadou, A. & A. Lengeris. 2016. One or many? In search of the default stress in Greek. In J. Heinz, R. Goedemans & H. van der Hulst (eds.), *Dimensions of Stress*. 263–290. Cambridge: CUP.
- Smolensky, P. & M. Goldrick. 2016. Gradient Symbolic Representations in grammar: The case of French liaison. Ms., Johns Hopkins University & Northwestern University.

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