

Transcribing the intonation of typologically different dialects of the same language: the case of Arabic

Sam Hellmuth, University of York, UK

Analysis of intonation in an increasing number of languages within the Autosegmental-Metrical (AM) framework (Ladd, 2008) has revealed a typology of cross-linguistic prosodic variation (Jun, 2005, 2014). Viewed from the perspective of AM theory, dialects of Arabic are found to differ from each other along known parameters of cross-linguistic prosodic variation: Moroccan Arabic (MA) is an edge-marking language (Bruggeman, 2018), whereas other dialects, so far, all appear to be head-marking; Egyptian Arabic (EA) stands out from other dialects, so far, in its rich distribution of accents (Hellmuth, 2007).

Recent work on related languages has rejected use of manual qualitative prosodic annotation, as it is perceived as 'cumbersome' (Watson & Wilson, 2017). We test here the claim that a pre-determined 'tagset' of categorical labels can ease the task of annotation but still capture the surface contrasts observed in Arabic dialects. Based on current work in progress (Hellmuth, in preparation), we report on both the *process* and *product* of prosodic annotation of spoken Arabic dialects using a set of categorical labels selected from those used in analysis of Romance languages (Frota & Prieto, 2015), which are in turn a subset of those included in the most recent IPrA proposal (Hualde & Prieto, 2016). We explain the motivation for adoption of this annotation technique and explore case studies of specific difficulties experienced in use of the label set. We also illustrate our use of quantitative analysis in the form of visualisation of pitch contours, and techniques from studies of interaction (Hutchby & Wooffitt, 2008), to both complement and corroborate the results of qualitative annotation. We will report on a subset of data from the Intonational Variation in Arabic (IVAr) corpus which contains read and spontaneous speech data, recorded on location in the Middle East and North Africa, with 12 speakers each from Morocco, Tunisia, Egypt, Jordan, Syria, Iraq, Kuwait and the Gulf (Oman) (Hellmuth & Almbark, 2017).

Bruggeman, A. (2018). *Lexical and postlexical prominence in Tashlhiyt Berber and Moroccan Arabic*. Unpublished PhD thesis, Universität zu Köln.

Frota, S., & Prieto, P. (2015). *Intonation in Romance*. Oxford: Oxford University Press.

Hellmuth, S. (2007). The relationship between prosodic structure and pitch accent distribution: evidence from Egyptian Arabic. *The Linguistic Review*, 24(2-3), 289-314.

Hellmuth, S. (in preparation). *Intonation in spoken Arabic dialects*. Oxford: Oxford University Press.

Hellmuth, S., & Almbark, R. (2017). *Intonational Variation in Arabic Corpus*. Retrieved from Colchester, Essex <http://reshare.ukdataservice.ac.uk/852878/>

Hualde, J., & Prieto, P. (2016). Towards an International Prosodic Alphabet (IPrA). *Laboratory Phonology: Journal of the Association for Laboratory Phonology*, 7(1).

Hutchby, I., & Wooffitt, R. (2008). *Conversation Analysis* (Vol. 2nd): Polity Press.

Jun, S.-A. (2005). Prosodic typology. In S.-A. Jun (Ed.), *Prosodic Typology: The Phonology of Intonation and Phrasing* (pp. 430-458). Oxford: Oxford University Press.

Jun, S.-A. (2014). Prosodic typology: by prominence type, word prosody, and macro-rhythm. In S.-A. Jun (Ed.), *Prosodic Typology Volume II*. (pp. 520-539). Oxford: Oxford University Press.

Ladd, D. R. (2008). *Intonational phonology* (Vol. Second). Cambridge: Cambridge University Press.

Watson, J. C. E., & Wilson, J. (2017). Gesture in Modern South Arabian Languages: variation in multimodal constructions during task-based interaction. *Brill's Journal of Afroasiatic Languages and Linguistics*, 9(1-2), 49-72.