How to represent focus in Egyptian Arabic (EA)?

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The representation of tonal properties of (different types of) focus have been the locus of interest in many recent studies on intonation carried out within the framework of Autosegmental-Metrical Phonology. In these studies, a variety of solutions for the representation of focal accents have been offered.

Thus tonal configurations signalling focus have been analyzed as *pitch accent + focal tone* in some Swedish dialects or as a *simultaneous gesture* (i.e. simultaneous with the lexical accent) in terms of scaling of the individual tonal targets in others (Bruce 2005). Another representation of the tonal properties of focus is *the pitch accent + phrase accent* analysis with possible secondary (Pierrehumbert 1980, Grice 1995, Benzmüller and Grice 1998, Grice, Ladd and Arvaniti 2000, Arvaniti, Ladd and Mennen 2006) or as a *sequence of a rising and a falling pitch accent* for polar questions in Neapolitan Italian (D'Imperio 2001). Recent discussion about Spanish varieties has suggested yet another possible representation based on the assumption that different kinds of focus and non-focus conditions show a three-way distinction in the alignment of the LH gesture. This problem is solved by positing *secondary association of pitch accentual targets* (Face & Prieto 2007). In older studies on German, the difference between topical and focal accents was analyzed as a difference between the pitch accents themselves: *L*+H for topic* and *H*+L for focus* (Uhmann 1991, Féry 1993). Similarly, Frota (2002) suggests a *pitch accent difference* for broad (H+L*) vs. narrow focus (H*+L) in European Portuguese. Nuclear focal accents have also been described as falling accents H*L within frameworks that only allow for left-headed "accentual feet" like the ToDI framework (Gussenhoven 2005) and the IViE system (Grabe, Post and Nolan 2001).

Only a handful of studies have addressed the issue of prosodic reflexes of focus in EA. In a small pilot study, Norlin (1989) found focus to be realized by an expansion of pitch range on the focussed item and compression of pitch range in the post-focus part of the uttererance. Hellmuth (2006), in an attempt to clarify whether the pattern identified by Norlin would hold for both informational and identificational focus (or contrastive focus), found gradient effects of pitch range and indirect alignment effects of the high target for identificational focus, but no effects for information focus. In a qualitative analysis of Modern Standard Arabic spoken by Egyptians Rastegar-El Zarka (1997) suggested that focussed items may exhibit a wider pitch range and a steeper fall to an early aligned L-tone that is part of her bitonal H*+L pitch accent. Recently, El Zarka (in press) suggested a tonal distinction between *topical* and *focal* (assertive) accents as *rising* vs. *falling*, respectively, not involving any boundary tones.

Under the assumption that the impressionistic perception of focus is brought about by a bundle of different prosodic features, a production experiment was designed that investigated broad focus, narrow informational focus and narrow corrective focus. Thus, following Xu and Xu (2005), different parameters such as the scaling and alignment of the targets, the slope of the gestures and different durational measures were examined, and the results show significant differences for many of these parameters that are stunningly parallel to the results of a study on Dutch by Hanssen, Peters and Gussenhoven (2008).

This paper will explore the different analyses proposed so far in the literature and their applicability to the EA data. It will be argued that the assumption of a falling accent is superior to an analysis involving a phrase accent in EA as has been argued for Dutch by Hanssen, Peters and Gussenhoven (2008). But as in EA rising and falling accents do not differ in the first part of their shape which exhibits a quite stable rise, whether in topic or in focus conditions, a representation by a basic *tritonal* accent (or accentual phrase) is proposed for EA that is modified by manipulating prosodic features like alignment and scaling in order to instantiate the falling focal movement (as opposed to the rising topical movement) as suggested in El Zarka (in press).

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