Grammar or not grammar?

Prosodic reflexes of information structure in Egyptian Arabic

Dina El-Zarka

In prosodic studies that investigate the influence of information structure on the prosodic shape of utterances in a specific language, it is commonly assumed that information structural notions such as topic or focus are universal linguistic categories that are "encoded" by a specific prosodic form. More recently, however, the assumption of universal information structural categories has been called into question (Matic & Wedgwood, 2013; Zimmermann & Onea, 2011). Calhoun (2010) offers an approach that the mapping of words onto metrical structure (i.e. accents) in English is probabilistic with information structure playing a decisive role in this mapping. I follow Calhoun in the assumption that information structure places strong constraints on the prosodic shape of utterances, assuming a two-dimensional approach to information structure with theme (topic) and rheme and focus as background as cognitive universals and not a priori as linguistic categories.

Based on the investigation of a large corpus of spontaneous and semid spontaneous speech and controlled experiments (El Zarka 2013), I argue that in EA, which is a nond deaccenting language in the sense of Ladd (2008), the interpretation of theme and rheme is not guided by accent position or accent strength as in English, but rather by contour shape. I further argue that the individual prosodic features are not direct signals of information structural 'categories', but have more general denotations. Although prosodic prominence is a means of highlighting important information in EA, accent position is not structured based in this language (El Zarka 2013). Neither does every IP exhibit an obligatory nucleus, nor is a rheme obligatorily more prominent than a theme. In accordance with its biological foundations (Ohala 1984, Gussenhoven 2002), rising pitch expresses uncertainty and thus questioning and falling pitch indicates finality and has an assertive flavour. Thus the frequent occurrence of rising themes, for instance, is not a matter of grammatical coding, but rather of the compatibility between speaker's intention and prosodic meaning. Similarly, the familiar pattern of a 'focus' accent on the only new constituent in a sentence with simultaneous downtoning of the background (1), is not a case of (obligatory) grammatical marking of "narrow focus", but rather the outcome of the optional, but preferred attenuation of given concepts and the highlighting of unexpected or contrastive elements. A speaker resorts to prosodic means to structure her contributions to discourse in order to facilitate the cognitive processing on the part of the addressee. I suggest that in EA the prosodic contribution to this


structuring is accomplished by the interaction of two preferences: (a) to highlight important concepts (with concomitant downtoning of given ones) (Fig. 1) and (b) to establish coherence by connecting utterances via tonal contour (Fig. 2) or separating them by treating every concept as a separate assertion (Fig. 3), which is typical in emphatic renderings of presupposition-less utterances.

Fig. 1: The utterance laʔ, ITNEEN fukulaatɔ'.
("No, TWO chocolates.") correcting a prior question
'Do you have one piece of chocolate?', data from SFB 632, D2.

Fig. 2: The utterance [ʃufna Malaka] theme [ʃ-manzil Lamluum] theme 'We saw Malaka in Lamli’s house.'
as a response to the question: 'Where did you see Malaka?'

Fig. 3: The utterance [ʃit kalb bi-j-tudd raagi] theme 'There is a dog biting a man.' with no presupposed information and an existential construction introducing the referent kalb 'dog'.

References:

Calhoun, Sasha. 2010. The centrality of metrical structure in signaling information structure. A
El Zarka, Dina (2013). On the interaction of information structure and prosody: the case of Egyptian
Arabic. Habilitationsschrift, Karl-Franzens-Universität Graz, Austria.
the International Conference on Speech Prosody (pp. 47–57), Aix-en-Provence, France.
Ohala, John J. 1983. The Origin of Sound Patterns in Vocal Tract Constraints. In Peter F. MacNeilage
Matić, Dejan & Daniel Wedgwood. 2013. The meanings of focus: The significance of an
163.
Zimmermann, Malte & Edgar Onea. 2011. Focus marking and focus interpretation. Lingua 121(11).
1651–1670.