Information Status and Prosody - Production and Perception in German

In a communicative situation a proposition's informativity is said to be interpreted with respect to information that is already 'known' by the interlocutors (cf. [3]). Accordingly, the dimension of *given* versus *new* information is a central part in the investigation of information structure. In my PhD I am particularly concerned with the investigation of the relation between *givenness* (also called *information status*) and prosody.

Since an adequate analysis requires considering the position of both speaker and listener I adopt a cognitive approach proposed by Chafe [4], [5] and Lambrecht [7]. Givenness is defined as the degree of activation of a referent or proposition assumed by the speaker to be in the listener's consciousness at the time of utterance. Following Chafe, I postulate different degrees of givenness / types of information status corresponding to three basic steps on a potentially continuous scale of cognitive activation, namely the poles *given / active* and *new / inactive* plus an intermediate level of *accessible / semi-active* information. In order to transfer an idea from a previous state into an active state the speaker has to invest 'activation costs'. These can be expressed e.g. by using prosodic means.

Recent studies have shown that prosodic marking of cognitive activation cannot adequately be described by a simple dichotomy of accented vs. unaccented. Instead, they provide evidence that it is the tonal configuration which is important for encoding a referent's degree of givenness (e.g. [6], [8]), and different types of more or less activated information demand different accent types as linguistic markers (cf. [1], [2], [11]).

In order to prove the basic assumption that (stepwise) changes in the degree of a referent's givenness are reflected in equal (stepwise) changes in its degree of prosodic prominence we conducted a production experiment on read German [9]. The reading material elicits four different degrees of givenness by varying a referent's salience in diverse discourse contexts due to explicit or implicit previous mention. Results reveal a significant stepwise increase in the number of pitch accents as well as higher and later accentual peaks with a decreasing degree of a discourse referent's givenness (namely from (textually) *given* through (textually) *given* but *displaced* and *inferentially accessible* to *new* referents - see Figure 1).

To validate whether the varying amount of activation effort expressed in production by different prominence-lending cues actually correspond to the listeners' degree of cognitive activation for a referent, two follow-up perception experiments have been carried out [10]. The effect of prosody on the listener's perception of a referent's level of givenness is tested on a selection of target referents of the production study both in sentences in isolation and in context. The main findings are that the presence or absence of accent, different accent positions (nuclear, prenuclear) and different accent types (determining factors: tonal value of starred element and presence or absence of an early peak), significantly influence a referent's perceived degree of givenness (see Figure 2). Accordingly, the accent positions (including no accentuation) differ significantly in their appropriateness as prosodic markers of different degrees of givenness (see Figure 3).

Together, the production and perception experiments on read German indicate that the nuclear accent type and the accent position reflect the speakers' activation effort and the listeners' cognitive activation for a referent. Thus, a referent's prosodic encoding alone can serve as the decisive cue for decoding its level of givenness. Furthermore, the results provide evidence for the relevance of different intermediate levels of cognitive activation between the poles, indicating that the system of cognitive activation of information may be a continuum.

Insights about the (de-)coding of givenness by prosodic means alone contribute to the comprehension of the general interplay between lexicogrammatical aspects and prosody in information structuring and thus help to define the role prosody plays in the extensive field of information structure.

FIGURES

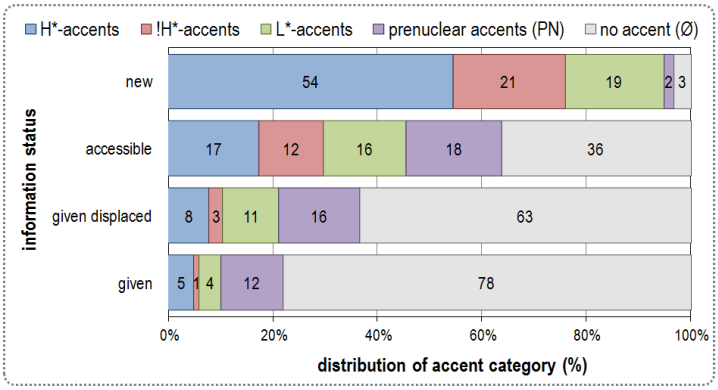

Figure 1. Relative distribution (x-axis) of nuclear accent categories (comprising accent types with the same starred tone), prenuclear accents and no accents on all target referents per information status (y-axis); 9 speakers pooled.

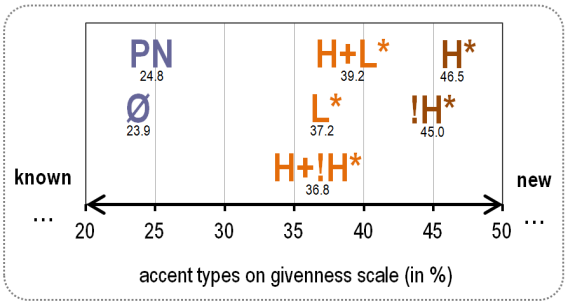

Figure 2. Distribution (x-axis) of nuclear accent types, prenuclear accents (PN) and no accents (Ø) according to the mean values of their evaluated perceived degree of givenness (*givenness scale*).

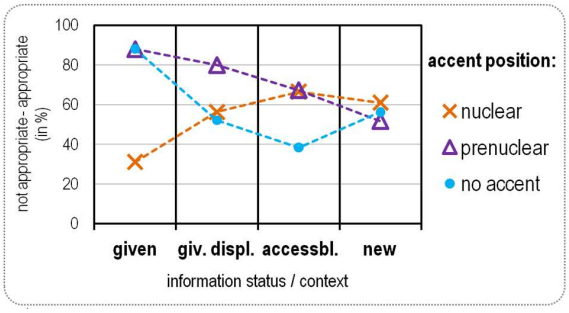

Figure 3. Distribution (y-axis) of accent position for each information status separately (x-axis) according to the mean values of their evaluated degree of perceived contextual acceptability.

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