

Phonological and acoustic specification of Information Status – a semantic and phonetic analysis

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The present study deals with the effects of information status (i.e. various instantiations of the concept of *givenness*) on phonological as well as phonetic parameters of prosody. The significance of our findings lies in the fact that information status not only influences the choice of phonological categories of pitch accents but also the fine acoustic detail of intonation within these categories.

A German radio news speech data base of approx. 1h of speech (Rapp, 1998) has been annotated with respect to prosody and information status. For the annotation of prosody the GToBI(S) system (Mayer, 1995) was used. For the annotation of information status we used the new scheme of Riester (2008), the main claim of which is that information status categories reflect the default contexts (Kamp, ms) in which presuppositions are resolved (discourse context – *d-given*, encyclopedic context – *generally accessible*, environment context – *situative*). For definite descriptions that are unresolvable (and, hence, get accommodated) a new category is introduced: *accessible via description*. Our annotations are kept ambiguous in order to do justice to our hypothesis that texts usually are informationally underspecified.

Furthermore, we used a parametric intonation model (Möhler, 1998) to determine intonation parameters that correspond to the actual shape of the F_0 contour for each accent. The parameters reflect e.g. accent steepness, accent range and temporal alignment of the accent's peak. We computed the parameters for the most frequent accent in the corpus, L*H ($n = 935$).

Our results are the following:

1. Information status significantly influences the choice of pitch accent type ($p \ll 0.01$).

The main findings here are that *novelty* is predominantly marked by a falling H*L accent, *d-givenness* on the other hand prefers the rising accent (L*H). Both, *general accessibility* and the category *situative* are reflected by a dominance of L*H accents while the newly introduced category *accessible via description* is predominantly realised with falling accent or unaccented, respectively.

2. Within the phonological category L*H, information status significantly influences the actual shape of the accent's contour ($p < 0.05$).

In those cases where *new* information receives an L*H accent it is marked acoustically in two ways. First, the accent range is significantly smaller. Second, the peak is significantly earlier. With respect to the former, the influence of *general accessibility* on L*H is reversed: the accent is realised with a greater range. For *synonymy* (a subcategory of *d-given*) the accent's rise was less steep than in other information status categories. We will offer possible explanations for the first two findings. The reason for the third one remains unclear.

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3. The category *accessible via description* displays its own characteristic accent preference.

This concept was not recognised in earlier information status taxonomies and was instead mostly treated under *general accessibility*. However, while the latter is predominantly realised with a rising pitch accent, *accessible via description*, representing to-be-accommodated definites such as in (1), shows a preference for falling accents or deaccentuation, respectively. This finding therefore corroborates the particular assumptions made in Riester (2008).

Example

- (1) In [the Bosnian Muslim enclave Bihac]_{acc-desc} [the fights between Serbs and government troops]_{acc-desc} went on.

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