The Intonation of Verum Focus and Lexical Contrast

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In this experiment we investigate the intonational marking of two types of focus in German: lexical contrast and verum focus. Lexical contrast focuses on a lexical category (noun, adjective, verb), whereas verum focus is widely understood as, inter alia, focusing on a functional category (semantic operator VERUM, which is invisible on the phonetic surface, Höhle 1992). Crucially, verum focus is generally assumed to be non-contrastive (cf. Höhle 1992). However, a recent approach has reanalyzed verum focus as a sub-type of contrastive focus (Lohnstein 2012). The current study investigates the prosodic marking of these two types of focus with a view to shedding light on their relatedness or otherwise.

The most common accent type marking lexical contrast reported in the literature is $L+H^*$ (Alter et al. 2001; Steube 2001), although L^*+H is also possible. Turco et al. (to appear) report $^*H^*+L$ for verum focus. (Their examples involved the auxiliary "hat" [hat], providing too little sonorous material before the accented vowel to entertain the possibility of $L+H^*$). Our observations from a spontaneous corpus indicate that, although there is overlap in their realisation, there are different likelihoods of specific accent types on verum focus and lexical contrast. In particular, accent types with a late peak (L^*+H) tend to be used more often to mark verum focus than lexical contrast.

In order to investigate the appropriateness of different accents (L*+H, as well as L+H* and H*) for marking these two types of focus, we conducted a web-based perception experiment, in which subjects evaluated realizations of five target sentences with each of the three accents on the focused word. Evaluation involved rating on a 5-point Likert scale how well a particular contour matched a context evoking either verum focus or lexical contrast. See example (1) below.

(1) a. Verum focus:

b. Lexical contrast:

A: Du WOHNST doch gar nicht in Köln.

A: Du ARBEITEST doch in Köln.

B: Doch! Ich wohne in Köln.

B: Nein. Ich wohne in Köln.

Results reveal a significant preference for L*+H accents over L+H* and H* accents as a prosodic marker of <u>verum focus</u> and a significant preference for L+H* accents over H* and L*+H accents as a prosodic marker of <u>lexical contrast</u> as shown in figure 1. Interestingly, in both conditions, L+H* was consistently preferred over H*.

In recent quantitative work we have shown that although both H* and L+H* involve an onglide (a rise *up to* the accented syllable), the accent categorized by labellers as L+H* involves a larger onglide than H*. Independent studies have found the rising onglide to be a perceptual cue to contrast (Ritter et al. 2012; Grice et al. 2012, see also Turco et al, to appear). This cue has a gradual dimension, the larger the onglide, the more likely it is that contrast is perceived. This study reveals that both verum focus and lexical contrast can be produced with this gradual cue to contrast, indicating that the two types of focus could indeed be related.

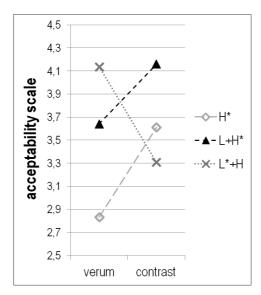


Figure 1 Distribution of accent types on the acceptability scale according to their mean scores for all target sentences (not appropriate = 1, highly appropriate = 5)

However, although the preference of L+H* over H* can be couched as gradient, the fact that L*+H is preferred as a marker of verum focus, but not of lexical contrast, points to a qualitative distinction that needs further exploration. First, it calls into question the claim that L*+H is not categorically distinct from L+H* (Kohler's (1991) late vs. medial peaks, see also Kohler 2006). Second, it points to a distinction between the two types of focus investigated here. Thus, although both show aspects of the intonation of contrast they can be realized by two distinct intonation patterns as well.

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