

## Focus affects the pitch register – focal lowering in German

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There is ample evidence that focus prominence yields higher scaling of pitch peaks in tone (e.g. Xu 1999 for Mandarin) and intonation languages (e.g. Féry & Kügler 2008 for German). These facts culminated in the proposal of intonational universals in terms of the effort code (Gussenhoven 2004). However, recent findings suggest that languages may also employ tonal lowering effects for the expression of focus (e.g. pitch register lowering of High and Low tones in Akan, Kügler & Genzel 2012, lower accentual peaks in Italian, Gili-Fivela 2008). This paper argues on the basis of an experimental investigation of low/rising pitch accents in German that (i) focal lowering occurs in German besides focal raising, (ii) focus affects the pitch register, which mediates tonal scaling of pitch accents, and (iii) focus effects are best accounted for in terms of a phonological analysis of the pitch register. To elicit low/rising nuclear intonation patterns in different focus conditions an interactive game (“Lingo-bingo”) was created inspired by Krahmer & Swerts (2001). Participants had a plate with coloured figures on it, and the experimenter had a number of individual coloured figures. Each participant had to ask for each coloured figure whether the experimenter had it to put on the plate. Each coloured figure had a letter on it, and the goal of the game was to find out a word from the individual figures. Recordings of L\*H accents of five Standard German speakers were analysed showing that focus has a significant lowering effect in German.

### References

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