

## Perceiving L2 intonational meaning – phonology vs. phonetics

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Many form-meaning relations in speech prosody appear to be explicable by means of “biological codes” (Gussenhoven, 2002; Ohala, 1983), such as the frequency code or the effort code. For instance, in many languages, questions are produced with higher pitch (Ohala, 1983); referents are introduced to the discourse with high pitch accents (H\*, cf. Baumann & Grice, 2006) and contrastive information with more emphatic accents (L+H\* compared to H\*, cf. Bartels & Kingston, 1994; Baumann, Grice, & Steindamm, 2006). Naturally, in the languages of the world we also find prosodic sound-meaning correspondences that are more arbitrary and need to be specifically learned in second language (L2) acquisition.

We investigated the perception of prosodic contrast by native Dutch speakers and German L2 learners of Dutch. Despite their typological relatedness, Dutch and German differ in the prosodic encoding of utterances with a double contrast (A did X and B did Y). While Dutch marks both the contrastive topic (B) and the contrastive focus (Y) with a salient pitch fall (double peak pattern), German also has the option to mark these double contrast utterances by means of a hat pattern (with a prominent rising accent on B and a falling accent on Y, with the pitch in-between staying high, cf. Büring, 1997). This hat pattern is the prototypical contour for neutral statements in Dutch (Cohen & 't Hart, 1967).

Using a cross-modal associative priming experiment we tested whether Dutch natives and German learners of Dutch interpret utterances with a double peak pattern and a hat pattern as contrastive. Participants performed lexical decision tasks to visual targets (e.g., pelican) that were contrastively related to sentence-final primes (e.g., flamingo). Shorter reaction times indicate the activation of alternatives and hence imply contrastive interpretation. Results showed that Dutch listeners only activated contrastive alternatives in utterances with a double peak and not in those with hat patterns. German learners of Dutch, on the other hand, activated alternatives for *both* kinds of contours (even though the double peak contour is prosodically more salient than the hat pattern).

This negative transfer of intonational meaning from German to Dutch suggests that L2 learners rely more on native language sound-form correspondences (phonology) than on low-level prosodic salience (phonetics).

### References

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