[S39] **Categorical speech perception revisited.** Klaus Kohler, Institut für Phonetik und Digitale Sprachverarbeitung (IPDS), Kiel, Germany. [Full Paper Available on CD]

CSP postulates perceptual grouping of an acoustic continuum into sharply delimited phonological categories with discrimination maxima across the identification boundaries. The experimental procedure was applied to F0 contours in a peak-shift and semantic contextualization paradigm in German and showed a categorical change from *early* to *medial* position in relation to the accented syllable. But in a comparable valley shift from *early* to *late* a discrimination maximum was not found although there was clear category formation in the identification task. In F0-peak perception a syntagmatic pitch contrast of high-low or low-high, respectively, across the syntagmatic articulatory landmark of consonant-vowel transition, preceding a final fall, is characteristic of *early* vs *medial*. In the valley shift, the decisive pitch difference between *early* and *late* final rises is confined to the vowel and thus lacks a tight link with a syntagmatic articulatory contrast. This leads to the conclusion that perceptual categorization of a physical continuum is not tied to a discrimination maximum, unless there is an additional association with contrastive vocal tract sequencing. This can also explain differences found in the categorization of consonants vs vowels, and stresses the relevance of *syntagmatic auditory enhancement* beside *paradigmatic phonemic opposition* in speech.

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