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Submission category: talk (20 minutes)

# Cross-linguistic challenges to language-specific infant word segmentation: The cases of Czech and Turkish.

Keywords: word segmentation; infancy; language acquisition; Czech; Turkish

Since language-specific factors play a central role in the acquisition and processing of human language, the lack of diversity in infant research (Kidd & Garcia, 2022) poses a problem for any generalization. The well-attested process of word segmentation, describing the strategies infants use to solve the problem of finding "minimal recombinable units" (Bernard et al., 2010, p. 264) in the input, highlights this problem. Prior research has provided evidence for a number of language-specific cues: *word stress* (Bartels et al., 2009; Butler & Frota, 2018; Houston et al., 2000; Jusczyk et al., 1999; Nazzi et al., 2014; Segal & Kishon-Rabin, 2012 inter alia), *phonotactic probabilities* (Blanchard et al., 2010; Gonzalez-Gomez & Nazzi, 2013; Mattys et al., 1999) or the *co-occurrence of morphological elements* (Haryu & Kajikawa, 2016; Shi & Lepage, 2008). While word segmentation has been associated with later language development (e.g. Newman et al., 2006; Marimon et al., 2022), the number of languages studied so far remains small.

This presentation will provide a cross-linguistic perspective on infant word segmentation, investigating possible cues for word segmentation in Turkish and Czech. In Turkish, speakers use canonical word-final stress with acoustic and perceptual correlates that may differ from those found in previous well-studied languages English, French or Spanish (Kabak, 2016; Levi, 2005; Özçelik, 2023). The idea of syllable prominence as a cue for prosodic word segmentation is even more challenged by Czech, a language with fixed word stress on the initial syllable (Dogil et al., 1999; Naughton & Kunes, 2021). Throughout empirical studies on acoustic and perceptual correlates of word stress in Czech, a complex picture has emerged, pointing to uncommon acoustic correlates (e.g. shorter duration and lower fundamental frequency) in first syllable stress (Duběda & Votrubec, 2005; Skarnitzl, 2018) and a larger role of contextual syllables (Palková, 1987). It is unclear yet, how infants make use of the prosodic cue of word stress in Turkish and Czech word segmentation. First, the talk will discuss the role of word stress for infant word segmentation in Turkish and Czech, based on current evidence on perceptual and acoustic syllable prominence. Subsequently, it will present two experimental designs for infant word segmentation for Turkish-German bilinguals and Czech learning infants, based on the behavioral *head-turn preference procedure* (HPP). While preliminary results from Turkish indicate a role for word stress in infant word segmentation, first data from infants between 9 and 12 months of age in both groups will be presented. The talk will close with an outlook on further cues for Czech and Turkish and the implications of integrating languages that are more synthetic.

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