Investigation of Norwegian tonal accents and intonation among Norwegian bilinguals

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The study investigates the acquisition and representation of Norwegian tonal accents, with a focus on bilingual speakers. Norwegian is characterized by a surface contrast between two tonal accents, which are anchored in word stress. Stressed syllables in Norwegian can be realized in two ways, resulting in Accent 1 or Accent 2, and which in some cases can differentiate word meanings through distinct tonal patterns on stressed syllables, such as 1*tanken* 'the tank' vs. 2*tanken 'the thought'*. The phonetic realization of tonal accents may also vary by dialect.

Situated at the intersection of heritage language linguistics, second language acquisition, and phonological theory, the study adopts a three-way comparative design involving L1 Norwegian speakers, heritage bilinguals with Urdu as a heritage language, and late L2 learners of Norwegian with Urdu as their first language. Urdu provides a relevant comparison language, as it has word stress but does not distinguish between tonal accents (Mumtaz, Bögel, & Butt, 2020). The project is theoretically grounded in the Micro-Cue Model (Westergaard, 2019). This framework helps to investigate how grammatical features are acquired or restructured under second language acquisition.

The project combines perception and production experiments. The categorial perception of stress placement and tonal accent distinctions will be assessed using ABX discrimination tasks. Production will be elicited through structured sentence-level tasks based on Hognestad's (2012) structured elicitation of words containing Accent 1 and 2. Acoustic analyses will focus on fundamental frequency contours, tonal alignment, and prosodic timing; these patterns will be assessed in relation to participants' background characteristics.

It is hypothesized that L1 Norwegian speakers will perform near ceiling on all tasks. Heritage Urdu speakers might show high accuracy in perception of tonal accents if early exposure attuned them to this contrast. Late L2 learners, however, are expected to find tonal accent discrimination more challenging, potentially testing at chance. The three groups are expected to successfully distinguish stress placement, as both languages encode word-level stress. Contrastively, tonal accents will pose challenges for the groups, especially, bilingual groups. If learners show reliable perception and production of Accent 1 and 2, it will indicate a stable grammatical representation of tonal accents, however, if they perceive without producing target contrasts or vice versa, it will indicate their reliance on routine use or imitation rather than an established grammatical representation.

References

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