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Efficient adaptation to listener proficiency: The case of referring expressions

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Abstract

If speakers communicate efficiently, they should produce more linguistic material when comprehension difficulty increases. Comprehension difficulty can be impacted by the message itself (studied extensively) or by properties of the listener (studied less). Here we investigate the impact of listeners' estimated proficiency on speakers' productions, using referential choice as a case study. Compared to full noun phrases (fNPs, 'the woman'), pronouns ('she') can convey similar content with less linguistic material: accordingly, speakers use more fNPs when the message is unpredictable (Tily & Piantadosi, 2009) and when listeners lack relevant information (Bard & Aylett, 2004). If referential choice is also impacted by listeners' estimated proficiency, then speakers should use more fNPs when conversing with language learners. To test this, we compared participants' descriptions of the same picture book to learners and proficient speakers. Indeed, participants used more fNPs when their interlocutors were child- or adult-learners, illustrating efficient adaptation to listener type.