Speaker adjustments to addressees during language production

On traditional views of speech planning, speakers design utters of speech planning, speakers someone

with an ice pick vs. *a knife*) because atypical components are highly unpred [2] Developmental research has particular (mostly visual perspective) and has produced mixed findings.[4,5] Here we revisit and probe a wider array of factors inspired by the literature on speech planning.[2,6,7] Focusing on mention of instruments, an optional VP constituent, we probe effects of both generic (typicality of instruments) and particular ( )]TJET Q4rf8.82 W2 reWri0.00.00000912) to instrument encoding during production.

In Experiment 1, 48 adults and 48 4-to-5-year-olds described events to a silent confederate-listener who either saw or could not see the events. In each event, an agent performed an action using a typical or an atypical instrument (e.g., watering plants with watering can/hat; Fig.1). To test how conversational goals affect production, experiments 2-3 modified Experiment 1 by having participants describe the same events to a silent (Exp.2) or interactive addressee (Exp.3) with a specific goal (i.e., to draw the events described). on of instruments was measured across experiments. Instrument mention (a binary dependent variable) was analyzed with three mixed effects logistic regression analyses (one for each experiment) with Typicality, Age, and Visual Access as fixed factors and maximal random effects structure justified by the design. Results showed that, across all experiments, children and adults were more likely to mention atypical than typical instruments ($ps<.001$) and adults mentioned instruments, overall, more frequently than children ($ps<.001$). Furthermore, adults were more likely to mention instruments when the events were not visible to their (silent) interlocutor ($ps<.01$; Exps.1, 2) but children did not adjust instrument mention visual access in any experiment ($ps>.05$). A comparison across experiments showed that mention of instruments increased when participants communicated with an interactive interlocutor ($p<.01$; Exp.3).

In sum, both adults and 4- to 5-year-olds performed generic adjustments (by adding information about atypical instruments) during utterance production. Furthermore, unlike adults, children made listener-particular adjustments inconsistently. These and prior findings can be explained by

harder to implement than less dynamic adjustments conversational goals, predictability/typicality of instruments). We conclude that a informational needs of a listener should be viewed as a set of distinct cognitive abilities whose degree of difficulty spans a continuum depending on its cognitive demands. We sketch implications of these findings for current models of audience design.

References

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