



Infants' inferences about language are social

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The recent paper by Begus, Gliga, and Southgate (1) provides compelling evidence that infants make inferences about speakers of their native language as being optimal informants. This interesting finding advances an understanding of infants' early social cognition.

The paper's (1) title "Infants' preferences for native speakers are associated with an expectation of information" suggests that a drive to obtain relevant information is likely responsible for infants' social responses to native versus foreign speakers (e.g., refs. 2–5), although Begus et al. (1) do not include a direct measure of social preference or learning. The implication is that an information-seeking motive is the only game in town, so to speak, when infants evaluate others based on their language. We disagree with this potential interpretation of the data.

We instead propose that infants make a constellation of inferences based on a speaker's language or accent, which could hang together as a larger conceptual representation of group membership defined by language. One such inference is thinking about who is likely to produce relevant communication, as Begus et al. (1) demonstrate. Other inferences may include thinking about people's shared relationships and properties, early indicators of social categorization. Two recent papers by Liberman et al. provide evidence that infants' evaluation of native and foreign speakers involves social categorization (6, 7).

First, infants form expectations about people's likely social relationships based on their language (6). In the first Liberman et al. paper, infants anticipated that two people who spoke the same language were more likely to affiliate than two people who spoke two different languages. In the second Liberman et al. paper, infants used language to guide their inductive inferences, such that they were more likely to generalize socially relevant

properties across speakers of a common language (7). For example, infants generalized food preferences across two speakers of the same language but they refrained from generalizing food preferences across speakers of two different languages. Interestingly, infants were just as likely to generalize food preferences across two speakers of the same foreign language, Spanish, as they were to generalize food preferences across two speakers of their native language, English.

We acknowledge that the mechanism behind social preferences in infancy (e.g., ref. 2) is underspecified, because infants may interact with people for reasons that do not reflect assessments of group membership. Nevertheless, as described above, infants also express rich conceptualizations of native and foreign speakers in third-party expectation tasks. It seems unlikely that an assessment of communicative potential—devoid of any group-related thinking—would underlie all of these inferences about speakers, and in particular infants' inferences that speakers of the same foreign language should share properties. Instead, we propose that infants use language to reason about social structure, which includes thinking about third-party social relationships that are outside of the infant's own relationships, social identity, or personal desire to learn.

To conclude, research demonstrates that infants: (i) prefer to interact with native speakers; (ii) view native speakers as optimal informants; and (iii) anticipate that same-language speakers share relevant properties and relationships. Open questions concern how social preferences, social learning, and social categorization may operate in concert, and perhaps even differ across individuals and cultures.

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