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How to learn more about how children learn languages: A commentary on
Kidd & García (2022)

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*How to learn more about how children learn languages: A commentary on
Kidd & García (2022)*

The quantitative analysis provided by Kidd and Garcia (2022) is a powerful demonstration of how far the field of language acquisition still has to go for us to begin to have a fair idea of the diverse ways in which children learn their language; this also follows from Evans and Levinson's (2009) account of how much is yet to be learned about the possible structures of language. And certainly it is one goal of our research to distinguish 'between universals and language-specific components of language acquisition' (p. 7). However, to my mind that goal is secondary to the deeper issue of gaining greater insight into the mechanisms of language development. This means, for example, tracking transition points and the nature of change over time, given (i) neurophysiological maturation, (ii) further exposure to the language and (iii) greater experience (or 'practice') with language production, and finding ways to distinguish between those critical shapers of development. Cross-linguistic research – and a more diverse database – is certainly critical to deepening our understanding of those mechanisms.

For example, from the point of view of phonological structure, one long-standing proposal has been that children begin by representing words as holistic forms rather than as sequences of independently learned segments ('whole-word phonology': Vihman & Keren-Portnoy, 2013). Such holistic representation can be deduced, for example, from movement of features across syllables (leading to palatalization over the form as a whole (Vihman et al., 1994), or omission of word-initial consonants in words with medial geminates or final-syllable accent (Vihman & Croft, 2007), or errors of segmental sequencing (metathesis: Vihman et al., under review).

Phonological analysis of words produced in the single-word period (within the first year of word production) suggests that Mandarin learners more strongly represent individual syllables than whole word forms (Vihman et al., in revision). This is in line with the association of words and morphemes with syllables in adult Mandarin, but it results, interestingly, in individual children sometimes substituting whole syllables in lexical units. For example, one child produced the syllables [kʰ, kʰʰ] in 10 out of 41 (24%) of the word variants she produced in a half-hour recording (Lou, 2021; substitution of non-target elements include ʃiɛ2ʃiɛ0 'shoes' [kʰʰ2ʃiɛ2, kʰʰ2ʃi2], xʰ2tʃi0 'box' [kʰʰ3kʰ1]); another child produced [tʃi, tʃɛ] in 12 out of 47 variants (26%) of her words (e.g., tui4 'right' [tʃi4], ʃou3 'hand' [tʃɛ4]).¹ No such

¹ The superscript numbers refer to tones: 1 high level, 2 rising, 3 falling-rising, 4 falling; the accuracy of child production of the tone sequences in disyllables has been found to be

substitution of non-target syllables has been reported so far in other languages considered from the point of view of the whole-word approach including Arabic (Khattab & Al-Tamimi, 2013), Catalán (Lleó, 1990), English (Priestly, 1977; Vihman & Velleman, 1989; Waterson, 1971), Estonian (Vihman & Vihman, 2011), Finnish (Savinainen-Makkonen, 2007; Vihman & Velleman, 2000), French (Vihman, 1993; Wauquier & Yamaguchi, 2013), German (Kehoe, 2015), Hebrew (Keren-Portnoy & Segal, 2016), Hindi (Vihman & Croft, 2007), Italian (Keren-Portnoy et al., 2009); Japanese (Vihman et al., in revision); Polish (Szreder, 2013), Portuguese (Baia & Correia, 2010; Oliveira-Guimarães, 2013), Spanish (Kehoe, 2015; Macken, 1979), Swedish (Renner, 2017) and Welsh (Vihman, 2019). The 'Mandarin difference' indicates a strong effect of the ambient language structure on this first step in word production. The finding appears to exemplify Kidd and Garcia's statement that 'when and in what languages common patterns emerge provide important clues regarding the complex interplay between the mechanisms children bring to language acquisition and how those mechanisms act on the input throughout development' (p. 23). Further developmental studies of languages of diverse phonological structure would be needed to test the validity of this interpretation, however.

There is no question but that extending the range of languages studied in relation to child acquisition is greatly to be desired. In fact, I would argue that a 'child's eye view' of a language - with the shift from adult-level complexities of structure to the stripped-down patterns with which children necessarily begin - can afford unique insights into the nature of language itself. But I would emphasize a point mentioned only briefly in Kidd and Garcia's paper: What is most needed is to identify and train potential students who are native or at least highly fluent speakers (or signers) of languages that have not yet gained research attention. The challenges involved in obtaining good acquisition data should not be underestimated. To successfully meet those challenges, and before serious analysis can be undertaken, it is essential that the work of obtaining digital recordings of naturalistic child language use, transcribing, coding, checking and rechecking for coding errors and reliability should all be carried out under the guidance of a fluent, long-standing (if not necessarily 'native') speaker/signer with the appropriate preparation. Absent such careful data collection the analyses are unlikely to prove solid or convincing.

From that point of view the suggestions of (i) increasing numbers of day-long recordings and/or (ii) preparing acquisition sketches for as many languages as possible would increase language representation, but nevertheless somehow miss the point: What is needed to provide real insight is more native- or fluent-speaker/signer training for as many understudied languages as possible and longitudinal studies of several children per language, with native- or fluent-speaker/signer transcription and analysis. Obtaining at least five hours of naturalistic data for numerous so far unstudied languages

independent of segmental accuracy: Choo, 2022.

would be a positive step (and the threat of ongoing language loss cannot be denied), but unless this work is done under the guidance of speakers/signers thoroughly knowledgeable about the language, it is not at all clear that this would result in usable findings that could properly inform further studies or theoretical advances – although it might provide the incentive for someone to gain the training needed to work more extensively on data from a language they know well. Similarly, ‘big data’ obtained through short-cuts, in the absence of guidance from native-like or fluent-language users, may lead to poorly grounded hypotheses or conclusions that will not really advance the field.

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