Special Issue: How Diverse Is Child Language Acquisition Research

FIRST LANGUAGE

What 'diversity' means depends on your perspective: A commentary on Kidd and Garcia (2022)

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Abstract

Having recognized the need for diversity spotlighted by Kidd and Garcia – but given that sampling all the world's languages is infeasible – we focus on which dimensions of variability researchers should prioritize. We consider three major approaches to the study of child language learning, namely, language as a (1) cognitive puzzle, (2) clinical/educational object, and (3) window onto socialization. We discuss how what is important about 'diversity' from each of these perspectives dictates the sociolinguistic communities from which researchers should sample.

Keywords

Diversity, child language acquisition, disciplinary perspectives, linguistic diversity, sample populations, language socialization, comparative research, generalizability

Kidd and Garcia (2022) put numbers to a widely acknowledged shortcoming of mainstream child language research, namely, current knowledge derives from a very narrow slice of the world's linguistic communities. The authors convincingly argue that, while improvements have been made in the last decades, we are a long way from reaching a state of representativeness in our published discourse, both in terms of populations studied and in terms of participating researchers. While it is clear there is no way to sample all or nearly all the language communities in the world, the actionable question raised by their work is how we might strategically increase the breadth of the populations studied. Here, we argue that any answer to this question, and indeed the meaningful parameters and outcomes of more 'diverse' research, depends critically on the researcher's perspective.

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We discuss three perspectives that stand out in past and current work: language learning as a fundamental puzzle of cognition (our tradition, and that of Kidd and Garcia), clinical and educational implications of language learning, and language as a window into child socialization. By explicitly acknowledging the history and motivations for the current (centrality/lack of) diversity represented in each of these literatures, we hope to promote insight into the foreseeable benefits and limitations that may arise as a result of individual or community-wide efforts to shift current scientific practice regarding diversity. We sum up by noting the worth of broadening individuals' awareness in each of these strands to the primary issues and findings in other strands, as well as local, non-mainstream hubs of descriptive and interventionist work that may actually fill much of this apparent gap in the literature, were they to be given more resources and attention. Our perspective is informed by our experiences as well-resourced Western scientists engaging in research with families from small-scale Indigenous communities and by our interactions with language researchers who have engaged in language development research from other scientific perspectives.

The puzzle model of language

The first approach (and the one we were trained in) is interested in language as a cognitive puzzle: How do children go from being able to produce only non-linguistic sounds or gestures to fluidly wielding a productive linguistic system? Here, we typically talk about the primary benefit of linguistic diversity as being *generalizability*, tested via one of two sampling strategies: *broad sampling* and *targeted sampling*.

An example of the *broad-sampling* approach, WordBank (http://wordbank.stanford.edu/; Frank et al., 2017), relies on the widespread use of the same instrument (the MacArthur-Bates Vocabulary Checklist, or MacArthur Communicative Development Inventories [M-CDI]; Fenson et al., 2007) to identify consistencies and sources of variation in early vocabulary development across $\geqslant$29 languages. Broadly applying a common instrument has the immediate benefit of comparable data, but is balanced by the disadvantage that any instrument designed for one population may be ill-suited for participant samples that are very different from that population (e.g. the M-CDI where caregiver literacy is not a given, or mean length of utterance [MLU] in polysynthetic languages).

Within a *targeted-sampling* approach to generalization, researchers aim to identify specific differences between languages or social groups that may shed light on the origins of any differences they find. Recent cross-cultural work examining children's linguistic input in understudied communities has typically taken this approach, for example, examining the frequency of child-directed speech in Yucatec Mayan and US or Tseltal Mayan and Rossel Island (Papuan) communities (Casillas et al., 2020; Foushee & Srinivasan, 2022; Shneidman & Goldin-Meadow, 2012) and the prosodic features of infant-directed speech across the Canada and Vanuatu (Broesch & Bryant, 2015) based on prior evidence suggesting differences between these communities in a variable of interest (e.g. adult orientation toward talking to infants). Targeted sampling can be especially fruitful when applied within already-targeted groups. Perhaps the best example can be seen in the work of a small group of researchers who have comparatively documented

child language development in a handful of related Mayan communities (Pedro, 2015; Pfeiler et al., 2003; Pye, 2018; Pye et al., 2017).

This highly controlled approach enables the researchers to effectively pinpoint differences in acquisition to known differences in language structure, language experience, or interactional practices that differ between communities, with most other factors being highly similar.

The resulting theoretical contributions can then be transferred to other settings and other controlled comparisons. The typical downside of the targeted approach is that the 'diversity' selection criteria are specific to the research question asked; two communities selected to differ on likelihood of infant-directed talk may not have the critical differences in their language structures to answer interesting questions about, for example, morphosyntactic development.

The enfranchisement model of language

The second approach researches language as a clinical/educational object, which is indissociable from the enfranchisement of its users. Research from this perspective is typically oriented toward diagnosing and/or changing language outcomes at the level of the individual. We place in this category two areas not typically cast as peers: (a) research from the communication sciences or speech language pathology dedicated to early identification and intervention of language difficulties, and (b) research from developmental psychology and education dedicated to describing or explaining differences in language knowledge and interaction patterns across socioeconomic strata. Both perspectives are concerned with the centrality of standardized (i.e. normatively valued) language in a society and thus stem from societies that rely heavily on literacy for general functioning, on linguistic explanation for the transmission of societally rewarded knowledge (e.g. formal mathematics, chemistry, and history), and that prize a version of 'intelligence' and ability with language that can be difficult to distinguish from productive and receptive academic vocabularies (Rosa & Flores, 2017). While diversity is essential to the design and calibration of research and clinical tools in this domain, diversity itself is typically scoped within a societally specific framework for success.

The socialization model of language

In the third approach, 'language' is understood as one of many culturally situated practices in which the young learner is socialized to partake. Researchers tend toward in-depth investigations of specific contexts or behaviors, aiming for a level of granularity at which any new population can provide new insights: Diversity is 'baked in' to this paradigm via specific focus on individual populations. Close observations of rich data in the socialization model can reveal both universal-like and variable characteristics of the same phenomena. Take for example triadic joint attention, presumed to underlie much communicative exchange and to represent a critical context for referential word learning (Tomasello, 2003). Brown (2011) comparatively examined triadic joint attention during naturalistic interactions with 9- to 15-month-olds in one Tseltal (Mayan) and one Rossel Island (Papuan) community. If joint attention were to emerge differently across cultural

contexts, these are two communities where we might expect to observe it: The Rossel Island children are initiated into joint attention more than 3 times as often and spend more than twice as much time actively engaged in social interactions. While Brown saw what looks like a universal propensity for triadic joint attention emerging during this age, equally important were the significant differences in how such episodes were realized: Joint attentional episodes were much more frequent, longer, and affectively aroused in the Rossel case. In both groups, vocalizations accompanying joint attention diverge from what is assumed based on research with infants in Western postindustrial contexts (i.e. acknowledgments, rather than labels; see Gaskins, 2006, for a similar argument; see also Liszkowski et al., 2012, and Salomo & Liszkowski, 2013, on universalist vs variationist perspectives on early pointing).

Ultimately, Kidd and Garcia (2022) point toward a different lifecycle for future basic research. That is, while 'generalizability' encourages researchers to build their theories with respect to one population and test them in another, future research might instead build theories that assume diverse developmental and linguistic contexts as a *starting point* (see also Singh, 2022). With a sufficiently rich data set, the analyst can probe many different operationalizations of a phenomenon (triadic joint attention, sentence complexity, etc.) to increase their own awareness of what is actually proposed to be universal versus variable in any complex behavior (see, for example, the ACQDIV project; acqdiv.uzh.ch). In the above triadic joint attention example (Brown, 2011), a measurement based on episode length would lead to significant differences between sites, while one based on existence would not, and a measurement based on accompanying language would find the two communities alike in their difference from Western middle-class contexts.

Another path forward suggested by (our reading of) Kidd and Garcia (2022) is to look beyond our narrow definition of 'the field'. Our goal has been to illustrate that definitions of diversity are contextually defined – according to the researcher's disciplinary training, model of what is important about language, and hypotheses about what drives language learning. Part of what is important about this realization is that it can hide relevant work being done in parallel fields that have a different relationship to 'diversity'.

Author contribution(s)

Ruthe Foushee: Conceptualization; Writing – original draft; Writing – review & editing.
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