

# We need a comparative approach to language acquisition: A commentary on Kidd and Garcia (2022)

First Language  
2022, Vol. 42(6) 751–755  
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DOI: 10.1177/01427237221093847  
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## Abstract

The study by Kidd and Garcia is long overdue. Their analyses of published research on language acquisition highlight the lack of typological diversity in studies of how children acquire their native tongue. We concur with their conclusion that more research on understudied languages is urgently needed. However, we argue that what the field needs is not just wider cross-linguistic coverage but a systematic comparative approach to language acquisition – one in which investigations of well-studied languages still has much to contribute.

## Keywords

Language acquisition, comparative approach, cross-linguistic variation, socio-communicative environment

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In their article, Kidd and Garcia (2022) note how the world's more than 7,000 current languages provide a treasure trove of linguistic diversity that can yield new insights into how children acquire their native tongue. Yet, their analyses of published research in four key language acquisition journals over the past 45 years clearly demonstrate that most studies in this field focus on English and other closely related Indo-European languages. In our own analyses (Christiansen et al., 2022), we found a similar bias in a large-scale multi-lab replication study of infant-directed speech (The ManyBabies Consortium, 2020) as well as in the CHILDES database (MacWhinney, 2000), which supports much of the computational work on acquisition. Given the alarming rate of language loss, as noted by Kidd and Garcia, more research on the acquisition of understudied languages is crucial. Their study is thus a welcome call to arms for language acquisition researchers.

Although we agree that documenting the acquisition of endangered and moribund languages is of utmost importance, we believe that such studies would add the most scientific value when conducted within a systematic comparative framework. That is, whereas the acquisition of individual languages so far has tended to be the norm in the field, we advocate for a comparative cross-linguistic approach to acquisition (see also Slobin & Bowerman, 2007). Specifically, we have proposed three levels of cross-linguistic comparisons (Christiansen et al., 2022): coarse-grained comparisons between the acquisition of unrelated languages to evaluate broad universalist claims, fine-grained comparisons between genetically and/or typologically related languages to assess the effect of specific factors on learning, and within-language comparisons to investigate how socio-communicative factors affect acquisition.

*Coarse-grained comparisons* between the acquisition of very different languages are fundamental to evaluating broad theoretical claims by uncovering commonalities (to establish general tendencies) or substantial qualitative differences (to dispute universalist generalizations). Here, the inclusion of understudied languages is vital, as noted by Kidd and Garcia (2022). They discuss several important examples of such comparisons, including variations in children's linguistic environment and its impact on acquisition (e.g. Casillas et al., 2020; see Christiansen & Chater, 2022, for a discussion). Of the few previous studies that have conducted cross-linguistic comparisons of language acquisition, most have done so at this coarse-grained level of contrast (e.g. Bates et al., 1984; Chouinard & Clark, 2003).

Melissa Bowerman (personal communication, as cited in Plunkett & Strömquist, 1992) pointed to a second level of systematic cross-linguistic comparison between typologically related languages to reveal how specific linguistic differences might affect acquisition. This kind of *fine-grained comparisons* can usefully be made between genetically and/or typologically related languages, whether they are understudied or not. In our own work on the Puzzle of Danish project, for example, we studied the learning and processing of Danish relative to its genetically and typologically similar neighboring languages – Norwegian and Swedish. We found that a higher degree of phonetic reduction in Danish, compared with the two neighbor languages, leads to the delayed acquisition of vocabulary and morphology (Trecca et al., 2021). Fine-grained comparisons have also been made between less studied languages, such as the investigation by Pye and Pfeiler (2014) of differences in

children's use of suffixes when acquiring two closely related Mayan languages, K'iche' and Yucatec. Future fine-grained contrasts may also yield insights into the effects of cultural and societal differences on language acquisition, for example, by comparing the acquisition of variants of the same language spoken in different countries (such as Chilean Spanish vs. Peninsular Spanish) to provide evidence about language-external influences on learning.

Whereas a few other researchers have similarly called for a more comparative approach to language acquisition (see, for example, Plunkett & Strömquist, 1992; Pye & Pfeiler, 2014; Slobin & Bowerman, 2007), we are the first to propose a multipronged comparative approach that also includes *within-language comparisons* (Christiansen et al., 2022). Given that language is inherently social (e.g. Beckner et al., 2009), it is important to study the influences of variations in social factors on language. To help isolate the impact of such factors, this is best done as a within-language comparison, contrasting language acquisition by children living in the same country but in different socio-communicative settings. This kind of investigation has primarily been conducted in Western countries and has typically centered on variations in socioeconomic status and its relation to the quantity of child-directed speech, such as the research on the '30-million-word gap' in the United States (e.g. Suskind et al., 2015; see Ochs, Kremer-Sadl, 2020, for a critique). However, we believe that a focus on differences in socio-*communicative* context instead might be more productive. For example, studies of socially diverse communities in the United States have revealed efficient alternatives to child-directed speech as avenues for language acquisition, such as learning through observation (Silva et al., 2010) or inter-child collaboration (Alcalá et al., 2018). As with fine-grained contrasts, within-language comparisons are equally informative whether they are conducted within well-studied or understudied languages.

Our systematic multipronged comparative approach to cross-linguistic research on language acquisition dovetails nicely with the call by Kidd and Garcia (2022) for more research on understudied languages. We agree with them that '( . . . ) when we ask the right questions of them, research on lesser studied and typologically diverse languages can move us forward at a faster rate than work on typically studied European languages' (p. 4). However, we would add that this will primarily be the case for coarse-grained comparisons. When it comes to both fine-grained and within-language comparisons, we are likely to learn as much – or perhaps even more, given the wealth of knowledge we already have about them – from well-studied languages as from understudied ones.

Kidd and Garcia (2022) correctly point out that working with understudied languages is both time-consuming and difficult. Moreover, given financial, familial, and practical considerations, going into the field to study such languages is not feasible for all scholars of language acquisition. We suggest, however, that we still have much to learn of theoretical importance by investigating how well-studied languages are acquired – especially when such studies are conducted within a systematic comparative approach to linguistic diversity. Only then can we hope to reap the full benefit from studying the world's more than 7,000 natural experiments in the cultural evolution of language (Christiansen & Chater, 2022).

### Author contribution(s)

**Morten H. Christiansen:** Conceptualization; Writing – original draft; Writing – review & editing.

**Pablo Contreras Kallens:** Writing – review & editing.

**Fabio Trecca:** Writing – review & editing.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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