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Critical Commentary

THE (IN)STABILITY OF GRAMMARS

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Since the inception of generative grammar, linguists have sought to achieve a more refined understanding of the underlying universals of the cognitive underpinnings associated with the human language faculty. Concomitant research over the past 60 years has led to a refined understanding of representations of linguistic knowledge, a.k.a. *I-language*, and the computational operations responsible for deriving them. Integrating bi/multilingual grammars into this research paradigm is accompanied with unique challenges, primarily due to the wealth of experimental evidence in support of the integrated nature of bi/multilingual grammar and cognition (see Putnam, Carlson, & Reitter, 2018 for a review of this literature). It has become common practice to describe the nature and quality of representations originating from bilingual grammars, especially those that are associated with the "weaker" grammar (in the case of sequential bilinguals), in comparison with monolingual controls. Such comparisons presuppose that monolingual grammars represent a preestablished standard, or at the very least a general standard of comparison, against which we can measure the quality of representations in bi/multilingual grammars. This view falls prey to what Cook (2016), de Bot (2016), and others have labeled as the "monolingual bias" that permeates research on bi/multilingual language competence. Two of the primary tenets of this fallacy are that (a) "there are separate language systems that have an impact on each other" and (b) "language exists as stable entities in our brain" (ibid., p. 133). In their Critical Commentary, Domínguez, Hicks, and Slabakova (2019) make the case for the validity of employing the term *incomplete acquisition* as apt in describing the state of grammars that "can arise when input conditions change during the course of acquisition … and that change impacts upon the overall pattern of acquisition and resulting grammar" (p. 242). In spite of the high usage of this term in analyses of "weaker" bilingual grammars, such extreme cases of reduced linguistic capacity (i.e., *incomplete acquisition*) represent rare exceptions, even in elderly speakers of moribund heritage languages (see Bousquette & Putnam, 2019). The (working) definition of *incomplete acquisition* introduced by Domínguez et al.

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unfortunately does not fare better than competitor terminology (e.g., *different*, *defective*, *deficient*, *divergent*), mainly due to the fact that establishing a rubric to "measure" the incomplete nature of acquisition requires the first step of clearly delineating exactly what *complete* acquisition is (see Putnam & Sánchez, 2013 for a summary of these arguments). Here I suggest that a more appropriate designation of these grammars would be to classify them as *unstable* or *unconsolidated grammars*.

Adopting labels such as *unstable* and *unconsolidated* verge on the same controversial status as describing these grammars as consisting of *incomplete* representations. I will, therefore, summarize this crucial distinction here. In spite of the cognitive pressure to generate discrete representations of linguistic knowledge, some degree of gradience is unavoidable (Smolensky, Goldrick, & Mathis, 2014). The symbolic nature of these representations and their interaction with performance systems in the generation of *E-language*[1] outputs (for both production and comprehension) is, therefore, based on primarily, but certainly not exclusively, discrete mental representations. Grammars that have achieved a more steady-state—consisting of richer, more discrete representations—have traditionally been the gold standard in establishing the universal properties of I-language. Due to the integrated nature of bi/multilingual cognition (including grammatical properties; Putnam et al., 2018), the simultaneous competition between these systems naturally results in representations that are more gradient in nature (see e.g., Goldrick, Putnam, & Schwarz, 2016 for a treatment of code mixing in unrelated typological source grammars to illustrate this point). Grammars that are acquired under conditions of limited and interrupted input diverge from monolingual populations in being *unstable*, that is, particular aspects of the grammar are reduced or underspecified, often resulting in representations that are noticeably distinguishable from counterparts found in monolingual grammars. These grammars also represent systems that were not allowed ample time to consolidate a full range of grammatical properties that are commonly found in monolingual grammars that were exposed to a sufficient amount input up until puberty and beyond; hence, some aspects of their I-language are *unconsolidated* when compared with stronger representations.

Attempts to arrive at a more accurate description of the status of grammatical representations for such populations of bi/multilinguals is analogous to debates from roughly a decade ago concerning the nature of representations in L2 grammars of varying proficiencies. Online studies of language comprehension have attempted to establish if any deviance in performance in L2 grammars are simply confronted with processing difficulties (i.e., and undergo "good enough" processing; Ferreira & Patson, 2007) or whether the representations generated by some L2 grammars are shallower when compared with those found in the L1 (i.e., Clahsen & Felser, 2006). The standing challenge has been, and continues to be, to clearly establish when/if these representations are shallower, showing that divergent performance when compared with L1 controls are not due to "good enough" processing. Research on this topic over the last decade has made a strong case for the existence of shallower representations (but see Cunnings, 2017 for discussion), with the exceptions coming from L2 populations who have been naturalistically immersed in the L2-speaking society for almost a decade (Pliatsikas & Marinis, 2013). After these individuals were given significant time to stabilize and consolidate these markedly difficult structures in the L2 grammar (i.e., licensing intermediate gaps in long-distance *wh*-extraction), their performance was largely parallel

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and indistinguishable from monolinguals. It is important to note that, although syntactic cues for plausible intermediate gaps were lacking in these shallower representations, simpler filler-gap dependencies posed little if any difficulties. In principle, one could extend the label of *incomplete (L2) acquisition*—or *fossilized*—to these L2 grammars, but in doing so we would fail to appreciate the significance of findings such as those by Pliatsikas and Marinis.

In summary, I suggest that labeling these grammars as *unstable* or *unconsolidated* is a more accurate description of the acquisition process and the resultant steady-state profile of these grammatical systems. In this respect, Montrul's (2016) classification of these grammars resulting from *incomplete mastery* of the L1 is also a viable alternative, although *incomplete mastery* is tacitly subsumed under the term *unstable*. Once we situate these unstable L1 grammars with the representations generated in other "weaker" bilingual (and multilingual) grammar, we can see how this shift in terminology more accurately reflects the cognitive reality of bi/multilinguals across the life span. This also calls for a shift in research practice to include other populations of bi/multilinguals as comparison groups with one another and to avoid exclusively comparing bi/multilinguals with monolingual controls (thus perpetuating the "monolingual bias"). Embracing the notion of *unstable/unconsolidated* grammars also blurs the distinction between *incomplete acquisition* and *L1 attrition* proper (Putnam & Sánchez, 2013), at least in most nonextreme cases. The fact that radically reduced and deficient grammars (i.e., incompletely acquired ones) are a rare exception lends further support to this proposal. Because elements of syntax are successfully acquired and remain principally intact in heritage grammars, this alone supports generative theorizing about the existence of universal properties of language. This also predicts that potential domains of atrophy and reduction in core elements of grammar should be extremely limited, such as the case of morphosyntactic agreement (Scontras, Polinsky, & Fuchs, 2018).

Research on the acquisition and maintenance of bi/multilingual grammars from a generative perspective provides an essential grounding to this research moving forward; however, progress will be significantly impeded if we continue to misappropriate the nature of grammatical representations generated in these populations. If these comments are on the right track, the pressure to store and activate linguistic representations that are as discrete as possible applies to all human grammars, and the acquisition of an additional grammar under less than ideal conditions may result in some linguistic knowledge being unstable/unconsolidated.

NOTE

[1]As a brief point of clarification, the distinction between I- and E-language is similar but not identical to the distinction between competence and performance. Whereas I-language is understood as the internal linguistic knowledge of individuals (and is the primary focus of linguistic inquiry in generative circles), E-language generally encompasses the linguist knowledge that is "external"—that is, characteristics shared by the community.

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