Review of **Language in Development: A Crosslinguistic Perspective** (2021)
by Suzanne Flynn and Gita Martohardjono (eds.) MIT Press.

For educators working in the field of second language learning, staying current with the basic research in bilingualism and crosslinguistic interaction will help us to better understand the progress of learners. This volume covers recent work on cross-language phenomena in a wide range of language-contact situations, both in the classroom and in the wider bilingual speech-communities. The chapters make reference to discussions and debates among investigators on difficult scientific questions around which consensus has only begun to gather. The broader controversies in theoretical and applied linguistics related to learning are also part of the interesting discussions.

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For the collection of papers on crosslinguistic research, presented as recognition and assessment of the work of Barbara Lust, the editors preview a number of threads that bring the subsequent chapters together. From the title, there are two important ways for us to understand *crossing language*: a comparative approach that considers hypotheses across spoken and signed languages and cognitively, in the mental grammars, and how they interact, of bilingual and multilingual individuals. Along another dimension, two themes unify the reports, even as they are not called by name each time: the Poverty of Stimulus (PoS) problem,[1] cross-linguistically, and the proposal of internal diversity within language. The second theme is about the hypothesis of dedicated, or specialized, domains that come into interaction in a Faculty of Language (FL).

Readers will take notice of how these themes converge on the idea, from the Preface, of the "fundamental nature of child language acquisition" (vii), attainment that the scientific study of other aspects of language development take as a (fundamental) referent.

Throughout the volume, the concept of cognitive diversity of language ability (the second theme) organizes the chapters that discuss the various empirical studies. The primary division will be between the domains of knowledge (competence) that conceivably are domain-specific (to language), and the domains that would be domain-general (for example, certain aspects of information processing). The latter allow competence to be implemented in the different kinds of language ability: conversation, giving a report (speaking), reading, etc.
Section I: Chapter 1, "Five Questions about Language Learning," follows up on the themes of the Preface touching on questions of variability in bilingualism. Chapter 2, "Coordinate Compounds in Theory and Practice," takes a detour to discuss the syntax of conjunctions. Then Chapters 3 and Chapter 4 return to the topic of crosslinguistic perspectives highlighting important methodological problems in language acquisition research.

Section II, on child language, leads off with three papers, the first two related to second language (L2) learning of English: Chapter 5, "The Development of Person and Number Agreement in Child Heritage Speakers of Spanish Learning English as a Second Language," and Chapter 6, "The Role of Gestures in First and Second Language Acquisition: A Case Study of a Hebrew-English Bilingual Child." On the ambiguity of imperfect aspect, the third paper of this section calls attention to an interesting contrast between Spanish and other Romance languages in Chapter 7, "Discourse-Morphosyntax Interaction in the Acquisition of Spanish Finite and Nonfinite Verbs."

Picking up from the discussion in the section on child language, Chapter 11, "The Tense Puzzle in Second Language Acquisition," brings the discussions to a culmination. It presents the findings of a second language learning study, crosslinguistic aspects of learning English by L1 speakers of Chinese, integrating our two themes. On the one hand, it shows how the PoS problem also applies to second languages, even for adults who after many years of immersion and study have mastered the L2 at a level distant, significantly, from typical native-speaker

proficiency. The second theme is addressed by applying the distinction between language abilities within the broader FL (e.g., processing factors) and the "core grammar" (p. 258). This second theme, as the debate in the field has shown, involves a much more difficult discussion than the first, despite what this review has summarily outlined above. On both counts, here, precision will be important. To this point, in a future revised edition, the authors might consider correcting the misrepresentation of the Full Transfer/Full Access hypothesis[2] (pp. 282—283) as it is presented, prematurely, as not consistent with the findings reported in their study. The earlier summary of FTFA (pp. 259—260) is in fact accurate. See White (2003, 2015) for a full discussion. In fact, a careful reading of the results section of the paper strongly points to an interim conclusion: that neither the authors' theoretical approach in this chapter nor an explanation of the findings based on the FTFA approach are disfavored by the data.

Chapter 5 should be read together with Chapter 11 as it implicitly makes reference to closely related theoretical problems. "The Development of Person and Number Agreement in Child Heritage Speakers of Spanish Learning English as a Second Language" presents the compelling findings of L1 (heritage language) attrition. This paper is a study of second language learning of English as the L2 learning takes the trajectory of *Replacing Language* development (an alternative term to "attrition"), unfolding between mean age 4;6 and 6;2. The findings are important to closely examine because the longitudinal study selected subjects who were evidently Spanish-dominant native speakers upon school entry at the beginning of the study, residents of a community in which over 70% report speaking Spanish at home. Readers can consult the surprising assessment data that challenge leading proposals in the field for explaining language *shift* (another alternative term for "attrition," in this case borrowed from the sociolinguistic literature) among child bilinguals. Very briefly, the factor of adequate/inadequate input from the shifting language (Spanish) to the acquisition mechanisms of the FL does not explain the *"competition" effect* (p. 121), elegantly presented in the results section. The "competition" between the two mental grammars is associated in a complex way with the robust development of the *Replacing Language*.

Chapter 12, "Bilingual Processing of the First-Learned Language: Are Heritage Speakers and Late Bilinguals Really that Different?," follows up on the research on the hypothetical properties

of heritage language. The authors consider the question of heritage language development from a somewhat different perspective, congruent, at the same time, with Chapter 5. And notably, the question of transfer in L2 learning is examined in Chapter 10, "Syntactic Ambiguity Resolution in Native and Nonnative Speakers of Chinese," from another vantage point. Interestingly, in this study the assessment comparisons are not about learner error. In a crisp experiment, the authors ask: how do native speakers and learners parse ambiguous verb constructions in the target language, and why do they do so differently?

The culminating discussions actually come at two peaks. The earlier focus on the two themes of the book was presented back in Chapter 3, "Hard Words." Here, the authors show how the PoS problem not only applies to the developing L2 grammar (also called *interlanguage*) but to the L1 lexicon, to vocabulary learning. As the authors propose, the explosion of word learning beginning before the child's second birthday would not be possible without the "bootstrapping" of early emerging syntax, in particular for the "hard words," starting with the abstract nouns. Without it, vocabulary development would be marked by the slow, domain-general type, learning that characterizes the incremental advances in adulthood. The "foundational vocabulary" of the 18-month old, consisting largely of nouns, allows for the constructing of a rudimentary clause-level syntax; the "structural placement of nominal arguments" in turn becoming the critical source of evidence for building a lexicon that includes a vocabulary beyond the concrete, situation-dependent, observable realm (p. 38). The newly available syntax is what is critically necessary for solving the vocabulary "mapping problem," in particular for the hard problem of verb learning (pp. 38—40).

Chapters 8 and 9 should follow the Hard Words chapter because all three are related indirectly to the PoS problem. An interesting discussion now takes up the question of infant-directed speech (IDS) in Chapter 8, "A Hybrid Approach to Infant-Directed Speech," "Discontinuous Dependent Morphemes in German and English Parental Speech: Input Differences between Two Languages." In the end, the decisive studies will compare the effect of this kind of parental register on ultimate attainment (assessment of L1 grammatical competence, for example, at age 6 or 7) between children who received IDS during the formative years and those who did not. The authors do not mention this research question; and importantly, the relevant category again in

this case is the "core grammar," not aspects of broader language development aligned with literacy-related and school-related language ability which is demonstratively tied to the kind of input factors during childhood described in these two chapters.

The key distinction in this series of chapters (3, 8 and 9) is taken up for the last time in Chapter 13, "Identifying Early Language Changes in Alzheimer's Disease: Extrapolating Lessons Learned from Methodologies Used in Investigating First Language Acquisition." The distinction is between what we could call the FL (narrow) and the FL (broad). Altogether, the thirteen contributions actually draw from a wide spectrum of research on language development, across the entire lifespan, a reflection, curiously, of the developmental parallels across childhood and adulthood.

Notes

1. The Poverty of the Stimulus (PoS) problem is a claim from research originally on child learning acquisition that tries to account for the rapid mastery of our mother tongue, approaching adult-level competence even prior to enrollment in elementary school. Children appear to "go beyond" the linguistic information that they receive from the environment. Associated initially with debate between B.F. Skinner and Noam Chomsky, and linked to the theories of Universal Grammar, it remains controversial. More recently, the PoS problem has been extended to observations of second language learning. The "poverty" here refers to the evidence that suggests that L2 learners also go beyond the available "stimulus" (language experience and teaching) in the development of their L2 competence. According to the theory of PoS, second language competence often significantly surpasses exposure to and practice with the target language, even though learners often do not ultimately attain complete native-speaker levels of proficiency in their L2.

2. Full Transfer/Full Access (FTFA) hypothesis: While second language learners have (full) access to the acquisition mechanisms of Universal Grammar, their "starting point" in learning the L2 is the L1 that they have acquired completely as native speakers. Progress in second language learning, evidenced in performance, will be affected by transfer effects from the mental grammar of the L1. Transfer from L1 accounts for some (not all) of the errors observed in L2 listening and

speaking. Not just in regard to errors, transfer also accounts for the learning resources that L2 learners take advantage of (sometimes called "positive transfer"), revealed in both comprehension and expression. At the same time, FTFA acknowledges the PoS problem in L2 learning, because of the FA – Full Access to UG (see Note 1).

References

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