Child language: Acquisition and growth

By Barbara C. Lust


Reviewed by Paul Thomas
SIL International

Child Language: Acquisition and Growth is mostly a survey of the literature surrounding child language acquisition. Assuming little prior linguistic knowledge on the reader’s part, Lust spends the first four chapters defining the problem of language acquisition and developing a theory to account for this acquisition. Her basic hypothesis is that children are born with a language facility (LF). That is, the brain is programmed at birth with all the structures necessary to do linguistic computation.

In chapter 4, she explains various models of language development, which she groups into “rationalist” and “empiricist” systems. She proposes to argue for the rationalist model, based upon various works by Chomsky concerning an innate universal grammar (UG).

In that chapter, she also references the work of herself and her associates (62-63) concerning a sub-model of UG, which she calls the strong continuity hypothesis (SCH) or “grammatical mapping”. It is not clear right away that this is the sub-model she is favoring, though she does say that it has the virtue of conforming to a tenet of developmental psychology, namely that the cognitive mechanisms of children and adults are identical. That this is the favored sub-model only comes clear in the concluding chapter’s brief subsection where she considers “grammatical mapping” to be a useful framework for guiding future research. Indeed, that is the only place where grammatical mapping gets defined: “children use UG to confront the data of the speech stream around them and to create developmentally the Specific Language Grammar (SLG) of their language” (267). “Grammatical mapping” also appears as a heading (164) and in a footnote (203). In other words, Lust has a sub-framework in mind, but her main goal is to demonstrate the superiority of a rationalist-based LF to empiricism.

She continues by extensively surveying, chapter by chapter, research from each of the main linguistic sub-disciplines (phonology, syntax, semantics), as well as developmental psychology, neurolinguistics, and methodology. She covers data from across a number of languages and language families, and she shows in the linguistics chapters how the data supports the LF.
linguistics-specific chapters helpfully end with well-developed conclusions, including at least “Toward an explanation” and “Open questions” subsections.

Does the author succeed in establishing this framework as a model for how children acquire language? I think broadly speaking, yes. Lust herself points out the paucity of languages in which developmental research has been done, and especially a lack of research protocols applied across a number of languages. Furthermore, she points out that much remains to be discovered regarding “the precise specification of the content of UG as a model” of the LF (267).

What research results there are, are fascinating. A reader can grasp this quickly by going to appendices 2a, 2b, and 4, which list research results by age of children studied. Infants at a few days to two months old, (to which I have added page numbers where possible):

- Distinguish maternal voice, speech, and non-speech (107-109),
- Perceive a wide set of sound distinctions (appendix 2b has a list of research results for the ability to make sound distinctions)
- Discriminate canonical and non-canonical syllables (150-151),
- Discriminate prosodic differences in stress and accent (151),
- Distinguish between maternal and other language (107), and
- Discriminate between lexical and functional words (192-193).

Additionally, by 4½ months, children show evidence of clausal segmentation (189). They are even capable at this age of doing such segmentation in a foreign language to which the child has had no previous exposure (192)!

The following concerns my reaction to this book as a teacher of language learning. Given the hypothesis and supporting evidence that the adult and child language faculties are identical, it feels quite plausible that adults can have faith in their language faculty to help them learn a new language, though how much of the adult LF comes from UG and how much from the adult’s specific language is an open question. Language and Culture Learning (LCL) consultants often teach (for example, Brown 1991, Krashen and Terrell 1995, Thomson 2002) that there are certain characteristics of the way children learn languages that adults do well to imitate, such as:

a. Listening to massive amounts of comprehensible, though slightly challenging texts,

b. Learning to comprehend before learning to produce language,

c. Some, but not a lot of correction,

d. Incremental learning that is neither too challenging nor too easy (often alluded to as “i+1”), and

e. It is sometimes helpful even to do language learning in the presence of children.

Looking at this list after having read Lust, it seems that (as in (a)) texts listened to need not always be comprehensible because from the earliest stages, the mind is mapping speech, however incomprehensible, to UG structure. If adult and child faculties are identical, then in an immersion situation, an adult need not get frustrated if much of the language going on around him is not comprehensible, because the brain will still over time be working on the language stream to parse it into phonological and syntactic units, even if it cannot sometimes arrive at meaning.
As to comprehension before production (principle (b)), Lust reports research showing that children seldom welcome or gain from either an adult’s child language imitation or attempts at correction. A typical adult-child interaction might go,

*Adult:* See the puppy!
*Child:* Buppy!
*Adult:* Yes it’s a pretty ‘buppy.’
*Child:* No. Buppy!

In other words, the child knows full well what ‘puppy’ sounds like, even if she cannot produce the word fluently. The adult’s attempt to produce the word like the child says it meets with resistance. So the nurturer ideally learns to respect the learner’s comprehension, even if it is not manifested in production. Furthermore, if the adult in the example attempts correction (e.g., “No, not ‘buppy,’ puppy.”), the child, disliking correction, will frequently resist (relevant to principle (c)). Do these kinds of resistance apply to adult language learners as well? Yes, probably, to native speaker imitation of learner mistakes. However, it seems (to me) that adult learners need to train their helpers to know what kinds of feedback are helpful and what kinds of errors could be allowed to slide.

As to incremental learning (principle (d)), it is quite apparent that child learning goes on simultaneously in all aspects of grammar (and pragmatics, though Lust only covers this briefly), and specific language grammar formulation is going on automatically even with incomprehensible input. In other words, the learner need not be overly concerned with acquiring small increments of information in discrete aspects of a grammar. Indeed, Lust shows how child learning in one grammar component, such as syntax, will cause “bootstrapping” in another component, such as semantics. Lust (264): “The developing dimensions of language knowledge seem to support rather than precede one another.”

Lust shows where certain language phenomena are not innate, such as case markings and gender (ch. 11). Also, children might acquire more nouns at first in one language, and more verbs at first in another. These sorts of non-UG phenomena give rise to questions about how to go about learning a language: Practicing in the presence of children (principle (e)) may lead the learner to miss grammar that the children have not yet mastered. Other questions about language learning arise, knowing how child language development happens. For example, would non-UG language phenomena be more efficiently approached through a process of drilling on flashcards, for example? Should a syllabus be sequenced to imitate the child sequence of language acquisition? What aspects of a language may the learner efficiently approach through learning syllabi that do not seek to imitate child learning?

I have one small gripe. In citing examples from other research, particularly from languages other than English, it sometimes takes considerable staring to understand what an example is illustrating, as to what exactly is non-adult-like in the child’s utterance. I also have a gripe about the publisher’s characterization of the book as a “textbook.” There being no exercises or discussion questions, it does not fit well into that category. “Reference book”, “handbook”, or “research literature survey” feels more apt.
Other than the minor problems I had, the book is a fairly easy read, and much of it comprehensible to a college graduate with little exposure to linguistics terminology.

**References**

