
This book is an overview of language development ranging from fetuses and their earliest sound perception in the womb through 14-year-olds with Williams syndrome, although the focus is primarily on the first three years of development. Very clearly written in an engaging style, it is accessible either as a textbook suitable for students with no previous background in linguistics or psychology, or as a resource for the educated lay reader eager for a solid grounding in child language development. It is not a general ‘how to’ book for parents or educators, nor does it focus on how scientific knowledge can be applied in child rearing or schools. This is the second collaboration by the mother–daughter team of Karmiloff-Smith (the mother), a well-known pioneering researcher in the field of language development, and Karmiloff (the daughter), who also conducts language development research. It comprises eight chapters, as well as a chapter-by-chapter guide for further reading and an index.

The book begins by introducing the marvel of language development in Chapter 1 and offering a brief overview of the chapters to come. Particularly
result more from limited vocabulary resources than from incomplete conceptual understanding, citing research showing that three-month-olds can perceive very subtle differences both within and between categories. A discussion of constraints on word learning is particularly useful in presenting this often complex literature both clearly and succinctly. The constraints are divided into three categories — lexical/cognitive (mutual exclusivity, fast mapping, whole object, taxonomic), social (joint attention, gaze alternation, pointing), and linguistic (syntax, morphology, principle of contrast). A brief discussion of relevant research is presented for each constraint, and the interplay between the constraints is stressed. A short section deals with how children represent and store words in the brain; processing strategies change to deal with the growing vocabulary at early stages, but primed monitoring tasks show that storage is highly organized and hierarchical from quite early on. At the end of the chapter, a discussion of developing metalinguistic awareness again illustrates the importance of methodology in acquisition research: new online tasks reveal that five-year-olds know that both abstract nouns (e.g. silence) and function words (e.g. the) are words, whereas previous studies requiring conscious reflection on the part of the child (e.g. asking the child to answer the question: ‘Is ‘when’ a word?’) failed to reveal this knowledge until as late as seven or ten years of age.

The acquisition of morphology and syntax is the topic of Chapter 5. It begins with a summary of findings about early knowledge of grammar as discovered through the head-turn and preferential-looking procedures; highlighted among these are the child’s ability to differentiate order of sounds in the input by two months, to detect meaning from word order by 17 months, and to detect meaning from the transitivity of the sentence by 21 months. A section on early morphology covers Brown’s 14 morphemes, MLU as an indicator of grammatical complexity, and what overgeneralization and omission of grammatical morphemes show about children’s knowledge of grammar. The syntax section discusses use of pivots as a reflection of development of relevant cognitive concepts (e.g. alikeone reflects disappearance) and the association of variable meanings with variable word orders at the two- to three-word stage. Tantalizingly introduced but not developed are the single vs. dual process mechanisms for past tense storage and the role of explicit vs. implicit correction in learning grammar. The chapter includes no information on aspects of syntactic development beyond word order, such as interrogatives, passives, causatives, null subjects, relative clauses, anaphoric reference, and the like, or on the effects of developing literacy on the development of more complex syntax. In compensation, however, the book is unusual among overviews of the field in presenting a very even-handed review of the different theoretical perspectives on grammatical development, including some that do not often find their way into such books. Perspectives covered include nativism, bootstrapping (prosodic, semantic, and syntactic), sociopragmatic
approaches, cognitive approaches, processing approaches (operating principles, competition model), construction-based approaches, and connectionist modeling. The authors are exemplary in comparing and contrasting each of the approaches, showing the strengths and weaknesses of each, and pointing out ways in which they might be complementary. They are careful to note that all researchers believe that some things are innate and some are learned, and they present the theories on a continuum between nativism at one extreme and construction-based approaches at the other.

Chapter 6 looks beyond the single sentence, focusing on the pragmatics of dialogue and the development of narrative in children aged three through nine years. Issues related to dialogue include the origins of turn-taking within early caregiver–child speech, the difference between child–child and adult–child interactions, and the development of the skill of maintaining conversation by creating links between utterances and initiating further responses. A quick peek at some data offers evidence that dialogic interactions change radically between ages three and five years, from a series of unrelated utterances or two-sentence question–answer exchanges to a more sustained interaction focusing on both content and form. The section on narratives covers both coherence (i.e. the overall structure of the narrative and how it serves to elaborate a goal-directed story that makes sense) and cohesion (i.e. the linguistic devices used to link sentences together). Development of coherence in both production and comprehension, based on data from English, is discussed relatively briefly. A longer section presents information on cohesion. Crosslinguistic studies based on the Frog Story are described, but only one result is mentioned (language-specific differences in focusing on manner or path in event descriptions). More information is given about a study in French and English based on a six-picture stimulus; results concerning the various syntactic forms used in subject position and how they function at different ages are discussed in some detail.

Atypical development is covered in Chapter 7, with sections on language development in individuals who are deaf and blind, and in children who have specific language impairment (SLI), Williams syndrome (WS) or Down syndrome (DS). A well-written section on language acquisition by children who are deaf begins by making a strong case for signed languages being real languages, and touches on acquisition in a variety of situations (deaf children of native-signer and L2-signer deaf parents, deaf children of hearing parents, and hearing children of deaf parents); cochlear implants and oral instruction are not dealt with. The effects of lack of access to visual context and of changes in input to account for this (e.g. more directives, fewer pronouns) are highlighted in the discussion of acquisition by children who are blind. Specific language impairment is treated in some detail with a focus on both different types of SLI and possible causes for SLI. Particular attention is paid to recent work on grammatical SLI and the effect of perceptual salience, as well as to the relative plausibility of SLI being caused by a defective ‘grammar gene’ on the one hand vs. by a malfunction of some aspect of the general developmental process on the other. A very good section on WS reviews current research showing severe early delay in language acquisition by children with WS, followed in later childhood by quite fluent language mixed with subtle syntactic deficits. Results from brain imaging studies show that language is processed differently in WS brains than in normal brains, leading the authors to question whether atypical development can adequately serve as a window into typical development. The chapter ends with short sections on language development in individuals with DS, and on brain plasticity evident in studies of individuals with focal brain injury.

Chapter 8 finishes the book by explicitly addressing the nature–nurture debate, which is a subtext throughout the book. A treatment of communicative capacities in non-human primates concludes that while many primates indeed have complex systems of communication, the evidence to date indicates that these abilities are nonetheless significantly different from those of both child and adult humans, especially in the domain of morphosyntax. Although the authors agree that crucial aspects of language are indeed species-specific and that something about them must be innate, they nonetheless argue against the idea that all individuals come with a fully specified grammar at birth. They claim instead that humans are programmed with a more general capacity for learning, which includes learning grammar, and that the brain becomes specialized for language only over developmental time. They conclude the chapter and the book with the prediction that the next significant set of answers to the nature–nurture question and to the full story of language development will be found in longitudinal brain imaging studies.

Several features make this overview stand out from others available in the field. First, while amply fulfilling the task of covering the most important knowledge accrued over the years, this book also particularly emphasizes the latest research and latest techniques that often do not find their way into general overviews; in addition to the chapter on research paradigms, this focus is especially evident in the sections on speech perception and WS, as well as in references to brain imaging research sprinkled throughout. Second, the treatment of theoretical approaches to language development is especially thorough and diverse for an overview. Although the authors are carefully even-handed in the first half of the book, their own position becomes more evident in the final two chapters when they use evidence from language disorders and the domain-specificity of language to argue against a strong view of the innateness of language. Third, this book is eminently readable in a way that makes one eager to find out more about an exciting topic rather than struggling to get to the end of the chapter before nodding off. I would happily recommend it to anyone seriously wanting to learn about the miracles of language acquisition, and would feel confident that they would thoroughly
enjoy the book while also getting a very accurate and up-to-date view of the field.

Those who might think of using this book for a class on language acquisition, however, should be aware of three factors that might present some difficulty. First, although the book is admirable in covering as much as it does given its length, it leaves out several topics which might be expected in an introductory text. These include development of communicative intent, babbling and productive phonology (although phonological knowledge evidenced by perception is covered), morphosyntax beyond about age 2–6, pragmatics (e.g. routines, speech acts), use of language in social contexts (e.g. register, politeness, dialect, gender), and acquisition by children who are autistic. Second, information on acquisition in languages other than English is not presented as consistently as would be optimal. Several references are made in the early chapters to the differences in features of child-directed speech (CDS) between Western mainstream cultures and other cultures in North America and around the world; the authors point out that particular features of CDS prevalent in Western cultures but not present universally cannot be necessary for language development. However, virtually no detail is given about the characteristics of CDS in other cultures so one must take these statements completely on faith. In addition, little information is presented about general language development in languages other than English. Notable exceptions are found in discussions of processing approaches to acquisition in Chapter 5 and of cohesion in Chapter 6.

A third difficulty for use as a class text involves the treatment of references. In a book such as this which is written to be readable, it is perfectly understandable that the text is not peppered with references and instead has a bibliography for each chapter at the back. However, it is unfortunate that research is often discussed without being attributed to a particular researcher in the course of the prose. This makes it difficult for students to get a picture from their own reading of the major figures in the field; it also does not help students to extend their knowledge by further reading on a topic since it is often difficult to link the references in the back of the book with a particular topic discussed in the text. Typical examples of lack of attribution include the section on changing meanings of words at the end of Chapter 4, the section on cohesion in French narratives at the end of Chapter 6, and the section on language in non-human primates in Chapter 8.

A more general complaint is with the subtitle ‘From Fetus to Adolescent’. Although the authors do an excellent job of covering a variety of research on language abilities of the fetus, very little treatment is given to adolescent language. Only a tiny bit of information about language learners older than about 3 years of age is presented in the first 5 chapters of the book (i.e. metalinguistic understanding of the term ‘word’ in Chapter 4), even though research certainly exists on the development of vocabulary and morphosyntax in children of older ages. Chapter 6 discusses narratives from children as old as 10, although the older ages are not the main focus of the chapter. Chapter 7 on atypical development pays more attention to development in older learners up to age 14, although the language skills discussed are often equivalent to those in much younger typical learners. Thus, readers who are looking for detailed treatment of language abilities in the adolescent will almost certainly be disappointed.

All in all, this book deserves to be heartily recommended. Its engaging style makes it one of the most readable introductions to language development that I have come across. The few shortcomings are more than made up for by the many strengths. I expect this to become a landmark book for lay readers and students alike.

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