
This workbook is a revised edition of the volume published in 1984 by Larry Selinker and Susan Gass entitled *Workbook in Second Language Acquisition*. Like the first edition, this edition provides a research-centered view of second language acquisition (SLA) that seeks to build an awareness of the issues, types of data, and methods of analysis through a series of practical problems of data analysis and related questions. The data and problems, which all focus on English as the target language, are drawn from articles published between 1968 and 1993, the majority of them “SLA classics” published in the 1980s. The book includes a short glossary and has accompanying tape-recorded material not provided to the reviewer.

The problems are divided into seven sections, on research methodology, lexicon, syntax and semantics, phonology, variation, oral language, and communication strategies. The individual problems are well constructed and should be relatively easy to work through. Many problems are introduced by background discussion of the language point illustrated, and some also include theoretical or methodological background. The questions provided in relation to each problem should lead the student to the desired conclusions and ultimately result in a good understanding of issues surrounding the types of data and methods of analysis illustrated.

This is clearly a useful book, and I would recommend it for any research-oriented degree that seeks to prepare students in second language acquisition or, more broadly, in data analysis traditions of linguistics. At the same time, there are some constructive criticisms that can be made; I term these “constructive” in the literal sense, meaning that I would like to see certain features built into a future edition.

First of all, the coverage seems somewhat unbalanced and biased to certain areas and traditions of SLA research. For example, the syntax and semantics section is longer than the others, including ten problems in aspects such as question formation, negation, adverb placement, subjacency, auxiliaries, and reflexives. The sections on research methodology, the lexicon, variation, and communication strategies, by contrast, include only two or three problems each.

Of particular note is the fact that the research methodology section addresses only four types of data in three problems designed to lead to an understanding of the comparative value and limitations of different types of data. Included in this section are data produced as judgments of grammatical acceptability, which can be compared with relative clause sentences produced by speakers of different languages (from “kernel sentences”) by sentence combining to test the acces-
sibility hierarchy. In a final problem, data from an “information-gap” descriptive task are to be compared to retrospective reflections on the question and answer sequences generated in the first task. The only linguistic/theoretical background provided in this section is on the accessibility hierarchy, and there is no background addressing issues of methodology.

The book includes no data of any sort from computer analyses such as concordances or acoustic speech analysis, both of which have been used in applied linguistics for 20 years. It also excludes bilingual data involving code switching or code mixing, language diary data, language attitudes data, and, in general, survey or questionnaire data. Thus, many types of data and many analytical techniques that researchers working in SLA use are not represented in this book.

The choice of data for inclusion paints a picture of the field that is strongly centered on the American SLA tradition. Although the book is intended to be a self-standing work, it actually presupposes a great deal in the way of familiarity with this SLA research tradition and, indeed, with the specific articles from which the data are drawn. The presuppositions of the book as a whole and each section of it are, to a large extent, implicit; and while many of the problems include background information, some do not. Thus, to a greater or lesser extent, the use of each problem is dependent upon the reader being able to intuit or reconstruct the context of the research. The inclusion for each problem of background information given in a consistent format that includes theoretical, linguistic, and methodological points would improve the usability of the material, as would a listing of suggested readings for each problem. It would also be of value to include an introduction for each section providing overviews of some of the issues and research traditions for that area.

In addition, it would be extremely helpful to have an explicit reference for the data of each problem in order to be able to tie in the relevant reading to the problem work. At present, the data sources are given only as a general listing of permissions obtained in acknowledgments at the beginning of the book, with no indication of which problems in the book they are to be referenced to. These acknowledgments are in the form of a very long, confusingly punctuated list of references of inconsistent grammatical structure, which in some cases makes it impossible to decide which part of the preceding context is relevant to the attribution of permission and publisher. One permission source is listed inadequately as “Heidi Riggenbach for data from her dissertation.”

In general, one has the sense that insufficient attention has been paid to readers’ needs with respect to contextualizing this work, identifying research issues, and being able to consult original sources and related readings. The short introduction is of little assistance, as it provides only a statement of the purpose and intended audience of the book, followed by a brief summary of contents. It is also, unfortunately, not understandable in some places, as in the following passage, where I have added italics to flag parts that are unclear, inconsistent, or not fully coherent:

– It is not sufficient for students to come up with a statement that “more data are needed.” Rather, that statement should be couched within a clear theoretical framework. We believe that students should go from the data to some conclusion that leads to a statement that has basically three parts: a) what else you would
like to know about these data; b) why this, specifically, and not something else; and c) how one can empirically research what you want to find out. This sequence of questions force [sic] students to constantly keep in mind the important question of falsification. (p. ix, italics added)

Teachers seeking to adopt the book for their students will naturally be interested in what the authors advise, but here, as elsewhere, much remains unclear. It can thus be hoped that a third, revised, and expanded edition of this book will be forthcoming in the near future.

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The study of gesture, especially its relationship to spoken and signed languages, has become a broadly studied topic for researchers from various fields, including neuropsychology, cognitive psychology, evolutionary psychology, human development, and communication disorders. One possible reason for the wide interest in gesture is its universality. People of all ages and cultures use gestures for various purposes. Young language-learning, hearing children often use gestures alone or in combination with speech to help express themselves to their interlocutors, for example, pointing to a desired object while saying “mine.” As a more striking example, deaf children in Nicaragua who had previously been unexposed to any conventional sign language, used gestures to develop home-sign systems that eventually developed into Nicaraguan Sign Language (Kegl, Senghas, & Coppola, 1999). On the other hand, gestures are often used in situations where the underlying purpose of the gesture is less clear. For example, people who are blind from birth are nonetheless found to gesture in conversation (Iversen & Goldin-Meadow, 1997), and adults gesture frequently, and often subconsciously, during conversations with one another. Despite their omnipresence, we know relatively little about gestures’ origins, their relationship to language, and, in some instances, the purposes they serve.

In their edited volume, Messing and Campbell have compiled an intentionally broad summary of the various angles of current research on the relationships between gesture, speech, and sign, resulting in a truly interdisciplinary collection of work by experts in diverse fields. Opposing views have developed concerning the relationship between the underlying mechanisms for gestures and speech. One theory proposes that gesture and speech develop together as part of the same underlying psychological structure (McNeill, 1985). An alternative view, as presented by Freyerson in the current volume, suggests that there is not a shared underlying neurological system for linguistic and gestural activity. This is just one example of current discrepancies in research on gesture.

This book is divided into two main sections, bound by an introduction to signed languages and a unique epilogue on the practical applications of the study of gesture. Part 1, on the neurobiology of human communication, contains
four chapters, and Part 2, on the relationships among speech, signs, and gestures, contains six chapters.

The introduction by Messing provides a general overview of signed languages, with emphasis on their acceptance as “real” languages, how they vary from each other and from spoken languages, and conventions for the transcription of signed languages. The review is basic, yet it provides a good starting point for some of the chapters to come, specifically Corina’s chapter, which presents research on the effect of neural disorders on sign language use in deaf individuals. In particular, he demonstrates that left hemisphere damage leads to errors in specific domains of sign language (phonology, morphology, semantics), as in spoken language. Yet right hemisphere damage affects sign language structures that rely more heavily on spatial information, such as discourse abilities and the use of classifiers. Through this discussion, Corina presents interesting examples showing the effect of Parkinson’s disease on the signer’s phonetic articulation (i.e., clarity of hand shape) and the influence of apraxia on signers’ linguistic versus sequential movement abilities. Overall, the chapter makes a strong argument for looking at sign language as a window through which to understand language-related neurological disorders.

Ekman, in his chapter, outlines five specific types of nonverbal signals — emblems, illustrators, manipulators, regulators, and emotional expressions. His typology grows out of an evolutionary-ethological approach to the study of gesture. Ekman offers cross-cultural and historical examples of the nonverbal signals, providing us with insight into how these specific body movements and facial expressions can be interpreted and why they are used. He also describes a coding system used to characterize facial actions, which has aided researchers in studying the connection between emotion and facial expressions as well as understanding the role of facial expressions in other fields (e.g., psychotherapy). Although this chapter is useful and offers insight into a common typology of gesture, it does not necessarily fit in with the more research-oriented, neurological-processing focus of the other three chapters in Part 1 of the volume.

In the final chapter in Part 1, Campbell examines the role of the perception of facial expressions, or face acts, in speech and signed language communication. In particular, she discusses the neurological bases of speechreading (reading the face for speech) and presents some evidence that when speech is heard it activates areas in the left hemisphere more than silent speech, which activates areas for perception in both the left and right hemispheres. Campbell also presents surprising empirical results showing that, compared to deaf signers, hearing people learning sign as a second language showed more evidence of the categorical perception of contrast when presented with a morphed series of facial images portraying question types in sign language. These findings are unanticipated, as one would have expected the deaf native signers to be better able to distinguish between the facial expressions than the non-native signers. This chapter emphasizes the empirical advantages of studying how different face readings make use of various neurological mechanisms.

Overall, Part 1 of the volume (consisting of chapters by Feyereisen, Corina, Ekman, & Campbell) presents an array of information about the neurobiology of gesture, speech, and sign. The chapters vary in the background knowledge
assumed of the reader from the most basic (Ekman’s chapter) to the most complex (Feyereisen’s chapter), yet as a whole they present a range of theoretical approaches taken in studying the neurobiology of human communication.

Part 2 of the volume starts off with McNeil’s discussion of the development of the process underlying utterances accompanied by gestures, or “growth-points,” to use his terminology. By looking at speech-synchronized gestures in hearing individuals through his growth-point analysis, McNeil breaks down the unit and accompanying underlying thought processes and goes on to propose a theoretical relationship between language and the nature of consciousness. In their following chapter, Krauss and Hadar oppose the view of McNeil and argue that the use of lexical gestures by hearing individuals in communication offer relatively little semantic information that is useful in the understanding of an utterance. They propose that the primary purpose of these gestures is to help the speaker in word retrieval, and they describe a cognitive model for the production of lexical gestures and its affect on speech production.

Turning to the role of gesture in young children’s language learning, Goldin-Meadow highlights the adaptability of gesture by describing how hearing children and deaf children not exposed to conventional sign language use gesture in very different ways. More specifically, once the hearing child begins to gesture at around 10 months of age, the use of gesture and gesture-speech combinations follows a fairly predetermined process. At first, gesture is used alone; then, during the one-word stage of verbal development, gesture accompanies speech and often conveys the same information as speech. Either at this time or a bit later in the one-word phase, gesture and speech combinations are produced in which the gesture adds to the thought portrayed through speech, and it is these combinations that predict the onset of the two-word stage. This process is presented as evidence that gesture and speech become part of the same unified system during the one-word stage of language development. For the deaf child who is not exposed to sign language, gestures are used in the development of home sign systems and take on the properties of conventional sign and spoken languages. Interestingly, Goldin-Meadow points out that these home-sign systems are developed primarily by the children, as the home-sign linguistic structures are not evident in the gestures that parents produce when communicating with their children. This chapter contributes significantly to the volume, as it is the only chapter that concerns the development of gesture in children. An additional chapter discussing the role of maternal gestural input to hearing children might have been useful here as well in order to show that the relationships between gesture, speech, and signs are not necessarily only within-individual relationships (Iverson, Capirici, Longobardi, & Caselli, 1999; Rowe, 2000).

Emmorey’s chapter is an appropriate follow-up to Goldin-Meadow’s contribution, as she discusses whether signers gesture and, if so, whether their gestures are similar to those produced by hearing individuals. The chapter starts by providing ample evidence that sign systems operate under constraints similar to those in spoken language but not found in gesture. After providing background on the types of gestures hearing people use when they speak and their corresponding constraints, Emmorey provides detailed examples of how signers gesture and how their gestures are different from their signs, even though the two
groups are often hard to distinguish. She shows us that signers either gesture and sign by using both hands, one for holding a sign constant and the other for making a gesture, or alternate gestures with signs, as opposed to gestures in hearing individuals, which most often occur simultaneously with speech. However, signers frequently use body and facial gestures simultaneously with sign. In addition, she explains that the manual gestures of signers take more of a conventional form than those of hearing individuals, and thus are not linked to specific lexical signs. In light of her evidence on gesture use among signers, Emmory argues against the view presented by Krauss and Hadar, that gestures are used primarily for word retrieval.

In their chapter, Sotkoe and Marschark, pioneers in the study of sign language, discuss the relationship between signs, gesture, and language. Through addressing the fine line between whether gestures should be considered verbal versus nonverbal, the authors adopt McNeill’s perspective, that spoken language and gesture come from the same internal processes (McNeill, 1985), and provide additional evidence from work with deaf individuals suggesting that gesture and sign language signs also derive from the same verbal source. They offer an evolutionary explanation of gestures as the starting point for language and encourage us not to discount the role of gesture in the study of the history of language. In the final chapter of Part 2, Messing describes the behaviors of hearing individuals who learned American Sign Language (ASL) as adults. She introduces the reader to a phenomenon that she observed in communication among these adults, which she terms “bimodal communication” (BC), in which signs are interspersed with nonlinguistic gestures. She presents empirical results showing that the frequency of use of BC among these adults increases with the level of training in ASL. In addition, she describes the particular purposes for which these subjects use BC. She includes a thoughtful analogy on the similarities between the use of BC in hearing ASL users and the use of code switching among bilingual individuals in two spoken languages.

Taken together, the six chapters that make up Part 2 of the volume present an array of perspectives on the relationships among speech, signs, and gestures. The methods employed by the authors to study these relationships vary greatly and further emphasize the interdisciplinary nature of the field. This volume is made particularly distinctive by the concluding epilogue in which Justine CasSELL describes how theories of gesture–speech communication have been modeled through the computerized Animated Conversation System. This type of applied computational research will allow researchers to find gaps in their knowledge through the testing of their theories and will ultimately move us closer to a more unified understanding of the relationships between gestures, speech, and signs.

As stated in the preface, the volume is intended for “professionals, graduate students, and upper-level undergraduate students with an interest in gesture and a background in languages, linguistics, psychology or computer science” (p. xii). The chapters in the volume are very appropriate for this type of audience. In addition to presenting new material, the authors include necessary background information on topics such as language acquisition, the development of gesture and sign, different types of gestures, and how to define gesture, which provides readers with the knowledge base to understand the various perspectives
presented. However, in the end, the readers are left on their own to draw conclusions based on the diverse perspectives presented about the nature of the relationships among gesture, speech, and sign.

REFERENCES

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Examining the language abilities of children with language disorders should be a deductive process, using much more than the data that formal measures provide. The assessment should be a systematic, psycholinguistic exploration of aspects of a child’s input and output, with a focus on the attempt to pinpoint specific areas of deficit within the language-processing system. Chiat, in this insightful and extremely accessible book, provides basic profiles of children with language disorders, along with case study examples, that both illustrate various forms of language disorder and demonstrate the use of tasks, commonly applied in psycholinguistic research, to problem-solve specific cases. Chiat is a senior lecturer in Linguistics at City University, London, where she is an established researcher who focuses primarily on phonological development and disorders and the impact of impaired phonology on lexical/semantic development.

The book is intended for “students of linguistics, psycholinguistics and speech-language therapy; researchers in the areas of language development and language disorders; therapists and teachers working with children with language and communication impairments; and lay people with an interest in how children discover their language” (p. i). The book is part of the Cambridge Approaches to Linguistics series, the aim of which is to provide a non-technical exploration of specific aspects of linguistics. Accordingly, it is written at a fairly introductory level, with limited references cited within the text. The author does provide a list of supplemental readings in normal language acquisition, disordered language, and language and cognitive theory. Indeed, the book is well suited for students and researchers from within a variety of disciplines. In particular, it seems relevant for those studying or engaged in children’s language assessment.
Four main sections, totaling 15 chapters, comprise the book. In the first section (six chapters), basic psycholinguistic concepts are presented, with a focus on lexical/semantic development. Chapter 1 presents the introductory thesis that children with language disorders have problems with words. The author highlights the notion that a word is a unit that both connects phonological, semantic, and syntactic information and is related to other words through the linguistic information it shares with them.

Chapter 2 provides a basic discussion of early language development, covering classic developmental questions, such as how an infant might segment the speech stream of adults into individual lexical units, and how the child attaches the meaning of a phonological form to an aspect of the scene in front of him. The chapter introduces basic terms from the developmental/psycholinguistic literature. The potential impact on children’s language learning of child-directed language, joint attention episodes, and word stress patterns of adults is discussed. The notion of bootstrapping, which is discussed throughout the book as a powerful tool in language learning, is also introduced.

Chapter 3 turns to how one might conceptualize the problems of children with language disorders. The author presents a model of word learning, dividing language processing into input and output processes. Within each set of processes, areas of potential difficulty for children with language disorders are delineated.

Chapter 4 introduces the diagnostic problem-solving process. It begins with several utterances of a language sample, which illustrate the inherent difficulty, given only language sample data, in pinpointing the nature of the child’s language problem. The need for further exploration beyond language sample analyses is emphasized. The rest of the chapter describes a set of tasks that are appropriate for systematically deducing a child’s specific area(s) of difficulty. These include phonological discrimination, lexical decision, picture pointing, picture sorting, and internal judgment (e.g., identifying a subset of rhyming pictures without hearing the words aloud).

In Chapter 5, the author turns to phonological problems, beginning with a definition of phonology, a description of several phonological processes, and an overview of phonetics concepts. Next, a phonological processing model of input and output processes is presented, again highlighting problems children might experience within each. This is followed by a discussion of research that has probed specific phonological input and output components, using tasks from Chapter 4 or similar tasks.

Chapter 6 focuses on children’s problems with lexical processing. Two case examples are used to illustrate the process of systematically searching for the area of deficit. Formal test scores and segments of language samples are provided, followed by an analysis of each child’s lexical output. Using a model to show potential areas of difficulty within lexical output, the author demonstrates how tasks were selected to address or rule out each area and how the information gleaned from performance on each task guided subsequent choices of tasks. Of importance, the author highlights the interplay between lexical and phonological processing, citing phonological bootstrapping as a means of acquiring new lexical items.
The second section of the book (four chapters) focuses on children’s syntactic processing. Following the same general format as the previous section, this section begins with a tutorial chapter, Chapter 7, in which terms, concepts, and examples related to verbs and argument structure are presented. The author relates sentence structure to rhythmic structure, pointing out that the verb and its arguments tend to receive prominence within a sentence, ultimately aiding the encoding process.

Chapter 8 provides a developmental overview of children’s acquisition of verb structures, including some cross-linguistic data. Again, the child’s use of syntactic, semantic, and phonological bootstrapping in acquiring verbs is emphasized. The author suggests that a child’s knowledge of verbs and their structures is developed through the “convergence of bootstraps” (p. 141), such that knowledge across domains can provide information cues about the meaning and argument structure of a verb.

Chapter 9 provides an overview of the language disorders literature with respect to language-disordered children’s difficulties with verbs and verb structure. Following this review, the author provides a model depicting the input and output processes by which a verb is acquired. As in the previous section, a series of psycholinguistic tasks (e.g., lexical decision, picture pointing, sentence judgment) is used to deduce the specific area(s) of difficulty within the process of acquiring verbs. Again, bootstrapping is emphasized as central to the learning process.

Chapter 10, building on information from the previous chapters in this section, presents a case study of a child whose spontaneous language suggests difficulty with verb structure. The author then takes the reader through the process described in Chapter 9, systematically posing questions about the child’s input and output processes and then answering them through specifically designed tasks. Of course, performance on these tasks is compared to that of normally developing children, matched either for chronological or language age. Following this deductive process, the author interprets the language data for this particular child in terms of his ability to use semantic, syntactic, and phonological bootstraps successfully to glean information about verbs and verb argument structure.

In the third section of the book (two chapters), the focus is on the acquisition of function morphemes. As with the first two sections, Chapter 11 provides a tutorial of terms and concepts related to morphological development. Information about the normal developmental milestones in this area, as well as the potential “blocks” that children with language disorders face, is covered. The author discusses the phonological and semantic cues available to children as they attempt to process function morphemes initially. Chapter 12, then, presents a case study of a 10-year-old child with a severe language disorder. Through a language sample analysis, as well as a set of informal tasks, the child’s processing of input and output is assessed and interpreted.

Finally, the fourth section of the book (three chapters) focuses on children’s processing of their experiences within the environment. In Chapter 13, the author highlights three tiers of experience: perceptual, affective, and mental. She points out that children’s words provide insights into the way in which they
have conceptualized and mentally organized their experiences. Children with visual impairment, autism, and pragmatic language impairment are discussed in relation to their conceptualizations of their experiences within the confines of their disabilities. Chapter 14 and 15 provide discussions of the strengths and weaknesses of children with disorders in the area of pragmatics, focusing on evidence of these children’s processing through each of the three tiers of experience.

The conclusion to the book seems to pull together observations from the preceding chapters about children’s language deficits across domains. The overriding theme of the work, though, is that understanding children’s language disorders involves a process of continual gathering and interpreting data, undergirded by psycholinguistic theory and deductive reasoning processes, and leading to the appropriate differential diagnosis of (and treatment planning for) children with language disorders. Students, clinicians, and researchers will likely find this book, with its many examples of children’s language, refreshing and thought provoking. It can serve them well as a useful guide to systematic assessment and diagnosis.

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