Book Reviews


The book was, in the first instance, written for the author’s own undergraduate students at Florida Atlantic University, where she is a professor of psychology. In the opening chapter she persuades the reader that the study of language development is worthwhile by showing how students from a variety of disciplines benefit from it and by explaining its practical applications. In my own experience this topic is very popular with undergraduates anyway, and so I was slightly surprised that it needed any advertising. However, her message extends beyond trying to instill enthusiasm in her students as it also emphasizes the need for a multidisciplinary approach to the topic.

More important, students will be relieved to find that the book makes sense of the jungle of empirical data. Students new to this topic are often bewildered by the vast quantities of contradictory data and theories. Hoff-Ginsberg untangles this web. She shows just how ingenious experimenters have been in reaching their findings. Opposing theories are laid out transparently and coherently.

The first few chapters of the book take the reader on a guided tour through the different linguistic components of child language without assuming any prior linguistic knowledge. Each of these chapters starts with an outline of only the relevant linguistic notions. Their application to a child’s development is then discussed, and empirical data is evaluated in light of all the major theories. Throughout the book, reference is made to these theories, most notably the nature–nurture and modularity arguments.

After giving a complete account of language development from childhood through adulthood and even into old age, the remainder of the book is reserved for special topics, such as language development in people with disabilities and bilinguals. Readers will be interested to find discussions of Williams syndrome and chatterbox syndrome in the context of modularity and of Carol Chomsky’s minimal distance principle in relation to Universal Grammar. As the author is by no means convinced of the applicability of these theories herself, prospective readers should expect to find plenty of descriptive accounts of the various parts of language development with alternative explanations.

In the final chapter Hoff-Ginsberg introduces neurolinguistic topics such as the critical age hypothesis and other areas such as the evaluation and species specificity of language.

By repeatedly emphasizing the individual differences among children (e.g., in their early vocabularies), Hoff-Ginsberg leaves the reader with the impression
that there are many possible routes to acquiring language. She leaves open the question of whether individual differences are due to personality traits or environmental settings. She asks the reader to consider sex differences, whether due to physical maturation or social settings, and the possibility that some children may inherently have better phonological memory skills, which make language learning easier for them.

Throughout the book Hoff-Ginsberg uses individual variations to show the reader that many different paths lead to language acquisition. This gives the book a slight bias, but it also makes it fascinating to read. It goes far beyond ordinary undergraduate courses, which tend to concentrate on how the imaginary typical/average child progresses.

In relation to Chomsky’s notion of “poverty of stimulus,” the author stresses that the quantity of the input, as well as the manner in which adults talk to children, affects vocabulary growth noticeably. Furthermore, she claims that class differences account for vocabulary size because educated mothers talk more to their children, especially their firstborns. This is obviously in direct opposition to authors like Pinker, who claimed that many cultures simply do not have motherese yet still raise perfectly competent speakers (cf. Pinker, 1994). Hoff-Ginsberg cites the following counterarguments from Lieven (1994): (a) children in cultures without overt motherese may still receive this input from older children; (b) children may not be directly exposed to motherese but nevertheless overhear adult talk; thus, their language development takes a different route; (c) children in cultures with well developed motherese are at an advantage because they develop language more quickly.

Even though Hoff-Ginsberg includes all the important theories, she does not give them equal treatment. After acknowledging that innateness plays some part in language acquisition and dismissing the behaviorist approach, she eventually discloses to the reader that she favors the dual-factor social/cognitive approach by referring to previously discussed data and leaving this view to stand out as the most promising theory for the future. The reader is left with the impression that a child’s language development relies on a supportive social environment and runs parallel to his or her cognitive progress. For this reason she favors the term “language development,” which reflects the active role the child plays in learning language from adults.

The book is extremely student-friendly and is essential for novices because it avoids linguistic jargon; lists up-to-date information on journals, journal indexes, and bibliographies; and covers all relevant topics in a coherent layout. On top of a general glossary, bibliography, and name and subject index for the whole book, each chapter contains its own list of contents, key terms, and review questions.

The outstanding positive aspects of the book are its completeness – for example, in its coverage of all aspects of linguistic competence right through to sociolinguistic skills – and its clarity in layout and wording.

The book succeeds at illustrating theoretical discussions that follow different lines of reasoning with experimental data in a clear and exciting way. It is thorough and informative and simply a pleasure to read.
REFERENCES

Chris Lawrence
University of Sheffield


What could possibly be innate? John Morton asked this question in a symposium on psycholinguistics in 1969 (Morton, 1970), and, as this book makes clear, he was certainly not the last to ask it. The Inheritance and Innateness of Grammars is one of the most recent manifestations of our fascination with the question of just what it is that makes it possible for humans – and only humans – to learn language as we know it. The book is the product of a conference that was held at Simon Fraser University in Vancouver in 1993. Nine chapters present work by authors whose expertise includes such topics as speech perception, neurobiology, sign language, language impairment, and, of course, developmental psycholinguistics. Although the word “inheritance” in the title can be understood to refer to genetics, it would have been helpful if the authors had provided their definitions of the term “innateness.” In its primary sense, innate means inborn or present at birth, but clearly no one is arguing that language itself is present at birth, although most would agree that some capacities that may underlie language can be demonstrated in very young infants. Eric Lenneberg provided one definition of innateness in his book, Biological Foundations of Language (1967), which may be what some authors have in mind since his work is frequently referenced:

Animals may be thought of as functioning like machines. Their inner structure is not the result of accidental circumstances. The machine unfolds during development, and the internal structure is programmed onto the ontogenetic process. Let us call the internal structure innate mechanisms and the modes of operation that are determined by these mechanisms innate behavior. (p. 220)

The title of the book, with its emphasis on grammar, is a bit narrow since the articles consider many aspects of language. The book begins with a paper on speech development by Patricia K. Kuhl and Andrew N. Meltzoff. These authors show that in early infancy categorical perception is a universal phenomenon: it is not culture bound in that infants can process all speech sounds, regardless of the ambient language. In their view, this universal capacity lays the foundation for later language development. As infants develop, they begin to tune in to the most representative instances of phonetic categories in the language around them – to phonetic prototypes. Citing data from cross-language studies involving English and Swedish, the authors propose that by 6 months infants have
begun to specialize in the sounds of their native language. These native speech sounds, in turn, are mapped onto the motor system and become one of the polymodal ways in which speech develops. This early specialization (what the authors call the native language magnet theory) helps to explain adults’ difficulties with learning a second language, especially with a native-like accent. Infants have an innate (present at birth) capacity to recognize perceptual boundaries, but once they are exposed to their native language, they begin to store the representational properties of that language. These stored representations alter and influence the subsequent perception and production of speech. Categorical perception may play a role in the development of speech, but, as the paper on neurobiology by Harvey M. Sussman in this volume demonstrates, categorical perception is the evolutionary descendent of earlier auditory systems, and it is not species-specific (even barn owls have it). Moreover, even if categorical perception of speech sounds is a universal phenomenon in hearing infants (human or otherwise), deaf children clearly do not rely upon it since they cannot hear the input. Nonetheless, deaf children do learn language; so we have to keep in mind the distinctions between language and speech.

In her paper, Laura Pettito explores the role of language modality (spoken or signed) in the process of acquisition. Her subjects include both hearing and deaf children who have been exposed to signed, spoken, or both signed and spoken language from birth. Her basic finding is that, regardless of the modality or of the child’s hearing status, the major milestones of language development—such as babbling, first words, and first combinations—appear at the same times. Pettito addresses the genetic foundations of language and concludes from her work that the biological basis of language is not modality dependent but is a more general capacity that makes language acquisition possible under diverse conditions.

Several papers deal with language impairment. A chapter on the epidemiology of specific language impairment (SLI) in English-speaking children by J. Bruce Tomblin shows that, for instance, concordance rates for SLI in monozygotic twins are much higher than in dizygotic twins, thus providing support for a genetic basis of specific language impairment.

A cross-linguistic study of SLI in English-, Greek-, and Japanese-speaking children was contributed by the editor and her colleagues. Myrna Gopnik and her coauthors (Jenny Dalalakis, Suzy E. Fukuda, and Shinji Fukuda) address the issues of specific language impairment as familial traits. These authors hold that children with SLI suffer from a specific, genetic impairment in the inflectional part of their grammar module. They believe that children with SLI may produce correct grammatical forms, such as past tenses, but only because they are able to rely upon some memorized inflected forms, as they lack the abstract, hierarchically structured rules of grammar. This is a very interesting, but problematic, chapter. The implication is that these children have a quite narrow, specifically grammatical, problem. The children in these studies, however, have many other impairments as well, including relatively low IQs (an average of 80 in the Japanese sample). The English-speaking subjects all come from the same extended family (36 members), and they, too, are atypical in various ways, with IQs as low as 71 and frequent articulatory problems. Although the authors speculate
that the same genetic flaw that causes the language impairment may also be responsible for cognitive problems, their argument that the major problem lies in damage to inflection in the grammar module is not convincing, given the broad spectrum of the deficits. Moreover, there are other explanations for the basis of grammatical deficits in children with SLI: for example, the possibility that capacity limitations in working memory make it difficult for them to acquire lexical and morphological rules (Weismer, 1996). If the grammatical deficits in SLI were as narrowly genetically defined as, for instance, color blindness, then we would not expect SLI children to be able to learn the rules any more than color-blind children can learn to see green. A chapter in this volume by Harald Clahsen and Detlef Hansen, in fact, differs with Gopnik et al. in the interpretation and attribution of grammatical deficits; these authors found that children with grammatical deficits could benefit from therapy and could acquire inflectional rules. They believe that children with SLI have problems more at the syntactic level than at the purely inflectional, morphological level.

A thoughtful essay by Judith Johnston provides different insights into the cognitive, biological, and linguistic nature of specific language impairment. Johnston agrees that there is a biological basis for SLI. Her research points to information processing deficits rather than damage to particular grammatical modules in children with SLI, and she finds that such children often show deficits in many areas of abstract functioning, such as in symbolic play. She warns us that “any attempt to observe SLI children and infer some general truth about human language must contend with the non-specificity of their impairment” (p. 176).

A paper by Martha Crago, Stanley E. M. Allen, and Wendy P. Hough-Eyamie explores the issue of innateness of language from a cross-cultural point of view. The authors describe an Inuit community with an extended family structure where children receive limited linguistic input from adults. However, they acquire language at the same rate as in cultures where children are frequently spoken to and encouraged to talk. Citing the paucity of input and the complex linguistic structures of the Inuktitut language, especially in the use of passive forms, the authors believe that there are some innate properties of the child’s mind that subserve language acquisition. The addition to this study of an SLI child with a different pattern of acquisition and use of the passive form provides support for the contention that there might be specific linguistic structures that prove to be elusive for SLI children. This work makes some important points about the use of cross-linguistic evidence to explore models of normal and atypical language acquisition, since it sheds light on the notion of “universality” of the core operational principles in language. Although basic linguistic milestones are very robust across languages, as argued by Lenneberg (1967), this does not preclude the possibility of breakdown in an impaired organism. The authors see language acquisition as part of “an elegant tapestry of multiplicity” (p. 87).

The chapter by Steven Pinker included in this volume contributes an evolutionary perspective that posits a genetic and biological predisposition for language as a species-specific trait and describes how this evolution was accomplished. The author believes that our present state reflects our early history: the human mind is a system of mental modules that originally developed in response
to all the problems faced by our evolutionary ancestors. The essay in its current form was adapted from Pinker’s well-known book, *The Language Instinct* (1994), and is thus stylistically somewhat different from the rest of this volume. The writing is imaginative, as the author sets out his own views, which contrast in some respects with those of both Darwin and Chomsky. Although it is beyond the scope of this review, Pinker’s interpretation of the evidence here, as well as in his more recent book, *How the Mind Works* (1997), have come in for their share of criticism on scientific grounds (Ahouse & Berwick, 1998).

*The Inheritance and Innateness of Grammars* is an interesting, if somewhat uneven, book. It would be even more useful if the authors and editor had provided their working definitions of the key terms “inheritance” and “innateness.” As it is, we are left feeling a bit like Gertrude Stein, who, it is reported, asked on her deathbed: “What is the question?” (cited in Van Vechten, 1962). The authors of the book share some general theoretical beliefs, namely, that there are genes related to language development and that there is some prewiring in the brain that subserves language development. They disagree in the particulars, however, such as whether language is a relatively encapsulated module or a more general reflection of our cognitive armamentarium. There are, of course, completely different ways of construing innateness, including some persuasive connectionist interpretations (Elman et al., 1996). Ultimately, these varied ways of studying and thinking about research problems can only benefit our quest for convergent validity.

**REFERENCES**


Elena Zaretsky
Jean Berko Gleason
Boston University


Guadalupe Valdes and Richard Figueroa carefully and clearly craft an argument for why bilingualism and testing constitute a special case of bias that con-
tinues to have serious consequences for today’s school-age minority population in the United States. This argument could not be more timely, given the drive in the United States for standards and a rising wave of state-mandated standardized testing programs for all students, including bilinguals. Perhaps a summary of this book should be on the desk of every educational leader and policymaker charged with the mandate of administering standardized tests to bilingual students and comparing their scores with those of monolingual groups for the purpose of special education and vocational placements.

Valdes and Figueroa’s main message to educators and policymakers is a serious call for examining research on bilingualism and testing so as to create new policies to combat discriminatory assessment practices. Changing demographics point to an increase in bilingual populations in U.S. schools, yet the standardized formats for achievement and special education testing remain clearly biased against those individuals who speak two languages. As the authors so aptly suggest:

This book is directly concerned with the reasons underlying bilingual children’s poor performance on standardized tests. It is our contention that, without an understanding of the nature of bilingualism itself, the problems encountered by bilingual individuals on such tests will continue to be misunderstood. (p. 2)

It is our position that although much has been learned by the fields of socio- and psycholinguistics, persons involved in the areas of educational psychology and psychometrics, and [those who] make decisions about bilingual students, in light of their scores on standardized tests, often have little knowledge of the nature of bilingualism. (p. 2)

These authors remind us that testing bilinguals evolved from the practice of testing monolinguals and was designed without questioning the assumptions and theories underlying how we measure a monolingual individual’s abilities. They suggest that “We cannot measure a speaker of one language in the same way that we measure a speaker of two languages” (p. 34). Simply put, in this book we learn that there is more – not less – language to consider in the bilingual assessment process. As this book teaches us, “bilingual individuals can rarely be considered or assessed as native speakers of their two languages” (p. 34).

This limitation in knowledge is a serious one because there is much to suggest that monolingual tests, standardized and normed on monolingual populations, are being asked to do something they cannot do. The bilingual test taker cannot perform like a monolingual. The monolingual test cannot measure in the other language. (p. 2)

Overall, this book helps readers see that testing individuals who function in two languages on a test designed for those who speak one language lacks theoretical foundation and remains a discriminatory practice, despite legal mandates against it. In this volume,1 Valdes and Figueroa present a wealth of background for understanding bias in testing bilinguals and offer recommendations and potential solutions. As the authors state:

The primary purpose of this book is to contribute to the development of a research, knowledge, and theoretical base that can support the testing of bilingual individu-
als. By reviewing and discussing both the nature of bilingualism and the nature of
standardized testing, and a detailed agenda of the questions that must be answered
before measures of bilingual individuals can be interpreted . . . , we hope to influ-
ence existing and future policies which govern the use of tests and test results.
(p. 3)
The authors’ conclusions, however, contain controversial recommendations that
warrant careful scrutiny. As they summarize:

Option 1 – Attempt to minimize the potential harm of using existing tests.
Option 2 – Temporarily ban all testing on . . . bilinguals until psychometrically
valid tests can be developed for this population.
Option 3 – Develop alternative approaches to testing and assessment. (p. 172)

To reach these conclusions, Valdes and Figueroa present six chapters addressing
the following topics:

1. The Nature of Bilingualism
2. The Measurement of Bilingualism
3. Bilingualism and Cognitive Development
4. Testing Bilinguals
5. Diagnostic Testing
6. Testing Bilinguals: From Issue Examination to Issue Implications

In Chapter 1, they present the problem of defining bilingualism. Bilingualism,
as they show, is difficult to define and is most often described as the ability to
use more than one language in varying contexts, forms, and capacities. Other
bilingual education authors (e.g., Baker, 1996) have attempted to categorize
bilinguals according to the conditions, age, and context under which individuals
learn a language.

Valdes and Figueroa discuss the nature of bilingualism and outline the social,
cultural, and linguistic factors involved, mainly in Canada and the United States.
They distinguish between elective bilinguals, a characteristic of individuals, and
circumstantial bilinguals, a characteristic of groups. This helps explain the seri-
ous distinction between linguistic minorities in the United States and other bilin-
gual individuals in the United States and abroad.

<table>
<thead>
<tr>
<th>Elective Bilinguals</th>
<th>Circumstantial Bilinguals</th>
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| Individuals chose to learn a non-soci-
  etal language and create conditions
  that help bring about such learning |
| Groups . . . respond to circumstances
  created by movement of people (con-
  quest, colonization, immigration) and
  learn a second language because the
  first language does not meet the
  group’s communication needs |

Often middle class, one dominant lan-
guage, one secondary language

Often different classes, indigenous peo-
ple, [who] learn two languages which
over time play complementary roles in
different situations of their lives (p. 13)
Chapter 2 moves beyond definitions to identify the crux of the bilingual testing issue. Here is the first fundamental message these authors offer, after 60 pages on the problems in assessing bilingual ability (e.g., related to norming, translating, conditions of testing, etc.).

The result is that there are no models for assessing the language ability...of circumstantial bilinguals in two languages. Whether we view bilinguals as native speakers of one or both languages...the best we can do is to use a series of measures that together provide some guidance for describing a bilingual as more or less like other bilinguals. (p. 67)

In Chapter 2, the authors deepen the reader’s knowledge with a discussion of the complexity of assessing a bilingual individual’s many aspects of language use. They clearly distinguish between a test of language proficiency and assessments of communicative competence in oral, reading, and writing areas. They present a chart (p. 48) of testing instruments to help demonstrate the complexity of testing the wide range of language abilities of a bilingual, including vocabulary, language use, oral and written capacities, and expressive and receptive capabilities. In this section, Valdes and Figueroa help the reader understand the complexity of the issue of bilingualism and testing and help us all see that it is both what you test and how you test that determine what you learn about any language learner, especially a dual language learner.

Chapters 3 through 5 present the critical research findings on bilingualism and cognitive development that warrant careful notice by researchers, practitioners, and policymakers. Chapter 3 presents a strong set of specific challenges with testing bilinguals:

From a measurement perspective, bilingualism is not the sum of a score in L1 plus the sum of a score in L2. As information-processing literature suggests, much more is cognitively involved. For example, taking some of the empirical findings and applying them to tests and testing, the following principles may apply:

1) For mental tests that require conceptualization during massed multiple items, the use of L1 and L2 (as a result of translation) enhances cognitive performance (Durgunoglu & Roediger, 1987);
2) When test items requiring associative recall (vocabulary) are given in L1 and repeated in L2, the bilingual repetition may be additive to items presented (Pavio, Clark, & Lambert, 1988);
3) The retrieval requirements of different memory tasks must be considered in determining whether the independent or dependent storage systems (in L1 and L2) help or inhibit [memory]. (p. 84)

Chapter 4 reviews the research on intelligence testing, outlining the problems and questions raised by using such tests on bilinguals. It presents discussion of tests of achievement, personality, and vocation. Chapter 5, a key chapter for school practitioners and policymakers, examines the diagnostic testing of bilinguals for special education placement. As Valdes and Figueroa state:

In no other context are intelligence tests as widely used...in determining the course of individual lives than in special education. This is particularly true for handicapping conditions that are invisible such as mild mental retardation, learning disabilities, and behavioral problems [where] tests often play the pivotal role
in diagnosis and educational placement (Mehan, Harweck & Meihls, 1986). With bilingual pupils, the results of this quasimedical use of intelligence tests are exceedingly harmful. (p. 123)

Describing legislation from 1978 to 1992, Valdes and Figueroa present 18-year-old data from the U.S. Office of Civil Rights (1978) documenting the over-representation of Hispanics in categories of mental retardation and the underrepresentation of this population in classes for the learning disabled and gifted. The authors present a plethora of court cases that banned IQ tests for use with minority students for placement in special education classes (Brown v. Board of Ed., Larry P. v. Riles) and then reinstated their use (Crawford v. Honig). A very thorough presentation of legislation related to special education and IQ testing of minority students, especially poignant in the classification of mental retardation, is presented. In a key quote, Superintendent Honig reminded the educational community that alternative assessments were once recommended and then denied by the courts in 1992.

I believe that the special education assessment for all children can and should be done without the use of IQ tests or the medical model that undergirds current assessment. These tests have proven expensive and ineffective in providing teachers with information on how students actually learn. I am committed to implementing an appropriate nondiscriminatory assessment method for determining special education eligibility that does not utilize tests or the medical model for any child. This is in line with a growing body of books and articles in the educational literature (e.g., The Harvard Educational Review, Phi Delta Kappan) and the National Association of School Psychologists which are redefining the role and function of testing in special education. (1992, pp. 2–3)

Overall, a discussion of other bilingual populations, along with Hispanic groups, could have presented an even stronger argument in this section.

Valdes and Figueroa have compiled a potentially strategic book packed with research-based arguments related to the complexity of testing bilinguals. If only it could be repackaged into a succinct booklet that could make research accessible to general audiences. Unfortunately, the dense language and organizational format make this a book for readers of language-based research (sociolinguistics, psycholinguistics) rather than for decisionmakers who craft policies, design programs, and make student placements into special education. The research on the nature of bilingualism, on cognitive issues, and on intelligence testing is thoroughly presented, although lengthy. This level of detail may be needed, especially for the greater communities who study linguistics, psychology, and measurement linguistics.

Chapter 6, which outlines educational and research implications, is the most controversial and questionable section of the book. Its strength is that it raises vital research questions for the research community and recommends creating alternative assessments for practitioners (expanded in the Appendix). In the policy areas, Valdes and Figueroa prescribe the following:

Our position is that in the absence of a knowledge base that can support the use of monolingual tests with bilingual persons, all testing of circumstantial bilinguals should be suspended or, at least, viewed as unreliable and uninterpretable. (p. 3)
This position suggests a testing ban when the problem is not the testing, but what the data is used for. If the authors offer a wealth of research to “qualify the validity and reliability of data,” this is one thing. However, what happens to those circumstantial bilinguals who are high achievers and can produce strong scores in either language? The authors suggest a ban on testing but fail to offer specific alternatives that would include the variability of bilinguals rather than would exclude all bilingual students in measuring their achievement. More concrete recommendations regarding the use of formal assessment (standardized tests) and informal assessment for bilingual students could more succinctly be presented in the educational implications listed in Chapter 6. In particular, my current review of research (Harris Stefanakis, 1998) suggests that bilingual students

1. take more time to complete tasks in their language, so performance on time tests may be invalid;
2. may use a different reasoning strategy according to the native language, so that a systematic sequential testing format may be unfamiliar and of questionable validity. (p. 11)

Therefore, some simple practices for testing bilinguals can be implemented:

1. careful evaluation of language proficiency (using formal and informal assessments) must precede any assessment of learning potential;
2. decisions should be made from a collection of formal and informal assessments in native language (L1) and English (L2). (p. 11)

There are ways this book could offer a wider range of readers access to its powerful content. The format and organization of this volume could be improved. The use of charts or figures to summarize key points in each chapter could provide a bridge for those who may not want to wade through the lengthy, but copiously detailed, body of research. A stronger set of chapter-based conclusions under each topic, based on what research suggests about bilingualism and testing, would guide readers to access key ideas in this volume. Overall, Valdes and Figueroa have made an important contribution to the research community as a call to arms for understanding that bilingualism and testing, as practiced in the United States, indeed represent a special case of bias.

NOTE
1. This book is part of a series dedicated to studies in acquisition and principled language instruction, Robert DiPietro, Series Editor.

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Evangeline Harris Stefanakis
Harvard Graduate School of Education