Language Development
Foundations, Processes, and Clinical Applications

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I dedicate this second edition to my son, Paul Christopher. Since the first edition, he has taught me more than I thought I
could know about development.

—Nina Capone Singleton

This book is dedicated to the memory of my father, Millard Shulman, who, along with my mother, Eleanor, taught me to
always ask questions and encouraged me to work as hard as I could to achieve the goals I set out for myself.

—Brian B. Shulman

Together, we dedicate our second edition to the next generation of students who will take the knowledge within these
pages and apply it to the children whose lives they will influence through evidence-based language assessment and
intervention.
Contents

FOREWORD.................................................................................................................................................. xi
PREFACE.................................................................................................................................................. xiii
ABOUT THE AUTHORS.......................................................................................................................... xv
CONTRIBUTORS ........................................................................................................................................ xvii

Chapter 1 Language Assessment and Intervention: A Developmental Approach ............................... 1
Nina Capone Singleton, PhD, CCC-SLP
Objectives ........................................................................................................................................... 1
Introduction ......................................................................................................................................... 1
What Is Language? ............................................................................................................................ 2
Receptive versus Expressive Language .......................................................................................... 4
Stages of Communication ............................................................................................................ 5
Who Is the Speech-Language Pathologist? .................................................................................. 5
Referral to a Speech-Language Pathologist .................................................................................. 6
Background History ...................................................................................................................... 7
Spontaneous Language Sampling .................................................................................................. 8
Formal Testing .................................................................................................................................. 8
A Developmental Approach to the Clinical Practice of Speech-Language Pathology .......... 10
Case Studies ...................................................................................................................................... 13
Key Terms .......................................................................................................................................... 19
Study Questions ............................................................................................................................. 20
References .......................................................................................................................................... 20

Chapter 2 Historical and Contemporary Views of Language Learning ................................................ 21
Sima Gerber, PhD, CCC-SLP, and Lorain Szabo Wankoff, PhD, CCC-SLP
Objectives .......................................................................................................................................... 21
Introduction ...................................................................................................................................... 21
Nature, Nurture, and Interactionist Views ..................................................................................... 22
The Science of Child Development: Broader Perspectives ................................................................. 37
Conclusion: How to Use This Information as a Lifelong Student of Language Disorders .......... 38
Key Terms .......................................................................................................................................... 40
Study Questions ............................................................................................................................. 40
References ......................................................................................................................................... 40

Chapter 3 Child Development ........................................................................................................... 45

Theresa E. Bartolotta, PhD, CCC-SLP

Objectives ......................................................................................................................................... 45
Introduction ....................................................................................................................................... 45
Cognitive Development ..................................................................................................................... 46
Motor Development .......................................................................................................................... 49
Social–Emotional Development ....................................................................................................... 50
Linguistic Development .................................................................................................................. 51
Assessment of Young Children ....................................................................................................... 53
Clinical Applications of Developmental Assessment ........................................................................ 55
Key Terms ......................................................................................................................................... 57
Study Questions ............................................................................................................................. 57
References ......................................................................................................................................... 58

Chapter 4 Gesture Development ...................................................................................................... 59

Nina Capone Singleton, PhD, CCC-SLP

Objectives ......................................................................................................................................... 59
Introduction ....................................................................................................................................... 59
Defining Gesture Types .................................................................................................................... 60
The Emergence of Gesture ................................................................................................................ 61
Gesture Reflects the Child's Mental Representations ....................................................................... 62
Gesture Reflects the Child's Readiness to Learn ............................................................................. 63
Gesture Input to the Child .................................................................................................................. 65
The Function of Gesturing ................................................................................................................ 66
Children with Language Learning Impairments ............................................................................. 67
Final Thoughts for the Clinician ....................................................................................................... 68
Summary ......................................................................................................................................... 68
Key Terms ......................................................................................................................................... 69
Study Questions ............................................................................................................................. 69
References ......................................................................................................................................... 69

Chapter 5 Hearing and Language Development ............................................................................ 73

Deborah R. Welling, AuD, CCC-A

Objectives ......................................................................................................................................... 73
Introduction ....................................................................................................................................... 73
Anatomy and Physiology of the Peripheral Auditory System ............................................................. 74
The Process of Normal Auditory Development .............................................................................. 78
Assessment of Hearing in the Pediatric Population ........................................................................ 81
Hearing Impairment .......................................................................................................................... 84
Interventions for Hearing Loss ......................................................................................................... 87
Language Development Typical of the Hearing-Impaired Population ............................................ 91
Case Studies ..................................................................................................................................... 95
Summary ......................................................................................................................................... 96
Key Terms ......................................................................................................................................... 96
Study Questions ............................................................................................................................. 96
References ......................................................................................................................................... 97
<table>
<thead>
<tr>
<th>Chapter 6</th>
<th>Comprehension of Language</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amy L. Weiss, PhD, CCC-SLP</strong></td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>99</td>
</tr>
<tr>
<td>Introduction</td>
<td>99</td>
</tr>
<tr>
<td>Studying Language Comprehension in Young Children</td>
<td>99</td>
</tr>
<tr>
<td>What Is Language Comprehension?</td>
<td>101</td>
</tr>
<tr>
<td>Measuring Children's Language Comprehension</td>
<td>111</td>
</tr>
<tr>
<td>Case Studies</td>
<td>115</td>
</tr>
<tr>
<td>Summary</td>
<td>116</td>
</tr>
<tr>
<td>Key Terms</td>
<td>116</td>
</tr>
<tr>
<td>Study Questions</td>
<td>116</td>
</tr>
<tr>
<td>References</td>
<td>117</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 7</th>
<th>Social–Emotional Bases of Pragmatic and Communication Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carol E. Westby, PhD, CCC-SLP</strong></td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>119</td>
</tr>
<tr>
<td>Introduction</td>
<td>119</td>
</tr>
<tr>
<td>Underpinnings of Social Competence and Language</td>
<td>120</td>
</tr>
<tr>
<td>Communicating with Others</td>
<td>126</td>
</tr>
<tr>
<td>Mediating Brain Development/Integration Factors Affecting Social–Emotional Aspects of Communication</td>
<td>130</td>
</tr>
<tr>
<td>Assessing Social–Emotional Bases for Communication</td>
<td>133</td>
</tr>
<tr>
<td>Philosophy of Intervention for Social–Communicative Deficits</td>
<td>139</td>
</tr>
<tr>
<td>Summary</td>
<td>141</td>
</tr>
<tr>
<td>Key Terms</td>
<td>141</td>
</tr>
<tr>
<td>Study Questions</td>
<td>142</td>
</tr>
<tr>
<td>References</td>
<td>142</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 8</th>
<th>Early Semantic Development: The Developing Lexicon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nina Capone Singleton, PhD, CCC-SLP, William O. Haynes, PhD, CCC-SLP, and Kristy Grohne-Riley, PhD, CCC-A</strong></td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>147</td>
</tr>
<tr>
<td>Introduction</td>
<td>147</td>
</tr>
<tr>
<td>Preparing the First Year: Perlocutionary Stage</td>
<td>148</td>
</tr>
<tr>
<td>Intent to Communicate: Illocutionary Stage</td>
<td>148</td>
</tr>
<tr>
<td>The First Word: Locutionary Stage</td>
<td>149</td>
</tr>
<tr>
<td>A Preponderance of Nouns</td>
<td>150</td>
</tr>
<tr>
<td>Expressive versus Referential Word Learners</td>
<td>152</td>
</tr>
<tr>
<td>Innate Biases Make Word Learning Efficient</td>
<td>153</td>
</tr>
<tr>
<td>The Emergent Coalition Model of Word Learning</td>
<td>154</td>
</tr>
<tr>
<td>Learning a Word</td>
<td>154</td>
</tr>
<tr>
<td>An Associationistic Account of Lexical–Semantic Representations</td>
<td>155</td>
</tr>
<tr>
<td>Overextension and Underextension</td>
<td>156</td>
</tr>
<tr>
<td>Naming Errors</td>
<td>156</td>
</tr>
<tr>
<td>Working Memory</td>
<td>158</td>
</tr>
<tr>
<td>Later Lexical Development</td>
<td>159</td>
</tr>
<tr>
<td>Summary</td>
<td>159</td>
</tr>
<tr>
<td>Key Terms</td>
<td>160</td>
</tr>
<tr>
<td>Study Questions</td>
<td>160</td>
</tr>
<tr>
<td>References</td>
<td>161</td>
</tr>
</tbody>
</table>
Chapter 9  The Development of Morphology and Syntax ................................................................. 165

Sandra L. Gillam, PhD, CCC-SLP, and Ronald B. Gillam, PhD, CCC-SLP

Objectives ........................................................................................................................................ 165
Introduction ..................................................................................................................................... 165
Learning about the Development of Morphology and Syntax ................................................... 166
Precursors to Syntax ....................................................................................................................... 169
Morphological/Grammatical Learning in Late Talkers and Children with Specific
Language Impairment (SLI) ........................................................................................................... 176
Summary ......................................................................................................................................... 181
Key Terms ........................................................................................................................................ 181
Study Questions .............................................................................................................................. 182
References ....................................................................................................................................... 182

Chapter 10  Speech Sound Disorders: An Overview of Acquisition, Assessment, and Treatment... 185

Lynn K. Flahive, MS, CCC-SLP, and Barbara W. Hodson, PhD, CCC-SLP

Objectives ......................................................................................................................................... 185
Introduction ....................................................................................................................................... 185
The Speech Mechanism .................................................................................................................... 186
Phonemes .......................................................................................................................................... 186
Speech Sound System Development .............................................................................................. 188
Acquisition ........................................................................................................................................ 189
Phonological Deviations ................................................................................................................... 190
Suppression of Phonological Processes .......................................................................................... 191
Phonological Awareness .................................................................................................................. 192
Evaluation of Children with Speech Sound Disorders ................................................................. 193
Treatment ......................................................................................................................................... 196
Case Studies ..................................................................................................................................... 198
Summary .......................................................................................................................................... 199
Key Terms .......................................................................................................................................... 200
Study Questions ............................................................................................................................... 200
References ......................................................................................................................................... 200

Chapter 11  Early Transitions: Literacy Development in the Emergent Literacy and Early
Literacy Stages ................................................................................................................................. 203

SallyAnn Giess, PhD, CCC-SLP

Objectives .......................................................................................................................................... 203
Introduction ......................................................................................................................................... 203
The Foundations of Literacy: The Emergent Literacy Period ......................................................... 204
Stage Theories of Reading Development .......................................................................................... 206
The Self-Teaching Hypothesis ............................................................................................................ 207
Early Literacy: The Transition to School ........................................................................................... 208
Early Identification of Later Reading Disabilities ............................................................................. 210
Case Studies ....................................................................................................................................... 212
Summary .......................................................................................................................................... 213
Key Terms .......................................................................................................................................... 213
Study Questions ............................................................................................................................... 213
References ......................................................................................................................................... 213

Chapter 12  School-Age Language Development: Application of the Five Domains of Language
across Four Modalities ....................................................................................................................... 215

Anthony D. Koutsoftas, PhD, CCC-SLP

Objectives .......................................................................................................................................... 215
Introduction ......................................................................................................................................... 215
As a student of speech-language pathology, I became interested in the subject of language and language acquisition because of the mystery of it all. Learning about and realizing the power of language intrigued me. Recognizing that language can take you from the here and now, and transport you to the past, to the future, and to imaginary places; realizing that just by saying a word, a curse could be delivered or—a more pleasant thought—a promise could be made; and appreciating that while an act, or the absence of an act, could break a promise, merely saying the words “I promise” creates a bond of intention between two people fascinated me and propelled me into the study of language development and childhood language disorders. As I progressed in my study of language, I marveled more and more at authors of fiction who are masters of figurative language and symbolism, and I contemplated with wonder those authors of nonfiction who use language to describe events that upon reading become shared events between the author and the reader.

As a young child listening to fairy tales, few words stirred my imagination as much as my mother reading, “Once upon a time, there was ...” As a child, I began to love going to plays, just to have words and actions envelop me for a few captivating hours. As a young teenager, I spent hours on the phone talking with my best friend about everything within our universe. It was our conversations that bonded us—talking about our plans for the future and dissecting every detail of the events of joy and disappointment in junior high and senior high.

I lived in a college town with four universities nearby. Often when famous individuals were invited to speak at these universities, my parents took me to hear them so that I would be exposed to scholarly leaders. While I may not have understood much of what was said at these events, I was struck by the occasion, by the fact that these were people with thoughts and words, and that it was important to get “dressed up” to go to auditoriums, churches, or banquet rooms to hear them speak about their experiences and their views.

Later in the mid-1960s, as editor of my high school newspaper, I took my journalistic responsibility quite seriously, conscious that my fellow students and I were creating a manuscript of our words and our thoughts. I wrote editorials to persuade, to pontificate (yes, I may have been a little pompous), and to motivate. As a high school and college student in the 1960s, language was amazing! Phrases such as “The New Frontier,” the “War on Poverty,” and “We Shall Overcome” were galvanizing. During the era of activism, words, phrases, and language were vehicles of social, political, and economic change. Language is very powerful.

Thus, with my love for language, as a graduate student of speech-language pathology, I became fascinated with studying the processes of language acquisition.
As children develop, they progress through the stages of language acquisition without formal instruction and without the benefit of systematic explicit tutelage. The outcome of their marvelous developmental journey is the acquisition of a phonological system, extensive semantic and grammatical systems that convey a myriad of thoughts and communicative functions, the ability to comprehend the language of others, and the capacity to perform executive functions. In literate cultures, children also acquire the milestones of literacy acquisition. Children begin with reflexive vocalizations to which their caregivers give meaning and reply as though there was communicative intent on the part of the baby. This social dance, replete with vocalizations and gestures, over the course of months evolves into intentional communication with a phonology, vocabulary, syntax, and pragmatics that correspond to the young one’s linguistic community. This occurs around the globe, in all cultures, and across all socioeconomic circumstances. Given that our world is a social, economic, technological, and commercial village, an understanding and respect for all cultures, languages, and peoples is a requisite for all professionals.

Every year, new information, new theories, and new evidence are published about development to explain the complexities that create and facilitate the language acquisition process. Language and communication are the products of a biological, developmental, and environmental synchrony of various systems, which together produce a linguistically capable and literate human being. In its second edition, this text examines these systems, including the role of biology, child development, and the linguistic input that abounds in the child’s environment. In addition to responding to the biology and linguistic interplay, intentional well-formed communication develops when there is efficient hearing and appropriate social–emotional development. The authors who have contributed to this text provide the latest research and perspectives on language development among neurotypical children.

Concern for children who reveal difficulty with the language learning process brings many people to the discipline of communication sciences and disorders. An ever-expanding awareness of typical language learning processes is the foundation for assessment and intervention for young children with language learning disabilities. This edition begins and ends with an awareness of our roles with and responsibilities to children who are challenged in learning to communicate—children whose phonology systems, vocabularies and concept development, syntactic systems, and understanding of language need the expertise of communication disorders specialists if they are to improve. This text bridges biological, environmental, technological, and professional venues to advance the development of professionals and children alike.

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We welcome you to this introduction to language development. Students have their own reasons for wanting to understand how children acquire language to effectively communicate with their parents, caregivers, peers, and others. Some of you may be interested in pursuing a profession that deals with children who have difficulty learning language. Others may have a niece or nephew, a son or daughter, or cousin who sparked your interest in understanding this developmental challenge. For whatever reason you have chosen to take this path, prepare yourself: The journey is exciting!

This second edition (like the first) was written in part by us and in part by some of our valued colleagues. It delineates the typical course of language development within the clinical context of language assessment and intervention. This second edition is strengthened by some changes and additions. First, the chapters are organized to highlight knowledge in foundational areas that build toward understanding typical development, as well as language impairment and language differences. Chapter 1 describes a clinical model that enables us to developmentally approach assessment and treatment of language impairment in children. Chapters dedicated to the nature–nurture factors of language development (Chapter 2), the child’s cognitive development (Chapters 3 and 4) and hearing (Chapter 5) place the child’s language and communication development in the context of his/her overall development. Each of the domains of language has a chapter dedicated to its development: semantics (Chapter 8), morphology and syntax (i.e., grammar; Chapter 9), and phonology (Chapter 10). The fifth domain of language, pragmatics, is the foundation of language development in infancy-toddlerhood and then the culmination of all the domains as children move through the school-age years. Pragmatics is integral to the other domains of language and so it is purposefully threaded throughout the text in several chapters (e.g., Chapters 1, 3, 6, 11) as well as in its own chapter (Chapter 5). There are now two chapters dedicated to school-age children (Chapters 11 and 12) with an emphasis on literacy. The text concludes with chapters that highlight individual differences in language learning (Chapters 13, 14, and 15). These chapters highlight cultural and linguistic diversity, and language impairment as two individual differences encountered in language and communication development. Speech-language pathologists, classroom teachers, early childhood educators, psychologists, and linguists are just some of the professionals who study and/or work with the children we describe in our book.

This text also juxtaposes the gains made by children who follow the “typical” developmental course with the delays experienced by children who are not necessarily keeping pace with their peers of the same chronological age. Chapter 1 introduces three primary case studies: a child who is developing typically and two children who vary from typical development. In subsequent
chapters, you will discover that these three case studies are explored further, from a variety of perspectives. Be on the lookout for additional case studies. These case studies specifically relate to contemporary views of language development (Chapter 2), school-age children (Chapter 12), and the use of augmentative and alternative communication with severely language-impaired children (Chapter 15).

Whatever your reason for learning about language and communication development, our text presents a broader understanding of this complex developmental phenomenon. Understanding language development helps us to understand each child as an individual and to elucidate the individual child’s needs within communication contexts.

We would like to express our sincere appreciation to our contributors (in alphabetical order): Theresa E. Bartolotta, Andrea Barton-Hulsey, Melissa A. Cheslock, Lynn K. Flahive, Sima Gerber, SallyAnn Giess, Ron Gillam, Sandra Gillam, Kristy Grohne-Riley, William O. Haynes, Barbara W. Hodson, Anthony Koutsoftas, Luis F. Riquelme, Mary Ann Romski, Jason Rosas, Liat Seiger-Gardner, Rose A. Sevcik, Lorain Wankoff, Amy L. Weiss, Deborah R. Welling, and Carol E. Westby. These experts share our view of the importance of linking information on language and communication development to the clinical process. The fact that these contributors represent diverse backgrounds, clinical experiences, and theoretical orientations continues to strengthen this text. We would also like to acknowledge our colleagues, Amy Hadley and Lynette Austin, for their contributions to the Glossary.

We also extend thanks to those scientists and mentors who taught us to always ask questions and encouraged us to continually search for answers. We encourage you, our students and colleagues, to take the information we present here and to continue to ask clinically relevant questions that impact how we describe, assess, and clinically address the challenges some children face in language and communication development. It is important to never assume that any solution is the best or only answer: Inquiry is the key to learning, and clinical inquiry must never end in the face of the children we service.

Nina Capone Singleton, PhD, CCC-SLP
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About the Authors

NINA CAPONE SINGLETON, PHD, CCC-SLP

Nina Capone Singleton is an Associate Professor in the Department of Speech-Language Pathology at Seton Hall University. Dr. Capone Singleton earned a bachelor of arts degree from Boston University (1990); her master’s degree (1997) and PhD (2003) were conferred by Northwestern University.

Dr. Capone Singleton has held clinical positions at the Children’s Seashore House-The Children’s Hospital of Philadelphia (Philadelphia), Children’s Memorial Hospital (Chicago), Bright Futures Early Intervention Clinic (Evanston, Illinois), and the Westchester Institute for Human Development (Valhalla, New York). Clinically, Dr. Capone Singleton evaluates and treats children with language and speech delays, as well as dysphagia. She has extensive experience in the area of pediatric dysphagia. She holds a Certificate of Clinical Competence from the American Speech-Language-Hearing Association and maintains her professional license.

Dr. Capone Singleton is the director of the Developmental Language and Cognition Lab at Seton Hall University. In her research, she investigates the relationship between semantic learning and lexical expression as well as the relationship between gesture and language development. She has been published in the Journal of Child Language, the Journal of Speech, Language, and Hearing Research, the American Journal of Speech-Language Pathology, and the journal Language, Speech, and Hearing Services in the Schools. She currently serves as associate editor of the Journal of Speech, Language, and Hearing Research. She has presented at both national and international conferences.

Dr. Capone Singleton teaches several courses that cover the following topics: language development, language disorders, phonological and other speech disorders, early intervention, and pediatric dysphagia. In addition, Dr. Capone Singleton mentors undergraduate, master’s, and doctoral-level students.

BRIAN B. SHULMAN, PHD, CCC-SLP, ASHA FELLOW, BRS-CL

Brian B. Shulman is Dean of the School of Health and Medical Sciences at Seton Hall University in South Orange, New Jersey. Dr. Shulman received his doctor of philosophy and master of arts degrees, both in speech-language pathology, from Bowling Green State University (Ohio). His bachelor of arts degree in speech-language pathology is from the State University of New York College at Cortland. Dr. Shulman holds the rank of professor in the Department of Speech-Language Pathology. He is a Board Recognized Specialist in Child Language (BRS-CL) as conferred by ASHA’s Specialty Board on Child Language, to which he has recently been
elected to serve for a three-year term. A Fellow of the American Speech-Language-Hearing Association (ASHA), Dr. Shulman has made numerous invited presentations to professional groups at international, national, state, and local levels. Dr. Shulman has served in a number of leadership positions within ASHA including, but not limited to, chair of ASHA’s Board of Division Coordinators (BDC), a member of ASHA’s Council for Clinical Specialty Recognition, and co-chair of two ASHA annual conventions in 2001 and 2005. Dr. Shulman served a three-year term from 2006–2008 as ASHA’s nationally elected vice president for speech-language pathology practice. In that role, he identified national issues, monitored the emergence of new areas of practice, addressed concerns of the work setting, and monitored and facilitated ASHA-related activities designed to promote all practice settings. Dr. Shulman recently completed a three-year term as the inaugural dean commissioner on the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) and has been reappointed to a second three-year term. The ARC-PA is an independent accrediting agency that protects the interests of the public and PA profession by defining the standards for PA education and evaluating PA educational programs within the territorial United States to ensure their compliance with those standards. The ARC-PA accredits qualified PA educational programs leading to the professional credential, Physician Assistant (PA). Dr. Shulman is the recipient of the 2010 Professional Service Award from the New Jersey Speech-Language-Hearing Association (NJSWA).
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