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# Prologue

## *The Contributions of Lawrence D. Shriberg: A Life's Work*

Larry Shriberg was our teacher when we were graduate students at the University of Wisconsin-Madison, although we were there nearly 20 years apart. At a time in the history of the field of communication disorders when many were abandoning their traditional role as “speech therapists” and moving toward more trendy topics in language development and disorders, Larry was a bastion of continued commitment to the long-standing core of our profession, concerning the acquisition of the ability to produce the speech of one’s community, and the ways in which that process goes awry. When everyone else was teaching clinicians to use child-centered, facilitative play techniques, Larry continued to teach behavioral methods. Larry’s stance should not, however, be seen as that of a contrarian. His commitment to evidence-based approaches meant that he believed the data should be examined as carefully as possible before moving from methods that have empirical support to those that just sound sexier. Larry was one of very few investigators who actually studied the effects of various forms of treatment, as well as the effects of clinician’s style of presentation. He was also interested from very early in his career in the ways in which psychosocial variables, such as birth order, influenced the acquisition of speech sounds.

What Larry has brought to the study of speech, apart from a deep fascination with

every factor that composed and influenced it, has been a profound commitment to data and detail. His research has demonstrated the highest level of attention to multiple sources of information and the value of digging deep within each source for the fullest understanding it could reveal. Larry has long advocated, for example, allophonic level coding of speech production from children, in the belief that only by looking at subtle variations in production could we learn about their source. He has also long believed that it was worth the time and effort it took clinicians to learn these skills because they were critically important in understanding their clients. But he has always searched for ways to make these efforts “doable” in the real world. In the early 1970s, before the wide availability of hand-held calculators, Larry created tables that he distributed to clinicians for converting numbers to percentages. That way, clinicians could easily look up percentages of correct production based on data taken from clinical samples without having to do any long division. Later, he created the PEPPER computer program, and linked it up to the popular SALT program, to help clinicians do phonological analyses more efficiently and to integrate them with language data. In all these efforts, Larry has demonstrated his unwavering commitment to the clinical application of research and his belief that there is no disconnect between the laboratory and clinic.

One of Larry's most enduring contributions to the study of speech has been the development of a principled, data-based approach to classification. His scheme for categorizing disorders of speech sound development, published first over 20 years ago, remains without serious competition. In recent years, Larry has been in the forefront of research on the genetic basis of speech disorders. The path to this endeavor was paved by his interest in classification, and his approach to this study has been no less impressive than his efforts in the earlier stages of his career. He believes that the key to genetic research is the delineation of the most precise phenotype that will allow the linkage of discrete behaviors to specific genes and that the only way to accomplish this is to describe phenomena that may look unitary on the surface, such as developmental speech disorders, at the level of detail that will allow not only subclassification schemes, but the isolation of markers that could lead to genetic linkage. In this endeavor, Larry has been unique in both his productivity and originality.

Aside from the quality and quantity of Larry's contribution to our profession, which are both remarkable and with few peers, what motivated us to create this tribute was his effect on not only our careers, which is inestimable, but on our lives. Larry is the staunchest of mentors and the truest of friends. For both of us, Larry has been a career-long guide and presence. Although he may not always be unreservedly positive about everything we do, we always grew—however painfully—as a result of our interactions with him. We each remember meetings when, after reviewing a contribution to a paper we were writing together, Larry looked at us and said, "This just isn't good enough." After we got over the feeling of devastation and embarrassment, we realized he was right, went back to work, and tried

harder. In every case, we turned out better products as a result. It wasn't always easy or comfortable with Larry, but we knew that his insistence on excellence was based on sincere respect and the conviction that we were capable of meeting the high standards he set. We are both convinced that one of the things that made us realize that capability was Larry's refusal to accept anything less from us.

There are few scholars in our field whose web of collaborations extends as widely as Larry's, but nonetheless, being a member of that circle was always a point of pride. We knew that Larry thought we had the right stuff because of his willingness, despite the raft of colleagues with whom he worked, to continue to want to work with us. This was, perhaps, his highest tribute to us, and to everyone with whom he has interacted.

We chose to have Larry lead off this volume with a synopsis of his own work because it reflects what he has always seemed to do, that is, lead the way. Most of us who have worked with him would readily admit that it usually takes considerable effort to keep up with him. Indeed, we both often marvel at Larry's ability to master both the details and the big picture simultaneously. In Chapter 2, Bruce Tomblin has taken Larry as a guide in outlining a move away from simple reductionist accounts of disorders to more mechanistic explanations. Barbara Lewis, a long-time collaborator with Larry, then skillfully highlights the research into the genetic bases for speech sound disorders in Chapter 3. In Chapter 4, Ann Tyler examines the many facets of the comorbidity question and concludes with some practical suggestions about how one might deal with children who have problems that coexist with speech delay. Although Larry's work has long been viewed by some as highly theoretical, anyone who has worked

with him knows that his ultimate goal has always been to provide practicing clinicians with useful tools to help real children. Chapter 5 was written by Larry's long-time colleague, Ray Kent along with some of Ray's students and delves into acoustics, an approach to analysis that Larry has wholeheartedly embraced. Having long recognized the limitations of perceptual transcription, Larry began to develop acoustic measures in his lab in the mid-1990s and one look at his most recent list of diagnostic markers makes it obvious that they are serving him well. His most recent work with John-Paul Hosum (Chapter 6) is motivated by his desire to automate his data collection and analysis methods and further improve both the validity and reliability of his measures.

The last four chapters reflect work on some specific populations that has been directly inspired by Larry's work. The first of these (Chapters 7 and 8) both look at autism, a population of great current interest, but do so with an eye to speech produc-

tion which has received relatively minimal attention thus far. In Chapter 7, Velleman and colleagues look at motor speech disorders in autism. This work bears directly on Larry's recent work as chair of an expert panel put together by ASHA to improve our understanding of the nature of Childhood Apraxia of Speech (CAS); the panel concluded that some instances of CAS may be associated with neurodevelopmental disorders such as autism. In Chapter 8, Schoen et al. use acoustic methods to examine early output in the autism population. The penultimate Chapter 9 represents a homage to Larry's ability to always find the right measure for the job. Campbell and colleagues note that their work on growth curves that is helping them to understand traumatic brain injury in children would not be at all possible without Larry's measures and his willingness to share his data. We chose to conclude with a chapter on intelligibility (Chapter 10) because of the central role of intelligibility in Larry's conception of speech disorder.

# Contributors

**Mary V. Andrianopoulos, B.S., M.S., Ph.D., CCC-SLP**

Associate Professor  
Acting Graduate Program Director  
Communication Disorders  
University of Massachusetts at Amherst  
Amherst, Massachusetts  
*Chapter 7*

**Keren E. Averback, M.S., CCC-SLP**  
Sharon, Maine  
*Chapter 7*

**Marcil J. Boucher, B.S.**  
Graduate Student  
University of Massachusetts at Amherst  
Amherst, Massachusetts  
*Chapter 7*

**Thomas F. Campbell, Ph.D.**  
Professor, School of Behavioral and Brain  
Sciences  
Executive Director, Callier Center for  
Communication Disorders  
University of Texas at Dallas  
Dallas, Texas  
*Chapter 9*

**Katrzyna Chawarska, Ph.D.**  
Assistant Professor  
Yale University School of Medicine  
Child Study Center  
Yale University  
New Haven, Connecticut  
*Chapter 8*

**Morten H. Christiansen, Ph.D.**  
External Professor, Santa Fe Institute  
Co-Director, Cornell Cognitive Science  
Program

Associate Professor, Department of  
Psychology  
Cornell University  
Ithaca, New York  
*Chapter 2*

**Alyssa R. Currier, M.A., CCC-SLP**  
Speech-Language Pathologist  
Center for Communication  
Sanford, Maine  
*Chapter 7*

**Christine A. Dollaghan, Ph.D.**  
Professor, School of Behavioral and Brain  
Sciences  
Callier Center for Communication  
Disorders  
University of Texas at Dallas  
Dallas, Texas  
*Chapter 9*

**Peter Flipsen, Jr., Ph.D., CCC-SLP**  
Associate Professor of Speech-Language  
Pathology  
Department of Communication Sciences  
and Disorders and Education of the Deaf  
Idaho State University  
Pocatello, Idaho  
*Chapter 10*

**John-Paul Hosom, Ph.D.**  
Assistant Professor  
Department of Computer Science and  
Electrical Engineering  
Center for Spoken Language Understanding  
OGI School of Science and Engineering  
Oregon Health and Science University  
Beaverton, Oregon  
*Chapter 6*

**Katherine C. Hustad, Ph.D., CCC-SLP**  
 Assistant Professor  
 Department of Communicative Disorders  
 Waisman Center  
 University of Wisconsin-Madison  
 Madison, Wisconsin  
*Chapter 5*

**Janine E. Janosky, Ph.D.**  
 Vice Provost for Research and Professor  
 of Mathematics  
 Office of Research and Sponsored Programs  
 Central Michigan University  
 Mount Pleasant, Michigan  
*Chapter 9*

**Raymond D. Kent, Ph.D.**  
 Professor Emeritus  
 University of Wisconsin-Madison  
 Madison, Wisconsin  
*Chapter 5*

**Barbara A. Lewis, Ph.D., CCC-SLP**  
 Associate Professor  
 Department of Communication Sciences  
 Case Western Reserve University  
 Cleveland, Ohio  
*Chapter 3*

**Courtney E. Lippe, M.A., CFYSLP**  
 Graduate Student  
 University of Massachusetts at Amherst  
 Amherst, Massachusetts  
*Chapter 7*

**Michael J. Marsello, M.A., CCC-SLP**  
 Research Assistant  
 University of Massachusetts  
 Speech Pathologist, Genesis Rehab.  
 Somerville, Massachusetts  
*Chapter 7*

**Luciana Pagan-Neves, M.A.**  
 Graduate Student  
 Universidade de São Paulo  
 São Paulo, Brazil  
*Chapter 5*

**Rhea Paul, Ph.D., CCC-SLP**  
 Professor  
 Child Study Center  
 Yale University School of Medicine  
 New Haven, Connecticut  
*Chapter 8*

**Jennifer J. Perkins, B.S.**  
 Graduate Student  
 California State University, Northridge  
 Northridge, California  
*Chapter 7*

**Elizabeth Schoen, M.S., CCC-SLP**  
 Research Associate  
 Yale Child Study Center  
 Yale University School of Medicine  
 New Haven, Connecticut  
*Chapter 8*

**Lawrence D. Shriberg, Ph.D.**  
 Emeritus Professor of Speech  
 Pathology  
 Department of Communicative  
 Disorders  
 Principal Investigator, The Phonology  
 Project  
 Waisman Center  
 University of Wisconsin-Madison  
 Madison, Wisconsin  
*Chapter 1*

**J. Bruce Tomblin, Ph.D.**  
 D.C. Priestersbach Distinguished  
 Professor of Liberal Arts and  
 Sciences  
 Department of Communication Sciences  
 and Disorders  
 University of Iowa  
 Iowa City, Iowa  
*Chapter 2*

**Ann A. Tyler, Ph.D.**  
 Western Michigan University  
 Kalamazoo, Michigan  
*Chapter 4*

**Richard Van Emmerik, Ph.D.**

University of Massachusetts at Amherst  
Department of Kinesiology  
Amherst, Massachusetts

*Chapter 7*

**Shelley L. Velleman, BA, M.A., Ph.D.**

Associate Professor  
Communication Disorders  
University of Massachusetts at Amherst  
Amherst, Massachusetts

*Chapter 7*

**Haydee Fiszbein Wertzner, Ph.D.**

Faculdade de Filosofia  
Letras e Ciências Humanas  
Universidade de São Paulo  
São Paulo, Brazil

*Chapter 5*