

***Toward a Genetics of Language*
(1996)**

Author: Mabel L. Rice, Ed.

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Reviewer: Patricia L. Cleave, PhD
Dalhousie University School of Human
Communication Disorders
Halifax, Nova Scotia

In the last few years we have heard reports of new genetic findings on what seems like a daily basis. Given the current focus on mapping of the human genome, a book which brings together research from a variety of fields that bears on the possible genetic basis of language is timely. *Toward a Genetics of Language* is just such a book. It is a collection of chapters written by researchers in language disorders, genetics, linguistics, and neuroscience. This book is intended for people interested in current theories of language and advances in basic science but it does not assume a thorough background in those areas.

Often readers skip over the preface and begin a book at Chapter One. I would not recommend doing this with this particular book, especially if your background in genetics and linguistic theory is limited. The preface lays out the general framework of the book, details the major issues and questions, and defines less familiar terms. The Preface serves as a useful orientation to the rest of the book.

The book is divided into sections which contain two to five related chapters. The first section, called Genetics, has two chapters by Brzustowicz and Smith and her colleagues which summarize the procedures involved in identifying genetic contributions to complex behaviours such as language. These serve as an easily understood introduction to genetics for readers who are not familiar with the field. In particular, the first chapter by Brzustowicz provides a very useful, readable introduction to the field. The

third chapter by Lefly and Pennington reviews the work on the genetics of dyslexia as an example of the application of genetics to the study of a complex behaviour. The data presented is only preliminary so firm conclusions are impossible to make. However, the chapter outlines the steps involved in looking for the genetic contribution to a complex behaviour. The final chapter by Gilger directly addresses the question of how behavioural genetics can improve our understanding of language and language disorders.

The second section is titled Linguistics and Language Acquisition. The two chapters in this part present analyses of the acquisition of two particular features of language, finiteness (Wexler) and Wh-Questions (deVilliers). The linguistic theory Government and Binding theory is the basis for both analyses.

Part III is composed of five diverse chapters addressing various aspects of language impairment. The chapter by Tomblin reviews his epidemiologic study of specific language impairment (SLI) in which both genetic and environmental factors are examined. The chapter by Rice and Wexler extends the theory of acquisition presented by Wexler in the previous section to SLI. The authors suggest that a phenotype for language impairment is finiteness marking. The chapters by Leonard, and Crago and Allen review what some of the crosslinguistic studies of language impairment have shown. Languages as diverse as Italian, Hebrew and Inuktitut are included. In the final chapter of this part, Miller presents information on the language outcomes of two syndromes, Down and fragile X.

The fourth section contains two chapters which focus on what is known about the neurological differences. The chapter by Plante focuses on children with SLI. She reviews MRI studies of the neuroanatomical differences in individuals with and without SLI. She highlights the variety of findings from studies, suggesting that some of the differences in

results are due to different behavioural criteria for defining affected individuals. On the other hand, Poeppel reviews PET studies of phonology which have also yielded contradictory results. Poeppel discusses how brain imaging technology can inform the search for the genetic basis of language and what the limitations of the technologies are.

Part V represents a shift in focus from formal linguistic models of language to an interactional view. The only chapter in this part is entitled "Toward a rational empiricism: Why interactionalism is not behaviorism any more than biology is genetics". In it Snow argues against an innatist view of language and stresses the importance of the environment in language acquisition.

One of the nicest features of this book is that many of the chapters are followed by a commentary written by the author of another chapter. This works particularly well when the chapter author(s) and the commentator have different perspectives on the issue or when the commentator applies another type of data to add substantially to the information in the chapter. Unfortunately, this does not happen with each commentary. Some commentaries are essentially summaries with a few additional facts and connections to other parts of the book.

Toward a Genetics of Language is a book that brings together research and theoretical thinking from a variety of disciplines to focus on one issue. This can make it a challenging book to read. However, it does not assume that the reader has an extensive background in each area and important concepts are presented in an accessible way. Language is such a complex achievement that a full understanding of language and language impairments will require the type of crossdisciplinary cooperation that is exemplified by this book. Readers who are interested in language and its genetic basis will be well rewarded for their efforts.

The Management of Stuttering in Adolescence: A Communication Skills Approach (1995)

Authors: Lena Rustin, Frances Cook, and Rob Spence

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19b Compton Terrace, London
N1 2UN, England

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www.lb.com, 1-800-621-4249

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Reviewer: Lisa Avery
University of British Columbia
Vancouver, British Columbia

This book presents a communication skills approach to intervention with adolescents who stutter. It is the culmination of over twenty years of clinical practice by the authors. The main message is that clinicians need to know their teen-aged clients well in order to plan individualized treatment that will lead to successful change. To do this, clinicians must truly understand what adolescence is all about.

Rustin and her colleagues celebrate adolescence! They consider it a unique stage in life between childhood and adulthood. The authors view it as a transitional process that is characterized by major physical, emotion, and social changes. During this process, environmental pressures from peers, parents, teachers, and society are great, and the interplay of these demands contributes to the success or failure of making this transition. The authors present insightful discussions about the notion of adolescence that will enlighten the clinician and create an optimistic mindset for the realistic challenges of working with teenagers.

The authors favour an interactionist model of stuttering development, and their approach is guided heavily by work in "lifespan developmental psychology" and Starkweather's Demands and Capacity Model of stuttering (1987). A detailed and easy to use protocol for interviewing and assessment leaves no stone unturned. Specific questions to ask for all areas of investigation are offered, together with rationales for their relevance to stuttering and suggestions for dealing with sensitive areas (e.g. sexuality; experiences with drugs/alcohol; eating disorders;

seeking appropriate support services for other problems).

The therapeutic approach includes six components: fluency control, relaxation, social skills, problem solving, negotiation, and environmental factors. Cognitive and behaviour aspects of each component are described fully. A daily schedule of goals and activities is given for an intensive two-week program; however, this approach is appropriate for individuals or groups on both intensive and non-intensive schedules. Potential relationship issues (i.e., issues with parents, teachers, peers, SLP) are identified and suggestions for dealing with these are very helpful.

Enlightening and thought-provoking case studies, some with very complex family dynamics, are used to illustrate the application of the assessment and treatment strategies to teenaged clients. Useful and reproducible program outlines, interviews, checklists, and intensive group therapy activities, are given in the appendices.

Claire Topping contributes a chapter on concomitant language impairment and stuttering in this population. It is especially helpful for differentiating language-based fluency problems and stuttering.

Like other books written by Rustin et al, this one is comprehensive, well organized, detailed, and practical. Clinicians working with teenagers who stutter should add this book to their resources, as it contains treatment suggestions and activities that go beyond the more traditional fluency-shaping or stuttering modification approaches. However, the extent to which clinicians follow the program may vary depending on their level of comfort with some of the material.

Assessment and Therapy for Young Dysfluent Children: Family Interaction (1996)

Authors: Lena Rustin, Willie Botterill, and Elaine Kelman

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19b Compton Terrace, London
N1 2UN, England

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www.lb.com, 1-800-621-4249

Cost: \$54.50

Reviewer: Rosalee C. Shenker, PhD
The Fluency Centre
Montreal, Quebec

The author's stated objective for this book is to "provide a comprehensive but essentially practical approach to the treatment of early childhood dysfluency". It aims to help clinicians better understand and evaluate the multifactorial nature of early stuttering so that they may select the relevant components of a treatment program which is uniquely designed for each family.

Chapters two, three, and four describe the methodology for assessment of early stuttering, focusing on four major factors which may influence fluency: physiological, linguistic, psychological and environmental.

Chapter two is devoted to direct assessment of the child including general behavior, cognitive skills, language and pragmatics, social skills, dysfluency, and attitudes.

Each aspect is discussed along with accompanying formats to assist the clinician in organizing observations and data collection. Clinical examples are provided to further describe the steps involved in collecting this information.

Chapter three provides a format for assessment of parent-child interactions.

The interaction profile outlines a list of non-verbal and verbal variables to be considered by clinicians when observing communication interactions, and cites supportive references when applicable. The purpose for completing an interaction profile is to be able to select and prioritize those aspects of the parent's style which may become intervention goals. The authors present a clinical example at the end of this chapter to enable the clinician to identify areas for intervention.

Chapter four presents guidelines for



a complete Parent Interview to further probe the relevant psychological, linguistic, environmental/sociocultural, and psychological factors, in order to rationalize the multifactorial model put forth in the introduction. The chapter is comprehensive, with each section composed of practical suggestions and case examples.

Chapter five attempts to summarize the information gathered during the 2 ½ - 3 hour assessment on a summary chart, organized into the four major assessment categories described earlier, in order to highlight the factors which are relevant for the particular child for the purpose of giving feedback to parents and making specific recommendations for therapy. Again, a variety of case examples help to clarify this process.

Chapter 6 is devoted to description of Rustinet al.'s Interaction Therapy model.

This includes a fixed-term treatment of six weeks during which both parents and clinician select the behaviors targeted for change, and parents "practice" the targeted goals in short home sessions. Parents are asked to provide video tapes of these sessions in order to provoke feedback and discussion during the in-clinic sessions with the therapist. Following the initial six sessions, a review period for consolidation of new interaction styles takes place, followed by a progress meeting to determine if further intervention goals are needed.

Chapter seven summarizes the environmental and emotional issues considered to be common to many families including reaction to dysfluencies, turn tak-

ing, behavior management and dealing with change and loss. This chapter also contains a brief section on bilingualism and dysfluency.

The final chapter is devoted to direct treatment of dysfluency which the authors recommend when "deterioration or insufficient improvement in the child's speech" persists in spite of the changes made by the parents. This chapter introduces some direct treatment concepts and includes a section on language and phonological therapy for the dysfluent child. Considering that the length of this book is under 200 pages it surveys a good deal of information.

Experienced clinicians wishing to replicate this approach to early stuttering will be pleased with this text. It provides a well organized overview of this program, with good presentation of material, a variety of clinical examples and an inclusive appendix of clinical assessment forms. In addition, clinicians looking for a well documented rationale for environmentally-based therapy will find support here. For those wishing to supplement this introduction with more information, a good supply of clinical references are included.

Novice clinicians may find the sections on treatment lacking in detail, and may feel unprepared to take on this family approach without more preparation. Another concern is that the length of time devoted to the assessment format may not be realistic for some workplace constraints. While the experienced clinician may be able to reduce the length of the evaluation, the inexperienced clinician may need

some guidance in developing a shorter assessment protocol.

While the book meets its stated objectives, the major weakness, from my point of view, is that it offers no empirical evidence in support of this model of treatment, nor does it suggest that any long term outcome data are available. We do not know if the majority of cases are successfully managed within the initial 6 week treatment period, if they return for additional sessions, or go on to more direct treatment models. This makes it difficult for clinicians to make an informed decision as to whether this point of view is the best rationale for the client they may have in mind, and may lead the reader to believe that all stuttering therapy begins in the indirect mode, with the choice of direct therapy made only after the family has failed at this approach, or the child gets worse. Given the recent and increasing support for direct treatment models clinicians may wish to consider other choices.

References

- Nippold, M.A., & Rudzinski, M. (1995). Parent's speech and children's stuttering: A critique of the literature. *Journal of Speech and Hearing Research*, 38, 978-989.
- Onslow, M. (1992). Choosing a treatment procedure for early stuttering: Issues and future directions. *Journal of Speech and Hearing Research*, 35, 983-993.