

## BOOK REVIEWS

Editor: James Neelley

ZWITMAN, DANIEL H. **The Disfluent Child, A Management Program.** Baltimore: University Park Press (1978).

— Reviewed by JANET DARRAH

This book provides a detailed format for counseling parents concerned with their child's disfluencies. Based upon techniques developed and tested over a three year period, the parents are given a concrete program of child management under the supervision of the speech pathologist.

The primary program objective is to develop consistency in the everyday routine of parent and child in order to create as conducive an atmosphere for fluent speech as possible. In addition to the treatment of the child's general environment, specific factors that appear to affect fluency are identified.

The first two chapters include a rationale for counseling the parents of a disfluent child and an assessment guideline. The clinician is given a procedural outline which helps in differentiating between the normally and the abnormally disfluent child. A pre/post rating scale is completed by the parents which assesses their reactions to the child's speech and their current coping strategies.

The remainder of the book is divided into seven sections of child management. The child's self concept and feeling of security and consequences of the speaking environment are discussed in Sections I-III. Specific suggestions for dealing with the child's speech are provided along with ways in which the environment can be structured in order to build up a feeling of self-respect and confidence. Sections IV-VII deal with the child's misbehaviors, the establishment of consistent discipline and a reinforcement system. Guidelines are given to the clinician regarding the selection of appropriate program sections (as indicated by the assessment procedure) and scheduling. Each section contains a questionnaire which the parents fill out together. The questionnaire reviews material discussed in the previous counseling session. A checklist is also provided with each section. The parents are required to chart daily how frequently they engage in a particular behavior. A star chart aids parents with reinforcement by setting up a specific way to inform the child of expected behaviors.

It was a pleasure to see a publication of this nature, for I have personally felt inadequate when attempting to counsel the parents of a disfluent child. This book provides a very structured program which even the clinician inexperienced in counseling techniques can readily implement. The inclusion of the questionnaires and checklists allow the clinician to carefully monitor parental co-operation during the week and their understanding of the principles discussed in the counseling session. Test results gleaned over a three year period indicate that the program is valuable in the establishment of a more consistent and more peaceful home environment with a minimum of communicative stress.

McLEAN, JAMES E., and LEE K. SNYDER-McLEAN **A Transactional Approach to Early Language Training: Derivation of a Model System.** Weston, Ontario: Charles E. Merrill (1978). 280 pp., \$9.95

— Reviewed by G. A. WARR-LEEPER

This book is the product of a two-year study conducted for the U.S. Department of Health, Education and Welfare. Its purpose was to generate an overall perspective of the language

acquisition process from all the currently available knowledge, and based on these results, to generate assessment and treatment procedures for severely language-disordered children. These achievements will be greatly appreciated by those of you who have felt that the ever-increasing body of knowledge in this area and the diversity of language remediation programs available are more reflective of the "language of confusion" than of a cogent theory of language development.

The discussion in this book is directed toward children who are functioning at or below a three-year chronological age level and/or at or below an MLU of 2.50. One section of the book deals with a comprehensive overview of the recent trends in the psycholinguistic literature, beginning with Chomsky's contributions, and tracing the development of the field through the "semantic revolution" started by Bloom, the semantic grammar stage, the cross-cultural studies searching for linguistic and cognitive universals, the social and pragmatic aspects of language, and finally to the works aimed at a linguistic description of the developmental process, such as Brown's **A First Language**. All of these data are well-reviewed and synthesized into a comprehensible whole of main concepts and premises.

The transactional model of language development which they generate considers emerging language in a very broad sense. It identifies the cognitive, social and linguistic prerequisites for language and discusses how, through a transactional process of interaction with primary figures in the environment, these prerequisites interact for the development of language.

One section of the book deals with procedures for assessment based on this transactional model. These assessment procedures suggest specific tasks which should be investigated in the areas of cognition, social development, receptive and expressive linguistic abilities, but they are not in the form of a standardized test. The authors do, however, include an informative overview of presently available standardized tests which could be used to assess some of the areas discussed in their model. However, they state that for many of the areas, there are no tests available. Another section of the book is devoted to treatment implications derived from their model. As the authors indicate, it is a very general discussion, and only delineates general areas which should be considered in the construction of a specific remediation program. Its strength lies in the broad view taken in the writers' approach to treatment. Included in this section is an evaluation, relative to their model, of existing language programs for the severely language disordered child. The authors conclude that presently there are none available which consider as extensive a theoretical base as their transactional model, and they point out the need for further research and development of treatment materials in this area.

The book is very well written and organized. It is theoretical in nature, but includes practical suggestions for application to treatment. The well-integrated, broad scope with which it views language development, assessment and treatment is a major strength. Unfortunately, it is restricted to the 2.50 MLU stage and below, but it is an excellent overview of the knowledge in this area. I would recommend it to practising language clinicians and as a supplementary text for an advanced course in language acquisition and remediation to cover the emerging language stages. Although it does not deal with higher linguistic levels, many of its suggestions about the nature of language are certainly applicable to these levels.

GERBER, SANFORD E., and GEORGE T. MENCHER. (Editors) **Early Diagnosis of Hearing Loss**. Don Mills, Ontario: Longman Canada, Ltd. (1978). 377 pp., \$18.50.

— Reviewed by SUSAN BRAINERD

This book reports the proceedings and resulting resolutions of the 1978 Saskatoon Conference on Early Diagnosis of Hearing Loss. The conference was designed as a sequel to the 1974 Nova Scotia Conference which focused on the development of newborn hearing screening

methods. The current collection of 17 papers, resulting discussions and recommendations is intended both to demonstrate that "it is possible to identify and diagnose hearing loss in the newborn" and to provide guidelines for the accomplishment of this goal. The conference papers, contributed by well known researchers and clinicians from five countries, summarize research results, theoretical and clinical concepts, and instrumentation. Papers focus on three major areas: medical aspects of differential diagnosis, audiological techniques and procedures, and descriptions of selected comprehensive diagnostic and treatment programs. Discussions following each paper provide some critical analyses of reported materials by conference participants. The vast majority of papers and resulting discussions maintain that accurate early diagnosis of hearing loss can be made. Guidelines for appropriately diagnosing early hearing loss are presented in the form of 14 resolutions developed by the conference participants. The resolutions emphasize four internationally applicable areas: parent involvement in diagnostic and treatment programs, comprehensive medical and audiological diagnostic methodologies, need for inclusion of training in hearing loss in medical and specialty school curricula, and use of electric response audiometry as a routine part of the clinical test battery. Appendices to the resolutions include detailed outlines of recommended audiological test procedures.

**Early Diagnosis of Hearing Loss** presents a high level, current, comprehensive, optimistic "state-of-the-art" review of research and differential diagnostic procedures. As an audiologist, this reviewer appreciated the consideration given to a wide variety of audiological techniques. Papers and recommendations concerning the clinical potential of Visual Reinforcement Audiometry, Electrocochleography, and use of the Auditory Brain Stem Response particularly were found noteworthy. This book should prove to be a valuable reference source for both graduate students and practicing professionals involved with the hearing impaired.

JOHNS, DONNELL F. (Editor). **Clinical Management of Neurogenic Communication Disorders**. Boston: Little, Brown and Company (1978). 342 pp. \$18.50.

— Reviewed by ISABEL KENT HENDERSON

Seven experts in this field have collaborated to produce a compendium which concentrates specifically on management strategies and treatment techniques for the neurologically-impaired patient. This most utilitarian text is comprised of seven chapters, and focuses, in a most extensive and scholarly fashion, on the following topics: differential diagnosis of aphasia; aphasia therapy; treatment for apraxia (including developmental apraxia); dysarthria diagnosis and treatment, and surgical and prosthetic management of neurogenic speech disorders.

The format is very impressive, with numerous charts, graphs, sample therapy tasks, and occasional photographs — all enhancing the book's clinical utility. As well, clinical illustrative cases are presented regularly to reinforce management strategies. The reader is frequently cautioned as to the importance of using an objective, behavioural approach.

The final chapter ("Surgical and Prosthetic Management of Neurogenic Speech Disorders" by Donnell F. Johns and Kenneth E. Salyer) presents a most innovative concept. Throughout, emphasis is placed on a multidisciplinary approach, especially the interaction between speech pathology and plastic surgery. The chapter by John Rosenbeck ("Treating Apraxia of Speech") offers a compendium of treatment approaches to the disorder. Robert Brookshire's chapter ("Auditory Comprehension and Aphasia") is interesting from a theoretical viewpoint, but disappointing in that it deviates from the other chapters by providing very little practical treatment-orientated information.

This book would be excellent reading material for both students of speech pathology and seasoned clinicians. It provides not only comprehensive data regarding diagnostics; as well, it

summarizes the literature which has been published to date regarding therapy. It is indeed a most thorough and eclectic symposium, analogous in many ways to Travis' **Handbook**. "Obviously we are seeing the doors open on a new era of therapy for neurogenic disorders of speech and language". (p.x) The book should fill that most conspicuous gap in our clinic libraries.

**SINGH, SADANAND, and JOAN LYNCH. Diagnostic Procedures in Hearing, Speech and Language.** Baltimore: University Park Press (1978). 647 pp., \$24.50.

— Reviewed by LINDA MIKUS

For the professional who would like to update his/her library in the area of Diagnostic Procedures for the evaluation of Communicative Disorders, this book would be an excellent choice. Not only does this text adequately highlight under one cover the three major areas of hearing, language and speech, it does so in a very organized, readable fashion. To the student of communicative disorders this text is a good source of information with respect to historical and theoretical information about and concerning our field. The editors have compiled the latest in diagnostic techniques and procedures. Where detail is lacking the authors, in their respective chapters, acknowledge this fact as beyond the scope and purpose of the book and direct the reader to sources which deal with the topic in greater depth — hence one of the values of this book as a current reference text.

The usefulness of diagnosis, as opposed to mere data collection adding to a body of knowledge, is emphasized. To accomplish this focus, the authors have chosen to present guidelines, checklists, charts and diagrams which are practical for the practicing clinician. On occasion an author may appear, to the experienced clinician, to be unduly elementary in his/her description of a diagnostic consideration. In these instances it may be necessary to remind oneself of the range of readers for which the book is intended, i.e., the student as well as the experienced professional.

A unique characteristic of this publication is the fact that each chapter is written by a practicing clinician. Consequently the information contained within is presented in a form useable to the practitioner. The general format of the book also lends itself to quick information access. A chapter outline, as well as a brief summary, directly precedes the contents of each chapter.

The treatment of the topic areas by their respective authors is such that information is imparted to enhance the understanding of the complexities of a given area. In addition, the information provides rationales for diagnostic procedures and decisions which ultimately will assist the practicing clinician to assess the client from a holistic point of view.

The two chapters on bilingualism should be of particular interest to all professionals in the field of Hearing, Speech and Language Pathology. Due to the paucity of available information regarding bilingualism as it relates to the diagnosis of language disorders in children, the text devotes two chapters to the topic. The first of the two chapters focuses entirely on the steps that constitute normal acquisition of a second language and the second chapter presents procedures for evaluating the child who has been exposed to two languages.

The editors of this most educational and practical text should be commended for their treatment of the topic. This book has excellent value as a text for students in our profession and as a resource text for practicing clinicians.

WEINER FREDERICK. **Phonological Process Analysis**. Baltimore: University Park Press (1979). 181 pp., \$19.95.

— Reviewed by L. MUTH

Weiner has attempted to design a procedure which would "provide a clearer understanding of the speech patterns of young children with communication problems." A diagnostic alternative to the traditional sound-by-sound articulation assessment paradigm is presented: a framework for the description of rule-governed error patterns vis à vis Ingram's (1976) description of phonological processes.

A basic premise of the process theory is that the child's pronunciation of a word results from the operation of a set of simplifying processes on the adult word form. Phonological development is therefore viewed as suppression of the simplifying tendencies, rather than the acquisition of sounds and/or distinctive features. Processes operate in three major ways: 1) simplifying the syllable towards simple CV structure, 2) preserving symmetry and sound harmony within words, and 3) reducing the number of feature contrasts.

The **Phonological Process Analysis** was devised to detect the presence of 18 common processes in the speech of unintelligible two to five year olds. A sample of 100 phonologically deviant children was used to determine stimulus relevancy to the process probed. Black and white action pictures assist single word delayed imitation and sentence recall responses for each of the 136 stimuli. A straight imitation response may be utilized if necessary. Responses are phonetically transcribed onto nine score sheets for later analysis and profiling. Total administration time is 45 minutes, although administration of select processes only is feasible.

The book's format separates a text portion from the analysis proper. Theory, administration, and interpretation are covered in the introductory text. The theoretical overview offers a general introduction followed by a detailed description of each process analyzed. While the brief six page treatment of theory is tantalizing, it might have been extended by the inclusion of topics such as: how the theory was derived; how our present knowledge of sound and feature acquisition might be accounted for in terms of process theory; and the limitations of the analysis. "Administration" features a complete step-by-step illustration of scoring and analysis. The clarity of this section could have been enhanced by juxtaposing responses and analysis to eliminate hunting. "Interpretation" utilizes a question-answer system to assist the clinician's phonological rule construction. Two treatment techniques are concisely presented for each of the three process categories. A short but very pertinent bibliography concludes the text portion.

The analysis stimuli, grouped according to process, comprise the bulk of the book. Ease of administration is optimized by a coil-bound side by side cue-stimulus format. Some stimuli require fine visual discrimination, but the high interest appeal cartoon characters would be useful in sampling procedures with a wide age group of children. The stimulus items alone make the book a bargain. A sample set of score sheets is also included.

In **Phonological Process Analysis** Weiner has designed a tool which may be useful in investigating the young unintelligible child's speech. The content validity is apparent. Ingram's (p. 87) sampling procedure requirements are basically met. This book is recommended for any clinician wishing to take a nontraditional route to explore the domain of childhood phonological deviance.

#### Reference

Ingram, David. **Phonological Disability in Children**. London: Edward Arnold Publishers Ltd. (1976)

BALTAXE, CHRISTIANE A.M. **Foundations of Distinctive Feature Theory**. Baltimore: University Park Press (1978). 219 pp., \$17.50.

— Reviewed by LEIJA V. McREYNOLDS

Christiane Baltaxe presents a short, but rather clear discussion of the evolution of distinctive feature theory by comparing the writings of primarily two linguists, Trubetsky and Jakobson, who figure prominently in the development of phonological theory. By tracing their written material, in publications and letters to one another, the author attempts to demonstrate how the concept of distinctive features first appeared and the original concept modified over time as more data accumulated and problems arose concerning the adequacy of the original concept and ensuing ones. Differences and similarities are drawn between the theories and features of Trubetsky and Jakobson in addition to notations of changes which took place as individual linguists developed their own versions of relevant features. Furthermore, the features identified by Trubetsky and Jakobson are discussed in relation to the features proposed by Chomsky and Halle in **The Sound Pattern of English**.

Dr. Baltaxe describes the shift from considering the phoneme as the smallest indivisible unit to recognizing that phonemes share elements with other phonemes and these elements, distinctive features, form the basic units of sounds. She then addresses the issue of how the two linguists, each within his own frame of reference, approached determination of the most adequate set of features for describing all languages and how these compare to the features by Chomsky and Halle. In describing the manner in which the features were derived by individual linguists, Dr. Baltaxe introduces the concepts of opposition, neutralization, archiphonemes and markedness. She also reminds us that we are still some distance from agreeing on a set of universal features or identifying a set which can be accepted unanimously.

The book is divided into two parts. Part I is entitled "The Development of the Conceptual Framework of the Theory of Distinctive Features," and Part II "A Comparison of the Feature System Developed in Grundzüge with Earlier Classifications and Those of Preliminaries, Fundamentals and the Sound Pattern of English." The book is recommended for courses in phonology, linguistics and communication and as reference material for students, teachers and professionals working with distinctive features. As such, it assumes a degree of linguistic background by the reader. Nevertheless, even a novice, if he or she is interested in reading about the methodology used in developing distinctive features, would enjoy parts of the book.

WYKE, MARIA A. (Editor) **Developmental Dysphasia**. New York: Academic Press, (1978). 179 pp.

— Reviewed by JAMES C. McNUTT, PH.D.

Developmental dysphasia as described by Maria Wyke is "the deficit in the acquisition of normal language functions in children of normal or above normal intelligence and with adequate hearing ability to permit the perception of verbal sounds . . ." (See 1.) The book contains chapters reflecting a multidisciplinary approach with contributions from neurologists, psychologists, linguists, speech therapists and remedial teachers. The first chapter (by O.L. Zangwill) is a general overview and outlines the parameters considered within the disorder. Three examples by case history are given as well as some background research related to causality. The second chapter (by Isabelle Rapin and Barbara C. Wilson) details neurological aspects and assessment of developmental dysphasia for a number of areas including disorders of acoustic input, linguistic processing, brain function and speech output. In the third chapter Arthur Benton reviews the literature and discusses cognitive functioning

and developmental dysphasia. Paula Tallal and Malcolm Piercy discuss defects of auditory perception in the fourth chapter. In these last two chapters the authors focus impressive reviews of research and discussions primarily on those areas of behavior which have generally been found deficient in children with developmental dysphasia (i.e. auditory and sequential perception). In the fifth and sixth chapters Richard Cromer and Paula Menyuk respectively deal with linguistic aspects of developmental dysphasia. Cromer presents the hypothesis of a hierarchical structuring deficit as a base for childhood dysphasia while Menyuk discusses the linguistic problems which are present in these children. Treatment and prognosis are examined in the last chapter by Jean M. Cooper and Pauline Griffiths.

This is an excellent collection of information from a number of different viewpoints. Although the title of the book is **Developmental Dysphasia** the definition of dysphasia clearly includes those children which may also be labeled "language disordered", although severity of the disorder may differ. Strengths of the book are in the quality of writing throughout and the wealth and variety of information presented. (See 2.) One weakness of the book is the restricted length (13 pages) of the section on treatment and prognosis. Although this overview is very informative it cannot provide the scope for treatment and prognosis which was achieved for other topics throughout the book. The text is highly recommended for students and professionals interested in language disorders.

1. Each of the contributed chapters of this book subscribes to this general definition.
2. Hypotheses are based upon summaries of research information.

TOSI, OSCAR I. **Voice Identification. Theory and Legal Applications.** Baltimore: University Park Press (1979). 182 pp., \$19.50.

— Reviewed by HERBERT A. LEEPER, JR., PH.D.

According to the author, this book was designed mainly as a reference or monographic source of information regarding voice identification and elimination. It is intended to satisfy lawyers, law enforcement agents, speech scientists, students of acoustic phonetics and to be a guide in voice identification by any other interested persons.

The book includes five chapters and two appendices. Chapter one gives an historical review of voice identification, an introduction to the methods of voice identification (both subjective and objective) and a listing of some nomenclature used in voice identification literature.

Chapter two presents some basic phonetics, acoustics, and a theory of speech production. In the phonetics section, vowel and consonant production are discussed briefly. Excellent sections dealing with Fourier analysis and Euclidean distance procedures of modeling are discussed in the acoustics section. Basic information regarding glottal and supraglottal acoustics and resonance is also included. The author presents techniques for controlling error when making voice identification.

Chapter three presents an in-depth look at the methods of voice identification, a great many of which are attributable to the Michigan State group. The chapter is divided into sections dealing with subjective and objective methods of voice identification. Subjective methods include aural voice examination, visual examination of speech spectrograms, and combined aural and visual examination. Objective methods include semiautomatic and automatic methods of voice examination. The author's approach using automatic methods is presented in some detail. The chapter also includes information on error probability and characteristics of human receivers in voice identification methods.

Chapter four presents a description of procedures followed in voice identification as recommended by the International Association of Voice Identification (IAVI), a select group of individuals trained to present expert "testimony" in a court of law. Steps to be followed include recording of a criminal call, making exemplar readings of known persons, preparation of aural materials and speech spectrograms for examination and presentation in court. A scaling method for use in visual speech spectrogram examination is proposed by the author.

The final chapter includes a discussion of the legal implications of voice printing prior to and after 1970. A number of legal cases are presented. A brief discussion of the future of voice identification concludes the chapter.

Two appendices are presented. Appendix A lists all court cases involving voice identification from 1966 until February 1978. Appendix B provides the names of members, trainees and supporters of the International Association of Voice Identification as of 1977.

The strengths of the book occur in the chapters dealing with acoustics, phonetics, the theory of voice production, and the methods of voice identification and examination. They are well written, well documented and presented at a cognitive level which may be understood by students interested in speech science. The chapters dealing with field practice and courtroom protocol should be of interest, in a general sense, to anyone called to testify as an expert witness on any aspect of human communication or its disorders and specifically to those involved in voice identification. The last appendix provides the reader with references for personal communication relative to particular voice identification procedures throughout the world.

The weaknesses of the book relate primarily to the author's manner of presenting rebuttal to criticism of the methodology used by Tosi and his colleagues rather than to a lack of factual data on his opponents' procedures. The author also relies heavily on his own "expert" testimony and personal courtroom experiences to substantiate the "voiceprint" techniques rather than on a detailed critical analysis of methodological considerations of the various approaches suggested by each of the expert witnesses as quoted in the text.

The book is a first of its kind and should be present in the library of any serious speech scientist. It may serve as a reference for advanced speech science students, but will not be immediately useful to the practicing clinician. In sum, the author's efforts to quantify and refine the methodologies used in voice identification should be applauded and efforts to continue the refinement of these techniques supported.