

APPROACHES TO VOCAL REHABILITATION

Edited by

Morton Cooper, Ph.D.

Marcia Hartung Cooper, M.A.

*Private Practice
Westwood
Los Angeles, California*

CONTRIBUTORS

Eugene M. Fatz, Ph.D.
Morton Cooper, Ph.D.
Marshall J. Duguay, Ph.D.
Paul Heinberg, Ph.D.
Anthony Holbrook, Ph.D.
Harry Hollien, Ph.D.
Bernard A. Landes, Ph.D.
David Blair McClosky

Alan C. Nichols, Ph.D.
William H. Perkins, Ph.D.
Wilbert L. Pronovost, Ph.D.
Shirley J. Salmon, Ph.D.
James C. Shanks, Ph.D.
William M. Shearer, Ph.D.
Wayne L. Thurman, Ph.D.
D. Kenneth Wilson, Ph.D.

Gertrud L. Wyatt, Ph.D.

The basic purpose of this book is to bring together, in one volume, many different approaches and techniques concerned with the process of vocal rehabilitation. The text covers a wide range of types of voice therapy, emphasizing practical techniques based on research and clinical experience. This volume will serve admirably as both a textbook for the student of voice therapy and as a reference book for the practicing clinician.

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**APPROACHES TO
VOCAL REHABILITATION**

CONTRIBUTORS

EUGENE M. BATZA, Ph.D.

*Professional Staff, The Cleveland Clinic
Head, Speech Pathology Section
Department of Otolaryngology
Faculty Member, The Cleveland
Clinic Educational Foundation
Cleveland, Ohio*

MORTON COOPER, Ph.D.

*Private Practice
Westwood
Los Angeles, California*

MARSHALL J. DUGUAY, Ph.D.

*Professor, Communication Disorders
State University of New York
College at Buffalo
Buffalo, New York*

PAUL HEINBERG, Ph.D.

*Professor of Communication
University of Hawaii
Honolulu, Hawaii*

ANTHONY HOLBROOK, Ph.D.

*Professor of Speech
Director, Speech Research Laboratory
The Florida State University
Tallahassee, Florida*

HARRY HOLLIEN, Ph.D.

*Professor and Director
Communication Sciences Laboratory
University of Florida
Gainesville, Florida*

BERNARD A. LANDES, Ph.D.

*Private Practice
Memorial Hospital Medical Center
Long Beach, California*

*Approaches to Vocal Rehabilitation***DAVID BLAIR McCLOSKEY**

*Professor of Singing and Voice Therapy
Boston Conservatory of Music
Boston, Massachusetts*

ALAN C. NICHOLS, Ph.D.

*Professor in Communicative Disorders
San Diego State University
San Diego, California*

WILLIAM H. PERKINS, Ph.D.

*Professor of Psychology
University of Southern California
Los Angeles, California*

WILBERT L. PRONOVOST, Ph.D.

*Professor, Special Education and
Communicative Disorders
Boston University
Boston, Massachusetts*

SHIRLEY J. SALMON, Ph.D.

*Speech Pathologist, Veterans
Administration Hospital
Kansas City, Missouri
Assistant Professor
University of Kansas Medical Center
Kansas City, Kansas*

JAMES C. SHANKS, Ph.D.

*Professor, Department of Otorhinolaryngology
Director, Audiology and Speech Clinic
Indiana University School of Medicine
Indianapolis, Indiana*

WILLIAM M. SHEARER, Ph.D.

*Speech and Hearing Clinic
Northern Illinois University
DeKalb, Illinois*

WAYNE L. THURMAN, Ph.D.

*Chairman, Department of Speech
Pathology and Audiology
Director, Speech and Hearing Clinic
Eastern Illinois University
Charleston, Illinois*

D. KENNETH WILSON, Ph.D.

*Professor of Speech Pathology
State University of New York at Buffalo
Buffalo, New York*

GERTRUD L. WYATT, Ph.D.

*Director Emirta, Psychological and
Speech Therapy Services
Wellesley Public Schools
Wellesley, Massachusetts
Lecturer, Language Development and
Language Disabilities in Children
Lesley College, Graduate School
Cambridge, Massachusetts
Department of Child Study
Tufts University
Medford, Massachusetts*

PREFACE

THE BASIC PURPOSE of this book is to bring together in one volume many different approaches and various techniques concerned with the process of vocal rehabilitation. This book may serve as a textbook for the beginning student in voice therapy and a reference book for the practicing clinician.

Approaches to Vocal Rehabilitation allows students and clinicians to consider and evaluate various techniques regarding voice therapy. Many clinicians may seek to master one specific approach. Some clinicians may feel the need to use different approaches with different patients. With time and experience each clinician may develop an individual framework or modifications of techniques of others for vocal rehabilitation. In essence, the relevant and conclusive concern for each clinician is to select, modify, or develop an approach to vocal rehabilitation that affords satisfaction and success to the patient and to the clinician.

We want to thank the contributors who gave of their time and effort in writing these chapters to make this a comprehensive anthology of approaches to vocal rehabilitation.

MORTON COOPER, Ph.D.
MARCIA HARTUNG COOPER, M.A.
Private Practice
Westwood
Los Angeles, California

To
Lorna and Marla
our two wonderful daughters

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APPROACHES TO VOCAL REHABILITATION

CHAPTER 1

ADVENTURES IN VOCAL REHABILITATION

EUGENE M. BATZA

VOICE SCIENCE is fast becoming an established scientific discipline, but vocal rehabilitation remains essentially an art. Few well-established and universally adopted principles have emerged in its practice, yet the clinical practice of vocal rehabilitation is a vital and productive one. In keeping with the title of this chapter, the writer will review his experience with hundreds of voice cases and share these adventures with the reader. Admittedly, personal biases will pervade the writing, but the writer begs indulgence on the ground that it purports to be nothing more than a narrative of the writer's personal experiences. He hastens to add, of course, that, at the present state of the art, most treatment technics in voice therapy have been developed from clinical experience. Sound experimental research has contributed much to our understanding of the mechanism of phonation, but at present it has only limited application in the voice clinic.

VOICE DISORDERS IN A MEDICAL CLINIC

The narrative set forth in these pages is based on a population representing the types of vocal disorders encountered in group medical practice. It may be appropriate at the outset to review their distribution. The data in Tables 1-I to 1-III represent 1,000 cases seen during a four-year period. The presence of organic lesions of the vocal cords facilitates classification of the problem, but, in the absence of pathology, codification becomes a matter

of individual judgment and personal choice. Various labels have gained wide acceptance and many of these appear in the tables for ready identification.

TABLE 1-I
DISTRIBUTION OF VOCAL DISORDERS IN 486 PATIENTS WITH
POSITIVE LARYNGOSCOPIC FINDINGS

<i>Laryngoscopic Findings</i>	<i>No.</i>	<i>Sex</i>	<i>No.</i>	<i>Mean Age</i>
Vocal cord nodules (adult)	115	F	83	35
		M	32	44
Vocal cord nodules (children)	19	F	6	8
		M	13	9
Postoperative dysphonia	89	F	32	54
		M	57	44
Vocal cord paralysis	42	F	26	50
		M	16	47
Irritated vocal processes	40	F	12	48
		M	28	51
Polyps or polypoid thickening	39	F	26	48
		M	13	39
Bowed vocal cords	30	F	14	49
		M	16	50
Contact ulcers	25	F	3	52
		M	22	49
Hyperkeratosis	20	F	6	44
		M	14	44
Hyperemic vocal cords	18	F	4	48
		M	14	37
Ventricular adduction	17	F	6	51
		M	11	58
Edematous vocal cords	16	F	10	43
		M	6	41
Laryngeal trauma	16	F	12	47
		M	4	43
Total	486	F	240	
		M	246	

TABLE 1-II
DISTRIBUTION OF VOCAL DISORDERS IN 472 PATIENTS WITH
NEGATIVE LARYNGOSCOPIC FINDINGS

<i>Laryngoscopic Findings</i>	<i>No.</i>	<i>Sex</i>	<i>No.</i>	<i>Mean Age</i>
Chronic hoarseness*	93	F	49	47
		M	44	43
Tension dysphonia*	88	F	56	52
		M	32	47
Excessively low pitch	64	F	15	38
		M	49	48
Phonasthenia	64	F	34	48
		M	30	57
Postflu dysphonia	49	F	28	52
		M	21	57

Spastic dysphonia	45	F	28	56
		M	17	54
Aphonia-dysphonia	26	F	19	41
		M	7	50
Hyponasality**	25	F	10	39
		M	15	35
Post URI (nonflu)	18	F	11	52
		M	7	52
Total	472	F	250	
		M	222	

* Medical diagnoses

** Dysphonia associated with deficient nasal resonance

TABLE 1-III
RARE VOCAL DISORDERS

Classification	No.	Sex	No.	Mean Age
Diplophonia	8	F	7	49
		M	1	
Falsetto voice	6	F	1	36
		M	5	
Endocrinopathy	6	F	4	41
		M	2	
Papillomata	5	F	3	46
		M	2	
Virilization	4	F	4	54
Juvenile voice	3	F	3	24
Phonophobia	2	F	1	55*
		M	1	8*
Transsexualization	2	M	2	19, 21*
Cricothyroid ankylosis	2	F	1	26*
		M	1	51*
Laryngeal blastomycosis	1	M	1	42*
Subglottic web	1	F	1	42*
Inhaled phonation	1	F	1	46*
Involuntary phonation	1	F	1	23*
Total	42	F	27	
		M	15	

* Actual Ages

Regarding functional disorders, our experience has led us to subclassify certain problems on the basis of a common denominator that appears to have clinical utility. One is impressed, for example, by the relatively large number of patients whose dysphonia had its onset during a flu episode and persisted for many months after remission of the illness. This was particularly striking during the summer months that followed a December Hong Kong Flu epidemic. Management of these cases sometimes requires approaches different from those used for functional problems of less specific origin.

Another example is the relatively large group of functional problems characterized primarily, though not exclusively, by an excessively low habitual pitch range. Whether hyperfunctional or hypofunctional in nature, the writer has found it useful to view the dysphonia as a pitch disorder in planning a program of rehabilitation, hence the classification of excessively low pitch as it appears in Table 1-II.

All the patients seen were first examined by indirect or direct laryngoscopy. Whether positive or negative, the laryngologist's impression, based on visual inspection of the larynx, stands at the top of the list of significant factors that the voice therapist must consider in management of vocal disorders. For this reason, two principal headings in the tabular distribution of the problems were selected—(1) a grouping of patients for whom the laryngologist reported specific deviant findings, some major, others minor (Table 1-I); and (2) a broad category consisting of patients reported to have normal structure and function of the vocal cords (Table 1-II). A third grouping (Table 1-III) is made up of cases that are distinguished primarily by their relatively low incidence and, in the writer's experience at least, may be referred to as rare vocal disorders.

Positive Laryngoscopic Findings

Among the patients having visible pathology or dysfunction, vocal cord nodules predominate, comprising 13 percent of the total group of 1,000 cases. The second largest dysphonic group having vocal cord pathology were those who had had vocal cord surgery, primarily stripping of polyps, polypoid thickening or hyperkeratotic lesions. Six had carcinoma *in situ*. Postoperative dysphonia ranged from a very mild problem requiring essentially preventive therapy to severe hoarseness, bordering sometimes on aphonia.

The remaining categories occurred with considerably less frequency. In descending order of occurrence these categories were made up of patients whose laryngoscopic findings were reported as vocal cord paralysis, irritated vocal processes, vocal cord polyps or polypoid thickening, bowing of the vocal cords