

**PSYCHOLOGICAL FOUNDATIONS
OF MUSICAL BEHAVIOR**

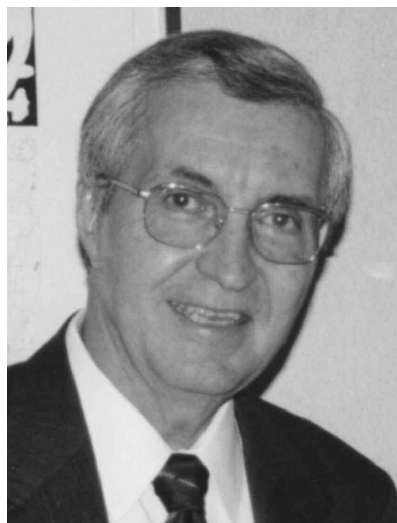
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Other publications include *Instructional Objectives in Music* (Editor, MENC, 1974), *Measurement and Evaluation of Musical Behaviors* (co-authored with R. E. Radocy, Schirmer Books, 1987), *Preparing Graduate Papers in Music* (co-authored with R. K. Fiese and N. Zavač, Halcyon Press, 2001), and numerous research papers.



Fourth Edition

PSYCHOLOGICAL FOUNDATIONS OF MUSICAL BEHAVIOR

By

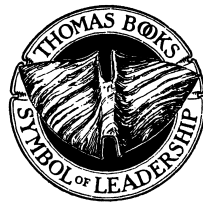
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PREFACE TO THE FOURTH EDITION

The fourth edition of *Psychological Foundations of Musical Behavior* appears at a time of stress and turmoil in the world. The early twenty-first century is marked by acts of terrorism and war, cases of starvation and pestilence, financial chaos, uncertainty regarding climactic changes, and concern over how to care for an ever-expanding population with limited resources. Many problems regarding politics, religion, economics, and natural phenomena defy solution.

The twenty-first century also is a time of positive developments. Rapid international communication enables almost instantaneous attention to any part of the world. Evolving understanding of the human genome promises control and alleviation of genetic misfortunes. Diseases and physical challenges that once were almost a death sentence upon diagnosis are becoming amenable to various pharmacological, surgical, and therapeutic interventions. As in earlier times of worldwide turmoil and opportunity, humans may express, challenge, enhance, and/or negate surrounding conditions through the organization of sound and silence: *music*. Musical styles change; music's functions do not. A pleasant diversion, a profound aesthetic experience, a symbolization of a nationalistic or religious ideal, a personal journey through time, a sales tool—all are roles which music may fulfill.

We have learned a lot about human musical behavior. We have some understanding of how music can meet diverse human needs. Many individuals—psychologists, educators, therapists, music theorists, composers, performers, and others—have contributed to a vast array of knowledge, loosely organized into a psychology of music, or, perhaps more accurately, a psychology of musical *behavior*. The knowledge embodied in that psychology of musical behavior may help enhance individuals' musical abilities, sensitivities, and enjoyment.

Thus, a comprehensive examination and reexamination of the psychology of musical behavior seems particularly appropriate at this time. Understanding music cognition, representation of musical structures, and the traditional areas of psychoacoustics, music learning, cultural organization of musical patterns, measurement and prediction of musical ability, the affective response to music, and musical preference all merit renewed attention.

Much remains to be learned about human musical behavior. While this edition draws on published findings appearing since the third edition (1997)

and reinterprets some older findings, it is far from any final “truth” regarding how people create, perceive, organize, and employ musical sounds. Inevitably, new research will appear, and new questions will arise. Given the contemporary tendency to publicize research results with only partial understanding, some individuals will make premature conclusions regarding music’s roles in people’s lives and how people process music. Further research and writing will be necessary to mitigate those conclusions.

As with all original textbooks and revisions thereof, constraints of time, space, and resources necessarily limited this revision’s scope and breadth. The authors have exercised their professional judgments, based on teaching courses and conducting research and other scholarly inquiry, regarding content. Naturally, some arbitrary decisions were necessary, and the book reflects the authors’ scholarly biases.

Recent years have seen the appearance of various texts addressing specialized areas within music psychology, especially cognitive perspectives. This represents an increasing diversification within the field. The authors have elected to continue a “one-volume” coverage of a broad array of topics, guided by the three “criterion c’s”: The text should be *comprehensive* in its coverage of diverse areas comprising music psychology, *comprehensible* to the reader who is literate in English (or the language into which the text is translated) and possesses some background in music and psychology, and *contemporary* in its inclusion of information gathered in recent years.

Again, while the world is everchanging, and music’s uses change with it, the *presence* of music is unchanging. The authors offer their latest review of aspects of human musical behavior with profound recognition of music’s enduring values.

R.E.R.
J.D.B.

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Many individuals contributed to the successful completion of this fourth edition. These include numerous students over the years in the authors' classes at The University of Kansas, The Pennsylvania State University, and The University of Miami, as well as students elsewhere using prior English, Japanese, and Korean editions. The authors are indebted to professional colleagues, especially Dr. William Hipp, Dean of the School of Music at The University of Miami. Particular assistance from Dr. Albert LeBlanc regarding musical preference and Dr. Wanda Lathom-Radocy regarding music therapy is acknowledged. While the authors have relied on knowledge and contacts made during many years of their university careers, they also have gained some perspective as they pursue their new careers, oceanic environmental observation (RER) and neveian frictional propulsion (JDB). Finally, the authors are grateful to their loving wives, Dr. Wanda B. Lathom-Radocy, and Dr. Arlene Boyle, for their continued loving support and encouragement.

R.E.R.
J.D.B.

CONTENTS

	<i>Page</i>
<i>Preface to the Fourth Edition</i>	v
<i>Chapter</i>	
1. INTRODUCTION	3
Purpose	3
Scope	4
Preview	5
References	7
2. MUSIC, A PHENOMENON OF PEOPLE, SOCIETY, AND CULTURE	8
Why Music?	9
Cultural Anthropological Functions	10
Sociological Functions	14
Psychological Functions	17
Another Perspective	19
What Makes Some Sounds Music?	21
Origins of Music	25
Music, Universals, Society, and Culture	32
Summary	34
References	36
3. FUNCTIONAL APPLICATIONS OF MUSIC IN CONTEMPORARY LIFE	40
Stimulative and Sedative Music	41
Stimulative Music	41
Sedative Music	42
Differential Responses to Stimulative and Sedative Music	42
Music in Ceremonies	44
Commercial Music	49
Background Music	49

	Muzak's Development	49
	Music in the Workplace	51
	Music in the Marketplace	52
	Music in Advertising	55
	Music as Entertainment	63
	Music for Enhancing Narration	65
	Therapeutic Uses of Music	69
	Music to Facilitate Nonmusical Learning	74
	Summary	83
	References	85
4.	PSYCHOACOUSTICAL FOUNDATIONS	93
	Production of Musical Sounds	93
	Transmission of Musical Sounds	95
	Reception of Musical Sounds	96
	From Air to Inner Ear	96
	From Inner Ear to Brain	98
	Pitch Phenomena	99
	Frequency-Pitch Relationship	101
	Pitch Processing of Single Pure Tones	102
	Pitch Processing of Combined Pure Tones	103
	Pitch Processing of Complex Tones	104
	Combination Tones	109
	Intervals	110
	Consonance-Dissonance	110
	Apparent Pitch	112
	Apparent Size	113
	Beating	114
	Absolute Pitch	115
	Pitch Measurement	116
	Loudness Phenomena	117
	Intensity-Loudness Relationship	118
	Volume, Density, Annoyance, and Noisiness	118
	Measurement of Loudness	119
	Stimulus Measures	119
	Response Measures	121
	The Power Law	123
	Masking	124
	Loudness Summation	125

	Dangers to Hearing	127
	Timbre Phenomena	130
	Waveform-Timbre Relationship	130
	Influences within Waveform	131
	Tone Source Recognition	132
	Measurement of Timbre	133
	Summary	134
	References	136
5.	RHYTHMIC FOUNDATIONS	143
	Functions of Rhythm in Music	144
	Rhythmic Structure in Music	145
	Movement and Rhythm Perception and Performance	151
	Cognitive Perspectives on Rhythmic Behavior	157
	Early Noncognitive Theories	158
	Beat/Tempo Perception	160
	Meter Perception	166
	Rhythm Groups	170
	Expressive Timing	178
	Development of Rhythmic Behaviors	181
	Developmental Research	182
	Experimental Research	185
	Teaching Practices for Rhythmic Development	188
	Evaluation of Rhythmic Behaviors	190
	Summary	193
	References	194
6.	MELODIC AND HARMONIC FOUNDATIONS	205
	Extended Definitions	206
	Melody	206
	Structural Characteristics of Melody	208
	Perceptual Organization of Melody	210
	Harmony	213
	Structural Characteristics of Harmony	213
	Perceptual Organization of Harmony	215
	Tonality	219
	Scales and Modes	222
	Functions of Scales	224
	Scale Tuning Systems	225

Major and Minor Modes . . . . .	.230
Other Modes . . . . .	.231
Other Types of Pitch Organization . . . . .	.233
Psychological Processes . . . . .	.235
Hierarchical Perceptual Structures . . . . .	.236
Empirical Studies of Perception and Memory . . . . .	.240
Expectations and Information Theory . . . . .	.243
Research on Musical Expectancy . . . . .	.246
Pitch-Related Behaviors . . . . .	.249
Receptive Behaviors . . . . .	.250
Production Behaviors . . . . .	.251
Development of Melodic and Harmonic Behaviors . . . . .	.252
Research-Based Findings . . . . .	.252
Music Teachers' Views . . . . .	.257
Evaluating Melodies and Harmonies . . . . .	.258
What Is "Good" Melody? . . . . .	.258
What Is "Acceptable" Harmony? . . . . .	.260
Evaluation of Melodic and Harmonic Behaviors . . . . .	.260
Summary . . . . .	.263
References . . . . .	.265
7. FOUNDATIONS OF PERFORMANCE, IMPROVISATION, AND COMPOSITION . . . . .	.273
Performance as Psychomotor Behavior . . . . .	.274
Performance Expertise . . . . .	.276
Performance Anxiety . . . . .	.280
Improvisation . . . . .	.285
Historical Perspective . . . . .	.285
Psychological Perspective . . . . .	.287
Jazz Improvisation . . . . .	.289
Evaluating Improvisation . . . . .	.291
Improvisation as a Teaching Tool . . . . .	.293
Composition . . . . .	.294
A Theoretical Perspective . . . . .	.295
Compositional Approaches of Selected Composers . . . . .	.299
Composition Theory . . . . .	.301
Composition as a Teaching Tool . . . . .	.303
Summary . . . . .	.305
References . . . . .	.307

8.	AFFECTIVE BEHAVIORS AND MUSIC	312
	Extended Definitions	312
	Affect	312
	Emotion	314
	Aesthetic	315
	Other Definitions	318
	Types of Affective Response	319
	Approaches to Studying Affective Responses to Music	321
	Physiological Measures	322
	Adjective Descriptors	327
	Philosophical Inquiry	334
	Psychological Aesthetics	338
	Meaning in Music	347
	Variables Contributing to Musical Meaning	351
	Summary	353
	References	355
9.	MUSICAL PREFERENCES	362
	What Is “Good” Music?	363
	Existing Musical Preferences	366
	Surveys and Classical Music Preferences	366
	Popular Music	369
	Summary of Existing Preferences	370
	Influences on Musical Preferences	371
	Altering Musical Preferences	376
	Summary	379
	References	380
10.	MUSICAL ABILITY AND LEARNING	384
	Extended Definitions	384
	Selected Influences on Musical Ability	386
	Auditory Acuity	386
	Genetics	387
	Musical Home	388
	Physical Features	390
	Creativity	390
	Intelligence	391
	Gender and Race	394
	Summary of Influences on Musical Ability	396

Normal Musical Development and Learning	396
Theoretical Bases	397
Behavioral-Associationist Theories	397
Cognitive-Organizational Theories	400
Musical Development Across Age-Based Stages	406
Musical Abnormalities	411
Measurement and Prediction of Musical Ability and	
Learning	413
Some Approaches	414
Validity	416
Importance of Nonmusical Variables	418
What Should We Measure?	418
Practical Suggestions Regarding Music Education	419
Summary	422
References	424
11. FUTURE RESEARCH DIRECTIONS	430
References	433
<i>Author Index</i>	435
<i>Subject Index</i>	443

**PSYCHOLOGICAL FOUNDATIONS
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Chapter 1

INTRODUCTION

Purpose

This book reviews human musical behavior comprehensively, from a psychological perspective. Music has been a vital component of human culture since before recorded history. Human organization of sound for functional and aesthetic purposes raises many fascinating, although occasionally unanswerable, questions. Description, prediction, and explanation of musical composition, performance, and listening behaviors are continuous challenges. In recent years, claims regarding music's purported therapeutic, commercial, and educational benefits have increased, thanks in part to hasty interpretations of incomplete data. This book focuses questions and general interest on describing, predicting, and explaining human musical behavior and seeks to promote a healthy skepticism regarding premature conclusions about music's influences. Psychologists, musicians, educators, therapists, business people, and anyone with a serious interest in music's power may find it beneficial.

Understanding human musical behavior is useful for the performing musician, whether in the studio, on stage, in the classroom, or in a commercial setting. Why do people prefer certain sounds over others? How relevant is precise pitch discrimination? What psychoacoustical processes underlie musical perception? What cognitive processes turn a stream of perceived sonic events into music? Are some individuals naturally "musical" or "unmusical"? Why is a deviation from stereotyped performance practice a "stroke of creative genius" when done by a well-known conductor but "failure to understand the style" when done by an amateur? Does the master performer differ in some fundamental way from the struggling student, or is it just a matter of more practice? Knowledge of human musical behavior in diverse manifestations and situations is essential for addressing these and other numerous questions.

The person who wishes to sell products or services or enhance entertainment needs to consider various uses of music. Can business employ music in successful marketing strategies? Can impulsive shoppers be encouraged to linger longer and spend more as a function of musical background? Is the

music essential to an unfolding narrative?

Music's therapeutic functions are well documented, but therapy is not a cure. In what settings is music useful as a healing agent? Are there instances where music may be harmful? Are there physiological changes underlying the behavioral changes noted with musical experience? The growth of the music therapy profession owes much to evolving understanding of human musical behavior, and researchers investigating musical phenomena owe much to music therapists' documentation of their experiences.

Contemporary educators, struggling to balance conflicting philosophies and societal demands, may find utility in developing understanding of and familiarity with human musical behavior. Does music really motivate and/or sedate students? Why are children more receptive to "different" music in the primary grades than in later years? Does musical ability relate to intellectual or manual abilities? Again, although this book can not promise definitive answers, the information provided may focus relevant inquiry.

Scope

Music psychology's traditional domains include psychoacoustics, measurement and prediction of musical ability, functional music, cultural organization of musical patterns, music learning, and the affective response to music. Music cognition, broadly defined, has been a dominant domain for the past quarter of a century or so. Music's catalytic uses in business, educational, and therapeutic settings, while clearly within the traditional domain of functional music, arguably comprise emerging contemporary domains. The chapter organization recognizes the traditional and more contemporary domains, with special emphases on psychoacoustics, musical preference, learning, and the psychological foundations of rhythm, melody, and harmony. The chapter on music as a phenomenon of people, society, and culture reflects contemporary interest in music's various roles as a catalyst for social behavior and its diverse sociocultural functions. While music psychology once gave less attention to performance and creative activity than to listening and associated behaviors, performance, composition, and improvisation now receive special attention.

Musical behavior is but one aspect of *human* behavior. Consequently, musical behavior must be subject to whatever genetic and environmental factors influence all human behavior. Throughout, the book expresses a concern for what people *do* with musical stimuli and what musical stimuli *do* to them, in natural as well as laboratory settings.

Behavior, as used herein, means the observable activities of living dynamic human beings. Such activities are of interest either in themselves or as external evidence of some internal state. *Cognition*, the internal processes of

assimilating, organizing, remembering, and recalling information (or “thinking”), may be a covert behavior, but the only way to study covert behavior with relative objectivity is to study its overt manifestations. *Perception* is a process of sensing the environment; obviously, it is essential for much behavior. Perception may be studied only through evidence of its results. Musical behavior includes performance, listening, and creative activity involved in composition and improvisation. The study of musical behavior necessarily includes related cognitive and perceptual processes. That which people *do* with music is musical *behavior*. So, too, is that which music *does* to people.

As Gaston (1968, p. 7) indicates, musical behavior is studied through psychology, anthropology, and sociology. The book primarily reflects a psychological approach: Psychology is the study of human behavior. Nevertheless, the authors have looked beyond the general body of psychological literature. Sociology, anthropology, philosophy, music history, acoustics, and business are germane areas from which the authors have drawn material.

Preview

As with the three prior editions, the authors have considered the dynamic (in the sense of moving and everchanging) aspects of music performance and listening as well as important influences of prior experiences on present behaviors. No human musical activity results solely from willful interaction with music. Cultural influences, learning, and biological constraints are as crucial as motivation, reward, and any “inherent” properties of the musical stimulus. Gaston’s (1957, p. 25) statement, from over two score years ago, remains significant:

To each musical experience is brought the sum of an individual’s attitudes, beliefs, prejudices, conditionings in terms of time and place in which he lived. To each response, also, he brings his own physiological needs, unique neurological and endocrinological systems with their distinctive attributes. He brings, in all of this, his total entity as a unique individual.¹

Chapter 2 examines diverse views of why people have music and considers music’s functions for individuals, its social values, and its importance as a cultural phenomenon. While the focus is largely on Western music, certain ethnological research suggests that commonalities of musical function exist across different cultures.

¹This is a direct quote of material written at a time when generic use of masculine terms in reference to unspecified individuals or humanity in its entirety was customary. In their original writing, the present authors have avoided exclusive reference to one gender when they discuss unspecified individuals or humanity in general.