

THE SOUNDSCAPE OF MODERNITY

ARCHITECTURAL ACOUSTICS AND THE CULTURE OF LISTENING IN AMERICA,
1900-1933

EMILY THOMPSON

The MIT Press Cambridge, Massachusetts London, England

CONTENTS

ACKNOWLEDGMENTS vii

CHAPTER 1:	INTRODUCTION: SOUND, MODERNITY, AND HISTORY	1
------------	---	---

CHAPTER 2:	THE ORIGINS OF MODERN ACOUSTICS	13
	I INTRODUCTION: OPENING NIGHT AT SYMPHONY HALL	13
	II ACOUSTICS AND ARCHITECTURE IN THE EIGHTEENTH AND NINETEENTH CENTURIES	18
	III WALLACE SABINE AND THE REVERBERATION FORMULA	33
	IV MUSIC AND THE CULTURE OF LISTENING IN TURN-OF-THE-CENTURY AMERICA	45
	V CONCLUSION: THE CRITICS SPEAK	51

CHAPTER 3:	THE NEW ACOUSTICS, 1900–1933	59
	I INTRODUCTION	59
	II SABINE AFTER SYMPHONY HALL	62
	III THE REVERBERATIONS OF “REVERBERATION”	81
	IV NEW TOOLS: THE ORIGINS OF MODERN ACOUSTICS	90
	V THE NEW ACOUSTICIAN	99
	VI CONCLUSION: SABINE RESOUNDED	107

CHAPTER 4:	NOISE AND MODERN CULTURE, 1900–1933	115
	I INTRODUCTION	115
	II NOISE ABATEMENT AS ACOUSTICAL REFORM	120
	III NOISE AND MODERN MUSIC	130
	IV ENGINEERING NOISE ABATEMENT	144
	V CONCLUSION: THE FAILURE OF NOISE ABATEMENT	157

CHAPTER 5:	ACOUSTICAL MATERIALS AND MODERN ARCHITECTURE, 1900–1933	169
I	INTRODUCTION	169
II	ACOUSTICAL MATERIALS AT THE TURN OF THE CENTURY	173
III	ACOUSTICAL MATERIALS AND ACOUSTICAL MODERNITY: ST. THOMAS'S CHURCH	180
IV	ACOUSTICAL MATERIALS AND MODERN ACOUSTICS: THE NEW YORK LIFE INSURANCE COMPANY BUILDING	190
V	MODERN ARCHITECTURE AND MODERN ACOUSTICS: THE PHILADELPHIA SAVING FUND SOCIETY BUILDING	207
VI	CONCLUSION	227

CHAPTER 6:	ELECTROACOUSTICS AND MODERN SOUND, 1900–1933	229
I	INTRODUCTION: OPENING NIGHT AT RADIO CITY	229
II	LISTENING TO LOUDSPEAKERS: THE ELECTROACOUSTIC SOUNDSCAPE	235
III	THE MODERN AUDITORIUM	248
IV	ARCHITECTURAL ELECTROACOUSTICS: THEATER AND STUDIO DESIGN	256
V	ELECTROACOUSTIC ARCHITECTURE: SOUND ENGINEERS AND THE ELECTRICAL CONSTRUCTION OF SPACE	272
VI	CONCLUSION: REFORMULATING REVERBERATION	285

CHAPTER 7:	CONCLUSION: ROCKEFELLER CENTER AND THE END OF AN ERA	295
	CODA	317
	NOTES	325
	BIBLIOGRAPHY	425
	INDEX	471