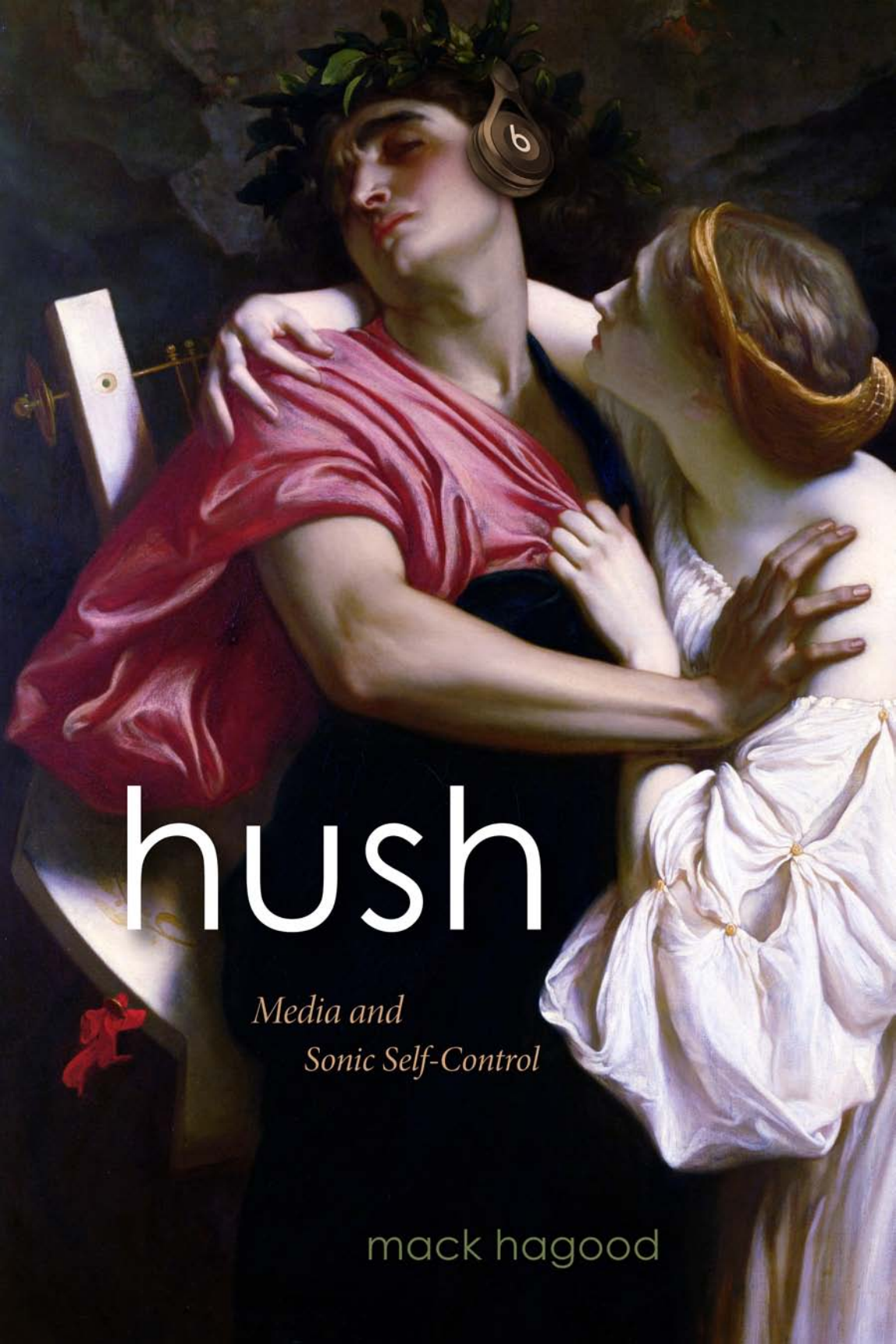




# hush

*Media and  
Sonic Self-Control*

mack hagood

Hush



**Sign, Storage, Transmission**

*A series edited by  
Jonathan Sterne and Lisa Gitelman*

# Hush

---

*Media and Sonic Self-Control*

Mack Hagood

DUKE UNIVERSITY PRESS *Durham and London* 2019

© 2019 Mack Hagood

All rights reserved

Printed in the United States of America on

acid-free paper ∞

Designed by Matthew Tauch

Typeset in Minion Pro by Westchester Publishing Services

Library of Congress Cataloging-in-Publication Data

Names: Hagood, Mack, author.

Title: Hush : media and sonic self-control / Mack Hagood.

Description: Durham : Duke University Press, 2019. | Series:

Sign, storage, transmission | Includes bibliographical  
references and index.

Identifiers: LCCN 2018037348 (print) |

LCCN 2018047134 (ebook)

ISBN 9781478004479 (ebook)

ISBN 9781478003212 (hardcover : alk. paper)

ISBN 9781478003809 (pbk. : alk. paper)

Subjects: LCSH: Mass media—Social aspects. | Mass media—

Influence. | Noise (Philosophy) | Noise—Physiological  
effect. | Headphones—Health aspects. | Noise control—  
Equipment and supplies. | Communication and culture—  
United States. | Information technology—Health aspects. |  
Popular culture—Effect of technological innovations on.

Classification: LCC P94 (ebook) | LCC P94 .H345 2019 (print) |

DDC 302.23—dc23

LC record available at <https://lcn.loc.gov/2018037348>

Cover art: Design including Frederic Leighton,  
*Orpheus and Euridyce*, oil on canvas, 1864, Leighton  
House Museum, London.

Duke University Press gratefully acknowledges the  
support of the Department of Media, Journalism,  
and Film, Miami University, which provided funds  
toward the publication of this book.

# Contents

---

*Acknowledgments* vii

INTRODUCTION. Hearing What We Want 1

## **Part I. Suppression**

29

CHAPTER 1. Tinnitus and Its Aural Remedies 31

## **Part II. Masking**

73

CHAPTER 2. Sleep-Mates and Sound Screens: Sound, Speed,  
and Circulation in Postwar America 75

CHAPTER 3. The Ultimate Seashore: Environments and the  
Nature of Technology 116

CHAPTER 4. A Quiet Storm: Orphic Apps and Infocentrism 148

### **Part III. Cancellation**

175

CHAPTER 5. Bose QuietComfort and the Mobile Production  
of Personal Space 177

CHAPTER 6. Beats by Dre: Race and the Sonic Interface 198

CONCLUSION. Wanting What We Hear 220

*Notes* 235

*References* 245

*Index* 261

# Acknowledgments

---

*Hush* would not exist without the words, actions, inspiration, and generosity of many people—so many, in fact, that I dread the inevitable glaring omissions I will find once these hastily written words of thanks are in print. This book began as a PhD dissertation for Indiana University’s Department of Communication and Culture, so I want to begin these acknowledgments by expressing gratitude to those who let a graduate student into their homes, workplaces, support groups, trade shows, storage spaces, and archives so that he could learn from them. I thank the people associated with Marpac (Gertrude Buckwalter, Liz Heinberg, Mac McCoy, Jimmy Sloan, Dave Theisen, Gordon Wallace, and Janet Zimmerman) and Sound Oasis (Troy Anderson), who shared the history and business of sound machines with me. Chris Newby of Lightning Bug, Adam Terranova of Amadeus Consulting, and Todd Moore of TMSoft provided an invaluable education on the world of sound app development.

I am also grateful to the many family members, friends, fans, and associates of Irv Teibel who shared stories and information with me: Miriam Berman, Robert Carlberg, Tony Conrad, Craig Eley, Daniel Emanuel, Lou Gerstman, Steve Gerstman, Lou Katz, Mark Levbarg, Rosanne Levbarg, Linda Lloyd, Mike O’Neil, Tom Roudebush, Laurie Spiegel, and Hans-Ulrich Werner. Special thanks go to Irv Teibel’s daughter, Jennifer Ballow, who shared the Syntonic Research Inc. materials with me. One of the great pleasures of doing this research has been seeing Jennifer bring SRI back to life with a new

website, downloadable recordings, and even an *environments* app. It has been rewarding to play a small part in this resurgence, and I want to congratulate Darren Richard and Jonathan Een Newton for their success in getting it done.

I am also indebted to the researchers and clinicians who provided me with insights into tinnitus and its treatment through interviews or observation of their practices: Nathan Amos, Jennifer Gans, Steve Hallenbeck, Pawel Jastreboff, Erica Koehler, Karen Libich, Jill Mecklenburger, Jill Meltzer, Jeanne Perkins, Michael Piskosz, and Robert Sweetow. Thanks to GN ReSound in Glenview, Illinois, and North Shore Audio-Vestibular Lab in Highland Park, Illinois, for allowing me to do observations at their facilities. I am grateful to Joel Styzens for sharing his story with me and to Joel, Nathan Amos, and Robert Hillman for welcoming me to the hearing and tinnitus support groups they lead. My deep thanks also go to the many people with tinnitus and hearing impairments who shared their stories with me but whose names I will not mention in order to protect their privacy.

Many sound machine images were acquired from the retail catalog collection at the Browne Popular Culture Library at Bowling Green State University. Thanks to my friend Hsin-wen Hsu and his students Mei-chen Chen and Wen-chun Lin for their research assistance on the *nianfo ji*. I am also grateful to Christiaan Virant of FM3 for discussing his Buddha Machine with me.

Next, I wish to thank the many academic mentors, staff, and peers who helped me when this book was in the dissertation phase. First and foremost, I thank my PhD advisor, Mary L. Gray, whose knowledge, patience, support, inspiration, and generosity have far exceeded any reasonable expectations. The foundations of this book were built in the graduate seminars of Mary and my other PhD committee members at Indiana University's Department of Communication and Culture: Stephanie DeBoer, Ilana Gershon, and Jane Goodman. I am so grateful to each of them. I thank my outside dissertation reader, Norma Coates, for generously sharing her time and knowledge with me over the years. Jonathan Sterne was also kind enough to offer feedback, advice, and encouragement to me as a sound studies newbie (and has continued to do so over the decade since). I would also like to thank Rayvon Fouché, Ted Striphas, and my anonymous readers at *American Quarterly* for their invaluable feedback on the dissertation. Props to the incredible Kathy Teige and Sabrina Walker for guidance with the administrative details of doing fieldwork and getting a degree. My brilliant fellow graduate students at CMCL supplied critical intellectual and emotional support—Eric Harvey, Andrea Kelly, and Travis Vogan were especially helpful in the Inspiration and Maintenance of Sanity departments.

The second phase of *Hush*'s creation, the metamorphosis from dissertation to book, took place entirely at Miami University, where I have been an assistant professor for five years. I can't imagine a more supportive place to work than Miami and its Department of Media, Journalism, and Film. At MJF, Richard Campbell has been an exemplary chair, Ron Becker has been the most generous of mentors and readers, and my colleagues have been the best workmates a new professor could ask for. Sara Christman, Susan Coffin, and Kim Hensley have been patient with me in the management of my research accounts and paperwork, and Steve Beitzel and Ringo Jones have been my trusted advisors in audio hijinks. My student research assistants Claire Stemen and Laurel Wilcoxson were most helpful in putting together the manuscript and art.

Led by Tim Melley, the Miami University Humanities Center has been another center of support for this research. In particular, the Humanities Center's 2015–16 John W. Altman Program on the Senses, led by Altman Fellows Charles Victor Ganelin and Elisabeth Hodges, was an enriching experience and a space for trying out some of the ideas in this book. I am grateful to Elizabeth Stockton for keeping the Altman on track that year and to all of my fellow Altman Scholars for their ideas and energy. Thanks also go out to all my friends across the College of Arts and Science for their support, especially my partner in the *Phantom Power* podcast, cris cheek, who is helping me keep the sound in my sound studies.

This book was made all the more possible by my appointment to the Robert H. and Nancy J. Blayney Professorship. I wish to extend my deepest gratitude to the Blayney family, Provost Phyllis Callahan, Dean Chris Makaroff, and Associate Dean Renée Baernstein for this great honor and financial support.

Beyond Miami, there are a number of people whose close reading and feedback at various stages made this book much better than it would have been: Ashley Hinck, Kristopher Holland, Eric Jenkins, Steve Jones, Danielle Kasprzak, Dylan Mulvin, Greg Seigworth, Nandita Sheth, Ben Tausig, Fred Turner, and my anonymous readers at Duke University Press and the University of Minnesota Press. Particular thanks go out to one repeat anonymous reader who has greatly improved *Hush* through their extensive and perceptive comments and suggestions.

Eric Jenkins helped me understand the roles of modes in Spinoza, while David Howes suggested the terminology of "intra-modal" and "cross-modal" sensory effects that I use in the book. Tarleton Gillespie supplied me with helpful resources on patents. Dave Novak supplied thoughts on the

onomatopoeia of the word *hush* and encouraged me to go with my gut on chapter order. I have been fortunate to test my ideas at the conferences of a number of scholarly societies while writing this book: the American Anthropological Association; the International Communication Association; the International Association for the Study of Popular Music; the Society for Cinema and Media Studies; the Society for Ethnomusicology; and the Society for Literature, Science, and the Arts. I am grateful to each of these organizations and to all of the amazing people I know through them.

Working with Duke University Press on this book has been highly gratifying. Courtney Berger has been a perceptive and patient editor, helping me sort out my sometimes tangled ideas over time. Sandra Korn has been excellent to work with during the production process. And I still can't quite believe my book is now part of my favorite academic book series—Lisa Gitelman and Jonathan Sterne's "Sign, Storage, Transmission." A special shout-out to Jennifer Lynn Stoeber of *Sounding Out!* for taking an interest in my work and introducing me to Courtney.

Thanks also go to the many good friends I've made while living in New Orleans, Taipei, Chicago, Bloomington, and Cincinnati (Northside!). Books mean nothing without friendship.

Finally, I thank the people who have supported me the longest—the people who believed in me even when I provided them with little evidence to go on. Thanks to my family, especially Anita and Skip Capron, who taught me the ethics of listening—and how to listen through the ears of others. James Lopez, we've been brothers for my entire adult life and my futile efforts at keeping up with your intellect have made me an accidental academic. Paul Preissner, our friendship will soon be counted in decades—may the snarky iMessages never cease! I couldn't possibly have married into a better family than I did with Liz, Art, and the Scotts, and I'm grateful to be a part of it.

Bridget, there is no way this book would exist without your incredible love, patience, and example. Abe and Theo, thanks for the cries, squeaks, giggles, belly laughs, questions, musings, poems, and songs. Some noise is joyful indeed.

# Introduction

---

## Hearing What We Want

*Hear What You Want.* This is the tagline of one of the most culturally resonant television ad campaigns in recent years, produced for headphone maker Beats Electronics. In these commercials, which first began airing in the United States in late 2013, star athletes are portrayed using smartphones and Beats Studio Wireless noise-canceling headphones to shield themselves from the verbal abuse of opposing teams' fans or the insulting interrogations of reporters. In one ad, San Francisco 49ers quarterback Colin Kaepernick peacefully strides through a gauntlet of deranged, insult-hurling Seattle Seahawks fans outside their National Football League (NFL) stadium. Though shot years before the athlete's national anthem protests, the ad eerily foreshadows his impending status as political lightning rod. Kaepernick walks through a near-riot of hatred—all directed at him—yet he barely hears it, his face displaying an equanimity derived from noise cancellation and the ego-affirming sounds of Aloe Blacc's song "I'm the Man" (figure 1.1). The "Hear What You Want" campaign, in the words of one reporter, "went beyond marketing and actually became part of pop culture," generating millions of views online and sending Blacc's song to the top of the iTunes singles chart (Beer 2015). The crescendo reached new heights in May 2014, when



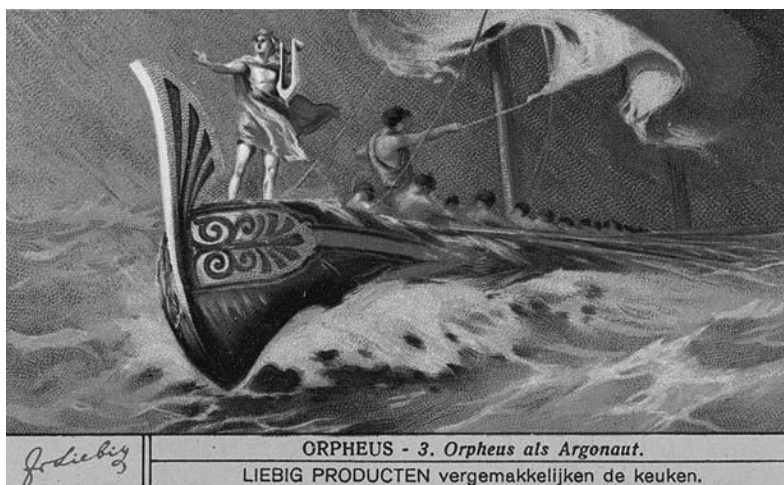
**Figure 1.1** An athlete besieged in Beats’ “Hear What You Want” ad campaign.



**Figure 1.2** Kaepernick displaying sonic self-control.

Apple acquired Beats Electronics for \$3 billion, confirming the ascendancy of headphones in the global electronics marketplace.

Despite the campaign’s popularity, however, there is something curious about the heroism these ads depict. We see no game, no team protecting Kaepernick, no field where he vanquishes his opponents, nor any spectacular display of physical prowess, joy, or celebration. There is only the lone man, protecting himself from the scrutiny and invective of “haters” through an act of sonic separation, getting himself into the mental zone necessary for success. As Kaepernick finally enters the stadium, a victorious grin forms on his lips. His victory is over the maddening crowd, which has failed to touch him. We last see him alone, stretching before the game, headphones on, at peace: in the end, the mastery he has displayed is a mastery over himself, a *hush* cast over his own senses and emotions (figure 1.2).



**Figure 1.3** Orpheus fighting sound with sound to create a safer space.

Media devices that provide control and customization of individuals' sonic environments are proliferating. Generating billions of dollars in revenue, these technologies include not just noise-canceling headphones, but also white noise machines, smartphone apps designed to make a noisy office or bedroom sound like the seashore or a rainy country field, wearable sound generators to suppress the sound of tinnitus, and new in-ear smart devices ("hearables") that filter, alter, and hush the sounds of the world. In Greek mythology, the musician-priest Orpheus heroically drowned the Sirens' fatal, mind-captivating voices in sound waves of his own, singing and playing his lyre to create a space of safe passage for the Argonauts as they returned with the Golden Fleece (figure 1.3). Similarly, what I call "orphic media" promise to help users, as represented by the Beats-wearing Kaepernick, remain unaffected in changeable, stressful, and distracting environments, sonically fabricating microspaces of freedom for the pursuit of happiness. Hear no evil, fear no evil.

Until now, neither consumers nor scholars have seen the disparate devices discussed in this book as a singular and prevalent type of media technology, but I argue that they should. The hush fabricated by white noise machines, nature sound recordings, noise-canceling headphones, and sound-filtering digital apps and devices reshapes our engagement with self, other, and world. As Natasha Dow Schüll writes in her study of video

machine gambling, “Although interactive consumer devices are typically associated with new choices, connections, and forms of self-expression, they can also function to narrow choices, disconnect, and gain exit from the self” (2012, 13). Indeed, the freedom not to choose something, not to connect, not to attend to unwanted aspects of self and world, is a powerful form of choice in itself. The orphic dynamics I describe in this book involve much more than just the experience of sound and silence—orphic media foreground a deep desire for control as freedom, a desire that motivates the use of nearly all electronic media today. Studying these technologies reveals how media function as a controllable interface between subject and environment—and as an interface between a society’s ideological imperatives and the personal poetics of its citizens’ self-making, self-defense, and self-control.

Understanding orphic mediation—the control of how we allow ourselves to resonate, especially where the vibrations of others are concerned—has important sociopolitical potentials. It provides a sensory and material framework for our often-abstract debates about public and private spheres, media echo chambers, urban noise, online noise, fake news, trigger warnings, and safe spaces. Central to all of these controversies about physical and digital spaces are our beliefs about how—and how much—we should affect and be affected by one another. When we use mechanical or electronic sound to reshape space, the blueprints are these often-unexamined beliefs about what self, freedom, and society should be. Intuitively, using the tools the market provides, we build the acoustic architecture of the future, but we do so piecemeal, individual by individual.

One of the risks associated with the unprecedented choice our new media tools offer is an ever-increasing need to literally and figuratively “hear what you want,” fostering intolerances both sensory and political. But at the same time, new media’s din of mediated voices—diverse and democratic, yet overwhelming and often hateful—makes guarded listening a necessity for sensory and emotional self-care. In this context, auditory freedom of choice is a self-reinforcing necessity: both personal and political, “sensitive listening,” with all the ambivalence that term implies, becomes a central issue of our time.

In *Hush*, I argue that addressing the literal and figural problem of sensitive listening begins with changing our notions of what media are and what they do, thinking, as John Durham Peters puts it, “beyond messages” to understand media as “our infrastructures of being, the habitats and materials through which we act and are” (2015, 14–15). Drawing on the philosophy of Baruch Spinoza (1970) and subsequent theorists, I argue that the real es-

sence of media use is not the transmission of information but rather the attempted control of *affect*, the continually changing states of bodies that condition their abilities to act and be acted upon. Subjectively speaking, affects are the immediate impacts that other “bodies” (defined broadly as composites of moving or resting material relations) make upon our bodies (Spinoza 1994, 128). Although affect can be transmitted through representation, it operates nonrepresentationally, overcoming us before we can even “read” an experience or give a name to it as an emotion, as in the moment a loud sound startles, a musical chord overwhelms, or the sudden memory of such an event echoes through us as if the sound were in the air all over again. Affect also accumulates slowly over time, gradually conditioning the range of possibility for future action.

The word *hush* itself speaks to sound’s affective power and utility. Its sound is not an arbitrary signifier or a mere carrier for a message—it is both onomatopoetic and performative, defying our Enlightenment-derived “binary separation of internal cognition from external vibration” (Samuels and Porcello 2015). *Hush* sounds like the hushed murmur of a crowd and the masking noise of its *shhh* has been soothing babies and disciplining the unruly from time immemorial—displaying controlled sound’s ability to enact and enforce social and bodily states. Similarly, while Orpheus’s song had words, its lyrical message was secondary to its sonic force in silencing the Sirens. And of course, any music fan can speak to the wide array of physical and emotional conditions that wordless music can bring forth. Plentiful examples such as these make sound a convenient sensory modality for understanding affective media with powers beyond effective messaging.

Like the Argonauts, we all travel through a world of things that affect us. Attempting to navigate these sometimes rough seas and atmospheres, we use media to pursue what feels enlivening and enabling—and to avoid what makes us feel diminished and disabled. In this way, we enact the same “autopoietic” (self-making) biological phenomenology that causes a single-celled organism to engulf a sensed food source and recoil from a perceived threat (Maturana and Varela 1998, 48–52). Yet unfortunately, as we use media to affectively engage the world, many of our motivating feelings and beliefs about what empowers and disempowers us are “inadequate ideas”—shortsighted, incomplete, and inaccurate (Spinoza 1994, 154–58). In fact, as Paul Roquet (2016) points out in his study of ambient music and video in Japan, autonomy-loving neoliberal cultures encourage subjects to disavow “atmospheric determinations of self” (15) even while “turning the atmosphere into a site of ever-increasing control and regulation” (11). “We need

to learn to *read the air* in a way that better recognizes the forces moving through it,” Roquet asserts, highlighting its potentials as a technology of self (15, emphasis in original).

But reading the air in this way provides other kinds of insights as well. Conceiving of media orphically, as the technologies of our often-misguided and ideologically driven attempts to control affectivity, dissolves the seeming paradox of recent media history: the spread of information through digital interconnectedness has fostered the retrenchment of identities and the proliferation of filter bubbles, echo chambers, trolling, and misinformation, rather than fulfilling the cultural fantasy that better communication would enlighten, cure social ills, and foster democracy (Dean 2009; Peters 1999).

To address the current impasse around listening, this book traces the modes and potentials of affective media use, identifies the ideologies that motivate it, and examines how the remediation of affect—particularly affects of fear and aversion—is designed, marketed, and monetized. While affective media practices *do* foster certain kinds of freedom and relief, they also often work against the best interests of individual and social “bodies politic” (Protevi 2009). The personal sense of control that orphic media provide often derives from the suppression of the biological, social, and material differences that make us who we are—a suppression of difference that actually makes us more compliant as subjects of the control society we inhabit (Deleuze 1992). Ultimately, the technologies I call orphic media may be designed to hush an age-old secret that is both too obvious and too frightening to contemplate: that we have never been, and will never be, in control.

## Structure and Argument of the Book

*Hush* presents its explication of mediated self-control through the ethnographic and archival study of a half century of fighting sound with sound in the United States. Since the early 1960s, American consumers have increasingly turned to orphic media to increase their sense of personal ability as they respond to an ideological ableism that fears difference in human bodies, a postwar capitalist landscape of disrupted spatial coherence and social stability, and a neoliberal information economy that demands individualized attention and, therefore, the suppression of audible difference as unwanted

noise. The book contains three parts. Each centers on a different affective modality through which orphic media fight sound with sound to pacify space for beleaguered subjects: suppression, masking, and cancellation.

Part I presents an ethnographic study of the personal experience and clinical treatment of tinnitus, a “phantom sound” of the body that is sometimes deeply disturbing to those who hear it. Tinnitus is the sound of a subject’s own auditory system, yet it interacts with environmental sound, growing subjectively louder in quiet spaces and quieter in loud spaces. Due to this fact, clinicians and tinnitus sufferers often use orphic media to sonically *suppress* its aural presence, thereby providing the ethnographer an intimate opportunity to examine these technologies of the self through the experience of disability. Through tinnitus, I plumb the depths of aural suffering, showing how an affect of fear can attach to our listening at a neurological level when we feel sonic difference diminishes our ability to act. In tinnitus, sonic threat feels inescapable, presenting a heightened version of the kind of dynamic that animates the orphic media practices in the rest of the book. Tinnital sound and suffering emerge in a complex relationship between neurophysiology, sociomaterial environment, and an ideologically infused habitus of listening (Becker 2004) that hates tinnitus, fears it, and locates it exclusively in a supposedly anomalous body. Not only does this “ideology of ability” (Siebers 2008) misunderstand the nature of phantom sound—it also feeds into subjects’ suffering, making tinnital suppression the most affectively charged form of orphic mediation.

In part II, I pull back from this intimate suffering to work at the larger scales of commercial and national history, surveying the evolution of white noise machines, nature sound LPs, and their digital descendants in order to isolate the cultural catalysts and repercussions of orphic mediation. This history maps the sociomaterial conditions that gave rise to these *sound-masking* technologies and examines their production, marketing, and use to discern Americans’ changing ideologies about sound, space, self, and society. Marpac’s noise-generating “sound conditioner,” the Sleep-Mate, first domesticated and feminized noise to sonically privatize the home for sleep in the early 1960s (chapter 2). However, soon the company found itself rebranding the same device as the Sound Screen, responding to demand for an almost opposite functionality—enhancing concentration and reducing distraction in work and study settings. In both cases, I argue, consumers and producers were responding to a postwar destabilization of physical space and temporality that accompanied the increased circulation of people

and capital. Syntonic Research Incorporated responded to these changes in a different way. Its *environments* series of nature recordings (1969–79) recast the phonograph as a cybernetic medium of techno-pastoral liberation, human and nonhuman interconnection, and self-development—a brief countercultural deviation from the utilitarian use of orphic media (chapter 3). However, today’s contemporary smartphone apps such as TMSoft’s White Noise return even more rigidly to Marpac’s utilitarian sleep/concentration binary, helping users mask affective interconnection to live up to the physical and attentional demands of a 24/7 economy that disdains the limitations of the human body and conceives of even consciousness itself as information capital (chapter 4).

Part III audits the racial, gender, and class politics of fighting sound with sound in the twenty-first century. It does this by studying the social construction of the orphic mode of *phase cancellation*, used by noise-canceling headphone manufacturers to turn environmental sound into a self-canceling signal. Recounting the development, marketing, and reception of noise-canceling headphones, I ask who these media are designed to protect from sound and why, whose sounds are perceived as too noisy or disruptive, and why we have such a hard time listening to one another in a milieu of unprecedented social diversity and interconnection. Using the noise-canceling headphones currently sold by Bose (chapter 5) and Beats Electronics (chapter 6) as case studies, I analyze the differing racialized, gendered, and classed conceptions of noise promoted by these manufacturers in their products’ early days. Early Bose marketing and reviews centered on the elimination of what could be called “white noise,” which often included women’s and children’s voices, heard from a white, male, upper-middle-class point of audition. Over a decade later, the “Hear What You Want” campaign introduced Beats noise cancellation as a solution to the “black noise” of racism that threatens even the most successful man of color. Although both companies would soon diversify the representations in their advertising, these early ads show a masculinist and neoliberal problematization of listening across difference that both companies still promote.

Finally, the book’s conclusion sounds a cautionary note on the future of listening, examining orphic media’s miniaturization (and weaponization) as “hearables,” in-ear computers designed to turn the aural world into a database of content for selective access and control, taking “hearing what you want” to a new level and potentially further atrophying our ability to listen across difference. But despite its critiques and warnings around audio technologies, *Hush* is not intended to simply condemn orphic media—nor

is it a book only about sound. Rather, its purpose is to create awareness of this ubiquitous form of mediation, explain why it exists, and, through its example, encourage greater understanding of the orphic aspects of *all* media use. Reflecting on our affective entanglements and the reductive, defensive, and utilitarian ways we often remediate them is the only way to challenge our self-defeating attempts to be free of one another—and a first step toward more ethical and inclusively empowering media practices. In the remainder of this introduction, I will present the theoretical underpinnings of the book and provide a brief historical backstory of how sound became a problem in need of personal remediation.

### **Making Room for Self-Control**

As a musician-priest, Orpheus shows how the mastery of sound (and other sensory modalities) can be used to move and unite people across differences—an affordance of affective mediation that music and the arts have long mobilized. The question, then, is why have orphic media emerged in such defensive and utilitarian configurations?

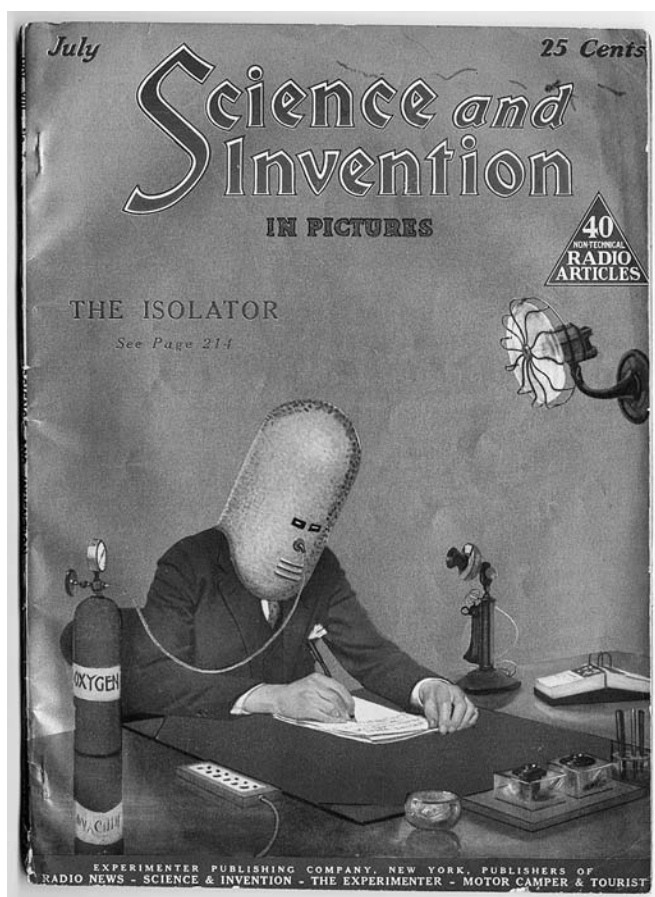
Perhaps the most intuitive answer to this question would be that people use orphic media because the world has gotten too noisy—both acoustically and in the sense of distraction and nonsense that prevents us from processing information efficiently. Acoustic ecologists such as Barry Truax and R. Murray Schafer (1994) first sounded the alarm on the issue of our degraded “soundscape” back in the 1970s, while more recent popular press books with titles such as *In Search of Silence* (Narse 2011), *In Pursuit of Silence* (Prochnik 2011), *Zero Decibels: The Quest for Absolute Silence* (Foy 2010), and even the rather resigned-sounding *One Square Inch of Silence* (Hempton and Grossmann 2009) attest to ongoing anxieties around noise both as unwanted sound and as unwanted information or informatic interference. Noise has also been a central concern in the interdisciplinary field of sound studies, with many cultural and philosophical analyses written on the topic—some of which have strongly influenced the present work.

Nevertheless, I have not found noise, in itself, to be a robust explanation for what people do with orphic media. As Hillel Schwartz explains, noise is “a register of the intensity of relationships” in a given space and time and therefore its history is fourfold. To understand noise in a given milieu, we must apprehend the ambient sounds of its sonic environment; its ways of listening and evaluating sounds; its definitions and theories of noise; and its

practices of condemning, defending, reducing, and producing noise (2011, 21). As a scholar working on the present and recent past, I find that our contemporary definitions and theories of noise often make it more difficult to examine relationships of intensity. Like information—and, to a great degree, *because of* information theory and cybernetics—noise has become a sprawling and shape-shifting epistemological presence in modernity. While a skillful analyst like Marie Thompson (2017) capably combs out noise's many matted meanings and rehabilitates the term for scholarly duty, noise still remains an overdetermined phenomenon in everyday life. Therefore, I have largely excluded noise as what ethnographers call an “etic” category (an implement in the scholar's own analytical toolbox) so that I can better scrutinize the discursive and material dynamics behind its emergence as an “emic” category (one in use among the people being studied).

In other words, I treat noise as a symptom, not a cause. The historical argument in this book does not reduce to noise, but nevertheless attempts to explain at least some of its facets. Orphic media have arisen to silence a blaring contradiction in our liberal, capitalist, and increasingly “infocentric” society, which generates the imperative for a focused, free, and disembodied subject while also complicating the environmental conditions that have always negated the possibility of such a subject. The noise people use these technologies to block out is symptomatic of this more fundamental conflict, which is both societal and deeply personal at once.

A humorous early twentieth-century device called the Isolator both anticipates the use of orphic media and hints at its longer Euro-American philosophical and social heritage (figure 1.4). Invented by the techno-utopian science fiction pioneer Hugo Gernsback, the Isolator is something like a diving helmet for immersion into paper media. As shown on the cover of the July 1925 issue of Gernsback's magazine *Science and Invention*, the helmet is isolating enough to require the use of an oxygen tank, creating a sonic buffer between the author and the world outside as he writes or edits his articles and stories. Peripheral vision is also limited. In fact, the eye slits in the Isolator are so small that “it is almost impossible to see anything except a sheet of paper in front of the wearer.” This attempt at disappearing the sensing body and projecting one's consciousness into the representation that one is manipulating anticipates William Gibson's cyberspace by more than sixty years. Making a claim that might resonate with both the professoriate and noise-canceling headphone-wearing business travelers, Gernsback wrote, “The greatest difficulty that the human mind has to contend with is lack of concentration, mainly due to outside influences.”



**Figure 1.4** Hugo Gernsback's Isolator, shown on the cover of his magazine *Science and Invention*, July 1925.

The Isolator was meant “to do away with all possible interferences that prey on the mind.” Looking at the accoutrements that surround the helmeted scribe, it is possible to get a sense of the interfering conditions that make the production of silence so salient in modernity. An electric fan, a telephone, an address book, and some sort of remote control device surround him, facing him expectantly, offering up the affordances (and interferences) of electrical and informatic circulation and connection. It’s only a short jump from the Isolator to a sound conditioner—or a digital app such as Freedom, which promises to prevent you from being distracted by shutting off social media and the World Wide Web. However, despite then-recent inventions

such as the phonograph, radio, and Eric Satie's utilitarian "furniture music," Gernsback doesn't light upon sound generation as a less cumbersome means of controlling one's self.

By the arrival of the Walkman (1979), Discman (1984), and iPod (2001), sonic self-control came into full view and scholars began framing the personal stereo's powers of "mobile privatization" (Du Gay et al. 1997; Williams 2003) as a response to the distracting and alienating conditions of modernity and capitalism, generating a literature that perhaps comes closest to the subject matter of this book. The most prolific and accomplished analyst of the personal stereo, Michael Bull, characterizes its use through a different Greek hero—not Orpheus, but the Sirens' best-known opponent, Odysseus, who orders his men to tie him to the mast and fill their ears with wax before sailing through the Sirens' strait: "This passage from Homer is significant, in part, because it is the first description of the privatisation of experience through sound, experienced now as a commonplace in iPod culture" (2007, 19). Drawing on Horkheimer and Adorno's reading of the myth (1972), Bull writes that "the auditory self" of the iPod user "rebels at the very same time as it is seduced—this is the dialectic of iPod culture" (23). Users want to be Odysseus, the hero of their own universe, but they achieve this by binding themselves to the mast, finding cognitive freedom "precisely through a tethering of cognition to the auditory products of the culture industry" (23, 133). Scholars and critics working in this Odyssean mode of analysis mainly disagree as to whether the headphone wearer, "whose step occupies the vague threshold between zombism and activism" (LaBelle 2010, 98) is truly a hero or more of a dupe, with some emphasizing individual agency through music listening (Chow 1990; DeNora 1999; Hosokawa 1984), while others, like Bull, are more aligned with a Frankfurt-inspired, anti-culture industry approach.

A comparison between the Odysseus and Orpheus myths illustrates *Hush's* debt to—and differences with—personal stereo scholarship. In the Frankfurt School reading, Odysseus represents the prototypical bourgeois individual, instrumental in his reasoning, with no particular concern for sound until he enters the Siren Strait of modernity. Modern capitalism gives us both the dulled senses of the workers/rowers and the instrumental listening of the managerial Odysseus. However, as Bull does note, the very existence of these Greek myths shows that the dream of auditory self-control *predates* modernity (2007, 18). Even the philosopher Seneca, after prescribing a Stoic indifference to urban noise, admitted defeat and retreated to the quiet Roman suburbs. "Why should I need to suffer the torture any longer than I want to," he wrote, "when Ulysses found so easy a remedy for his companions even

against the Sirens?” (Atkinson 2015, 15). An orphic perspective, on the other hand, emphasizes that sonic entanglements are indeed ancient and multivalent. Orpheus, son of the musical muse Calliope, is aurally sensitive from birth and sonic in his everyday practices. His power comes not from wax-filled ears, but from listening to the world’s vibrations, taking musical lessons from the birds and attending to the sounds of spiders spinning their webs (Wroe 2011, 15). When Orpheus encounters the Sirens, he combats their song with a song of his own, displaying the affective modes of connection and disconnection, harmony and dissonance, that sound has always afforded. The problem in modernity, then, is not that these affective entanglements are new, but rather that they are now simultaneously denied, suppressed, revealed, and multiplied, affectively ensnaring us in complex new ways.

Gernsback’s Isolator serves as the perfect symbol of this contradictory state. This helmet for wranglers of representations harkens back to René Descartes’s *Meditations* (“Now I shall close my eyes, I shall stop my ears, I shall disregard my senses”) and technologically inscribes a cognitivist, liberal view of a rationally detached, thinking self (1951, 33). At the same time, the helmet’s existence suggests how difficult it is to achieve such a disembodied, unaffected state—and to what absurd lengths we will go in the attempt. The contradiction the Isolator embodies is both naïvely idealist and naïvely materialist—on the one hand, the body is just the unimportant physical carrier of the all-important, immaterial mind, but on the other, we are desperate to perfect what we perceive as that body’s disabilities (Siebers 2008, 7). Similarly, we tend to think of our environment as a transparent, idealist grid to be filled with our grand designs in one moment, while in the next, we think of it materially, a field or stockpile of matter that confounds or furthers our wishes (Lefebvre 1991, 30). The oscillation between idealist and materialist thinking powers the modern advance of science and capitalism, but it also prevents a holistic understanding of our relation to body and environment.

Thus, the orphic perspective draws on Bull’s critique of post-Enlightenment instrumental reason, but also focuses more intently on its consequences for the capacities of bodies and their relations to environments. Ironically, the outputs of instrumental reason have included a proliferation of commodities, images, and voices that affect us beyond all reason, as well as scientific and sociological revelations that undermine or disprove any notion of self as a unique, coherent, autonomous, and agential mind (Barglow 1994; Gergen 1991, 1996, 2000; Jameson 1991; Lyotard 1984). At the same time, economic and environmental transformations have required the average person to be more disciplined with her powers of attention. “At the moment when the

dynamic logic of capital began to dramatically undermine any stable or enduring structure of perception,” Jonathan Crary writes, “this logic simultaneously attempted to impose a disciplinary regime of attentiveness” (2001, 13). Technologies and labor practices reshaped perception, absorbing and immobilizing subjects through attentive practices aimed at production or consumption. From this perspective, “stopping our ears” looks less like a dubious act of rebellion and more like a requirement of modern living.

Examining the century preceding the advent of orphic media, one sees noise problems escalating in tandem with economic and political demands for autonomous selfhood and attentional discipline. It is no coincidence that the eighteenth- and nineteenth-century forerunners of Richard Florida’s “creative class” (2014) were the loudest public noise critics of their day. William Hogarth’s 1741 engraving “The Enraged Musician,” for instance, which shows an angry middle-class maestro railing against the noises of the London street outside his window, portrays the sonic hindrances of the lone, urban creative (figure 1.5). Over a century later, in 1862, the famed mathematician Charles Babbage blamed his inability to complete his mechanical computer, the Analytical Engine, on the “vile and discordant” sounds of London’s street musicians (Swade 2001, 212). One of Babbage’s contemporaries, the writer Robert Carlyle, constructed an architectural forerunner to orphic media—a literal room to think—a double-walled and windowless soundproof study for reading and writing. John Picker avers that such Londoners’ noise problems stemmed from “their own fledgling and curious status as housebound professionals, workers whose place of rest doubled as their place of labor” (2000, 428). The technological and social practices of the industrial revolution were generating economic liquidity and affording a spatial and temporal proliferation of economic activity, including that of both the street musician and the genteel home worker whom he would torment. Nineteenth-century physicians and psychiatrists increasingly came to the opinion “that years spent toiling amid ever-present noise do in time take their toll, if not in nervous collapse then in a loss of mental focus” (Schwartz 2011, 343). In this era, sonic fatigue rose as a cultural concern while sleep and concentration became threatened personal and economic resources.

Then, as now, privileged individuals tended to locate the noise problem not in the structural contradiction they inhabited, but rather in the person of the noise-making other. Many have pointed to the classist and xenophobic aspects of London intellectuals’ complaints about street music, the sound of which was actually quite harmless in comparison to the industrial noise that was literally deafening boilermakers and other workers at the time



**Figure 1.5** William Hogarth's *The Enraged Musician*, 1741. Retrieved from the Library of Congress, <https://www.loc.gov/item/miller.0342/>. (Accessed March 20, 2018.)

(Bailey 1996; Goldsmith 2012; Hendy 2013; Keizer 2010). Far removed from the greatest sonic hazards of the industrial revolution, Babbage decried the noise of “those whose minds are entirely unoccupied” (Goldsmith 2012, 113), while Carlyle complained of the “vile yellow Italian grinding” and “vagrant musical scamps . . . with guitars and Nigger songs” (Hendy 2013, 243–44).

From the soundproof study to the Isolator to the noise-canceling headphone to the filter bubble, we see the miniaturization, refinement, and virtualization of technologies that afford the freedom of not listening to difference. At first, these technologies were mostly *passive* attempts to block out sound, compensating for our lack of “earlids” through architecture or earplugs. Their effectiveness was limited: Carlyle found no relief in his study, as its insulation from outdoor sounds seemed to reveal all manner of noises coming from within the house. As for earplugs, while a sensitive artist such as Franz Kafka was a devotee, a combination of social stigma, ineffective and uncomfortable materials, hygiene concerns, and other factors prevented most people from using them (Bijsterveld 2008; Schwartz 2012). Like architectural acoustical treatment, the earplug would find its technological refinement

and widespread adoption only in the twentieth century, although, like Carlyle's soundproof study, earplugs tended to reveal interior noise—in the form of tinnitus.

However, by the 1960s, when attention came even more under siege, electromechanical and electronic technologies emerged that *actively* mobilized the affective potentials of vibration—not merely buffering subjects, but instead fighting sound with sound. When Gernsback was working on his Isolator, a little over half the U.S. population lived in urbanized areas and the nation's rural way of life was quickly waning. Both industrialization and, later, a postindustrial economy reshaped and fragmented the spaces and temporal rhythms of work and home life, while media supplied a proliferation of new sensory inputs. With the rise of the information economy, the problem of attention found its full overdetermination. Insofar as it posits information processing as the essence of consciousness, what I call “infocentrism” may be the ultimate disciplinary discourse, placing the responsibility on each of us to control that which cannot be controlled, especially in the informatic din it has catalyzed. In this setting, an “attention complex” emerges, a network of power relations that produces the problem of attention in individuals—thus a “complex” in two senses of the word (Rogers 2014).

In response to these attentional conflicts and pressures, individuals use orphic media as “technologies of the self” (Foucault et al. 1988, 19), technologies that make them “capable of bearing the burdens of liberty” (Rose 1999, viii), in an attempt to be the kinds of individuals they think they are supposed to be. In liberal, market-driven democracies, freedom, self-reliance, and individuality are less the motives of government than its requirement (Burchell 1996, 271). On the one hand, the relationship to self becomes highly *managerial* as we are expected to maximize our own attentional potential in a marketplace of precarious labor with little in the way of a safety net (Gershon 2011). On the other hand, government's respect for private space and individual autonomy leads it to take a hands-off approach to the kinds of neighborly noise that can degrade our abilities to maximize our powers of attention (Bijsterveld 2008, 262).

In such a sonic setting, the market supplies “technologies of individuality for the production and regulation of the individual who is ‘free to choose’” (Rose 1999, 232). However, the technological freedom from being affected is most often used by subjects to thrive *within* prescribed spaces of power and value. The kinds of spiritual or economic freedom they support are thus highly individualized and circumscribed. As designed and constructed today, orphic media provide freedom of choice *within* the system, not the

freedom to listen carefully, reflect upon our situation, and potentially choose a different system altogether. These devices encourage us to hear *private* problems of sonic self-control and noise-making others where, in fact, a *shared* social dissonance affects us all. In order to address this social dissonance, it is important to examine the affective modes and potentials that subtend our current configurations of orphic media—modes and potentials that also offer possibilities of reconfiguration.

## Sonic Space and Empty Media

The story of this book began two decades before I knew I would write it. It was 1994 or so, my workday at an educational magazine in Taipei, Taiwan, was over, and I was indulging in my frequent habit of walking for miles through the streets of that vast city. As night fell, I found myself in the narrow alleys of an old section of Taipei's Wanhua District. Somewhere up ahead, I heard the sound of a lone male voice chanting a Buddhist sutra. Pursuing the sound, I eventually came upon a conundrum: the voice came through the open and uncurtained window of a dimly lit room, but the singer wasn't there. Instead, the room was practically empty save for a small, wall-mounted altar holding flowers, incense, an electric candle, and a box of some sort that I couldn't identify. Nevertheless, the voice repeated its short, enchanting refrain over and over again until, after a few minutes, I forced myself to move on.

When I later related this uncanny case of the invisible monk to a Taiwanese friend, she told me the voice came from a *nianfo ji* (念佛機, literally “reciting—or chanting—Buddha machine”), a cheap, plastic audio device used to generate karmic merit and bring peace to its user (figure 1.6). According to religion scholar Natasha Heller, the *nianfo ji* “brings forth the sound of the Pure Land,” an important heavenly realm in Chinese Buddhism, “creating an environment that is both protective and efficacious” (2014, 301). Fascinated with their looped recitations on digital chips, I began purchasing these little sutra boxes, which, I learned, were found in Buddhist households across Mainland China and the Chinese diaspora. Sometimes I would turn on one or more of my chanting machines and listen, often imagining that unseen devotee in Wanhua and wondering what feeling he or she may have derived as its sound filled the small house from that otherwise empty room.

This scenario reminded me of the occasional sleeplessness of my own childhood and the soothing company I found in a late-night show for



**Figure 1.6** A *nianfo ji*, which “brings forth the sound of the Pure Land.”

long-haul truckers on a little AM radio, which seemed to transform my dark bedroom into a safer space. Years later, I would learn that the Spinoza-inspired theorists Gilles Deleuze and Félix Guattari recognized this sort of sonic spacemaking as well:

A child in the dark, gripped with fear, comforts himself by singing under his breath. He walks and halts to his song. Lost, he takes shelter, or orients himself with his little song as best he can. The song is like a rough sketch of a calming and stabilizing, calm and stable, center in the heart of chaos. Perhaps the child skips as he sings, hastens or slows his pace. But the song itself is already a skip: it jumps from chaos to the beginnings of order in chaos and is in danger of breaking apart at any moment. There is always sonority in Ariadne’s thread. Or the song of Orpheus. (1987, 311)

In *A Thousand Plateaus*, Deleuze and Guattari refer to the child’s song as a form of “Refrain,” a practice that reworks the emergent relations between sound, space, and subjectivity. There is also a social dimension to this kind of mediation: “Radios and televisions are like sound walls around every household and mark territories (the neighbor complains when it gets too loud),” they write (1987, 311).<sup>1</sup> Sitting in the resonant territory of the sutra box and reflecting on my childhood radio refuge, I got an inkling of how