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Soundscapes for Social Change: Community and Consciousness through Sound Design Rhetorics

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SOUNDSCAPES FOR SOCIAL CHANGE: COMMUNITY AND CONSCIOUSNESS
THROUGH SOUND DESIGN RHETORICS

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ABSTRACT

By applying a "sound-mapping" methodology that incorporates qualitative
interviews and field research, I argue that theater sound design provides new means to
connect sonic rhetorics with social change. I examine theater sound design as an
ecological composing practice that lends itself to empathy, community, action, and
pedagogy; and further argue that there is rhetorical potential in what I call "soundscapes
for social change," a concept that encourages sonic agency and sound as contemporary
resistance. The theater setting introduces sound and vibration experiences carefully
calculated and developed to impact a variety of audiences and stir their imaginations
through sensory experiences, accessed not just through the ear but also through the body.

DEDICATION

This dissertation is dedicated to my nieces Olive and Luella, with love.

They are only a few months old right now, but someday, they'll change the world.

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Being part of many "theater families" over the years also led to this project. To Ann Marie Dragich and Nicole Ohr, thank you for allowing me to be part of your dance theater collective shortly after I moved to NYC. You provided me with fascinating perspectives on sound and silence in dance. To Matthew Preston and Eleah Burman, thanks for giving me a chance to perform in your beautiful play at Gene Frankel during NYC Pride Week—and for becoming my good friends! To Veronica Dang, thank you for inviting me to join so many of your theater and film projects—and for introducing me to Athena Theatre Company, a group that became integral to my research.

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A final thank you goes to my committee members: Cynthia Haynes, Steven B. Katz, Becky Becker, and Hamilton Altstatt. Each member of my committee provided unique thoughts and insights, and it was a privilege to work with all of you.

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Introduction

There is that ominous texture. See how you've got these sort of pulses? This is a

heartbeat. This is a recording that someone made and put for public domain

recordings—taking a stethoscope to someone's heart and recording their heartbeat

to show an example of what different heartbeats sound like. So, I took one of

those recordings of a heartbeat, and you're usually hearing bump, bump. Bump,

bump. Bump, bump. This is bump, bump, very slowly. So, this is slowed down to

maybe one percent . . . In the speakers in the space, you could feel the rumbles,

and that becomes part of the design. (Andy Evan Cohen, Personal Interview)

During my interview with Andy Evan Cohen, sound designer for Athena

Theatre's production of *I Carry Your Heart* (2019), he shared the sounds and vibration of

a heartbeat slowed to a crawl within the play's sound design. The sounds, meant to subtly

resonate with audiences through the sensation and abstract feel of a heartbeat rather than

the direct sound, connect thematically to the play about the politics and poetics of organ

donation. Research shows that audience members' heartbeats synchronize during

theatrical performances, as the audience members "overcome group differences and

produce a common physiological experience" (Devlin qtd. in "Audience Members'

Hearts"); and this physiological and emotional impact allows theater sound to move,

inspire, and evoke change and action. In this dissertation, I apply IRB-approved

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interviews and case studies to explore questions that build on the social power of theater sound and its potential for the composition and rhetoric field: In what ways might sound designers and audiences alike understand and compose soundscapes of social change? What is revealed rhetorically when we explore spatial and sensory patterns of sound? How do sound-based methods for making change and understanding contemporary issues have an impact on empathy, community, action, and pedagogy?

In the study, I build on the concept of theater as resistance by specifically considering theater sound *and vibration* as resistance, applying specific case studies and IRB-approved interviews with theater industry professionals (see Appendices A-E). Through my research, I examine the ways in which sound and vibration negotiate an opening for empathy, community, action, and pedagogy through sonic agency. To develop my key findings and assertions, I apply a "sound-mapping" methodology to analyze the assets of sonic communities through oral interviews, ear-witnessing, narrative inquiry, and sonic immersion in the theater setting. My research includes qualitative interviews that I conducted with the sound designer, director, and producer of Athena Theatre's *I Carry Your Heart*, a play that tackles contemporary issues such as organ donation while exploring family connections and community. This methodology pulls from the work of the Massachusetts Institute of Technology (MIT) Community Innovators Lab (CoLab), who incorporate soundwalks and interviews to "soundmap" various community assets. Rather than sound-mapping the assets of a physical space, I map the intersections of theater sound and rhetorical soundscape studies to introduce soundscapes for social change.

As someone who lives in an urban environment, I find myself immersed in loud sounds on a daily basis. In the hustle and bustle of New York City, the Lexington Avenue Express train runs through the Bronx, Manhattan, and Brooklyn, carrying an estimated 1.3 million passengers each day—and these passengers regularly include performers who shout "Showtime!" while entering the sliding doors. Since this particular train runs express, passing several stations where a local train would stop, street performers know passengers will be stuck on the train for a lengthy amount of time. This is the busker's ideal occasion to hop on the train, amplifier in hand, ready to sing, dance, or play an instrument. The throngs of passengers, whether daily commuters or tourists to the Big Apple, typically have two aural options beyond the vibrations and hums of the train's crowded cars. The first option is experiencing the action, sounds, and clamor of the unofficial, unapproved street musicians, dancers, or acrobats who stream onto the train. These passengers stare entranced and cheer, fully immersed in the moment. The second option is less immersive: casually looking away, avoiding the situation with a half-hearted smile or grimace.

For those who avoid the performers' sounds, this performative experience is one of many sounds to avoid in New York City, where the loud sounds of sirens, construction, traffic, and helicopters make people more sensitive to distractions. These passengers regularly choose a second aural option: pull out their phone, insert earbuds, and listen to music or podcasts of their own choosing, creating an isolated sound bubble to avoid interaction with buskers. These customized options allow for a non-shared soundscape amidst the hectic, overpowering cacophony of city sounds.

Through technology, passengers now have access to their own personal library of sound, a catalog of desired noise available in handheld devices. As a result, urban dwellers control and cultivate their own soundtracks and soundscapes, even within public spaces such as the Lexington Avenue Express train. These solitary listening experiences allow passengers to design their own sound environments, filtering out noises they wish to ignore. The physical force of outside sound may intervene through its vibratory impact, but pocket-sized, digital mediated sound creates a personalized experience instead of a collective, intentional listening experience.

In public spaces, shared listening experiences become more limited with the advancement of technology. Headphones and isolation techniques will continue to improve in their cost effectiveness and noise cancellation abilities, allowing more people to customize what they hear each day. In their introduction to *Promising Practices in 21st Century Music Teacher Education*, Michele Kaschub and Janice Smith explain that "autonomous control of musical interaction has dramatically shifted from collective and shared listening experiences to the engagements of a single listener . . . It is this listener who determines what will be heard and the level of attention that will be devoted to the listening experience" (6). Even *without* the distraction of technology to mediate and modify our listening practices, it may be impossible to have a truly shared listening experience, as individual perspectives, contexts, and backgrounds will modify and mold the personal response to collective listening experiences, allowing a diversity of sonic perception. Nina Kraus explores such sound processing in "Listening in on the Listening

Brain," where her work on complex auditory brainstem response uncovers the ways that experiences impact sound perception.

One area that attempts to create meaningful, collective listening experiences is theater: a place where groups come together with the expressed desire to share a soundscape and listening experience. That desire, and its potential impact, is why my research uses theater sound design as a heuristic to explore nonverbal sonic composing and sound design rhetorics as social action. My dissertation creates a multi-layered exploration of theater soundscapes to develop nuanced methods for inquiry, research, and action regarding contemporary societal issues and meaning-making. The lens of theater soundscape design and nonverbal sonic composition exemplify Brandon LaBelle's concept of *sonic agency*, a means to consider how sound informs emancipatory practices, including the ways "speech and action are orchestrated" (1). Sonic agency is meant to enable "new conceptualizations of the public sphere and expressions of emancipatory practices—to consider how particular subjects and bodies…creatively negotiate systems of domination, gaining momentum and guidance through listening and being heard, sounding and unsounding particular acoustics of assembly and resistance" (LaBelle 4). Theater readily inspires resistance and alters perception as a place to invent, interrogate, and explore different worlds. Theater is a moment in time where fact and fiction coexist—a setting that muddles the lines between audience and stage as a "rehearsal for the revolution" (155) as explained by Augusto Boal, founder of the Theatre of the Oppressed. In *Staging Resistance: Essays on Political Theater*, Jeanne Colleran and

Jenny S. Spencer emphasize "the continuing vitality of theater as a form of cultural intervention and political resistance" (2).

A sonic agency that looks to sound as resistance lends itself to engaged attention, to complex ecologies, to listening, and to empathy. Through community and civic engagement, sounds interact, intersect, and diverge with other forms of writing—and connect to an ecology and future for student writing. By providing a means to influence community change, sound design and nonverbal sonic composition present significant opportunities for praxis in higher education. My study embraces rhetorician Steph Ceraso's call for a *multimodal listening pedagogy*, which she describes as a means to experiment with listening scholarship and pedagogy, exploring bodily and multisensory approaches to composing. A deeper consideration of nonverbal sonic composition in theater fits within this call and aligns multimodal listening with performance, perception, and the connection between sounds and/as social action.

By applying a methodology that involves both ethnographic and field research, I assert that theater sound design provides new opportunities to connect sonic rhetorics with social change and to examine practices that exist in theater sound design as an ecological composing practice that lends itself to empathy, community, action, and pedagogy. I further argue that there is rhetorical potential in what I call "soundscapes for social change," a concept that encourages sonic agency and sound as contemporary resistance. The theater setting introduces sound and vibration experiences that are carefully calculated and developed to impact a variety of audiences and stir their

imaginations through sensory experiences, accessed not just through the ear but also through the body.

The concept of "soundscapes for social change" also highlights dynamic engagement with sound and the development of sound in/as social action. Although soundscape exploration and manipulation may lead to both positive and negative outcomes (R. Murray Schafer; Greg Goodale; Carolyn Birdsall), the concept of "soundscapes for social change" uses sound design as a foundation to consider unique perspectives of "sounding out" the world. The concept of "soundscapes for social change" further places social action in conversation with sonic rhetorics by considering the inventive potential of sound.

Sound artists and activists, including Stavros Stavrides, Salomé Voegelin, and LaBelle, have examined the publics created through co-production, which Stavrides designates as communities in movement. Enveloping such communities in movement, Voegelin explores the notion of sonic sensibility, as impacted by the formlessness of sound and its capacity to (re)shape politics of visibility. In *Sonic Agency*, LaBelle expands on this idea with examples of sound informing social practice and change, including examples from the late 1960s in the United States and the peace struggles in East Berlin in the 1980s. LaBelle's works fully engage with contemporary life and the complexities of public and political engagement, and his concept of sonic agency intertwines with the issues of sonic rhetorics and social action, providing a foundational text to explore the agentive potential of theater sound design. While LaBelle considers the use of sound and listening in response to conflict and violence, my research builds on

this work by applying theater sound to concepts of sonic agency—moving past sounds as protest but also into sound design as an ecological, nonverbal sonic composing process.

This chapter provides an introduction and also includes a literature review with four sections: (1) Understanding Soundscape Studies, (2) Sound Studies and Rhetoric, (3) Theater Sound Design as Sonic Rhetoric, and (4) Theater Sound Design for Social Change. As a fully immersive sense that comes to listeners from every direction, sound presents challenges in overwhelming and dangerous environments, such as the distractions of noise in work areas and the harmful effects of noise pollution; but when harnessed to share opportunities for participatory action and active listening, sound also contains potential for transformative community engagement and writing education in its dynamic and inherently socially-engaged nature. As Yanira Rodríguez notes in *Soundwriting Pedagogies*, sound writing requires attention to a "real material existence" as a place where "resistance is made possible and inevitable," and theater sound design necessitates the same awareness of audience perceptions. Consideration of sonic writing within theater also provides new opportunities for composition and rhetoric scholars to connect sound and social change by (1) evoking sonic community, empathy, and action through performance and literacy; and (2) developing opportunities for sound design pedagogy in composition and rhetoric that incorporates each of these elements.

In Chapter Two, I explore the connections between theatrical performances and the cultivation of empathy in audience members. After defining "sonic empathy" and how sounds and vibrations create emotions, the chapter includes an application of Kanta Kohchhar-Lindgren's model of the "third ear," a model of multimodal listening that

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supports cross-sensory listening in the theater setting. Kochhar-Lindgren combines perception with meaning-making to explore the "third ear" within deaf and multicultural performance. To explore unexpected links to sonic empathy, I further consider contemporary and politically-charged theater performances that intentionally use sound to create feelings of discomfort or inclusiveness among the audience.

In Chapter Three, I apply community listening practices and qualitative interviews to the "sound-mapping" methodology through an interview that I conducted and recorded with Andy Evan Cohen, the sound designer for Athena Theatre's *I Carry Your Heart*. The chapter covers qualitative interviewing as community listening and the development of community through theater sound design—both the community "behind the scenes" who collaborate to create the production and the impact on the audience members as a community. By sharing insights from my interview with Cohen, I argue that theater sound design serves as an ecological composing process worthy of study within sonic rhetorics through its alignment with movement, multimodality, and audience awareness intended for social change.

In Chapter Four, I use narrative inquiry as a research methodology to uncover the ways audiences move from empathy and community to action. By sharing and learning from my personal interviews, the chapter includes insights from director Cate Caplin and producer Veronique Ory from Athena Theatre's play *I Carry Your Heart*. During our interviews, Caplin and Ory provided background information on how this production raised awareness of the politics and poetics of organ donation, how sound and "talk back" sessions with LiveOnNY (a nonprofit organization committed to organ and tissue

donation) encouraged audience action, and how the collaboration and histories of each person involved in the show informed the overall experience. My findings lead to three assertions of *sonic action* as being impacted by agency, space, and storytelling.

In Chapter Five, I share my argument through two "acts" that consider how instructors and students can harness sound for social action and embrace possibilities for what Steph Ceraso calls a multimodal listening pedagogy of experiential pedagogies related to embodied sound. I ask, for all students and all classrooms, how might a composition course become its own soniferous garden? How might instructors combine sound with empathy, community, and action in ways that enact social justice and provide students with meaningful assignments, activities, and assessments?

Understanding Soundscape Studies

Soundscape studies sits in a middle ground between science, society, and the arts. Since this field of study is interdisciplinary in nature, it allows "musicians, acousticians, psychologists, sociologists, and others [to] study the world soundscape together in order to make intelligent recommendations for its improvement" (Schafer 96). In *The Soundscape*, Canadian composer R. Murray Schafer explains that to adequately modify and manipulate soundscape compositions, an understanding of acoustic ecology is necessary through a deep consideration of "the study of sounds in relationship to life and society" (205). Schafer coined the term "soundscape" to represent the sonic equivalent of landscapes, adding that, like visual landscapes changing over time, the soundscape of the world is constantly changing as new sounds are born and old sounds evolve or disappear. Schafer provides an example of this with the emergence of snowmobiles and how they

drastically alter the soundscape of cold climates, not just changing what people hear in these environments but also impacting animals and nature with noise pollution and vibrations in the tundra. Although Schafer considers any acoustic area to serve as a soundscape, he also argues that a soundscape is more permeable than a landscape, particularly since it is harder to "zoom in" on one specific impression among the many noises of a soundscape—even when listening attentively.

Schafer introduces a question for the field of soundscape studies: "Is the soundscape of the world an indeterminate composition over which we have no control, or are *we* its composers and performers, responsible for giving it form and beauty?" (96). Schafer's question leads to more questions, for example, is the soundscape simply noise, sound, or a collection of both? In *The Sound Studies Reader*, Jonathan Sterne asks: "How many of the sounds of everyday life existed ten years ago? Twenty? Thirty? Fifty? That's just the sounds—but what of the contexts in which they happen, the ways of hearing and not-hearing attached to them, the practices, the people and institutions associated with them" (1)? Sterne analyzes "both sonic practices and the discourses and institutions that describe them . . . [it serves to] re-describe [not simply *describe*, he later points out] what sound does in the human world, and what humans do in the sonic world" (2). Sound design rhetorics within theater present an opportunity to enter and contribute to this topic, as soundscapes shape contexts, institutions, and audience experiences, both intentionally and unintentionally.

According to scholars like Schafer and George Prochnik, today's sonic environments (sonic landscapes, or soundscapes) constantly shift due to the intensity of

new sounds as well as digital technologies that lessen the tactile or bodily sensations of

sound. Individuals often create their own sound "bubbles" rather than experiencing

community soundscapes (Julian Treasure). Typically, researchers engaged in sound

studies tend to explore some variation of the following question: "What is the

relationship between man and the sounds of his environment, and what happens when

those sounds change?" (Schafer 95). This may be explored through the politics of sound.

Sound has been used as a weapon, including sonic warfare at the Branch Davidians in

Waco by the FBI and "sound bombs" in the Gaza Strip (Steve Goodman); and as an

instrument of peace, as recently seen—and heard—in the Sounds of Peace initiative

between Musicians Without Borders and Peace One Day ("Sounds of Peace Music

Workshop Manual"). In addition, silence and sound can evoke change: chanting,

marching, protesting, and moments of silence. By regulating and amplifying sound, sonic

rhetorics are connected to political and activist experiences, and debates on "sound"

versus "noise" can be deeply political. Meanwhile, the politics of noise grow more

polarizing through the use of digital technologies as well as greater noise pollution in

many environments (Bello et al.).

Terms such as "noise" and "sound" are often used interchangeably, which is why

in "Let's Have Done with the Notion of 'Noise,'" composer Michel Chion argues that

"the word noise (*bruit*) is one that we ought to be able to do without . . . Acoustically as

well as aesthetically, it is a word that promotes false ideas" (245). Chion clarifies a lack

of precision in the meaning of "noise," and the fact that both unwanted sound and

nonlinguistic, nonmusical or nonverbal sound can serve as definitions for this term—

making it a vague terminology. The construction of spaces by architects, engineers, and designers allows for a control of sonic behavior, as materials are modified and manipulated to develop certain sound environments that focus on preferred sonic elements and remove unwanted sound. This architectural precision may, then, provide yet another differentiation between sound and noise, as noise is often considered "unwanted sound" (Schafer). Because scholars often split sonic environments into a binary regarding what is sound and/or noise, Marie Thompson clarifies in *Beyond Unwanted Sound* that "noise is simultaneously too vague and too 'segregationist'—it is too ambitious with regard to what it signifies, and too rigid in the distinction it requires" (1). Yet, each concept, both sound and noise, must be combined in the consideration of soundscapes.

Ari Y. Kelman argues in "Rethinking the Soundscape: A Critical Genealogy of a Key Term in Sound Studies," that in contemporary scholarly circles, the term "soundscape" has "become disconnected from its original scholarly concept and used broadly to apply to nearly any sonic phenomenon. Scholars either misapply it or redefine it to suit their needs" (212). He notes examples such as Fiona Richards' *The Soundscapes of Australia*, an edited collection that moves soundscapes out of the environmental realm and into a more artistic realm. Kelman indicates that Schafer, far from seeing soundscapes as a merely artistic venture, has an idea of soundscape that is "tied explicitly to environmental dangers on the one hand and, on the other, the social order which, if acoustically designed, can become a symphony of sorts" (Kelman 220)—quite a different approach of Richards. Although Kelman analyzes works that use the term "soundscape" but do not critically engage with Schafer and his legacy; he also identifies works that

critically engage with Schafer's understanding of soundscape but silence him by redefining the term: Kay Kaufman Shelemay et al.'s *Soundscapes*, Barry Truax's *Acoustic Communication*, and Emily Thompson's *The Soundscape of Modernity*. Shelemay uses the soundscape as a metaphor for understanding relationships between sound, meaning, and context in her work—an ethnomusicology textbook. Truax, meanwhile, advances Schafer's notion of the soundscape to make it something "communicational," and he works closely with Schafer's initial definitions. Since the two of them worked together on the World Soundscape Project, the connection is quite clear. Thompson succeeds in taking prior soundscape work a step further without silencing prior work:

> Thompson focuses more on the sound of modernity than on its soundscape. By so doing, her use of Schafer's term outdoes Schafer himself, whose own use of the term is caught in a similar tension but cannot seem to rise to her level of analysis. For both authors, modern life is characterized by sound run rampant, yet each examines a dramatically different strategy for facing that circumstance. In both cases, too much noise presents a problem, and in both cases, the solution lies in the mitigation or diminution of background noise. For the subjects of Thompson's book, the solution lay in abstracting sound completely from its context and developing technologies to control it. For Schafer, the solution is only accessible not by attending to sounds as they define or characterize a particular place, but by learning to listen selectively, tuning out the noise and leaving only music. (Kelman 226)

Schafer notes that the world soundscape has reached an "apex of vulgarity in our time" sharing that noise pollution continues to grow as a problem and that universal deafness may be a result (95). Jonathan Sterne, in *The Sound Studies Reader*, similarly notes that "we live in a world whose sonic texture is constantly transforming and has been for centuries. New, never-before-heard sounds like ringtones enter and leave everyday life in the course of a few years" (2). Although there are negative impacts of man-made noise pollution, with urban noise pollution often being considered "the next big public health crisis" (Owen), acoustic ecology also includes the manipulation of soundscapes and its impact on such awareness, as seen in sonic art and sonic activism. In *Noise: The Political Economy of Music*, Jacques Attali observes that "today, our sight has dimmed; it no longer sees our future, having constructed a present mode of abstraction, nonsense, and silence . . . By listening to noise, we can better understand where the folly of men and their calculations is leading us, and what it hopes is still possible to have" (29).

As it impacts this future, performance often embraces soundscape, and vice versa. In "Contradicting Media: Toward a Political Phenomenology of Listening," Jody Berland writes about structure, space, team, and the impact on our listening practices. She notes how radio, as a man-made soundscape, "extends space if you're making music, shrinks it if you're listening" (33). Art historian Rudolf Arnheim explores the social, political, and perceptual possibilities of technology in *Radio: An Art of Sound*. Arnheim examines the social and political possibilities of the technology—and posits that an art of sound can

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have a social and political impact, as we now see in sonic art as well as activist performance art in the theater setting.

Soundscapes have played a role in theater since the ancient Greeks, who designed staged spaces and masks in ways to distort and project the voices of performers (Leonard 5). Several playwrights over the past hundred years—George Bernard Shaw, Henrik Ibsen, Anton Chekhov—wrote sound effects directly into their plays to develop more realistic or moving worlds for audiences. Architecturally, theaters are designed for different soundscape qualities, with theater types including open air spaces, thrust stages, theater in the round, traverse theaters, and others. Therefore, sound designers must consider sound design and composition in the realm of what is practical, effective, and realistic within that space. A look at performing arts also provides examples of controlled, manipulated sound to evoke embodied, sometimes visceral feelings. The Flea Theater in New York City, for example, presented two productions in 2018 that highlighted sound design, *Sound House* and *This Is the Color Described by the Time*. The educational activist theater group, Girl Be Heard, provides another example of theater soundscape that combines education and activism to make impactful changes on society. Soundscapes persuade; soundscapes hurt; soundscapes heal; soundscapes impact. Examples ranging from protest marches and sonic art to theaters, museums, and classrooms show that soundscapes can inspire social change and social action.

As my work argues for an inclusive pedagogy through multimodality, the consideration of theater soundscapes must include nonverbal sounds, vibration, and multimodal listening. As a result, scholarship in disability studies is incorporated as I

consider the accessibility of theater sound design and the use of soundscapes for social change within inclusive pedagogy. In addition to Kochhar-Lindgren's applications for the "third ear," Brenda Jo Brueggemann's *Lend Me Your Ear: Rhetorical Constructions of Deafness* informs my work as it explores Deaf culture and activism as well as American Sign Language. Brueggemann pursues and provides alternatives to speech-focused rhetorics.

Two articles in *Disability Studies Quarterly* further my considerations of inclusivity through soundscape-based explorations and pedagogies. First, Sean Zdenek's "Which Sounds are Significant? Towards a Rhetoric of Closed Captioning" provides insights on the rhetorical and interpretive qualities of closed captioning, informing my understanding of what sounds are essential and connected to arguments and understanding. Second, Georgina Kleege and Scott Wallin's "Audio Description as a Pedagogical Tool" highlights inclusive pedagogy in the composition classroom through the creation, study, and use of audio descriptions, which are the practice of audio- or word-based translations of visual material for people who are blind or have low vision.

Pedagogical interventions such as Shannon Walters' published work in *Technical Communication Quarterly* have found that students who are deaf, hard-of-hearing, blind, or have low vision still participate in and benefit from pedagogical activities rooted in multimodality, which plays an essential role in my explorations of "soundscapes for social change" within pedagogy in Chapter Five. Such efforts must incorporate what Cathy Davidson calls collaboration by difference in *Now You See It*: "Collaboration by difference respects and rewards different forms and levels of expertise, perspective,

culture, age, ability, and insight, treating difference not as a deficit but as a point of

distinction" (100). Participatory learning impacts classroom environments by allowing

students to apply *all* of their abilities and skills, and by providing this foundation for

sound studies and rhetoric activities encourages the dynamic and embodied nature of

soundscapes.

Sound Studies and Rhetoric

Although a focus on theater sound design presents a new area of research within

composition and rhetoric studies, *sonic rhetorics* is a growing area of scholarship within

writing studies, communication, composition, and rhetoric. By studying the affordances

of sound in rhetorics, composition and rhetoric scholars investigate sonic imagination,

sonic dimensions (hearing, listening), and auditory culture—challenging what was once

the privilege of the visual in academic contexts. Sonic rhetorics specifically focuses on

rhetorical implications, creations, and interpretations of sound, whereas the overarching

field of *sound studies* intersects and overlaps with the humanities and social sciences,

crossing disciplinary borders from media studies and history to geography, anthropology,

musicology, acoustic engineering, and beyond. As its own field, sound studies is a

relatively new area of scholarly inquiry, but recent conferences and publications search

for and define its place in scholarship. For example, sound scholar Jonathan Sterne's

Sound Studies Reader brings together multiple readings, both historical and

contemporary, on the much broader field of sound studies. In addition to the *Sound

Studies Reader*, Sterne has published many books and articles on sound, culture, media,

and technology, and he regularly highlights the debates of the sound studies field: noise versus sound, definitions of sound, and sound as material versus cultural.

Aurality played a key role in rhetoric throughout history—given the oral modes and expressions of ancient cultures and the primacy of oral speech (Walter Ong). The materiality of sound and writing was present in early sophistic rhetorics, as Henri Irénée Marrou notes that the speeches of Isocrates, although published and not presented, are "always presented in the form of real speeches—even when the speech is entirely fictitious, like the one in On Exchange, in which Isocrates pretends to call upon the clerk of the court, refers to the water in the water-clock used to measure how long the speech took…" (81). This example evokes the sensations and materiality of the speech— Isocates' engagement with materiality through consideration of the water-clock and other surroundings, and how that may impact the rhetorical understanding of the "receivers" of a speech. I use the term "receivers" in place of readers or listeners, as Marrou's example of the midnight oil shows how Isocrates' work may provide a gateway to move us beyond a sensory hierarchy privileging vision and into other forms of rhetorical understanding, including smell and sound. More recent work in sonic rhetorics, however, fully delves into the role of sound and materiality in twenty-first century composition. Today, sonic rhetorics encompasses multiple areas of exploration, including but far from limited to, the areas explored in this literature review: multimodal composition, ambient and material rhetorics, and rhetorical soundscape studies.

Multimodal Composition

The sonic turn of the composition studies field started in the late 1990s with Steven B. Katz's *The Epistemic Music of Rhetoric* and Byron Hawk and Thomas Rickert's special issue of *Enculturation* on Writing/Music/Culture. Sonic rhetorics later re-entered the scholarly conversation on rhetorical theory with Cheryl Ball and Byron Hawk's' special issue of *Computers and Composition* titled *Sound In/As Compositional Space*, and Cindy Selfe's oft-cited article "The Movement of Air, the Breath of Meaning: Aurality and Multimodal Composing." My work with "soundscapes for social change" serves as a response to Cynthia Selfe's argument that instructors should not "constrain the semiotic efforts of individuals and groups who value multiple modalities of expression" (616), a point that is particularly relevant when taking into account the linguistic and cultural diversity that many college students bring to the classroom. Selfe argues that, rather than having teachers focus on either writing or aurality, teachers should "model a respect for ... the various roles each modality can play in human expression, the formation of individual and group identity, and meaning making" (626).

Research on sonic rhetorics in the early 2000s led to a wealth of new scholarship; and, today, the field includes work in sonic archives (Jon Stone), podcasting (Jennifer Bowie; Kyle Stedman), ways of teaching sound in first-year writing (Kati Fargo Ahern; Steph Ceraso), ambient rhetorics and sound (Thomas Rickert), and sonic materialisms (Erin Anderson; Byron Hawk). In her 2014 enculturation article on recorded sound, titled "Toward a Resonant Material Vocality for Digital Composition," Erin Anderson contends that "scholars of sonic rhetoric have worked to carve out a space for sound as a

subject of rhetorical analysis, a material for multimodal text production, and a methodological model for alphabetic writing practice." Other work in this area focuses on material and embodied experiences, as well. For example, in "Composing for Sound: Sonic Rhetoric as Resonance," Michelle Comstock and Mary E. Hocks write that "if sounds are 'vibrational surfaces, or oscillators' as Steven Goodman argues, then sonic rhetorical engagement can be characterized as embodied and dynamic experiences with sound, from listening practices into composing practices" (135). Meanwhile, Kati Fargo Ahern goes beyond the multimodal composition approach to sonic rhetorics and identifies three ongoing scholarly conversations or frameworks in which sonic rhetorics, or, what she calls auditory rhetoric, could best be situated: (1) multimodal composition, (2) material rhetoric, and (3) genre theory/embedded genres. Ahern built on the pedagogical work in sonic rhetorics that emerged in the 2000s.

Steph Ceraso adopts a similar approach in exploring the role of multimodal listening within sonic rhetorics. In "(Re)Educating the Senses: Multimodal Listening, Bodily Learning, and the Composition of Sonic Experiences," Steph Ceraso considers the ways that listening is an embodied, multimodal experience:

> In a culture where being plugged in to digital devices is a common occurrence, when so much of what we pay attention to is streaming through earbuds or flashing on screens, I am calling for a reeducation of our senses—a bodily retraining that can help us learn to become more open to the connections between sensory modes, materials, and environment. (120)

Ceraso argues for the necessity of multimodal listening training within various sound environments, which she expands in her book *Sounding Composition: Multimodal Pedagogies for Embodied Listening*. Similarly, in "Toward a Pedagogy of Materially Engaged Listening," Christina M. LaVecchia calls for instructors to help students understand "what listening might require of them in terms of bodily activity" in a purpose-driven manner that asks students to reflect on listening habits and the attentions and affordances of sound.

Through multimodal composition and pedagogies, students have an opportunity to work with digital composition and twenty-first century literacy, the "set of abilities and skills where aural, visual, and digital literacies overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and easily adapt them to new forms" (*A Global Imperative* 2). In addition, elements for the framework of the National Council of Teachers of English's *Definition of Literacy in a Digital Age* includes that students must be able to "explore and engage critically, thoughtfully, and across a wide variety of inclusive texts and tools/modalities " and "consume, curate, and create actively across contexts." Not only do basic literacy skills improve when students read and compose in a variety of ways, but such practices also promote in-class support for students with varied learning styles, as Cynthia Selfe and Gail Hawisher explain in *Multimodal Composition: Resources for Teachers*.

Ambient and Material Rhetorics

Thomas Rickert's *Ambient Rhetoric* further engages with soundscapes and nonverbal composition as part of networked, connected rhetorical invention that moves beyond epistemological thinking, or thinking centered on knowledge and rational belief. Instead, he presents a rhetorical theory attuned to ambience and emergent ways of thinking, much like soundscapes encourage the need for attunement, close listening, and "dwelling" within moments. Rickert takes language beyond the written word and into consideration of environment, of composition, of the rhetorical situations that surround individuals—all elements that are also important in a theater setting. Rickert observes: "Language and environment presuppose each other or become mutually entangled and constitutive. Further, becoming aware that there is no tidy separation of language and environment opens us up to forms of 'connection' that are not solely link-driven" (105). Rickert's concept of *ambient rhetoric* attends to the use of language (as he explains, "how we-use-language/language-uses us") in a manner that seeks interaction between place, language, and body: "ambience connotes distribution, coadaptation, and emergence, but it adds an emphasis to the overall, blended environment that the network does not" (106).

Ambience is spatial, and, as such, connects closely to sonic rhetorics, specifically as a consideration of sonic environments and our attunement to them. In an era of information overload, when attention spans and competition for attention cause dissonance and embodied disturbances in an individual's being, a vigorous appreciation or design of soundscapes will heighten experiences within material space. Rickert applies

the foundational Greek philosophical concepts of *kairos* (time), *chora* (space/place), and *periechon* (surroundings). Rickert also explores the concept of *terroir*, a French wine term referring to the place and time of its origin—explaining that *terroir* is somewhat representative or at least conveys much about ambient rhetoric. Like wine, rhetoric is "of the earth" and also "impacts the senses, circulates in waves of affect, and communes to join and disjoin people" (Rickert x).

These waves of affect relate to Jacques Attali's notion that the ear demarcates power and relationships of power, an idea that relates to the role of social action and participatory action with/in sound studies. Attali believes that music and sound form our perceptions of the world and serve as a map to greater knowledge. Attali's arguments also connect to those of rhetorician Byron Hawk, who in *Resounding the Rhetorical* creates an opportunity for established sound to serve as a central feature of composition and rhetoric, disrupting the text-based traditions of rhetoricity. Hawk defines the terms "quasi-object" and "co-production" in this book, where he posits that composition, like perception, is developed through circulation. According to Hawk, a quasi-object exists through co-production, and examples of quasi-objects that Hawk shares include noise (as the bodies, movements, and uncontrollable factors work together to develop a soundscape and make meaning) and composition, which is impacted by circulation and ecological factors. Sound studies inform Hawk's writings, as well as theorists and writers such as Sid Dobrin (postcomposition), Thomas Rickert (ambient rhetoric), and Michel Serres (who originated the term quasi-object). Sound represents each of these distinct elements, as its meaning evolves over time and gradually morphs with each transition and passage.

In his book, which "re-sounds" through chapters on composition, process, and collaboration, Hawk explores the concepts of sonic agency and social action in his analysis of public spheres (or the networks and public connectivity to composition). Hawk considers the different ways that publics emerge and develop in time and space, using Michael Warner's work on publics and counterpublics as a framework for the interconnected nature of publics. Hawk applies this to bands who have both digital and in-person publics. Hawk provides an example of a Swedish punk band who became famous several years after their final album was released, due to the album's distribution on file sharing websites like Napster, and later YouTube, showing the way the evolving public sphere impacted their work.

In "Auscultating Again: Rhetoric and Sound Studies" in *Rhetoric Society Quarterly*, Joshua Gunn et al. review scholarship in sound studies and in communication and rhetoric, explaining that sound studies have heretofore been largely overlooked in rhetorical study. Greg Goodale further develops this idea of sonic materiality in *Sonic Persuasion*, a book that he opens with the concept of "listening" to texts[1]. He shares an example from his graduate school years, when he faced complications and became frustrated while analyzing letters a professor assigned him to read. The professor suggested he spend time "listening" to the letters, a suggestion that led Goodale to

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[1] As Greg Goodale writes of "listening to the pages," might we as well consider and connect other sensations to our reading and writing (or listening, smelling, tasting, touching) of text? Each sense brings its own rhythmic quality to the experience of rhetorical thinking. Isocrates blurred the lines between "reading" and "listening," between "speaking" and "writing," as he did not deliver his speeches but rather published them, a method that, Henri Irénée Marrou clarifies, served to raise oratory to a literary art. "They were works of art which took a long time to ripen—with the result that they very often smelled of 'midnight oil'" (Marrou 81). Marrou's focus on the smell of Isocrates' speeches provides an object of study that evokes the persuasive power of our "nonthought senses," as Goodale would say, particularly in regards to olfactory sensation.

eventually consider sonic metaphors for scholarly activity, which has traditionally been overrun with visual metaphors. Goodale analyzes speech, film, radio, literature, and cartoons to show the subtle and nuanced ways that sound persuades audiences. Goodale includes sounds that create community and bring people together, such as sounds that develop positive, collective identification and encourage empathy. But he also discusses harsher examples, especially the role of sound and the loudspeaker in Nazi Germany. Goodale highlights the fact that the loudspeaker, according to Hitler himself, is what made it possible to conquer Germany—illustrating the potentially nefarious uses of soundscapes.

Carolyn Birdsall also analyzes controlling uses of soundscapes in *Nazi Soundscapes*, considering how the manipulation of sound can lead to violence, exclusion, and hate speech. This "dark side" of soundscapes is important to note, and Birdsall shares examples of the ways Nazis manipulated the German populace through amplification, music, and broadcasting technology. Birdsall's work is a reminder to understand and reflect on how sounds can harm and manipulate—not just historically, but also in the present. As Birdsall's work proves, sound can be manipulated to negatively impact others, and this relates to its ability to influence and persuade through sensory pathways—concepts at the very heart of rhetorical study, and concepts that impact, for better or worse, social action.

Rhetorical Soundscape Studies

Perhaps the most relevant connection between soundscape studies and sonic rhetorics comes from a new field of study: *rhetorical soundscape studies*. In

"Understanding Learning Spaces Sonically, Soundscaping Evaluations of Place," Kati Fargo Ahern proposes the term "rhetorical soundscape studies" as a subset of sonic rhetorics in the same way that "rhetorical genre theory" is a subset of genre theory. She writes that rhetorical soundscape studies, "bring together an understanding of both the generative and critical components of soundscape analysis and design to interrogate the rhetorical consequences of soundscapes for (both human and non-human) participants and inhabitants of those spaces" (24). Ahern applies soundscape studies to the design of learning spaces and presents "rhetorical soundscape studies" to encompass soundscapes and their effects within rhetorical genre studies. Ahern defines existing research that places rhetorical theory in conversation with soundscapes. For example, rhetoricians Michelle Comstock and Mary Hocks recently looked at the soundscapes of climate change in "The Sounds of Climate Change: Sonic Rhetoric in the Anthropocene, the Age of Human Impact," analyzing projects from sound artists who layer multiple dimensions within their artwork that explore the temporality of sounds as they decay and species coming and going as a result of climate change. The researchers incorporate feelings of nostalgia, memory, and grief through their engagement with the sound and voice of cultural soundscapes.

The applications of rhetorical soundscape studies are practical, not just theoretical. In "Speaking Back to Our Spaces: The Rhetoric of Social Soundscaping," published in *Harlot: A Revealing Look at the Arts of Persuasion* in 2013, Kati Fargo Ahern and Jordan Frith contemplate the rhetorical potential of "social soundscaping," which they describe as the opportunity for people to "contribute, share, 'prune,' and listen

to geo-located sounds in specific spaces. Geo-locating has to do with individuals being able to upload sounds, text, or images via an application or interface, and tag them to a specific location [using a GPS]." They consider how "geo-locating sounds in soundscapes give us rhetorical opportunities to 'speak back' to our spaces," with examples of projects such as Urban Tapestries, Rider Spoke, and Tactical Sound Garden that allow this geo-tagging of sound and development of immersive, interactive, and embodied sonic experiences.

Due to rhetorical soundscape studies being a relatively young field of inquiry, there are substantial opportunities to reverberate within the field. In his work on acoustic ecology, Schafer searches for ways to isolate key sounds and learn what happens to the relationship between humanity and the environment when sounds change. Through the World Soundscape Project in the 1970s, Schafer and Hildegard Westerkamp developed a research technique called "soundwalking" to capture and analyze the soundscapes surrounding a community. Since soundscapes create and define communities, the method involves capturing audio (often about two to three minutes per site) and visuals of a space to consider embodied sound, context, history, and issues of equity and inequity. Westerkamp similarly stresses the importance of listening, a skill fine-tuned through her work as a scholar, sound ecologist, and soundscape composer. Listening, she argues, connects individuals to the environment and enriches all community experiences. Soundwalking allows for close, focused, embodied listening. These sonic and listening experiences are beneficial in the classroom, but they also have value in communities

outside of the classroom, due to soundscapes promoting, enhancing, and changing cultural values.

Like Westerkamp's research, Schafer's individual work focuses on listening. He suggests listening for the three main aspects of a given soundscape: *soundmarks*, *sound signals*, and *keynote sounds*. Soundmarks are unique to an area, such as the doorbell in a home or community sirens that ring at 12 p.m. every Friday. An unexpected alarm, however, would be an example of a sound signal, which could be defined as sounds that require conscious listening, including whistles in a soccer game, car horns when traffic is stopped at an intersection, or bells alerting the end of a middle school class. These sounds are more obvious than keynote sounds, which represent background noise. Those sounds may reflect the identity of people living in an area but are also easier for them to ignore: construction in urban areas, bird songs in the countryside, or the humming of a washing machine inside a home. Each sound element—sound marks, sound signals, and keynote sounds—combines to create a soundscape.

While personal listening histories and contextualization inform our perspectives of sonic experiences, acoustic explorations of space and place reveal the aural architecture behind a rhetorical soundscape. In *Spaces Speak, Are You Listening?: Experiencing Aural Architecture*, Barry Blesser and Linda-Ruth Salter write about auditory spatial awareness as indicative of the aural architecture of soundscapes, synthesizing research from cultural studies and engineering to explore human experiences and reverberations. Their co-authored, interdisciplinary work separates performance and listening spaces, while further considering aurality within physical, social, and virtual

spaces. Within a space, the architecture and audience placement can make a significant impact on a sonic experience: "Just as the location of an observer determines the observer's visual perspective, the location of a listener determines the listener's aural perspective. Although we speak of a concert hall as a single space, more accurately, it is multiple coupled subspaces with similar but subtly different acoustics" (Blesser and Salter 130).

Although the visual elements of architecture have reigned supreme for many contemporary architects, Blesser and Salter's theoretical work reignites the classical sonic emphasis within architecture, therefore aligning with rhetorical soundscape studies. Such an emphasis first began with the work of the first century BCE Roman architect Vitruvius, who developed building and spaces with a sonic awareness. His theater spaces underscored and accentuated sound and voices. In addition to the aurality behind theater spaces, ancient architects built other historic spaces, such as cathedrals, to privilege sound and acoustics. More recently, sound-inspired architecture in the early twentieth century plays a significant role in Emily Thompson's *The Soundscape of Modernity*, where she redefines soundscapes to look to the cultural and technological implications for the materiality of sonic-minded performance spaces in Hollywood, Boston, and New York City. Thompson asserts that a soundscape consists "not only of the sounds themselves, the waves of acoustical energy permeating the atmosphere in which people live, but also the material objects that create, and sometimes destroy those sounds" (2). In "Sound, Modernity, and History," Thompson follows the work of Alain Corbin in defining a soundscape as "an auditory or aural landscape" (117), explaining that a

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soundscape is both a physical environment as well as a perception of that environment, as encompassed through rhetorical soundscape studies.

Theater Sound Design as Sonic Rhetorics

Despite the growing interest in sonic rhetorics, researchers have largely overlooked sound design rhetorics within theater. Here, I use the term "sound design rhetorics" to focus on the work of artistic sound design (whether in theater, radio, film, video games, or other media) and its rhetorical potential and impact. Sound design, which combines aesthetics and practicality, is the process of developing sound and audio elements for various media. These sounds create new pathways to what is already "known" as part of individual communities and individuals' lives, enhancing the way the overall soundscape connects with people. In this dissertation, I will primarily use *theater* sound design to exemplify possibilities for sound design rhetorics and writing and its connection to sonic agency and social action.

Theater sound design is the earliest example of sound design, as ancient theater settings were typically arranged to create a sense of surround sound for the audience. In *Sound: A Reader in Theatre Practice*, Ross Brown argues that today's theater sound design is unequivocally aligned with the world's evolving auditory culture, creating perceptual encounters that move and influence audience members. In exploring dramaturgically-organized noise and theatrically-organized hearing, Brown describes sound as a potential "scenography of engagement and distraction" (132). An unexpected onus is placed on audience members themselves to create the subjectivity of given sounds while engaged in a reciprocal process—both receiving and giving sound in the theater

context while establishing immersive experiences that mirror society. In the theater

setting, sound design enhances individual and collective understandings and empathy

through auditory and vocal cues, vibrational forces and patterns, and memory formation.

Theatrical sound design is a complex, creative process that evokes emotional

responses; yet the level of complexity and elements involved in theatrical sound design

remain mysterious to many theatergoers. Even in the professional theater community,

there are many misperceptions about sound design and much confusion over what it

encompasses. This led to the removal of both Best Sound Design award categories and a

resulting backlash at the Tony Awards in 2014. The Awards Committee argued that many

voters did not know enough about the inner workings of sound design to judge its value.

Some committee members even posited that sound design was more of a technical rather

than artistic craft, a speculation decried by sound designers and other theater industry

professionals. Broadway sound designers such as Abe Jacob and Nevin Steinberg point

out that sound design involves creative and artistic efforts, including everything from

sound montage and microphone placement to mixing, editing, and aesthetic perspectives

(Gioia; Gustin). A social media hashtag, #TonyCanYouHearMe, went viral to resist the

removal of these awards. Consequently, the Tony Awards Committee reinstated the Best

Sound Design awards for the 2017-2018 season, with updates to the voting process to

pacify the Awards Committee's objections over adequate judgment and ensure

evaluations came from industry professionals best suited to assess sound design.

A helpful tool for exploring sound design is through the "dramaturgy of sound,"

as introduced in *Theatre Noise: The Sound of Performance*. In this book's preface, edited

by David Roesner and Lynne Kendrick, Patrice Pavis notes that a dramaturgy of sound includes the perceptions and intent of performance that combine the "listening eye" (Paul Claudel) with what he calls the *seeing ear*. Pavis explains that within a dramaturgy of sound, "sonic writing continues to develop; sounds, words, noises, images, and gestures come together, unite, and invite us to feel (to experience) works in the making and our world in motion" (xiii). Further, theater allows for the "friction between signal and receiver, between sound and meaning, between eye and ear, between silence and utterance, between hearing and listening" (Pavis xv). Such a dramaturgy of sound may be applied to mediated sound, advances in sound design and recording technology, and even the use of Foley sound in theater, which consists of nonverbal, everyday sounds created through materials and props.

Foley art reinforces or enhances ("sweetens," as Foley artists often say) sounds. Foley artists might use and amplify items such as celery to simulate the sound of breaking bones, the rustling of a windbreaker to represent a runner, or pressing on cornmeal for walking on gravel or cornstarch for walking on snow. The term "Foley sound" derives from Jack Foley's sound work with Disney films in the 1930s, but the technique existed long before then through theater and radio dramas. Some early Foley sounds in American theater included thunder sheets and wind machines in the early 1900s. In the contemporary musical *SpongeBob SquarePants*, which premiered on Broadway in 2017, sound designers worked collaboratively to create live, imaginative Foley sound effects that sweeten on-stage action through squeakers and speakers, building a bubbly, lively, "underseas" community.

This performance includes sounds that do not necessarily have real-life equivalents, much like Foley artist Greg Barbanell describes his experiences creating sound for television and film. Barbanell's experience with the television show *Breaking Bad* involved the creation of sounds that Barbanell and others did not desire to experience firsthand (e.g. the sounds of making meth). In Episode 11 of the *Turned Up* podcast on sound design, Barbanell shares that it is not necessary to be intimately familiar with a sound to create the sonic experience through Foley (Jones Jake and Robert Venable). Barbanell instead chooses sounds that align with the emotion or idea being created: "Every time I have to come up with a sound, I think, what do I *want* to hear? What's gonna work? Then, I have to figure out how to make the sound that I'm imagining" (Jones and Venable). He argues that Foley art provides artists with a means to *create the world they imagine*.

Central components to sound design include the artist's experience, vision, aesthetic preferences, and professional identity. Therefore, soundscapes intended for social change provide an outlet for students and community members to *create the world they imagine* through soundscape exploration, inquiry, invention, and development. Sonic agency plays a significant role in the development of these worlds. Barbanell's theory and practice of Foley art embraces this idea, and the need for a personal aesthetic is a common theme among sound design artists, including those who create live Foley art for theater. Benjamin Wright, in "Footsteps with Character: The Art and Craft of Foley," explains that Foley is about "capturing the dramatic and aesthetic 'feel' of sound effects,

which is intimately connected to a Foley artist's personal style and professional identity"
(204).

In addition to the affordances of live Foley art, pre-recorded Foley and other
sounds also lend themselves to inventive, playful, and meaningful soundscapes on
Broadway. Digital soundscapes are becoming common in theater, including a recent
soundscape that Nevin Steinberg developed to represent social media in *Dear Evan
Hansen*. The musical covers major social issues such as suicide, mental illness, and
feelings of alienation (Weinstein and Clements)—one scene includes an immersive
soundscape that portrays the chatter, gossip, and nonstop action of social media through
whispers, spoken word, beeps, and whooshes associated with social media apps and tools
(Barbour). The immersive soundscape of *Dear Evan Hansen* supports the complex layers
of storytelling in the show, and moments from the musical exemplify sonic rhetorics and
particularly "soundscapes for social change" by inspiring community, connection, and
feelings of "being found," as the cast sings in "You Will Be Found."

Theater Sound Design for Social Change

The soundscapes and sound stories that most impact my dissertation will be the
several examples of meaningful community action and civic engagement inspired by
sonic rhetorics and sound studies. In 2018, for example, the MIT CoLab published a
handbook that presents sound-based methods for research in urban communities (Allegra
Williams and Maggie Coblentz). CoLab asks readers to pay greater attention to the sonic
environment within public space, through activities such as aural histories and
storytelling, meditative listening, sound maps, and pop-up listening booths, to engage

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community members and envision community-building. One such project, audio mapping, reveals the relationship between sensory experience and spatial patterns. A place-based sound map might identify the needs or assets of a community through recordings. These might be field recordings or representative audio files from a resource such as FreeSound.org.

The sound art collective Ultra-red has published multiple sound investigation workbooks, including *SILENT/LISTEN*, *Rural Intavenshan*, and *We Come from Your Future*, with activities that could create "soundscapes for social change." Ultra-red, founded by two AIDS activists, explores acoustic space and social relations, employing sound-based research, militant sound investigations, and the acoustic mapping of contested space. Their earliest work involved using audio to record interactions that were necessary for AIDS patients but could place them in danger, such as needle exchanges, with this audio serving as a means to protect them from legal repercussions and false statements from police or others. Most impactful for my dissertation is an activity in their handbook that asks readers and listeners to brainstorm, record, and reflect on sounds that oppress, deceive, save, and empower. This type of activity sets the scene for my research on sound in/as social action. Ultra-red's use of collective organization and relationship-building ties sound to social action, and the organization's work persists in the development of meaningful "sound stories," or what I deem "soundscapes for social change." In theater, a "soundscape for social change" may incorporate found sounds through material or digital means to represent a contemporary issue or present a sonic argument for change.

This example highlights the impact of sound on social change and bigger movements, placing sound design rhetorics in conversation with community engagement and activist networks. Whether it is for theater productions, community workshops, the composition classroom, or other sites of engagement, "soundscapes for social change" may be used to exemplify Brandon LaBelle's concept of sonic agency. Sonic agency is intended to negotiate sound, embodiment, and political resistance through what LaBelle deems the four figures of resistance: (1) the invisible, (2) the itinerant, (3) the overheard, and (4) the weak. Each figure of resistance connects to ongoing sonic initiatives, networks, and cultures, whether those of in/visibility, mobility, surveillance, or vulnerability. LaBelle argues for their role in creating alternative publics through always-moving, sound-based experiences that foster political and social transformation.

Social change through alternative publics is present in composition and rhetoric scholarship and highlights community engagement projects meant to contribute to the public good, per the Conference on Computers and Composition Statement on Community Engagement. These projects often involve collaboration with communities, and have included oral histories and digital storytelling projects (Shannon Carter, James Conrad), local issues and responses (Jeff Grabill, Linda Flower), digital humanities projects about civil rights (Deborah Mutnick), rhetorical history and performance (Laurie Grobman), and many others. Much work on sound, writing, and listening connects to various publics. Kate Lacey's *Listening Publics* examines the role of listening within the public sphere, specifically its importance when conceptualizing the public sphere. She provides histories of listening as a cultural practice and how concepts such as realism and

"realness" create meaningful listening publics historically and in the media age. Further, Salomé Voegelin looks to sound and listening as a socio-political practice and speaks of the compositional practices of field recordings and how field recordings help us understand ourselves as part of the soundscape. She turns to field recording as social and cultural interaction, and as leading to shared spaces.

As today's political assumptions and social and geopolitical issues diverge and widen, as cultural struggles deepen, opportunities to explore sound spaces and design in activist theater and its networks are needed more than ever. As Jean-Luc Nancy explains: "To sound is to vibrate in itself or by itself: it is not only, for the sonorous body, to emit a sound, but it is also to stretch out, to carry itself and be resolved into vibrations that both return it to itself and place it outside itself" (8). The ebbs and flows of sound continuously carry individuals to new places, center us in the environments around us, or allow for a strange disconnect. Our being, perhaps, is tied to the soundscapes that immerse us—both those involuntary soundscapes, and those produced by/for us, the constantly changing ambience and sounds. As examples from theater show, manipulated or aesthetic soundscapes may impact embodied, rhetorical experiences for "audience" and the development of sound activism and rhetorical soundscape pedagogies.

Soundscapes, like any form of rhetoric, may foster discord and negative outcomes; soundscapes in themselves are not ideologically neutral. However, an awareness of the agentive and inventive potential of sound opens new areas for research, pedagogy, and practice. When used for the "public good," as suggested by the Conference on College Composition and Communication Statement on Community

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Engagement, the study of theater sound design provides engaging implications of soundwriting for community engagement and social change. More than ever, rhetorics and the humanities have a crucial and unique role in addressing questions of social justice. Many instructors rise to this challenge, and noteworthy examples include Ofelia García's participatory research projects on borderlands, any scholarly and pedagogical work applying Augusto Boal's Theatre of the Oppressed, the MIT CoLab's handbook on sound and community, and the CUNY Futures Initiative projects on publics, politics and pedagogy. Theater sound design and soundwriting for community engagement, as circulating through sonic rhetorics possibilities, present new ways to explore questions of social justice and respond through experimental, embodied composition and reflection.

CHAPTER TWO

SONIC EMPATHY: CULTIVATING EMPATHY AND EMOTIONS THROUGH
THEATER'S HIDDEN/YET HEARD

Shortly after a matinee production of the Broadway musical *The King and I* in
September 2015, actor Kelvin Moon Loh posted an entreaty for empathy to his public
Facebook page. During an intense scene at that day's matinee—the "whipping scene," a
distressing moment that builds in harrowing ferocity with the cracking of whip—the
voice of a young boy with autism pierced the theater as he yelped out in terror. From his
location as an actor in the production, Loh still heard murmurs from the audience: "Why
would you bring a child like that to the theater?" This question, Loh writes in his
Facebook post, was "plainly wrong." He elaborates:

> The theater to me has always been a way to examine [and] dissect the human
> experience and present it back to ourselves. Today, something very real was
> happening in the seats and, yes, it interrupted the fantasy that was supposed to be
> this matinee but ultimately theater is created to bring people together, not just for
> entertainment, but to enhance our lives when we walk out the door again. (Loh)

In his call for compassion and empathy, noting the important role that these elements
play among audiences and within theatrical productions, Loh asks over social media:
"When did we as theater people, performers and audience members become so concerned
with our own experience that we lose compassion for others?"

Loh's experience highlights the ways that theater sound design is a synergistic
endeavor between the sound designer, other artists, and the audience. Sounds, including

those intricately and intentionally designed or those created by audience reactions and movement, evoke and heighten the audience experience. The soundscapes of the theater setting impact audiences in surprising ways—and sound thus becomes an area of significance when exploring the role of empathy in theater. Lin-Manuel Miranda, who has won numerous awards for his work as a composer, lyricist, and performer, reflected on Twitter on a similar experience when a fellow audience member admonished him for laughing loudly at a show in 2018. Later, the fellow audience member, embarrassed upon realizing Miranda's identity, apologized, but not before the experience highlighted the consideration of who "belongs" in the theater. As Miranda says: theater is for anyone who loves theater.

Lin-Manuel Miranda ✓
@Lin_Manuel

The lesson here, if there is any: there is ALWAYS the type of
Theatergoer that defines themselves by excluding others.
You could WRITE musicals, and they'll still try to make you feel
like you don't belong.
Don't you dare let 'em.
You love theater? You belong.
Welcome.

♡ 53.9K   10:35 AM - Jul 9, 2018   ⓘ
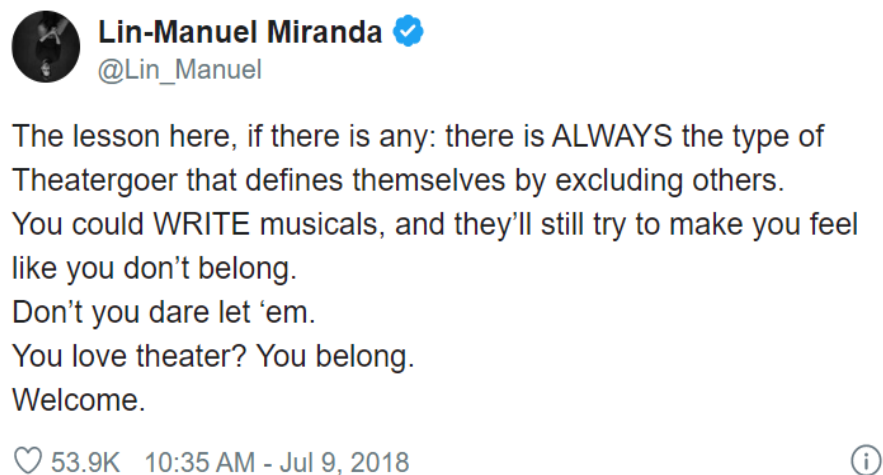
Fig. 2.1. Screenshot of a tweet from Lin-Manuel Miranda (@Lin_Manuel) on inclusivity in theater. Published on July 9, 2019, and accessed on January 22, 2020.

The sense of inclusivity and empathy guides Miranda's music and writing. Miranda is considered both an artist and activist, and his musicals include a resounding, impactful use of words, movement, and sound supported by his research and empathy—

while he simultaneously notes: "Empathy can only get you so far" (NPR Staff). But, he adds in "The Role of the Artist in the Age of Trump," "What artists can do is bring stories to the table that are unshakably true—the sort of stories that, once you've heard them, won't let you return to what you thought before." Miranda's work illuminates the importance of relating to others, to furthering understanding, and the way that great art, in being inherently political, reflects the world around us and "allows us to go around all of the psychological distancing mechanisms that turn people cold to the most vulnerable among us" ("The Role of the Artist in the Age of Trump"). The thoughtful writing and acting, the use of hip-hop and rap, and the consciously diverse casting: these elements and several others made Lin-Manuel Miranda's *Hamilton: An American Musical*, a musical that tells the story of "Founding Father without a father" Alexander Hamilton, a box-office success with wide critical acclaim. In addition to being one of the most popular and profitable musicals of all time (Paulson), the musical received eleven Tony Awards in 2016, including Best Musical, and the 2016 Pulitzer Prize for Drama. Although the musical shares the stories of white historical figures, the casting of the show reflects the diversity of today's America, with Black, Latino/a, and Asian American actors portraying the lead characters.

 While each cross-sensory element within *Hamilton* interweaves to create a powerful performance, the use of sound plays a particularly significant role in developing empathetic listening and understanding among audience members. Research shows sound enhances connections to emotional states, as musical interaction impacts the cognitive and affective elements of empathy (Rabinowitch et al.) and listening to music and sound

may "train the listener's self in social attuning and empathic relationships" (Leman 126). Nevin Steinberg, the sound designer for Miranda's *Hamilton* and *In the Heights* (as well as other Broadway musicals such as *Dear Evan Hansen* and, as sound co-designer with Jessica Paz, *Hadestown*), incorporated elements into the sound design for *Hamilton* that vividly influenced one of the most dramatic moments of contemporary Broadway—the final duel between Alexander Hamilton and Aaron Burr. In the scene, Steinberg uses sound to give the gunshot a "point of view" and enhances the storytelling through layered effects. Although the actual historical moment only included one gunshot, there are two iterations heard in Miranda's version of the final duel between Burr and Hamilton. To signal the halting of time, the fateful shot is heard then reversed, prompting a turntable and Hamilton's final, hauntingly melodic monologue... before the shot is replayed to its fatal effect. Steinberg works to give all of the gunshots and cannons in *Hamilton* their own arcs, stories, and unique sounds. He includes simple gunshots as well as exaggerated gunfire, including a "stutter" gunshot when a young character's life ends in another duel. The audience regularly gasps when this moment takes place, responding viscerally to the power of the sound and dramatic ending of a life, placing themselves in the moment, relating and empathizing with multiple characters and emotions. The sounds from the beginning to the end of *Hamilton* elicit strong audience reactions, as one of the many ways that Miranda and his collaborative team found "ways to make the story personal for his audience" (Adelman 283) as the creative team uses sound to "stop, slow or even reverse time during the show" (Steinberg qtd. in Gusten).

The theatrical sound designer communicates and acts with other theater artists to create a soundscape that lends itself to storytelling—a soundscape capable of an emotional, psychological, and physiological impact on the audience. The sound designer must be aware of varied aesthetic, evolutionary, and emotional responses to sound and must consider how sound resonates with audiences through perception, vibration, hearing, and listening. A special challenge exists in sound design: creating distinctive sounds that evoke universal feeling while knowing each audience member has a unique background and perspective that informs their experience with sound. Audience members are simultaneously participating in a collective experience *and* being drawn, alone, to new places in their minds, controlled by sound while applying personalized forms of unique discernment and conscious comprehension. Audience members find their own place among the sounds and vibrations in the theater setting while concurrently becoming one with the larger group both emotionally and physiologically.

The live performance setting therefore eschews the isolation of watching media at one's home; and instead, as a semi-public place of gathering, provides opportunities for collectivity and connection through shared soundscapes and vibrations. One team of researchers found that, due to heartbeats synchronizing among audience members at live performances, "the physiological synchrony observed during the performance was strong enough to overcome social group differences and engage the audience as a whole . . . Experiencing the live theater performance was extraordinary enough to overcome group differences and produce a common physiological experience in the audience members" (Devlin qtd.in "Audience Members' Hearts"). The theatrical sensorium places audience

members in time and space with others, people both known and unknown, who experience the show—and sounds and vibrations—alongside them.

Sound ricochets, rebounds, and personifies experiences through layers of meaning that exemplify what sound artist and writer Brandon LaBelle calls "the invisible," being one of the four figures of resistance introduced in *Sonic Agency*. Sonic agency is meant to enable "new conceptualizations of the public sphere and expressions of emancipatory practices—to consider how particular subjects and bodies . . . creatively negotiate systems of domination, gaining momentum and guidance through listening and being heard, sounding and unsounding particular acoustics of assembly and resistance" (LaBelle 4). Such a sonic agency lends itself to engaged attention, to complex ecologies, to listening and empathy (LaBelle 7); invisibility, as a figure of resistance, may provide "the conditions for occupying the limits of the normative structures by which political subjectivity and social work are made meaningful" (LaBelle 42). Writers such as Ralph Ellison argue sound is personified through its invisibility, which may be a reason "the invisible" is one of LaBelle's four figures of resistance. Invisibility, to LaBelle, involves looking away, or looking elsewhere, and into a space that locates the listener through the unseen. Invisibility connects us with what is missing and what can be found through sound; it provides us with opportunities to empathize with others with different values, experiences, and histories.

The thoughtful, rhetorical use of sound in theater applies to a concept I call *sonic empathy*, which refers to the cultivation of empathy through sound-based experiences. Sonic empathy is best grounded in Lisa Blankenship's *Changing the Subject: A Theory of*

Rhetorical Empathy, in which the concept of empathy calls for immersion with the personal and collective experiences of others, of an attempt at understanding, of an emotional response. Empathy differs from sympathy; rather than feeling for someone, we feel with another, and the theater setting, complete with its rhetorical use of sounds and silence, provides opportunities for such emotional connections. Although empathy among those in caring professions may lead to higher level of distress and burnout (West et al.), "tuning" empathy away from distress and into concern and understanding creates meaningful avenues for empathy. Attuned *sonic empathy* provides opportunities for listeners to contemplate and relate to the others' emotions, experiences, and values. Auditory perception unites with and creates emotions that impact the thoughts and feelings of audience members, establishing multimodal sensations that emerge through the listeners' imagination and awareness. The expressivity of sound carries with it a sonic agency that belongs to anyone within the theater space—not just performers, not just sound designers, not just audience members, but to an emergent agency co-constructed by those within a shared sonic environment.

This chapter provides a roadmap for ways sonic empathy may be analyzed and applied inside and outside of the theater setting. Sonic expressions, and the motivation and agency behind theater sound design, strengthen the potential for empathy cultivation through its emotional pull and wide-ranging styles. These sonic and emotional unions, synthesized by the audience, invite reactions that permeate the theater experience and lead to a potential for change and awareness through sonic empathy. To further define, explore, and apply sonic empathy, the chapter includes three sections: (1) Defining Sonic

Empathy, (2) The Emotional Impact of Theater Sound, and (3) Encouraging Sonic Empathy through Theater Sound.

Defining Sonic Empathy

Because studies show empathy declining in the United States over the past four decades (Konrath et al.), a broader understanding and exploration of empathy will benefit the composition and rhetoric field—and society. Research by Sarah H. Konrath and others at the University of Michigan reveals an empathy deficit in the United States consistently growing over the past four decades. In the results of empathy studies of more than 14,000 American college students, Konrath et al. uncovered a forty-eight percent decline in the "empathic concern" of American college students between 1979 and 2009, with an even greater decline in empathy between 2000 and 2009. The average American student was shown to be less empathetic than seventy-five percent of students in 1979 (Konrath et. al). The researchers found no specific cause for these shortcomings in empathy but posited that greater isolation among citizens, an increase in violence and bullying, inflated expectations of ourselves, and more homogeneity in social interactions may be leading to the empathy decline. President Barack Obama highlighted this empathy decline in his commencement address at Northwestern University in 2006: "There's a lot of talk in this country about the federal deficit. But I think we should talk more about our empathy deficit—the ability to put ourselves in someone else's shoes, to see the world through those who are different from us."

Although scholars across fields agree that there is a potential decline in empathy, scholars debate the actual definition of empathy—which may be one reason our

understanding of empathy or the ability to feel empathy in contemporary American

society can, at times, falter. In "These Things Called Empathy: Eight Related but Distinct

Phenomena," C. Daniel Batson finds as many as eight different uses of the term empathy

in scholarship. In Batson's research of readings throughout psychology and various other

fields, empathy has been defined as any and all of the following categories presented by

Batson:

1. Knowing Another Person's Internal State, Including His or Her Thoughts and
   Feelings

2. Adopting the Posture or Matching the Neural Responses of an Observed Other

3. Coming to Feel as Another Person Feels

4. Intuiting or Projecting Oneself into Another's Situation

5. Imagining How Another Is Thinking and Feeling

6. Imagining How One Would Think and Feel in the Other's Place

7. Feeling Distress at Witnessing Another Person's Suffering

8. Feeling for Another Person Who Is Suffering

With so many reasonable explanations for empathy and what it encompasses, the

confusion over empathy is not surprising. Blankenship provides an analogy to rhetoric

that explores the complexities of empathy: "Empathy, like rhetoric, is an epistemology, a

way of knowing and understanding, a complex combination of intention and emotion"

(7). Her work outlines empathy as a "conscious, deliberate attempt to understand an

Other" as well as "the emotions that can result from such attempts—often subconscious,

though culturally influenced" (7). Blankenship also notes the origin of empathy in

nineteenth century aesthetics as emotional identification with art (30). Therefore, this chapter applies and considers emotions in creating the sensation of empathy, morality, and mindfulness, particularly within the development of theater sound design.

A complex and varied term, *empathy* developed from the German word *Einfühlung* ("feeling into") coined by Robert Vischer in the mid-nineteenth century in reference to the psychological theory of art—not, as often used, as the ability to connect others' feelings to our own, but as the ability to experience and understand human emotions through art and aesthetic objects. The original use of the term revealed the empathy between performer and audience, or the idea that the audience must feel empathy toward a performer or artist to truly understand their feelings and artwork. The term *empathy* readily aligns with the sensations and emotions of theater sound design, particularly since the concept of empathy was first associated with arts, aesthetics, and performance. Adam Smith argues in *The Theory of Moral Sentiments* that sense and sensation alone cannot lead us to understand the sufferings or experiences of others, because "as long as we ourselves are at our ease, our senses will never inform us of what he suffers." However, the ability to use our imaginations to understand another's situation is a moral aptitude that may allow us to "become in some measure the same person with him, and thence form some idea of his sensations, and even feel something which, though weaker in degree, is not altogether unlike them" (Smith). While Smith argues shared sensations alone may not lead to what we now consider empathy, cultural transmission and mindfulness of others through sensation such as sound remains possible.

Empathy is often classified into two components: *affective empathy*, or relating and responding appropriately and emotionally to another person; and *cognitive empathy*, or attempting to understand others' perspectives (Carl Rogers). Carolyn Calloway-Thomas adds another component in her multifaceted exploration of empathy: *behavioral* components of empathy that overlap with the affective and cognitive components to "urge humans to be discerning in their treatment of others" (7). Calloway-Thomas opens her book *Empathy in the Global World: An Intercultural Perspective* by referencing Martin Luther King Jr.'s 1956 address to the First Annual Institute on Non-Violence and Social Change. While King didn't use the term *empathy* in this speech, he encouraged humans "to rise above the narrow confines of our individualistic concerns to the broader concerns of all humanity." Calloway-Thomas particularly highlights King's calls for "togetherness" and "goodwill" in this speech, and she echoes King's philosophy with her belief that "our significance as human beings stems in a very large measure from how much goodwill we inject into the troubled world of globalization" (xi). She paints a picture of *empathy* as a way of thinking that helps humans understand others, as "the moral glue that holds civil society together" (Calloway-Thomas 7). She adds that "unless humans have robust habits of mind and reciprocal behavior that lead to empathy, society as we know it will crumble" (Calloway-Thomas 7).

This conception of empathy echoes and expands through the concept of *sonic empathy*. Throughout history, sound marks beginnings as much as ends. Sound even creates the world in most major world religions, constructing reality and enveloping humanity; sound therefore impacts relationships and communities through mediated

sonic experiences that block noises, through collective sounds in public settings such as a protest march, or through the shared use of digital spaces that incorporate sound. While the term *sonic empathy* has been previously used in transcultural psychiatry, connecting the role of vocal tone with the work of psychiatric providers (Bombaci), the definition in this chapter builds and expands on ways sound may cultivate empathy beyond the psychiatric setting and instead within larger communities. In "Musical Empathy, Emotional Co-Constitution, and the 'Musical Other'," Deniz Peters presents two new ways of looking at—or hearing—empathy between performers, composers, and listeners. Peters differentiates between social empathy, which aligns with interpretations of empathy from Blankenship and others, and the concept of musical empathy, which he argues may lead listeners into their own consciousness and then beyond themselves.

In considering the psychological effect of music, Peters writes that the music listeners' engagement may be supported by perceived musical empathy, best defined as empathy felt through music. Peters explains: "Bodily knowledge can extend auditory perception cross-modally, which, in turn, can orient a bodily hermeneutic" (2), or to paraphrase, cross-sensory perception orients a theory of interpretation related to the body and embodied experience. Similarly, a conception of *sonic empathy* creates sensations of empathy, or an awareness of others and potential understanding, through sound, including not just music but also nonverbal sounds and sound design. The concept relates to LaBelle's notion of "visibility" through the hidden/yet heard, as reverberations take listeners beyond appearance and to properties that seek to craft "forms of public life . . . a complex and multi-dimensional framework, in which rational knowing and critical

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inquiry gain traction" (55). Sonic empathy involves responding to the performativity of sound as well as underground or nonverbal components; it involves listening with all parts of the body; it involves listening to voices, to texts, to scenes, to time.

The voice remains a strong starting point for these multi-layered explorations of sonic empathy, as studies show sound to impact impressions of others, playing a role in possibilities for empathizing and relating. In research of online versus offline communication, Juliana Schroeder et al. found that hearing the voices of others—rather than simply reading their points of view—made the speakers seem more "humanlike" to the listeners or readers. By reviewing responses to the same arguments made in different mediums (written and spoken form), the researchers suggest that "a person's voice, through speech, provides cues to the presence of thinking and feeling, such that hearing what a person has to say will make him or her appear more humanlike than reading what that person has to say" (Schroeder et al. 1745-6). The study reveals a greater likelihood of dehumanizing rather than empathizing with others when simply reading the text of a controversial argument or differing beliefs. When the vocal qualities are present, however, paralinguistic cues and the sounds of a voice may "moderate the tendency to dehumanize the opposition" (Schroeder et al. 1760). Hearing a person explain their beliefs makes that person come across as more mentally capable than reading them, thus influencing impressions by giving that person a "voice" and decreasing the likelihood of a respondent denigrating the others' thoughts.

An important component of sonic empathy is personalizing experiences through sound processing, as with theater sound design. Deaf poet Pamela Wright-Meinhardt

recognizes sound experiences to incorporate the entire body, as she explains when responding to her Shakespeare professor who "pitied deaf people," believing they "missed so much of the beauty of language, especially the spoken magic of the dramatic voice" (139). Wright-Meinhardt breaks down the inaccuracy of this belief: "The organ of the ear is a small compartment of a whole, not the whole of a person. Millions of nerves race through a body; what's to say a few in the ear destroy a person's ability to understand music? Or poetry?" (139). She clarifies that acoustic messages are understood beyond ear-centric listening. Veit Erlmann in *Hearing Cultures* similarly writes that we must "conceptualize new ways of knowing a culture and of gaining a deepened understanding of how the members of a society know each other" (3), which results in connections between sound and empathy. Kanta Kochhar-Lindgren thus introduces new listening practices in theater that engages a "deaf (and hard-of-hearing) aesthetic that begins to pull apart our notions of hearing" (417). She elaborates on these practices, which she calls the "third ear": "Within the study of sound cultures, insufficient work has been done to unpack the ways in which hearing is haunted by deafness: not as a condition to be overcome, but as the site of the repressed cultural other that has implications for how we can understand the practice of 'hearing' across theatres" (Kochlar-Lindgren 418).

Kochhar-Lindgren examines the "third ear" as "an interpretive activity for a cross-sensory listening across domains of sound, silence, and the moving body in performance along the categories of race, ethnicity, deafness, and disability. As we attempt to hear across soundscapes, the third ear acts as a hybrid ear that ferrets out bits and pieces of meaning in a mixed landscape of sonic and imagistic fragments, sites of

partial and hidden meaning" (423). She presents the third ear as a hybrid, cross-sensory mode of listening, which considers elements such as silences, breaks between images and sound, and the positioning of performers' bodies. Listening with the "third ear" in theater, or incorporating multimodal listening in a variety of settings, furthers the likelihood of a sonic empathy that unites listeners and enacts understanding and meaning. An understanding of sonic empathy moves beyond ear-centric listening to incorporate embodied listening practices and contemplation of nonverbal and "background" sounds and vibrations.

In activism, sound and intentional silence are equally important in establishing empathy and meaningful change. At a March for Our Lives rally in 2018, Marjory Stoneman Douglas High School student Emma González, who survived the deadliest school shooting in history that claimed seventeen lives at Parkland High School in Florida gave a passionate and defiant speech that utilized the soundscape for a powerful message on gun violence. "Six minutes and about twenty seconds," she stated. "In little over six minutes, seventeen of our friends were taken from us, and fifteen were injured, and everyone—absolutely everyone in the Douglas community—was forever altered." She named her slain classmates, recognizing the things they would never again do, and then stood, silent, staring into the audience. During this time, there was applause. There were tears. There were the sounds of paper rustling and voices shouting "Never again." Then, the slow and quiet beep of a timer followed before González spoke: "Since the time that I came out here, it has been six minutes and twenty seconds. The shooter has ceased shooting and will soon abandon his rifle, blend in with the students as they escape

and walk free for an hour before his arrest. Fight for your life before it's someone else's

job." The soundscape, reporters said afterwards, led to empathy among those in the

audience (Weissman). The soft sounds resonated as this powerful technique of silence—

of what may be considered sonic empathy—moved a live audience.

The Emotional Impact of Theater Sound

In "The Sounds of Emotion: Towards a Unifying Neural Network Perspective of

Affective Sound Processing," Sascha Frühholz et al. present neuroimaging studies that

reveal a common neural network of affective sound processing, or an extended brain

network that supports our listening experiences and links to behavior and emotion. The

researchers find that both simple and complex sounds "induce emotional reactions in us"

and "convey emotional meaning" (Frühholz et al. 97). The article includes a taxonomy of

affective sounds that may create "affective signs" for receivers: environmental sounds

(thunder, chalk on a chalkboard, a barking dog), nonverbal sounds (interjections like

"wow," laughter, the cry of a baby), speech intonations (speech inflected with anger or

happiness), artificial human voice, singing human voice, and music. The research

explores the origin of affective meaning for various affective sounds, as some are more

impacted by the perceiver and others by the source. Since the perceptions of many

affective sounds are shown to be more impacted by the source, this means that a sound

designer, for example, plays a significant role in creating and changing perceptions and

emotions.

That said, every aspect of emotion continues to change as people age and mature

(Shackman and Wager), and the person hearing a sound will ultimately, albeit often

unconsciously, shape their own perception through past experiences and their social reality. In *How Emotions Are Made: The Secret Life of the Brain*, neuroscientist Lisa Feldman Barrett argues that emotions are constructed through intentionality and social reality: "An emotion is your brain's creation of what your body sensations mean, in relation to what is going on around you in the world" (30). Feldman argues for a *theory of constructed emotion* where the brain uses past experiences to make sense of the emotions connected to new sensory experiences. In many ways, her views may connect to the 2015 Disney film *Inside Out*, which personified emotions and connected them to past and current experiences by taking viewers inside the head of a young girl named Riley, giving distinct personalities to five core emotions— Joy, Sadness, Fear, Anger, and Disgust, portrayed as their own characters in the film. Each of these emotions, and others, also connects to the field of psychoacoustics, which unites auditory perception and physiological acoustics with psychology. Essentially, any sound becomes psychoacoustic once heard, as it moves from being a physical phenomenon and instead overlaps with perception and emotion.

The emotional impact of sound permeates artistic thinking about theater sound design, since the majority of contemporary plays and musicals demand psychological and physiological interpretations of sound. The "breaking string" effect in Anton Chekhov's *The Cherry Orchard* is one of the most well-known sound effects of the twentieth century, a time when Chekhov and other playwrights such as Henrik Ibsen wrote plays with an intentional focus on aurality. *The Cherry Orchard* ends with this sound effect—a string that is breaking, fading away… and "sad," the stage direction reads. Directors and

sound designers are left to reflect and interpret this sound in their own unique way. Sound designers must ask questions of themselves, the script, the director, and others when developing meaningful sound—or using silence. In theater sound design, silence is used rhetorically to add depth and significance, drawing attention to particular moments—a technique used in film, music, and other media that allows the power of the pause.

While searing dramatic moments might come to mind when considering the use of the pause (a scene showing the subtle sadness of a relationship dissipating, a jolt of silence that represents a joyful or nostalgic moment suddenly ending, or a noiseless moment that evokes a sense of doom), silence also has comedic power. The Classical period of music introduced an Opus from Joseph Haydn that uses silence for humorous means. In this piece, the music seems to end, and the audience starts applauding. Then, the piece suddenly begins again, and when it finally ends, there is once again applause, albeit more hesitant. This happens or two more times until the point where it *does* finally, truly end, and… the audience also pauses, nervously looking at each other to see if it is time to applaud. Before any applause, though, the audience starts laughing at the comicality of this silence. The piece, as a result, is called "The Surprise Symphony" or "The Joke."

Compared to Haydn's use of silence for amusement and surprise, American composer John Cage was more existential and experimental with his use of silence in *4'33"*, in which the score instructs musicians to play nothing for an extended period of time—four minutes and thirty-three seconds, to be exact. Instead of listening to instruments, the audience hears the sounds of the environment around them: coughs, seats

creaking, paper programs rustling, slow breathing, hearts beating. Cage was insistent that the piece *not* be seen as a joke, but instead responds to (or even resists) social expectations and performance etiquette. Such etiquette is what permits an audience to sit in near-silence for this four minutes and thirty-three seconds, listening only to ambient noise. This piece could be considered a protest piece, and it is also an example of the ways our past experiences and expectations with sounds and noise influence how we hear and perceive moments. Because the audience expects music in a music hall, they hear the sounds of *4'33"* as music rather than meaningless silence.

This soundscape, in a way, creates the world the audience expects, and vice versa. Cage's work shows that perhaps the word "silence" in theater sound design should be replaced with "the concept of silence" or "idea of silence"—maybe, as Simon and Garfunkel sang, the *sound* of silence. No pure, unadulterated silence exists outside of an anechoic chamber, a soundproof space that blocks reverberations and outside noise. Even within an anechoic chamber, sounds exist. Predominantly, sounds appear in the mind of the person who is in the otherwise soundproof room, who starts hearing "earworms" in their mind. John Cage's *4'33"*, for example, was inspired when the musician spent time in one of the earliest anechoic chambers: "In that silent room, I heard two sounds, one high and one low. Afterward I asked the engineer in charge why . . . He said, 'The high one was your nervous system in operation. The low one was your blood in circulation'" (Cage qtd. in Kahn 235). People in soundless spaces often have auditory hallucinations as well (Gardiner). Listeners themselves create meanings for sounds, which highlights the

fact that sound designers and their audiences work together for meaning through spatial awareness and the mind-body connection.

As with all senses, sound is impacted by spatial conditions and context, and the sound designer attempts to control the audience's spatial awareness. The materiality of objects and aural architecture changes and creates the sound of a space, and the size and configuration of an environment plays a role in its sonic production. In her writing on theater sound design, Victoria Deiorio points out four key aspects to spatial awareness in her work: (1) social behavior, which impacts how we interact to others, (2) navigational awareness, which either replaces or enhances vision as we orient ourselves within surroundings, (3) aesthetic response, and our appreciation of sound, and (4) music and voice, and how each sonic component interweaves to foster respect, action, or dissent among the audience. Sound designers direct focus and attenuation while considering innate human responses to different types and frequencies of sound. Because each theater space has unique auditory qualities, as Emily Thompson also discusses in *The Soundscapes of Modernity*, the sound designer must consider how to transport the audience from the theater setting to the exact space needed for the performance. Deiorio shares an example of how echoes and muffled audio methods might create the sense of actors sitting in a cave, and how this aural technique will give the audience the sense that they, too, are sitting in a cave. The opportunity for sound to transport us is what allows sound designers and others to create a new existence through symbolism or exact representation and mirroring of soundscapes.

Cultural experiences guide the perception of sounds, and our own consciousness influences emotional and tangible responses to sound and vibration. As Steph Ceraso notes in *Sounding Composition*, a book on the benefits of multimodal listening to composition and rhetoric, sound is *felt*, not just heard. Ceraso includes an interview with Dame Evelyn Glennie, a solo percussionist and musician who *feels* her music. Glennie, who is deaf, practices embodied listening practices through kinesthetic and material experiences, and her work attends to the bodily learning and the multiple sensory affordances of sound and vibration, including sight and touch. Her body feels the differences between high and low frequencies, and the frequencies fill her body with reverberating sound as she plays her music barefoot. All individuals perceive and feel sonic experiences in differing, culturally-informed ways that rely on a person's sensory availability, past experiences, and consciousness, and our auditory imagination creates a rich, immersive experience through individual perception. Even the same sound and vibration experience may "feel" or "look" different to each person.

Accordingly, sound design is both a technical and artistic skill. Many media professionals say that the best sound design is not even noticed, playing a supporting role in its imperceptibility—but sound designers also remain aware that sound has the potential to change the entire outcome of a story and experience. Theater productions often incorporate a range of sounds and what we would consider sound effects. These include what R. Murray Schafer, Canadian composer and soundscape scholar, would consider the three main aspects of a soundscape: sound signals, sound marks, and keystone sounds. Sound signals are the obvious, sometimes jolting sounds that require

close attention. For example, the sound of a gunshot or cannon in *Hamilton* immediately grabs the attention of the audience. A sound mark is a sound that almost represents a space, or is "unique" to an area. A musical refrain, such as some of the repeated songs in *Hamilton*, would be an example of a sound mark. Finally, keynote sounds are more of the background sounds, such as the constant hums of the ensemble in *Hamilton*. In other plays, a keynote sound could be a constantly ticking clock or the sounds of birds to represent nature. A soundscape design in theater will typically involve some or all of these soundscape elements to enact emotional response.

Space also aids the intricacies and interpretation of sounds and how our brains "map out" and perceive sounds and their timing. Sound delineates time, marking time changes, highlighting the present, and, in the theater setting, extending itself to the audience as a wave. In theater, audio and speaker placement must link to spatial arrangement, reverberation (resonance and echoes), and the speed of sound from its onset point. A sound will reach those in the back of an audience at a slightly different time than those seated in the front of the audience, and the placement of microphones and speakers must account for this timing and tuning, this sonic onset, duration, and reverberation. Spaces themselves maintain particular importance to theater and sound design in Barry Blesser and Linda-Ruth Salter's *Spaces Speak, Are You Listening?* The aural architecture of a space has an impact on audience reception. Focused on the sonic architecture and physical properties of space and place, Blesser and Salter combine research from cultural studies and engineering in this co-authored, interdisciplinary book. Spaces and their sounds have an emotional, artistic, and historical context, and sound denotes space and

vice versa. The book considers performance and listening spaces, and the "set-up" of a physical space is important for theater sound designers to consider. In *Hamilton*, for example, sound designer Steinberg shares that he drastically altered some arrangements and sonic components when moving from the Broadway theater where *Hamilton* opened to the Chicago theater where it was later presented, attempting to align the same emotional responses to a different architectural space.

Through these considerations of placement and time, sounds in the theater setting create embodied and aesthetic experiences for audiences, moving them to take action or dig deeper into their own psyches. This is particularly relevant as sound becomes more and more disjointed and disconnected from its source. The very first "recording" ever made conveys a ghost-like quality, a haunting—and that's exactly what is present: a ghost, long-dead, his voice resurrected half a century later. This sound is likely the voice of Édouard-Léon Scott de Martinville, a Parisian bookseller and the first person to develop a method of capturing sound in 1857 (Feaster). This sound recording worked through, first, visually recording sound with the phonautograph, a machine that created lines from sound waves—a sound that de Martinville himself never heard, as the lines were only discovered in an archive and played in 2008 through a virtual stylus developed at the Lawrence Berkeley National Laboratory. The haunting sound of de Martinville singing "Au Clair de la Lune" into a phonautograph on April 9, 1860, is considered the first recorded sound (Feaster). This may be the first example, then, of what R. Murray Schafer refers to as "schizophonia," or recorded sound split off from its original source. The sound is disembodied, dislocated, and unhinged by separating the sound from its

creator, making the source unclear and confusing. The term "schizophonia," first seen in *The Soundscape*, is what Schafer calls a nervous word. Schafer connects this to synthetic soundscapes in which natural sounds are becoming increasingly unnatural while "machine-made substitutes are providing the operative signals directing modern life" (90-1). Theo van Leeuwen analyzes the recording of a nature soundscape of Jean Roche to arrive at the following conclusions of the sonic environment and its recording:

> To anyone who has heard the deafening cry of cicadas on a summer afternoon it is immediately clear that the level of the cicadas on this track is far too low relative to the other sounds. They are turned into a background, a Field, like the 'masking noise' in the library, or the traffic on High Street nearby my work room. It is also clear that the aural point of view created by the mix is physically impossible. (18)

The digital recording has a different impact on our experiences of the world and its sounds—furthering experiences of schizophonia, for example, or enacting false sonic experiences and emotions. However, nonverbal sonic composition and theater sound design work together through action and imagination to form the concepts for a concept of sonic empathy and emotion through sound that may work with social justice themes to envision and develop a just and socially engaged world.

Encouraging Sonic Empathy through Theater Sound

Despite the perceived empathy deficit in the United States, our brains are still typically hardwired to be empathetic. Infants, for example, experience both cognitive empathy and affective empathy as early as six months, showing concern for distressed others (Uzefovsky et al.), and reacting with "contagious" crying when hearing the cry of

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another infant (Dondi et al., Martin and Clark; Roth-Hanania et al.). Other experiments show babies expect facial expressions and sounds from caregivers to match, with babies expecting mothers to look happy when they sound happy or sound sad when they look sad (Kahana-Kalman and Walker-Andrews). Empathy is often tied to sound, as many parents hearing the cries of a child might attest. Research shows mothers from diverse cultures around the world to have a universal response to the sound of a baby crying (Bornstein et al.), with similarly empathetic behavioral responses and brain activity. Bornstein et al. explain that "similarities in parenting practices across diverse cultural groups would supply unique evidence that responses to crying constitute culturally common, species-general, fundamental processes" of empathy (E9466), with the study including mothers from Argentina, Belgium, Brazil, Cameroon, France, Kenya, Israel, Italy, Japan, South Korea, and the United States. Across cultures, acts of listening to and creating sound provide ingrained, hardwired mediums for empathy practice, engagement, and action.

In the preface for *Sonic Persuasion* (2011), Greg Goodale considers his graduate work with obscure historical sources—the letters that he read in a course on cultural history and letters of sympathy written in 1901 to Ida McKinley following her husband's assassination. As Goodale attempted to categorize these letters, he finally asked his professor, Lawrence W. Levine, what he should do with them. Levine's one-word response—"Listen"—resonated with Goodale, who began to contemplate the metaphorical "listening" to sources: "After five centuries of the book, scholars have become accustomed to perceiving the world only through the lens of reading . . . The

legacy has left scholars in the humanities with a host of visual metaphors for thinking [but] it is a rare metaphor that compares the other senses to the acquisition of knowledge" (ix). Goodale writes that we learn from other senses—from taste, touch, smell, and sound—just as much as sight, and that "inattention to all five senses . . . leaves our understanding of both history and the present disabled and leave us prey to the manipulations of those who understand the persuasive power of the nonthought senses" (ix). Sonic empathy creates pathways to listen in complex, nuanced ways to the world around us. The theater setting is an ideal location to practice and enact such possibilities through the range of sound and vibrations and its focus on culture, society, and identity.

Theater sound design, like sonic empathy, leads to personalized experience for those affected by sounds and vibrations. A new way of listening proposed by Kanta Kochhar-Lindgren provides ways of applying and contemplating sonic empathy: the "third ear" that can "keep open a transactive space of multiple meaning systems, marked by uneven differentials between the sensorial and metaphorical registers of deafness, disability, ethnicity, class, and gender" (426). Kochhar-Lindgren explains:

> While many theorists share the goal of cultural / political transformation, it is often less clear how the sensorial becomes subsumed, even erased, in the name of the conceptual clarity of understanding comprehended in a logocentric manner of listening for truth. The charting of the lived events, whether in everyday life or theatrical examples, is crucial to theories of deaf and disability studies, because those instances either validate or discount the politics. Otherwise, we run the risk of engaging in a political rhetoric that glosses over the way the different

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individuals live their lives, and where the various experiences / histories of

colonization of the deaf, disabled, ethnic, or postcolonial body continue to haunt

each other—echoing and reverberating across distorted and insufficiently

articulated cultural terrain. (426)

Kochhar-Lindgren weaves through various geographic, cultural, and historic sound sites

to make space for multisensorial experiences, using knowledge and examples from Deaf

theater. When spelled with a capital D, the term "Deaf" signifies members of the Deaf

community who embrace Deaf culture through sign language, whereas "deaf" represents

those who are hard-of-hearing but do not necessarily identify with Deaf culture. Kochhar-

Lindgren's writing includes the role of the "third ear" as a multicultural and multilingual

types of hearing, for audiences who are deaf, Deaf, and hearing, clarifying the sense of

hybridity within theater—an element that may be applied to theater sound design and its

creation of empathy in multimodal spaces. Such applications connect to Richard

Schechner's belief that theater creates and shifts our identity spaces through performance

of resistance, as he notes that, on the stage, we are "me, not-me" and therefore challenge

representations and ways of knowing and making knowledge.

The embodied nature of listening with the "third ear" connects our sonic

understanding to the embodied nature of empathy. Blankenship writes, "Empathy is

powerful and transformative because of its proximity to our bodies (i.e., we experience

empathy bodily in the form of sensory impressions and also in the form of an emotion)

and to the degree to which we can relate to the one with whom we empathize" (44).

Theater sound design accounts for this embodied nature of listening, sound, and

connectedness. This concept, in many ways, mirrors the work of Augusto Boal, who developed Theatre of the Oppressed to envision new futures, restore dialogue, and create authentic space for actors (or *spect-actors*, a term Boal coined to highlight the duality of actor and spectator). In one form of Theatre of the Oppressed, the actors create a tableau of an oppressive moment and inspire critical reflection through spoken word and movement. Then, *spect-actors* rearrange the scene to show liberation from the oppression, creating an ideal world. Other activities include legislative theater, where actors attempt interventions on-stage and make suggestions to legislature, and "invisible theater" that poses as reality in a public space, getting others involved who never realize they are part of an acting game. With work inspired by Paulo Freire and Bertolt Brecht, Boal's work with Theatre of the Oppressed was also largely influenced by rhetoric, as his book *Theatre of the Oppressed* includes a close reading of Aristotle's *Poetics*. Boal argues that theater can be used to react to social conditions and incorporate embodied experiences, implementing theater as both language and discourse. Boal encourages participatory action and modes of expression and a *spect-actor* focus on space, place, and systems.

Embodied listening expands beyond performances more obviously labeled as "activist theater" and into many more theatrical works in community theater, independent theater, off-Broadway, and on Broadway. The shared spaces of theaters provide a sense of proximity with other people and worlds, and the sonic elements amplify the impacts of this space and shape reality for the audience. For example, the sound design for Deaf West Theater's *Spring Awakening* reimagined the musical, which originally opened on

Broadway in 2006, to be performed in both English and American Sign Language, bringing together musicians, Deaf actors, and hearing actors in this story about teenagers dealing with issues such as abortion, suicide, sexual abuse, and their own sexuality. Based on a play set in nineteenth century Germany, this production of the musical invited audiences to listen in embodied and material manners through its unique approach to sound and movement. The musicality and sounds of the show went beyond the audiological and became vivid and multimodal. In the production, each actor communicated in American Sign Language with "deaf actors accompanied by speaking actors, or voices—like a shadow, or visible subconscious" (Ross), and the script adding new layers such as parallels with Deaf education in the nineteenth century, during a time when oralism was forced on students who were dissuaded—or even severely punished— for using sign language. Actor Michael Arden adds insights in an interview with Neda Ulaby of the radio show *All Things Considered*: "It's emotional work, to find a musical's voice with mouth and hands," Ulaby paraphrases. "And it's not a compromise, Arden says. It can make it better." Gareth Owen, the sound designer for Deaf West Theater's *Spring Awakening*, highlights the way the musical resonated with audience members and performers who were Deaf and hearing. For many Deaf performers, the experience with the musical allowed for a stronger understanding of music as a concept, and Owen shares:

> The drummer in the show has a Tama Rhythm Watch tempo box, which sends a
> tempo click into everyone's ears. To help the deaf actors we bought a load of
> Guitammer ButtKickers — those things you bolt under drummers' stools. We

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fixed them to the underside of the stage — a large matrix of ButtKickers hooked

up to another output from the Tama tempo box. When the drummer activates the

tempo, the whole stage starts clicking under your feet. You can't hear it, but all of

the actors can feel the tempo and perform in time. (qtd. in MacDonald)

The feel of the sounds plays a significant role for the performers—as well as the diverse

audiences, who listen through their ears, their bodies, and visually, adopting concepts of

Ceraso's *multimodal listening* and Kochhar-Lindgren's *third ear*. As a result, audience

members of all backgrounds have a variety of mediums to relate to and empathize with

others through the performance, and cultivate sensations of sonic empathy.

Gareth Owen was also the sound designer for the 2017 Broadway adaptation of

George Orwell's *1984*, a play that used sound in more painful, often traumatizing ways.

This production serves as an example of a contemporary and politically-charged theater

performance that intentionally used in/hospitable sound to create feelings of discomfort

among the audience—often in an attempt to reveal subconscious emotions, inspire

political resistance, and negotiate sound and embodiment. Visceral reactions to the

jarring sound design, such as jackhammer sounds, and other sensory assaults during *1984*

led to fainting, vomiting, screaming, and even calls to the police and arrests. Actress

Olivia Wilde's response after the opening night performance, where one audience

member passed out, reveals the connections between the inhospitable sound design and

empathy: "I'm not surprised, since this experience is unique, bold and immersive. It

allows you to empathize in a visceral way, and that means making the audience

physically and emotionally uncomfortable" (Lee). Based on George Orwell's dystopian

novel of the same name, the play *1984* hosts scenes of torture, shock, and horror while using effects such as strobe lights, blackouts, and overwhelming sounds and vibrations to tell the story of a totalitarian regime and the suppression of critical thought.

While the sensory elements of *1984* connect to Antonin Artaud's Theatre of Cruelty, which argues for "sensory cruelty" that disrupts the relationship between audience and performers, it also connects to broader activist concepts such as sonic sensibility and sonic agency. In fact, sonic empathy plays a significant albeit surprising role, as co-director Duncan Macmillan explains that this jarring approach to sound and sensation may, in fact, lead to greater empathy. He shares that much of the content is "happening right now, somewhere around the world: People are being detained without trial, tortured and executed. We can sanitize that and make people feel comforted, or we can simply present it without commentary and allow it to speak for itself" (Lee). This sound design therefore relates to Salomé Voegelin's notion of sonic sensibility (what is possible in the unseen) and LaBelle's concept of sonic agency (how sonic sensibility informs activist and emancipatory practices), as *1984* is a theater performance that uses sound design in complex, sometimes unwelcoming or even hostile ways to promote change and action. Voegelin considers sound part of an ecology that interconnects humans and the environment, while LaBelle attempts to take public spheres beyond the traditional visual world and into sonic relationships.

LaBelle argues that sound exacerbates our vulnerabilities and impatience; however, though such vulnerabilities, sound and listening might enable social exchange and mutual recognition, concepts that relate to sonic empathy and its many possibilities.

Sonic empathy creates the sensation of sound, including nonverbal and background sound, as a conversation—much like writing. Rhetoric scholar Kenneth Bruffee argues that writing is inherently collaborative; and while his research looks at alphabetic text, the same could be said for sonic compositions. The questions of a sound designer will mirror those of a student writer, making concepts of sonic empathy relevant to both theater and the composition classroom. When creating a soundscape for a scene, the sound designer must consider key elements of the production such as where the action is taking place, when it is happening, why it is happening (theme and emotion), how it is happening, and the genre of the piece.

Sound design requires a thoughtful level of attention and an awareness of an audience's empathic impulses. Sound designer Victoria Deiorio shares other important areas to consider when developing aural cues, including the emotions of the actors, the emotions intended to resonate with the audience, and both the internal and external events taking place during the scope of the production. She speaks to the importance of the "neural pathway" of the audience and how mood and ambience connect to this mind-body pathway. Soundscapes incorporate physical and metaphysical (mind-body) qualities, and concepts such as punctuation, abstraction, and repetition guide possibilities for theater sound design. Volume, pitch, and tempo each play a role, as does the perception of silence. Close analysis of sonic concerns and contemporary issues lends itself to Paulo Freire's suggestion for students and citizens (and, it could be said, audiences) to name the world so they can change it; or, in the case of sonic empathy, to

name the world so they can better relate and understand its many diverse perspectives and

experiences.

CHAPTER THREE

COMMUNITIES AT WORK THROUGH THEATER SOUND DESIGN

"Young Jean Lee [in her play *Straight White Men* (2014)] specifies in the

preshow she wants the most aggressive, loud hip hop music to play and it should

be at an uncomfortable volume level. She wants the audience to come in where if

you're into it . . . you know that it's going to be cool and fun. If you're not into it,

she knows that you're not going to like this. Get with it. She wants to be in your

face, and that's what the sound design has done. Put all that stuff up. It's loud, it's

happening, it's blasting, it's kicking, and that's the aesthetic." (Andy Evan Cohen,

Personal Interview)

Whether it is the fluttering of paper programs as audience members turn pages,

the echoes of footsteps within a large auditorium, or the sounds of birds chirping in an

outdoor amphitheater, audiences are immersed in sound and vibration upon entering a

theater space. Such sounds and vibrations immediately place all audience members

within a sonic community and a specific frame of mind—and members of the theater

community, from playwrights and producers to sound and lighting designers, use this

moment of sonic community to their advantage. As part of my dissertation's "sound-

mapping" methodology, this chapter reveals connections between sound design and

community by reporting results from my qualitative interview with sound designer Andy

Evan Cohen, who developed the soundscapes for Athena Theatre's *I Carry Your Heart*, a

play about the politics and poetics of organ donation. My interview with Cohen revealed

the role of theater sound design as a community at work, a concept with significant

potential for pedagogy. My findings on theater sound design as a community at work

support my assertions that theater sound design serves as an ecological composing

process worthy of study within sonic rhetorics—through its alignment with movement,

multimodality, and audience awareness intended for social change.

For this dissertation project, I chose to immerse myself within a specific theatrical

production, to conduct interviews, and to research the components involved in creating

and composing sounds that attempt to incite social action. As a result, I partnered with

Athena Theatre for their New York City premiere of *I Carry Your Heart*, a play on the

politics and poetics of organ donation. I was able to observe the production from its

conceptual stage to production, attend the production's first technical rehearsal (see fig.

3.1), meet the people involved, and attend "talkback" sessions held with local nonprofit

LiveOnNY after each performance. The play, written by Georgette Kelly and produced

by Athena Theatre in 2019, relied heavily on sound to tell the story of two families

connected through organ donation.

Fig. 3.1. A technical rehearsal at 59E59 Theaters includes the completed set. The sound designer, lighting designer, and crew are present. I am also pictured (right) as a face glancing at the camera. I had the opportunity to observe this technical rehearsal and experience the development of multimodal components. Image by Veronique Ory and posted on the Athena Theatre Instagram (@athenatheatre) in black and white.

While there are numerous theater groups in New York City and across the world who are doing exciting things with sound and social change, I chose this theater, these interviews, and this particular case study based on three factors:

1. **A theater company producing original contemporary works**—ideally "pushing at the boundaries of live theater," which is part Athena Theatre's mission: "Since 2003, Athena Theatre Company has dedicated itself to developing and producing contemporary, off-beat and irreverent psychological dramas and dark comedies that challenge traditional stereotypes. Athena is committed to introducing future classics: theatrical works that not only entertain, but also inform, enlighten and deepen audience

awareness of issues without sacrificing universality for the sake of the topical" (*Athena Theatre*).

2. **A theater company actively bringing new voices into performing arts.** Athena Theatre has as part of their mission statement that they "actively and responsibly invest in new voices for the stage by nurturing playwrights and promoting original works" (*Athena Theatre*) and working to diversify theater. Athena runs a playwriting fellowship and residency where they bring together about seven or eight playwrights each year. Playwrights focus on a particular theme that guides their work for the year.

3. **A theater company that emphasizes the use of sound and vibration in their productions.** There are several theater companies that fit that bill, but the year 2019 was a particularly major one for this theater company, since Athena Theatre's theme" for writing fellows was "A Deafening Silence." The theme "A Deafening Silence" reminds me of what Romeo García says about *community listening*: that it "invites us to create presence from absence, and sound from silence" (8). The theme connects to the idea that in the moments where there is silence, or an absence of sound, is when it is the most important to be listening. Like the works developed in Athena's writing residency, *I Carry Your Heart* also used soundscapes as an integral part of storytelling.

I Carry Your Heart, written by Georgette Kelly and directed by Cate Caplin, relied heavily on sound to tell the story of two families connected through organ donation and the relationships between organ donor and recipient. Phoebe, a poet living in the

shadows of her mother Debra's literary acclaim, is grappling with two legacies from her mother: her mother's recent death and organ donation and her mother's unread journals from her travels in Morocco that allow her to form a deeper connection to her estranged mother. Her story is juxtaposed against and eventually interwoven with that of partners Tess and Lydia and their adult son Josh, who discover that a heart is available for Tess. Kelly, the playwright, describes the play as "a play in which two families come together and find the interstitial tissue that connects them in spite of the fact that they've never met through both organ donation and poetry" (qtd. in Soltes), adding that it further considers "how parts of ourselves can live on after we die."

Through my interview with Cohen on his work in the industry and the sound design for *I Carry Your Heart*, my research methodology connects qualitative interviewing as a type of community listening that calls for thoughtful and strategical contemplation. The IRB-approved qualitative interview approach was a *semistructured*, or focused, format (Merton et al.), a format in which the topic is introduced with guiding questions while there is still room for the interviewee to add additional input (see Appendix A-E for IRB materials). For example, Cohen brought his laptop to the interview, which was held at a small "phone booth office" at a co-working space in Manhattan, and he was immediately eager to share audio examples of his work for *I Carry Your Heart*. With this in mind, Cohen played the sounds and discussed them before the structured interview components, creating an expressive focus on all of the sounds within the space throughout the interview process, an emphasis relating to Jonathan Alexander's argument that removing background sounds "elides the specificity

of embodied experiences and somatic contexts—contexts through and out of which particular sounds and voices are made, heard, and understood" (78). This balance of voice and nonverbal sonic composition allowed for Cohen to organically share his knowledge and insights on theater sound design projects, which expanded from his experience with Athena Theatre to his other sound design projects nationwide and off-Broadway.

In revealing unknown histories and truths, sound design in theater relates to Brandon LaBelle's notion of the invisible and its impact on sonic agency. The fragmentation of visibility breaks from political structures and systems: removals and silences, gestures and conditions, impact institutional visibility. Visibility stems from oneself and others in various contexts—it is a performativity of appearance. However, visuals may also abuse or mask the truth while the invisible may provide counter systems to subjugation, a support for hidden or culturally underground communities or forms of survival. LaBelle asks: "Might we appreciate sound as a material event that generates conditions or experiences of non-visuality?" (31). The unseen is a crucial component: "Of not looking, or looking elsewhere, into sound, and locates us within spaces of shadows, a dimness, a dim light, and at times, even total darkness—a listening in the dark" (LaBelle 33). My research builds on this work by applying theater sound to concepts of sonic agency—moving past sounds *as protest* but also into sound design as an ecological, nonverbal sonic composing process.

With theater sounds as well as interview practices, sonic agency holds an immersive and relevant quality. In *Qualitative Interviewing*, Herbert J. Rubin and Irene S.

Rubin stress the importance of listening to *hear the meaning* of spoken word during interviews (7), clarifying that qualitative interviewing requires "intense listening, a respect for and curiosity for what people say, and a systematic effort to really hear and understand what people are telling you" (17). The visual, sonic, and material components of the interview space impact the perception of the interviewer and interviewee. By applying a case study that delves into Cohen's use of sound in *I Carry Your Heart* and other productions, this chapter incorporates this production's inclusion of "social soundscaping" and the development of environments with sound in mind, pulling from Kati Fargo Ahern's call in *Computers and Composition* for the "co-constitutive process of planting sounds to increase flexibility, contextuality, accessibility, and/or sustainability of a soundscape or learning space" (32). To align "planting" and "pruning" sound to embodied listening in theater, the chapter reveals findings about the cultivation of communities through theater sound and vibration, as "ear-witnessed" through this particular case study.

In *Bowling Alone*, Robert Putnam argues that American society has become more individualistic, leading to a decline in civic participation. As we face these challenges in civic participation, I argue that the collaborative nature of sound design extends to its influence on community-building and provides avenues for community identity. Thus, this chapter includes two sections: (1) Sonic Community through Community Engagement and Community Listening and (2) Rhetorical Affordances of Theater Sound Design Communities.

Sonic Community through Community Engagement and Community Listening

Sonic community, as a space and place in time that brings communities together for social change, aligns with the rhetorical model of community engagement and pedagogy that Linda Flower presents in *Community Literacy and the Rhetoric of Public Engagement*. Such a practice can "affirm both the personal *and* the public and both the individual *and* the collective aspects of rhetorical action" (Flower 207). Flower calls for scholars to "recover the practice of 'doing' rhetoric in its wider civic and ethical sense" (81), a practice that lends itself to community, engagement, and the recognition of lived experiences. In its exploration of sonic community, this chapter places theater sound design in conversation with understandings and perceptions of community relationships to reveal the impact of sound design on community building. In "When the First Voice You Hear Is Not Your Own," Jacqueline Jones Royster asks, "How do we listen? How do we translate listening into language and action, into the creation of an appropriate response?" (38). Within education and literacy studies, the development of sonic community unites concepts of community engagement and community listening.

Royster and Gesa E. Kirsch provide terminology for rhetorical feminist researchers that "help create new knowledge and understanding" (84), including four key terms: critical imagination, strategic contemplation, social circulation, and globalization. The concept of *strategic contemplation* affords researchers the opportunity to "linger deliberately inside their research task" (84) and to pay attention to forms of research and interactions that are undervalued or rarely considered. Further, strategic contemplation "allows scholars to observe and notice, to listen to and hear voices often neglected or

silenced, and to notice more overtly their own responses to what they are seeing, reading, reflecting on, and encountering during their research processes" (Royster and Kirsch 86). Strategic contemplation calls for suspending judgement and not leaping to conclusions, which Jenn Fishman and Lauren Rosenberg find "vital to community listening, which we understand as a praxis that has many locations and occasions and is always dependent on deep human interactions" (2). For this chapter, both strategic contemplation and community listening fall within the methodology of "sound-mapping," particularly when combined with qualitative oral interviews.

Community Engagement

Before exploring the connections between sound and community engagement, the definition of community engagement must first be considered. Community engagement is considered a fairly new field much like sound studies. The interdisciplinary field attempts to respond to community needs while asking questions such as: What is community? How is it developed? Why is it more important than ever today? What assets and needs exist in different local and global communities? How can these areas be addressed? Community engagement covers philosophical and pedagogical approaches such as service-learning and place-based education. Thomas Ehrlich defines civic engagement as "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes" (vi). Similarly, the National Youth Leadership Council looks to civic engagement through service learning as an "approach to teaching and learning in which

students use academic and civic knowledge and skills to address genuine community needs." However, not all community engagement needs to be combined with service learning, a murky term that Eric C. Sheffield calls "over-defined" (46). My argument for the development of sonic community calls for a consideration of listening, connections, and networks—not presenting students to external communities as experts to resolve an issue but rather providing students and others with opportunities to *listen to* people and surroundings in a manner that engages with community and their own identities and beliefs. When most effective, community engagement incorporates the Asset-Based Community Development model to consider a community's assets and circulations.

In community development, it is important to focus on assets and not just things that may be lacking. In fact, the MIT CoLab even suggests asset mapping as a possibility *with sound*. The CoLab approach incorporates soundwalks and oral interviews to "soundmap" the assets of a community, and this approach would be helpful to any community engagement work, not just work that intentionally encompasses sound-based methods of research. Community engagement, regardless of approach, closely aligns with social justice education, and the activist framework and integrated community development of social justice education allows for contextualized learning that incorporates both local and global communities. In addition to criteria proposed by the Asset-Based Community Development model, other models include the community engagement classification from the Carnegie Foundation and the Imagining America Initiative. In the academic setting, faculty and students must also consider how a particular form of community engagement connects to disciplinary knowledge.

In higher education, programs that incorporate community engagement are shown to lead to higher retention, completion, and grade point averages among students (Cress et al.); despite this, Robert D. Reason and Kevin Hemmer found that "there is not a single body of literature or set of easily identifiable instruments in higher education that are tied to the majority of civic learning assessment" (6). The *Cambridge Handbook of Service Learning and Community Engagement* reflects on community engagement as going beyond service learning and into community engagement models that encourage reciprocity. Community engagement is not the idea of doing *something for* others, but rather becoming part of a community, learning from a community, or immersing oneself within the ideas, values, and attitudes of a community. For example, Amy Driscoll notes that community engagement "describes the collaboration between higher education institutions and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity" (6). Dan W. Butin and Scott Seider point to community as an intellectual movement more than a social movement; this assertion is supported by Caryn McTighe Musil's point that "civic engagement is acting on a heightened sense of responsibility to one's communities that encompasses the notions of global citizenship and interdependence, participation in building civil society, and empowering individuals as agents of positive social change to promote social justice locally and globally" (58-9). Community engagement, no matter how directly or indirectly approached, should create habits of lifelong engagement, empowerment, and socially responsible citizenship (Musil 59).

Community Listening

Fishman and Rosenberg present *community listening* as a feminist intervention into community writing (2), an "active, layered, intentional practice . . . [that] includes awareness of, as well as a responsibility for, being part of an evolving process" (1). Their work highlights that willingness to change remains an active component to community listening, as listeners must be eager to respond to an ethical and engaged way (1). Stories emerge from sound and silence, and Erica Stone finds that community listening requires participants to be mindful of "story, place, personality, and culture" (16), a point that Cohen has found similarly relevant to sound design and audience awareness, particularly during his experiences designing the sound for *I Carry Your Heart*.

The concept of community listening closely connects to the theories and practices of rhetorical listening. Krista Ratcliffe argues that we must "continually negotiate our always evolving standpoints, our identities, with the always evolving standpoints of others" (34), and she brings forward rhetorical listening as "a stance of openness that a person may choose to assume in relation to any person, text, or culture" that may be applied "in many different contexts for many different purposes" (xiii). The discursive nature of rhetorical listening allows for meaningful change and interpretive invention.

Making connections plays a crucial role in the practice of community listening, where researchers must prioritize what others are saying—and how they say it (Fishman and Rosenberg 2; Flower 19). Because community listening is "about being immersed in the experience of understanding and nonunderstanding, and trying and trying again with empathy" (Fishman and Rosenberg 3), the concept interweaves and overlaps with

practices of qualitative interviewing findings. Qualitative interview design must be flexible, iterative, and continuous (Rubin and Rubin 43), and the final design slowly emerges from the listening process and the evolution of the discussions. While this chapter of my dissertation focuses on results from my interview with Cohen, two others were interviewed for Chapter Four of my dissertation: Cate Caplin, the director of Athena Theatre's *I Carry Your Heart*, and Veronique Ory, the lead producer and the founder of Athena Theatre. Following the advice of Rubin and Rubin, I developed a different set of potential questions for each person being interviewed, as each person had a unique perspective to bring on the topic of sound design and social change and how it fit within this production. Rubin and Rubin consider qualitative interviewing to be "a philosophy, an approach to learning. One element of this philosophy is that understanding is achieved by encouraging people to describe their worlds in their own terms" (2). These descriptions of worlds create space for "sound-mapping" and avenues to enact community listening practices through reciprocity between speaker and listener.

Rubin and Rubin describe a model for qualitative interviewing that combines an interpretive approach to the feminist model of interviewing, which emphasizes the humanity of both the interviewer and interviewee and focuses on forming real and reciprocal relationships between the two people. Rubin and Rubin stress that qualitative interviewing is personal and not detached and that the qualitative researcher "has to have a high tolerance for uncertainty, especially at the beginning of the project, because the design will continue to change as the researcher hears what is being said" (41). The interview process with representatives from Athena Theatre revealed new insights to me

on the formation of sound design as a process that mirrors the process of a student writer. Through analysis of my interview with Cohen, I share my findings on the rhetorical affordances of nonverbal sonic composing as a community at work.

Rhetorical Affordances of Theater Sound Design Communities

Theater sound design is emblematic of communities at work—sound design as dialogue with audience and sound design development as discourse between members of a theater team. Those involved "behind the scenes" in a production become a community while also building a community, making theater sound design a prominent example of sonic composing for community engagement. The nonverbal sounds within a soundscape still "speak" politically and culturally, and "move" socially to reveal vulnerability and strength, rhythm and resistance. Sound and vibration are a means to connect to an audience that, on a daily basis, may be detached or apathetic; these sensations create a space for discourse. Sound serves as a mechanism to explore and work through contemporary issues, conveying an acousmatic aesthetic that is not always transparent but still attempts a sentiment of change. The audience becomes part of a community through immersion within sound and vibration or even silence; before this, theater sound design involves significant interactions with the text and with other creators as the sound designer contemplates their work's potential impact on others. Findings from my interview with Cohen support my three assertions about theater sound design as a community-driven ecological composing process worthy of study within sonic rhetorics. I propose that theater sound design serves as a resource to create social change through its alignment with (1) movement, (2) multimodality, and (3) audience awareness.

Movement

By connecting soundscapes to contemporary issues, theater sound design embraces movement to create connections and community.

LaBelle's concept of sonic agency differs from much composition and rhetoric scholarship, which looks to sound as a type of composition rather than an embodied experience. However, Steph Ceraso bridges this gap in her work on multimodal listening, and other scholars such as Steve Goodman and Frances Dyson speak of sound as a vibratory event. Theater sound encompasses both ways of thinking about sound. When a sound designer embarks on a new project, some initial activities will include reading the script to understand the plot, adding notes and annotations, scrutinizing cues and transitions, and eyeing locations and contrasts. As early as their first reading of a script, sound designers are already thinking ahead to the audience and their potential experience with the performance. During this process, the sound designer imagines a conversation with the playwright to build the scope and soundscapes needed for emotional response and continuity. This theatrical collaboration extends to the sound designer's work with directors, stage managers, lighting and costume designers, and many others, as each component of a performance works together to immerse the audience in the experience.

Researchers must ensure the interviewer and interviewee are on the same page about the meaning of words and concepts, and Rubin and Rubin provide the example of an interviewer who, based on his own experiences, defined *advocacy* as "demonstrating and leading protest marches" (18), whereas the development leaders with whom he was speaking considered the term to reflect "lobbying for financial resources" (18). As a

result, the researcher's questions about resistance and revolution were answered by "describing conference-room deals" (18). To avoid such room for error, I asked Cohen for his definition of the term "sound design"—a term that, at times, can be open to interpretation and ambiguity despite its importance within the theater setting. Ross Brown writes that "many professional theatre sound designers will have stories to tell of how directors or producers have either misunderstood, or simply not understood at all, what sound design is" (11). In many ways, this confusion is due to the overlap between technical and artistic skills in sound design.

Cohen's definition of sound design unites the technical and artistic components of sound design and storytelling: "There are as many different definitions as there are different ways to tell a story. So sound design is just using sound to help with the storytelling, and it could mean making things louder or it could mean making things complex or could mean making things more simple and softer" (Personal Interview). His work has varied between the constant use of sound versus sound as an underestimated resource, and he adds, "A sound design could have 20 cues, but all 20 are at very important moments, or it could have 150 moments, and the entire show becomes partially about the sound" (Cohen, Personal Interview). The production of *I Carry Your Heart* was designed to be "sound heavy," with Cohen adding: "We had 110 ten cues, not counting in between cues, so probably closer to a 115, 120, 130 . . . This show wouldn't have made sense by just transition music, the music fades out, and they talk and the transition music. That wouldn't have told the stories effectively" (Personal Interview).

This approach of sound design as storytelling, both technically and artistically, relates in many ways to what Tony Award winner Nevin Steinberg shares about sound design as a technical and artistic skill. In a *Vice* interview with Sam Gustin, Steinberg compares the technical and artists approaches to sound design to the technical and artistic components of winemaking: "Sound design requires a tremendous amount of technical knowledge, like winemaking requires organic chemistry and the understanding of all of these reactions, and time, and sugar content and all of that. But at the end of the day, it's a glass of wine, and it needs to taste good" (Steinberg qtd. in Gustin). In this manner, the artistic endeavor must be supported by the technical knowledge, and that "becomes a matter of taste" (Steinberg qtd. in Gustin). Personal definitions of sound design will vary even more when considering different forms and context for sound design, such as sound design for film, television, and video games.

Cohen, who focuses his sound design on storytelling, worked closely with the playwright and director to capture the music and sounds of *I Carry Your Heart*. The playwright of *I Carry Your Heart* finds that connections and communities are central to the play's story: "This story came at a time in my life when I had a friend who was diagnosed with a terminal illness, and so I was spending a lot of time visiting him in the ICU" (Kelly qtd. in Soltes). The experiences in the hospital made the playwright start thinking about "all of the people in the hospital and watching the interactions and the ways that people connect seemingly by chance in those moments of feeling alone in a hospital" (Kelly qtd. in Soltes). To this end, the sounds of the hospital juxtapose with

sounds of cityscapes, Gnawa music from Morocco, strums on a bass guitar, and other modified sounds that Cohen developed for the project.

One way that Cohen aimed to influence and complement the contemporary issues within the play, the focus on organ donation, was by using the sound of a beating heart in the opening monologue, where Debra appears as fluid and ghost-like—and he brings that sound back at different points in the play, too:

> There is that ominous texture. See how you've got these sort of pulses? This is a heartbeat. This is a recording that someone made and put for public domain recordings—taking a stethoscope to someone's heart and recording their heartbeat to show an example of what different heartbeats sound like. So, I took one of those recordings of a heartbeat, and you're usually hearing bump, bump. Bump, bump. Bump, bump. This is bump, bump, very slowly. So, this is slowed down to maybe one percent." (Cohen, Personal Interview)

The audience is then hearing a heartbeat edited through granular synthesis. Granular synthesis is a technique that allows the sound designer to slow down, speed up, and combine sounds and samples. Cohen takes a heartbeat recording and shapes the sounds and textures by using granular synthesis, which is used to adjust speed and sounds, and "adding Equalization, EQ, which is cutting out certain frequencies" (Cohen, Personal Interview), therefore turning the beeps of a hospital into something eerie, ominous, and otherworldly. He describes the sounds: "So what we heard was a heartbeat, applying that to create this sort of low, rumbly sound, which on these speakers sounds kind of hissy, but in the speakers in the space, you could feel the rumbles, and that becomes part of the

design" (Cohen, Personal Interview). Underlying sounds maintain an ability to influence and complement the contemporary issues within a play, as experienced by the sounds of a beating heart—bump, bump, bump—in this play about organ donation.

After Debra is introduced in an "otherworldly" moment through nuanced, emotionally transporting music and sounds, the sounds of Gnawa music and the heartbeat give way to city sounds of jackhammers and traffic and then, the sounds of a hospital, a short, persistent beeping—and the ominous tone of a heartbeat slowed to a crawl. Sounds, vibrations, and visual projections are timed with her words, and these elements transition to each other. One series of sounds fades as others enter and projections cue: "And now, onto the world of our play," Cohen explains:

> So you can hear all these roars and textures. You can hear that it's a combination of realistically recognizable sounds with musical music, in this case, folk music from Morocco—the Gnawa music that they refer to—and then combining the folk music with the sounds of the city and abstracted gestural sounds. (Personal Interview)

The use of granular synthesis allows the sound designer to slow down, speed up, and combine sounds and samples, which Cohen applied to remove "some of the percussive nature of the heartbeat so that you get that slower, lower, more of a vibe rather than a perception of a beat or a rhythm" (Personal Interview).

In *I Carry Your Heart*, Cohen used several different textures and variations. Looking to the editing tool, he says, "I can see an example of two similar sounds where I've made: here is one beeping sound . . . This is taking one of those hospital sounds and

slowing it down. And here's the same sound except emphasizing different frequencies . . . And if I play them side by side, you can hear a slight difference between them" (Personal Interview). By moving from lower pitches to higher pitches, Cohen ensures that the ears and bodies of audience members start to shift as they pay more attention to the sound. This allows him to play around with focus and perception for the audience. For example, Phoebe's emotional change throughout the play is sonically illustrated by moving from lower pitches to higher pitches in the production, as Cohen ensures that the ears and bodies of audience members start to shift as they pay more attention to the sound as embodied—applying an inclusive multimodal listening and movement.

Modality

        Through their inventive potential and inclusion of multimodality, soundscapes invite sound designers to create new worlds that connect and intersect with communities.

        Cohen's process begins with the technical side before he starts the storytelling journey. He begins by figuring out the technical components such as budgets, financing, load-ins, technical rehearsal dates and times, and board operations, and whether he will have assistants, run crew, and work crew available. Then, he says, he closely reads the script. While Cohen teaches sound design at a local college and advises students to read the script at least once to "experience the play" before taking notes, he is typically comfortable enough with his experiences and knowledge to take notes right away. He shares:

        I've now read enough plays by different writers that very rarely will I be reading a script and say, 'Wow. I've never seen writing like that before.' . . . And so I can

be writing as I'm going along to make notes, and if I stop the note-taking process

because I'm so engrossed, then I know that this is going to be something special.

And that's what happened with this play. (Cohen, Personal Interview)

Once Cohen read to a point in the second act where Tess, the transplant patient, is

re-hospitalized, Cohen was too immersed with the play to take notes: "And I just stopped

taking notes from there to the end and then just went back and gave notes . . . and then I

started realizing this is going to be the type of play that I'm going to want to start

thinking about underscores and textures" (Personal Interview). He adds that Georgette

Kelly, the playwright, also wanted to approach the sound in this manner, and she

collected Gnawa music and music that inspired her—as did the director, Cate Caplin. "So

early on in the process, we're all exchanging sound files and playing music for each

other" (Cohen, Personal Interview). The community supported each other, as Cate

responded "This is beautiful" to examples of Cohen's work. Then, the team "did a few

rehearsals trying different things in place to see if it's going to work. They knew what

was [working]" (Cohen, Personal Interview). About a week before the technical

rehearsals, Cohen shares, "I came into a rehearsal and started playing longer sequences

with the tones that I had created, and the actors were starting to get acclimated to the

world of the play and what to do" (Personal Interview).

Cohen uses the program QLab to create sound design for what he calls life events:

"plays, dance pieces, circus acts, museum installations . . . where you've got live

performance that needs to have some degree of interactivity" (Personal Interview). For

the past fifteen years, Cohen has used this software: "I saw it pretty early when it first

came out, and was like, 'This is amazing,' and I've been designing on it since. And how it works is that you program a lot of things in together, and it can do anything from playing music, fading music, triggering video, triggering lights" (Personal Interview). QLab therefore played a significant role in the development of *I Carry Your Heart*, as the production included several multimodal components including visual projects, nuanced soundscapes, and subtle leitmotifs to symbolize different characters.

Cohen explains that, in addition to collaboration between cast and crew members, each person becomes a type of multimedia artist: "I'm writing in the same world we're living in . . . It's now, 'Sure. I'll write music for a string quartet and also play piano and also play some jazz and also add some drums to your recording and also do this and create a website and do photography.' Now, we're all multimedia artists" (Personal Interview). Cohen elaborates on the collaboration necessary for today's multimedia artists:

> The world we're living in is a multimedia world. Journalists no longer just write a story; they write the story, they take the photography, they edit the photography, the edit the story, they put it all together in one package . . . And similarly, doing sound for a theater, I'm no longer just doing the sound. It becomes, "Okay. You need help with projections? I can help you with the programming of the projections and setting things up and all the networking things. So Lauren can design [the projections]. I'll just create the infrastructure, and then we'll just plug in together and make her designs work." So that's [an example of] how I interact with community. There's all sorts of stuff out there and it's constant interacting

and plugging things together and making it all work together. (Cohen, Personal

Interview)

The use of multimedia in theater creates opportunities not previously available. Through

technology, Cohen says, "The whole world's opened up . . . You can write a ten-minute

play that takes place on a roller coaster with sounds of the roller coaster crashing and

breaking to a halt and swooping up and swooping down, and all that can be timed to the

actions" (Personal Interview). He explains this type of production would not have been

producible twenty years ago, but now, it has become a quick, easy practice. For this

hypothetical example, Cohen explains:

I'll just build roller coaster cues. And with lighting boards, now we're getting

super digital and fancy, the lighting designer [says], 'Great. I can set up a whole

series of lights, control them all with macro keys, program something in, and

within one hour, when you say go, we hear the roller coaster slowly creeping up,

the lights are moving from upstage to downstage very slowly as we're going up

the walls into the grid. And then at the top, the sound goes to an underscore. The

lights freeze. They're caught up in the roller coasters. They talk, dialogue,

dialogue, dialogue. And then one person says, "We're going down." And then all

the lights, big chase sequence start cascading up around the entire theater as we

hear the sound of the roller coaster plunging mixed in with screams and people

going, "Ah," break to a halt, the lights go up, and repeat that over and over again

as they do the play. And it takes an hour to put something like that together. So

technology's there. Be creative. (Personal Interview)

Sound becomes another character of sorts, as Mladen Ovadija states in *Dramaturgy of Sound in the Avant-garde and Postdramatic Theatre* by arguing that sound itself becomes an actor in the drama (9). Nonverbal sounds in theater become part of a process as listening becomes language and as subconscious dialogue begins with the ephemeral.

Because it is impossible to turn off and comes at us from all directions, sound may be considered from positions of verbal and nonverbal, intentional and unintentional, and visible and invisible. Conversations between the sound designer and others within the production are critical to allowing the ideal opportunities for sound. Cohen states: "Sound design is . . . closely tied to dramaturgy because a lot of what I'm doing is by choosing what underscores or where the underscores go [is] saying, 'What is this moment really about? What are the key things in this moment?'" (Personal Interview). In this regard, Cohen often shares dramaturgical advice with theatrical teams, such as technical corrections for specific music (for example, if a playwright wants to use the piece of music from a wrong year), or advice on sounds that better suit the emotions of a production.

As part of his work with dramaturgy and sound, Cohen shares that, in a hypothetical example, a playwright may have a specific song in mind for a breakup scene—Cohen provides the example of "With or Without You" by U2—and he will need to explain to them, "No, because the scene is much more intimate, and putting that song in is going to make it feel like it's anthemic and possibly make it feel like a joke. So that's not the breakup song you want" (Personal Interview). Elements of fact-checking also play a role, or discussing whether a sound or instead a prop is most fitting for a

scene. If there is a situation where "a play calls for a gun," Cohen says, "I start explaining about how guns work and how gun shots work. Because a lot of people say, 'Oh, we can just use a real gun on stage. We don't need a sound.' No. No. You can't do that . . . I've seen guns. I've handled guns. You don't just put a gun on stage. It doesn't work that way" (Personal Interview).

This is one way that Cohen and others must decide if a sound is needed, or if a prop may be enough to provide audience understanding through "seen" sound. The idea of sound as "seen" is a concept most often applied to synesthesia, a condition in which multiple sensory reactions take place after only one sense is activated. For example, a person with synesthesia might "hear" colors or "taste" sounds. But all people experience multiple sensory responses to sound, including visual and haptic. "Live coding" artwork, which was recently presented as part of a panel at the Conference on College Composition and Communication in 2019, also takes sound to produce visual effects. During this panel, coded artwork, using a code by Nathan Riggs, evolved and flowed on a screen, interacting and interwebbing to represent the dynamic presentations, performances, and speech of scholars A.D. Carson, Firasat Jabeen, Whitney Jordan Adams, and others. Through rap, poetry, and papers, this panel merged sound and image to categorize and draw implications on areas of social justice, confronting the diversity of human experience through multiple sensations, providing a window into outside stimuli and awareness. Theater constructs similar experiences for the audience through sight, sound, and space.

Connections between sight, sound, and space were prevalent in Cohen's work

with an off-Broadway show titled *(A)loft Modulation*. According to Cohen, the show had:

> The six speakers around the stage, house speakers, and then it had the actors on
>
> set playing with different reel-to-reel tape machines, and sounds were moving
>
> literally from one reel-to-reel machine the other. So a person clicks on their reel-
>
> to-reel, we hear the sounds from there, then as the lights focus, we hear the same
>
> sounds as they're being recorded on a second reel-to-reel in a different part of the
>
> stage. (Personal Interview)

Cohen's experience with *(A)loft Modulation* included the push for different feeling and

emotions, created through a large team working together. While *I Carry Your Heart* is

about interpersonal relationships and connections, *(A)loft Modulation* "was much more

about different worlds not relating to each other, and musicians and writers and

filmmakers, and they're all doing their things separately and at times, coming together,

and at times, fighting and then breaking apart" (Cohen, Personal Interview). The first

scene of *(A)loft Modulation* immediately sets the tone of the production. In the first

scene, an actor speaks on his cell phone as a means to inform the audience that this is the

present day. After his phone call, he puts on an old reel-to-reel machine as unknown

voices are heard. The tape freezes, and the character curses and plays another tape before

the sound pans to the radio and the lights go up. A voice speaks that is recognizable from

the radio, and then people enter, fight, and argue. The scene climaxes in "a giant jam

session" as sounds vary from screaming, fighting, a band jamming, and, as a man wears

headphones, the reel-to-reel machine. Space and sound interact and intersect through this opening scene.

The collaborative work between designers makes this interaction between sound and environment possible. Brown describes the sound design process as necessitating an abstraction of self from the environment to transition from model to immersive experience, going from the sound designer "listening/hearing" to others and the space around them, to thinking, and then to "sounding" (3). These efforts create a sense of community for those involved with the production, as well as the audience.

Audience Awareness

By incorporating audience awareness, sound design inspires social change through sonic storytelling and amplified ambience.

Like sound design, an understanding of social change and what it entails—and how it may be developed—also varies based on the person being interviewed. Cohen feels that storytelling itself, whether sonic, visual, or physical, is what has the potential to start conversations or potentially create social change, adding, "This [sound design in *I Carry Your Heart*] is not trying to be like Steve Reich, Come Out, or Rzewski, The People United Are Never Defeated, those classic examples of . . . obvious music to hit you over the head to make social change" (Personal Interview). He explains that the onus is on audience members to make connections: "There are writers of all types, whether it's music or journalism or fiction writing or nonfiction writing whose job is to say, 'Look at this. We need to do something about this.' My job is more to say, 'Look at all these connections. Let's make these connections together and see what you take out of it'"

(Cohen, Personal Interview). Romeo García argues that community listening intends to re-situate individuals within "constellations of stories, genealogies, ghosts, and hauntings" (7); and this, too, is the job that Cohen outlines for his role as a sound designer.

Cohen, Caplan, and Kelly decided that this would not be a play in which sound was merely a cue to actors or an actor waited for a sound before delivering a line. Rather, the actors were told, "You've got to figure out what's going to motivate you to go, and then the sound cue is going to help you with that motivation" (Cohen, Personal Interview). The actors adapted to this approach very early. Often, an actor in a theatrical production will say their lines before a transition, pick up props, exit the stage, change their costume, and come back with new props as the lights come up. However, *I Carry Your Heart* did not follow such a mechanical approach and instead relied on the team to immerse the environment with palpable emotion: "This is taking away mechanics. This is, you're going to need to come on stage in the emotional frame of mind of what you want. Because as you're coming on stage, the sounds are going to start shifting, and you need to be ready for those shifts as you're coming on. That became the process of the play" (Cohen, Personal Interview).

Cohen shares that he must remain aware of the potential audience for his work, as responses to sound and music vary between cultures due to musical memory, musical experience, and emotional recognition:

> One of the fun things in music is when we talk about these gestures and these
> emotions, how much of it is cultural versus how much of it is universal. And

100

that's an interesting question because there are some things that we always

assume were universal, and then the more that we start experiencing different

cultures, we realize that they weren't, and something that we thought were purely

cultural turn out to be universal. (Personal Interview)

Cohen provides two examples: perceptions of high versus low frequencies tend to be

more universal whereas a response to a certain melody is more likely to be cultural. For *I

Carry Your Heart*, the production team, based in Manhattan, worked off of the

assumption that the audience was *primarily* Western or Western-based. "This is not to

say that audiences who come from a non-Western perspective won't appreciate it,"

Cohen explains in our interview, "but I suspect they will appreciate it very differently and

get different reactions to it. I write coming from the world in which this play is written: in

the English language with a New York multicultural community." That said, the play

incorporates Gnawa music regularly to represent a heart donor who traveled throughout

Morocco in her youth, and Cohen adds:

The question is how would people whose first language is not English and whose

first experiences with music and sound are not Western music and sound, how,

for example, would this go about for a tribe in Morocco who's Gnawa music is

part of their culture, and how would they perceive the Western interpretation of

the Gnawa music? That would probably be very different . . . and that's fine.

(Personal Interview)

The space of a performance impacts how an audience perceives the sounds.

Places, after all, conjure affective reactions (Amedeo and Golledge; Blaison and Hess;

Ulrich). *I Carry Your Heart* was performed in an intimate, black box theater space with a flexible seating arrangement, and the set design consisted of a sterile environment: a few large, white boxes; a hospital bed; and other simple imagery. This approach to the space and set design allowed audiences to feel a sense of calm amidst chaos, comfort amidst even the most uncertain or challenging moments; Cohen developed the sound design to complement an environment that was simple but full of opportunities. This space held great potential for Cohen, who applied for a grant for enhanced sound design: "Imagine what we could do if there were speakers on every possible grid position above the audience so that I could have sounds that were literally moving like waves around the theater… but that budget just didn't happen" (Personal Interview).

Even with a minimal budget, Cohen was still able to create meaningful sound through materials available, such as two main speakers and other "special things," like a special speaker for a bar scene—"so that all the bar music and bar sounds could happen from there so that becomes a separate space" (Personal Interview)—and another small, distinct speaker for scenes with a player piano. In these scenes, Josh, the son of Tess and Lydia, finds comfort in a player piano that he runs across in a hospital waiting room. "In the script, I read the player piano, and I said I want the player piano to be a separate speaker—so that whatever sounds you're hearing in the hospital, the player pianos are always separate from it," Cohen explains as he glances at his laptop. The visual elements in QLab reveal that the spatial quality of the sounds separates unique focal points for the audience members, and creates individual moments of community within each scene.

The intimate space also meant that the audience could more readily feel the frequencies and vibrations of the sound design. Frequencies may impact our perception of multiple senses, such as the way high-frequency sounds impact the sweetness of food and low-frequency sounds cause a sour taste (Eplett). The connection between taste and soundscape is particularly highlighted within airplane soundscapes; the vibrations and background noises within the plane cause food to not taste as good (Woods et al.). Similarly, sounds in the theater setting create embodied and aesthetic experiences for audiences, moving them to take action or dig deeper into their own psyches. A consideration of frequencies and attenuation in theater goes back as far as theater in ancient Rome and Greece, when bronze "sounding vessels" were placed in audience seating areas to resonate sound and reduce attenuation (Vitruvius), elements that can now be achieved through technology or, still, by applying material methods to impact sound barriers and amplification.

In our interview, Cohen explains the impact of frequencies in audience perception to sound: "You hear someone talking . . . your first reaction is to focus and listen. You hear something high, like a screeching sound, your first reaction is—" Cohen cuts off at this point to makes a startled facial expression, hands gesturing to frame his face.

> We're manipulating those frequencies and how people react to them to create
> different effects. Sometimes, I'm enhancing frequencies that aren't there or
> adding frequencies that aren't there, and sometimes I'm enhancing ones that are
> there to make them more permanent, and sometimes I'm taking out frequencies

that we don't want to focus on so we can focus on other things. (Cohen, Personal Interview)

Layering sounds through technology or "found sound" also creates an impression on the audience. When many sounds are heard at once, audience must decide on a focal point, and place themselves within the community identity.

All these sort of layered sounds, back in the old days, you'd have just had reel-to-reel tape machines, and they would all just be layered together on multi-track recording, which has been around since, at least, the '60s or so. And now with computers and Pro Tools, it's super easy to layer them together. And with QLab, you can just put everything into a folder and then everything just plays together. (Cohen, Personal Interview)

By listening to various cues, Cohen is able to "layer it in the [performance] space" and decide when he wants more bass, or heartbeat sounds, or different controls and cues. He points to a visualized audio file in QLab: "You can see that we've got various sounds and various fades that are fading them at different times. So we're at fade up for four seconds then fade down for eight seconds. Well, this one fades down for eight seconds while this one fades up for four seconds. So we've got this all programmed in, crossfades" (Personal Interview).

Cohen's background as a musician enhances his sound design work through a knowledge of musical theory and emotion. Like other forms of sound, music creates moments of catharsis for the audience—while at the same time, specific cultures, practices, and differences of audiences will influence the perception of music and its

emotional qualities. Although not all music will be interpreted similarly for all audiences,

Cohen finds the presence of music itself can prepare audiences for key moments of

storytelling. Clicking the "play" button on his laptop, Cohen plays the sounds from a

scene where Tess realizes she will receive the heart transplant that she desperately needs.

"Why music there?" Cohen poses the question. "Because previous to there, we've had

these really intense emotional, abstracted [moments, such as] the prologue of what

happened to the mother and dealing with the crises that the families are all experiencing.

And here's our first place for catharsis, where this is the first major transition" (Personal

Interview). In this scene, Tess and her partners hold hands, which Cohen explains is the

"first moment of maybe things will turn out well, so [it provides] the first chance for me

to have a theme that tells us maybe things are going to be okay. But as you can hear, it's

just a very simple few notes stated. It's not the big sweeping theme. It's tentative"

(Personal Interview). He refers to this as a *maybe theme*: "That's part of scoring, which is

sometimes you don't want to go for the big sweep, and you want that we're holding back

a little bit. We're giving you just a little bit of the music. Just enough to hold your hand,

but not enough to grab it and give you a hug and tell you that it's the end. We're going to

save that for the end of the play" (Cohen, Personal Interview).

Sound becomes part of a subconscious dialogue, with others and within the self,

as contemporary issues are explored through sonic compositions in theater. It induces a

search for connections and understanding, much like Linda Flower describes for

community-based work: "In the spirit of Paulo Freire, the purpose of dialogue is not to

create a warm *feeling* of mutuality. It is a search for understandings that can transform

reality" (4). Joining an intuitive discourse through exposure to theater soundscapes becomes a transformative and rhetorically situated practice. "The way I see it is that the sound is helping tell the story of the play, and then what you get from the story is what you take with you," Cohen says. "[With] my music or my sound, I love for people to get entertained and feel supported and happy and enjoyed by the work that I'm doing. If that spurs them to social change, all the better" (Cohen, Personal Interview).

Cohen clarifies that by "supported and happy," he means that audiences are getting what is needed from the play's sound design. Some plays, he says, need sound that intends to "alienate the audience and make them feel frustrated, angry, desolate" (Cohen, Personal Interview). "[But] that's not the world of this play." He provides an example of a play that creates a sense of community listening among the audience through implications of alienation and frustration rather than "togetherness" or obvious connectivity:

> I did a play a few years back at 14th Street Y, which was about the history of the making of the atomic bombs, and it was sort of based upon the true story, of course fictionalized. And you had Robert Oppenheimer and his brother debating on whether the work that they're doing is valid or not and critiquing themselves between the physics of it . . . And the climax of act one is, "Okay. We've got it ready. Let's try it and see what happens." Now, Oppenheimer gives a long speech about how he can't promise everything, and the math says this is going to happen, any number of things can happen, and the actors put on their goggles. They step to the side. The lights go up a little bit in the house. We hear some countdown.

We hear some rumblings building, and then end of the countdown, zero, there's a beep. Everyone looks at each other, and the script says it's the loudest explosion that you could ever imagine experiencing. And I had eight speakers, decent-sized loud speakers, plus two subwoofers which are designed for really low frequencies. I pushed them all to maximum capacity to see what would happen. The chairs that people were in were shaking. Several people [during] opening night actually held their ears… It was boom, shake. You could feel the room vibrate… The lights cue was blinders, meaning the lights were super bright in everyone's faces, held that for several seconds, loud noise, bright lights, it all fades, get silence, and blackout. (Cohen, Personal Interview)

Cohen says the entire audience feels annoyed, frustrated, and angry—but relieved, because it is over, and because that is the story.

Storytelling plays a crucial role in sound design—but also in community listening, community writing, and transrhetorical resistance. Rachel C. Jackson and Dorothy Whitehorse DeLaune distinguish "community listening" from "rhetorical listening" in an attempt to decolonize community writing, applying stories that demonstrate "transrhetoricity" (37). Jackson and Whitehorse DeLaune share that "Kiowa storytelling, as a culturally literate act that depends on community listeners for collaborative meaning making, invites us to listen without limitations" (40). The theater setting, and storytelling through social soundscapes, provides another environment for collaborative meaning making, as embodied listening by the audience creates the relationships and the actions that will develop through storied sound. Much like Kiowa stories "ask us to understand

why the story is being told, as it is being told" (Jackson and Whitehorse DeLaune 40), the

storytelling impetus of activist or story-changing sound design—what I deemed earlier in

this dissertation as "soundscapes for social change"—asks audiences to consider, to

contemplate, to connect. It asks audiences to be, in this fleeting moment in time, part of a

reciprocal community of listeners.

CHAPTER FOUR

CATALYZING CHANGE THROUGH SOUND STORIES

Sound Story 1. When I was 11 years old, I performed with a rural, regional opera

company housed in a decades-old building near a train track. During one performance,

unexpected environmental sounds of this location influenced on-stage action and

audience perception in a way that I still vividly remember. In a funeral scene, as my

character sobbed over her younger sister's death, the sound and vibration of a nearby

train rattled the entire building. A dramatic moment suddenly turned comedic, as the

action on the stage was interrupted, and our sobs were set against the backdrop of a loud,

blaring train—coincidentally, moments after a train had been referenced. A scene that, on

other nights, had the audience crying with us suddenly had a sense of levity at what

seemed to be overly transparent sound design. The actors shook with tears as the train

roared past—seemingly never-ending, to my youthful perspective. Trying to hide my

frustration and sense of being flustered, I cried harder, my character's tears likely

intermingling with some of my own. The rattling building and the loud cry of the train

led to giggles, and afterwards, a few audience members commented, "That train sound

was brilliant! It was hilarious!"

Sound Story 2. When I was a child, I would fall asleep to the sound of my

mother typing on her Mac 3G, a bulky, bright orange computer that she says sat on her

desk like an old Volkswagen. To me, this sound was soothing and comforting, and helped

me drift off to sleep. The purchase of her computer also led a special opportunity for me

to craft stories; her old electric typewriter was moved to my bedroom where it sat next to

a window and awaited my words. My fingers pressed against individual keys and made a loud clank as I typed, heavily, on each letter. I have memories of moving pieces of paper with the little wheel to the side of the buzzing machine and using Wite-Out when I needed to correct a word. Once I reached a point of focus in my writing, I zoned out, aware only of the words and subtle background sounds of wind, music, birds, car honks, someone shutting a door; as long as they stayed in the background, these sounds complemented my writing rather than distracted me from it.

Sound Story 3. I also remember sounds from time spent with my grandmother when we would sit in her backyard in New Orleans, slowly working on puzzles as we overheard the sounds of birds singing, the chirps of crickets, the rustle of grass in the wind, a puzzle piece fitting into its place. When my grandmother was in her thirties, a young mother of five daughters, she had a brain aneurysm, brain surgery, and a stroke. It left her paralyzed on her right side and, for a long time, unable to speak due to aphasia—where the ability to speak, read, or write suffers but intelligence is unaffected. The thoughts and words are present but unable to come out—not entirely. Her spoken vocabulary through my entire life was about 36 words, but the sounds of her singing "You Are My Sunshine" still resonate in my mind several years after she has passed away.

I situate three of my own sound stories at the start of this chapter to consider the impact of sound on emotions, memories, and embodied experiences. As the taste of the madeleine evoked memory for Marcel Proust in "À la recherche du temps perdu," all of our senses—including the sense of sound and vibration—similarly affect involuntary

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memories, situational attunement, or overwhelming feelings of pleasure or displeasure. Noise can never be truly abated (E. Thompson), so a soundscape constantly surrounds us, whether that is a soundscape of music and melody, buzzes and hums, construction work, traffic, or a "soundscape" of silence. In *Sonic Persuasion*, for example, Greg Goodale writes stories of how modern air-raid sirens have encouraged courses of action, persuaded survival. However, he adds that they have also been used in manipulative ways, exploited to frighten citizens into obedience (Goodale 108-10). Goodale writes the sound of the siren is as close to iconic as any noise in the American soundscape (107), and personal stories of the siren articulate the dramatic impact of sound on publics and counter-publics. The stories we tell of sounds situate us within a cultural and emotional context, and these stories reveal the impact of sounds and vibrations on our lives, movements, and actions.

This chapter is framed by a *narrative inquiry* on arts experience and identity to argue for theater sound design as a form of storytelling that integrates consciousness and action. By applying narrative inquiry, a "profoundly relational form of inquiry" (Clandinin xv), I explore the integration of consciousness and action within sound stories gathered in my interviews with Cate Caplin, director of Athena Theatre's *I Carry Your Heart*, and Veronique Ory, the producer. While my interview with the production's sound designer was held face-to-face in Manhattan (see Chapter Three for details on the interview with sound designer Andy Evan Cohen), my interviews with Ory and Caplin were held in different settings. Ory and I connected over the phone on a conference call through the web platform Zoom, and my interview with Caplin was facilitated and

conducted via email. As case studies, these stories from Ory and Caplin provide perspectives on opportunities for theater companies to use sensation to move audiences from empathy and community to action. The interviewees provided background information on this production and its raising awareness of the politics and poetics of organ donation, how sound and "talkback" sessions with a local nonprofit encouraged audience action, and how their personal histories in performing arts impacted the development of this production.

For Jerome Bruner, narratives are set within two landscapes: *landscapes of action* that follow a sequence of events in a set order, and *landscapes of consciousness* that focus on perceptions and feelings, and stories only take on meaning when a landscape of action becomes integrated within a landscape of consciousness, or vice versa (14). Through storytelling, this chapter maps examples of sound and action and provides further possibilities for social and community action influenced by sound stories. Colette Daiute writes that the power of narratives is not how we tell stories *about* life, but how narrative interacts *in* our lives (2). On narrative inquiry as a methodology, Daiute explains: "Dynamic narrating is a theory and practice researchers can use to learn from meaning-making processes people use every day" (2), and this methodology is guided by the idea that that narrating mediates "experience, knowledge, learning, and social change" (4). Both Caplin and Ory came to this production of *I Carry Your Heart* with rich, varied experiences across multiple modalities and types of performance, with each woman specifically working in movement-based performance often inspired by sound, vibration, and haptics.

I examine storytelling as a methodology for sound studies and "sound-mapping" before introducing readers to my interviews with Caplin and Ory, which encompassed their personal experiences and stories, and how these stories weave together. The chapter continues the case study in Chapter Three as I share their experiences in the theater industry as the director and producer for *I Carry Your Heart*. Further, I apply those field experiences to a concept I call *sonic action*, or sound-influenced movements for community action and social change. I argue that (1) sonic action bears witness to the agentive potential of sound; (2) sonic action transcends limits of space through kinetic, tactile, and felt experiences, and (3) sonic action must rely on sound stories and compassionate listening to foreground sound as action instead of as mere background noise. Finally, the chapter concludes with a call for the use of narrative inquiry in sound studies and furthering connections between sonic action through the sharing of sound stories.

Storytelling Methodologies for Sonic Action

The use of storytelling as methodology relies on Indigenous forms of rhetoric and scholarship, such as methodologies discussed by Gregory Cajete, Ranjan Datta, Rachel C. Jackson, and Dorothy M. Whitehorse DeLaune. Cajete considers stories foundational to all human interaction and learning, while Datta similarly argues that storytelling shapes lived experiences and opportunities for participatory action. Datta focuses on scholarship with Indigenous communities and also finds that storytelling, as a research methodology, "deconstructs the colonial mindset, reconnects with the land and culture, builds a bridge between Indigenous and Western ways of conducting research, and

empowers both research participants and researcher" (36). Datta says methodology is

centered on the principles that guide our research, adding, "Stories reflect the genuine

and authentic experience of an individual, a team, or a community" (36). Jackson and

Whitehorse DeLaune apply the practices of Kiowa storytelling to scholarship on

community listening, and pursue storytelling as a "decolonizing" move (40). Jackson and

Whitehorse DeLaune invite readers and researchers "to listen differently, *with* a

community rather than *to* a community or *for* a community" (40). The researcher, or

listener, then works alongside the storyteller to draw connections (46).

Narratives cover spatial, temporal, and cultural contexts, and intend to draw

attention to moments in time. As a representative of culture and context, narrative is a

"product of social life and human social activity" (Vygotsky 164). Through its

"collaboration between researcher and participants, over time, in a place or series of

places, and in social interaction with milieus" (Clandinin and Connelly 20), narrative

inquiry allows for an understanding of experiences through inquiry, relationships, and

storytelling. Huber et al. describe narrative inquiry as layered, contextualized, alive, and

moving, noting the transcendent power of stories that interact, react, and respond to and

with one another (216). The authors consider narrative inquiry to be an "old" practice, but

agree with Clandinin and Rosiek's findings that, within social science research, it

emerged as a research methodology in more contemporary times and has increased

consideration of the function of stories in our lives (Huber et al. 216). The turn to

narrative inquiry means that subjects are no longer considered static or deconceptualized

(Huber et al. 217), but instead researchers understand experience through "the stories

people live. People live stories and in the telling of them reaffirm them, modify them, and create new ones" (Clandinin and Connelly 415).

As a qualitative methodology, narrative inquiry allows for recursive flexibility in accounts of lived experiences as interviewees bring forward elements most important to them, with this methodology focusing "not only on individuals' experiences but also on the social, cultural, and institutional narratives within which individuals' experiences are constituted, shaped, expressed, and enacted" (Clandinin and Rosiek 42-3). Therefore, my approach to interviewing for this chapter allowed those being interviewed to focus on their emotional connections to sounds, their identities within performing arts, and their firsthand accounts of the experience directing and producing a play focused on a contemporary issue.

There are many stories to be told about productions on contemporary issues, just as there are many productions that cover important global and community issues and many activist theaters across the country and world. These stories are not meant to be representative of all of these—and could not possibly be, as this is only one specific case study. In her TED Talk "The Danger of a Single Story," Chimamanda Ngozi Adichie speaks to the dangers of limited perspectives: "The single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete. They make one story become the only story." The stories in this chapter are far from the *only stories* on this topic, as there are many more stories in theater that remain to be shared. Rather, these are the stories of two women and their experiences—and they

provide context and insights on their experiences with sound, theater, and action through this form of narrative inquiry.

Weaving Stories of Sound for Sonic Action

As storytelling aligns with action and consciousness, so must sound design as a form of *sonic action*. Caplin has seen firsthand the ability of theater to inspire and change audiences, leading to community action, and she finds "all form of art is considered to be a reflection of individuals and cultures. Any time a production enlightens, inspires, or engages an audience in conversations and new perspectives, there is the potential for social change, one person at a time" (E-mail Interview). She adds that conflict portrayed in theater may lead to "understanding, resolution and redemption... Sometimes it offers people a perspective they would otherwise have been blind to and their heart has been opened through a new level of compassion" (Caplin, E-mail Interview). Ory builds on this concept in her definition of social change, stating that social change involves "changing the way that we as a culture see our interactions. Some of it could be political, or it could be in regard to diversity. It could be in regard to really discrimination on any level. And a lot of it is just an awareness" (Phone Interview). This need for awareness encompasses compassionate listening, community listening, and soundwriting as methods for sonic action.

Although theater sound and community listening have not been linked in the rhetoric and composition field, connections between community listening and soundwriting are explored in case studies in the digital-born book *Soundwriting Pedagogies*. The chapter "Soundwriting and Resistance: Toward a Pedagogy for

Liberation," written by Michael Burns, Timothy R. Dougherty, Ben Kuebrich, and Yanira Rodríguez, directly connects soundwriting to resistance, situating sound within liberation, pedagogy, Black Lives Matter, and concerns with current rhetorics of multiculturalism. The writers introduce varied and diverse approaches to writing with hip-hop and sound, and each writer includes their own pedagogical experiences using music to approach topics of racism and resistance in the composition classroom. As the chapter focuses significantly on structural racism, the writers posit that opportunities for the composition classroom are created within sonic dissonance, exemplifying Gwendolyn Pough's prediction of a "future moment," one that breaks from dominant discourse and into new potentials for sound and writing.

Another chapter in *Soundwriting Pedagogies*, "Sounding the Stories of Isla Vista: Archives, Microhistory, and Multimedia Storytelling," relies on community building through interviews and microhistories. Patricia Fancher and Josh Mehler share their students' use of oral histories and archival research to tell the stories of a small, local, often overlooked community. Through this work, the class developed a multimodal archive of the community history. Their work brings to mind the great deal of work existing with archival sound, such as literacy stories shared within the Digital Archive of Literacy Narratives and oral histories publicly shared through StoryCenter. Although such storytelling projects may be somewhat "ear-centric," to use a phrase from Steph Ceraso that implies more ear-focused rather than embodied listening (*Sounding Composition*), this work provides students with new means for discovery and connects to

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the range of listening publics. My findings further build on connections to listening publics, with three assertions on *sonic action* developed through the interview findings.

Sonic Action Bears Witness to the Agentive Potential of Sound

A consideration of sound raises questions of the agency of soundscapes and whether listeners have control over their sonic experiences. The materials used to create sounds and the spaces that control and amplify sounds impact sonic agency. Steph Ceraso writes that "When it comes to sonic encounters… agency is distributed among sound, bodies, environments, and materials" (*Sounding Composition* 19). Sounds mediate and modify communities; for example, "community sounds" may be as simple as sirens bringing together the community due to crisis or impending danger, or bonding through cheers at a sports event. Protest bands and chants also exist in sites of community activism. Each community has its own unique soundscapes, whether horns and honks of overwhelming traffic, the ongoing sounds of construction, the arrival of trains, or other sounds and noises. These soundscapes merge together to form nonverbal sonic compositions and to create rhetorical soundscapes, yet deliberate engagement with these sounds impacts the sonic community. One of LaBelle's four figures of resistance in *Sonic Agency*, "the overheard," considers political resistance through compassionate listening, a concept that relates to the transition from sonic empathy and community and into sonic action. Through the overheard, sonic agency supports circulation and community, as it does with "the itinerant," another form of resistance. Sound is mobile, always moving— or moving on. To understand opportunities for sonic action, we must look to sonic agency.

As described in Chapter Three of this dissertation, *I Carry Your Heart*, written by

Georgette Kelly, interweaves the stories of a young woman, Phoebe, whose mother has

passed away and donated her heart, with the stories of the recipient of the heart, Tess, and

her family (see fig. 4.1). By applying the development of this production of *I Carry Your*

Heart as a case study that serves a "soundscape for social change," I share stories and

findings of sonic action as connected to the experiences of the producer, Ory, and the

director, Caplin. During my interviews with Ory and Caplin, I asked about their

experiences with this production and the use of sound. I use "soundscapes for social

change" as a term that refers to any soundscape developed or curated as a response to or a

call for contemporary issues, and the rhetorical and intentional use of sound and vibration

to impact audiences during *I Carry Your Heart* falls under this category. Many elements

of the Athena Theatre performance were inspired by sound, from acting decisions and

staging to the use of lighting and movement; however, at the same time, sound also

inspired many of the decisions, leaving room for new considerations of sonic agency.

Fig. 4.1. Tess lies in bed in her hospital room, not yet awake after a heart transplant. Her partner Lydia sits near her, while their son Josh is out of the room. Photo by Sehee Kim for Athena Theatre.

Ory stresses that, much like the artists talk to each other, the individual components and design elements of the production "need to be talking to each other… Sometimes those cues were built together just because as the projections unfold and certain movement is happening in a way those instances are like a dance, they have to happen at the same time. And then sometimes they were more organic moments" (Phone Interview). Ory references monologues in which the pace intentionally differed between performances, adding that "sometimes cues were built to have more space, so that she didn't feel like she had to rush through if on a given day it seemed to need more space. Those were all things that we discover as we rehearse: what needs to be very precise and

what can have room to grow with every performance" (Phone Interview). Sound and space are both part of the immersive theater environment, as material surroundings impact the acoustic environment and on-stage relationships, creating their own signposts.

Theater sound design creates an ecological engagement with sounds that incorporate the multimodality of sights, vibrations, and noises that inherently pose questions of the agentive potential of sound—and performing sound. John Collins provides an example of *performing* sound by discussing a "sight gag" in the Wooster Group's production of *Brace Up!*, their reimagined interpretation of *The Three Sisters*. The actress Kate Valk performs a dance, alone upstage, while other actors sing a Russian song and drink vodka. She holds a shot glass, and at the end of the song, she mimics throwing the shot glass. Although the shot glass stays in her hand, the sound system creates the sound of a glass smashing on the floor. While the audience could see the glass was still tightly in her hand, the sound tracks an imagined trajectory as Valk looks, surprised, to the sound booth. The sounds continue again at the end of each verse, as the moment happens two more times: "What was played first as a sort of unexpected mistake was transformed into a kind of predictable logic, a truth within the artificial reality of the production" (Collins 24). In this manner, Valk *performed* the sound in a manner that moved beyond the typical conventions of theater design. This combination of design and performance creates new connections between sound and action, and between the actor and sound designer, adding "layers of aurally modulated reality" (Collins 27).

John Bracewell provides descriptions of sound design in *Sound Design in the Theatre* that differ from this approach and put technical basics before creativity. In many

ways, his approach is respective of the time when this book was published, as computer use was not common in live theater in 1993, and most sound designers of this time focused on functional scope. Bracewell considers the functional scope of theater sound design to incorporate audibility, motivation, music, vocal alteration, vocal substitution, extension of dramatic space and time, and mood (207). These fall into the categories of the practical, the dramatic, and the aesthetic, with some overlap between different functions and categories (Bracewell 207), which lead to opportunities for "sounding" for the audience and performers. "Sounding" is a verb, and therefore action-driven, encompassing activities, movements, and affective experiences. In her explorations of "sounding," Ceraso stresses that multimodality should go beyond the search for meaning, as scholars should also consider the "affective, bodily, *lived* experiences" of multimodality (*Sounding Composition* 9).

Ory sees the sonic agency of theatrical experience as breaking down barriers and "lifting the veil off" of various points of view. It comes down to "allowing for more of an open mind, so that there's more openness and more receptivity in the world" (Ory, Phone Interview). In Ory's experiences, beliefs are often tied to what people have been taught early in life, so "if we can communicate something where maybe they see things in a different way, then maybe they'll take a different stance… or view the world in a different way" (Phone Interview). These stances and views can be developed through stories, images, haptics, multimodality, and sound. Caplin speaks specifically to the impact of sound, both music and natural soundscapes on narrative and experience: "Music plucks emotional chords quite directly, so there are many times a particular piece

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of music may make me weep or encourage me to rock out joyfully or create tension or anticipation" (E-mail Interview). She lists times that music works particularly well for plays, such as creating moods, underscoring scenes, or introducing transitions. She also adds that other soundscapes can move and add to the tone and environment, such as the "sound of waves and birds underscoring a scene at the beach, or glasses clinking and low laughter and conversation underscoring a party scene" (Caplin, E-mail Interview). Ory shares similar insights on the power of sound and its agentive nature:

> Sound has always been a really integral part of storytelling. Typically, when you think of theater, you think it's a very visual medium. But of course, the visual is enhanced by sound. Whenever I have conversations with a prospective sound designer before they are hired, a lot of the questions are surrounding, "How do you hear this world?" Because it [sound] becomes a character in and of itself. (Phone Interview)

As a character with its own sense of agency, sound creates more than aural arenas and circumstances; it connects audiences with their own inner selves through sonification. This is not new to modern sound technology, either. Bruce Johnson points out that William Shakespeare wrote for sound rather than print, and that in doing so, he "is writing for a community that is experiencing a transition, and therefore a tension, between two modes of knowing: visual and aural" (258). The thematic resonance of sound expands beyond character and content and into audiences themselves.

Sonic Action Transcends Limits of Space Through Kinetic, Tactile, and Felt Experiences

Both the physical space and the materiality and physicality within that space influence possibilities for sonic action. Theater as a physical space brings people together to immerse communities in the same soundscape—something that is often a rarity with today's handheld digital technology. Theatergoers typically attend with open minds, ready for an experience, and the sound designer has an opportunity to impact their ways of thinking through sound, vibration, and the accompanying emotion. Like the way that art traditionally "makes it its business to try to manifest meaning in chaotic environments" (Brown 4), practices of theater sound have "shown life played out against vast noisy battles of elemental chaos and cosmic harmony… It has used sound to show things about reality and dreams, about silence and existence itself" (Brown 4). The people in the audience impact the soundscapes within a performance space through their presence. Not only does their presence create a subjectivity for given sounds, but the audience receives *and gives* sound. Brown writes: "When I whisper or talk, cheer or whistle, cough or applaud in the theater I hear myself and *sound out* my aural sphere and place in the world" (6). Brown finds his goal as an audience member is to radiate sound as much as to receive sound (6), and explains that, no matter the theater setting and the arrangement of seats, the theater of sound "is round because individual earshot is spherical and because sound ripples outwards on all fronts" (7). Inference is made through the sounds the audience finds importance and the sounds that individuals or groups choose to overlook.

Sound has always played a significant role in shared spaces, as Sharon Gerstal's research on the lost sounds of antiquity shows how "ancient spaces were designed to shift a person's sensory experience" (LaFrance). Each sensory element is present in the ancient space design, as Gerstal explains: "The first thing you notice is images of saints, who are your size, staring at you. Gold halos against dark background, and they seem to loom. It smells of incense… The temperature is different as well… and then to have music [sound] at the same time? That hits every sense" (LaFrance). In *Acoustic Communication*, Barry Truax contends that soundscapes, as a form of organized acoustic communication, pinpoint "the way in which the sonic environment is understood" (50), as can be witnessed in embodied and place-based research on sound—as we see in Gerstal's experiences and studies of sound in early theater settings as well as the experiences of the cast and crew of *I Carry Your Heart*.

Like Gerstal, Ory theorizes that sonic design elements can, without a doubt, create or change emotions in audiences: "I feel like I can never watch a sad scene with strings underneath it and not cry. There's something about strings that—just, it gets me. And it's different for every person, right? We all come to the theater with our own lenses of what makes us vulnerable or what makes us harden" (Phone Interview). Ory shares that many Athena Theatre productions have been described as dark comedy, "so that there is darkness in lightness, and there's also lightness in darkness" (Phone Interview). She finds that there is a balance "just like life, and that I think there's a responsibility of letting the audience feel those emotions. It can be a healthy catharsis of processing maybe loss or joy or even just laughing at yourself" (Ory, Phone Interview). Through such storytelling,

her goal is that "every single audience member is able to see themselves in the world in some aspect and that they're a little bit different afterward. That they've gone through a journey and that they feel a certain sense of release in a way . . . and that it has a resonating effect on them" (Ory, Phone Interview).

Sound travels through space in different ways than lighting, than visuals, than physical movement. The soundscape can be studied as an object or as a felt sensation; regardless, soundscapes may reflect our lives and values, and the sounds that matter most to us. Temporal relationships further guide these experiences, and the open-ended nature of a script like *I Carry Your Heart* allows for numerous possibilities for sonic action. The space and sounds depicted within each performance may vary, giving directors freedom to enact their own unique style. Ory elaborates on how open to interpretation this play can be: "You could give this play to ten different directors and you would have a very different experience of the play, because Georgette wrote it… to almost have a blank canvas" (Phone Interview). Because Caplin saw this play in full production prior to her New York City premier, she had an immediate "vision" of the possibilities and "ideas of where I might want to take it from there. I waited to cast [the production] before zooming in more specifically in how it would be told through the actors in our production" (E-mail Interview). The blank canvas of the script, Ory says, made this play a "designer's dream" in that the world could look or sound several different ways. She adds: "One of the exciting things about getting to work in a new piece like this, is you can really have your own stamp on it. You can really come in and let it be your own… flavor of the way that you see this world" (Ory, Phone Interview).

Both Ory and Caplin hoped for the audience to connect to the full sensory range of details, and sound immediately helped Caplin to imagine this production. Caplin found a song with an introduction that felt "somewhat otherworldly and 'under water,' and I used it as an example of the sound design I wanted for the entire ride. The story has a ghost in the center of it [Debra, the mother who donated her heart], so I knew I wanted something nuanced and emotionally transporting" as part of the multimodality" (E-mail Interview). Danijela Kulezic-Wilson argues that multimodality moves audiences past linear narratives and into illusory reality through the music, dance, visual arts, film, and electronic media used in contemporary theater (33). Caroline Claus and Burak Pak present sound as a "vibrational nexus," and their work introduces research as a critical spatial practice found within inquiry and socially-engaged sound art (46).

An ecology of vibrational effects contains elements of negation, inclusion, and autonomy, and sonic spatial qualities serve to illuminate elements of listening and impact tactical interventions (Claus and Pak 51). In sound studies, concepts of community building and political actions are influenced by sound vibrations (Claus and Pak 47). Claus and Pak build on Steve Goodman's work on the vibrational nexus, which he defines as each individual experience that puts elements into disarray through sound. They present these frequencies as "unfolding the body onto a vibrational discontinuum that differentially traverses the media of the earth, built environment, analogue and digital sound technologies, industrial oscillators and the human body" (Claus and Pak 48).

In *I Carry Your Heart*, the use of sound and vibration extended in many ways to the lyrical movement of the performers. "Cate comes from a dance background and she is

also choreographer," Ory says. "All of her staging is deeply grounded in stage pictures. Even when you see her directing in rehearsal, she's using her arms and she's guiding people" (Phone Interview). Ory noticed a great deal of attention put into each character's posture, "which is not something that is talked about a lot when people are doing a modern play. But I think with *I Carry Your Heart*, since it is lyrical and has a poetic feel, it does almost feel like a dance in a way" (Phone Interview). She adds that everything needed to flow from one scene into the next since there were no interruptions or blackouts during the play.

The lyrical movement, Ory notes, was particularly prevalent in the character Debra (see fig. 4.2): "She's a ghost and she's almost meant to be floating through space. So there were a lot of moments where movement sounds, lights, and even projections were all talking to each other. Where she would turn and—as soon as she turned, it was… BOOM. That's when sound, lights, projections shifted" (Phone Interview). Ory considers that a key part of the storytelling, particularly since the set was minimal with substantial white space and limited props, and she adds that subtle nuances and details of movement can be easily read by the audience in this intimate space. "If you just looked at the set it's on, you would think this could be anywhere," Ory explains in the interview. "We really needed sounds, light, and projection to be talking to one another, and also to [the] movement."

Fig. 4.2. The character Debra, who has passed away and whose heart is about to be removed for the organ donation process, delivers a monologue as the play opens amidst the sound of Gnawa music that represents her time as a young adult in Morocco. As the monologue continues, these sounds give way to urban noises such as traffic and jackhammers, and then the beeps and background noises of a hospital. Photo by Sehee Kim for Athena Theatre.

Several sensibilities and ideas impacted the felt experience as the space and room was created for interactions as different people come together. Caplin also notes that "sound, lights and projections were layered in support of and in collaboration with each other" (E-mail Interview). Caplin's directing technique involves inviting different artists into the production and asking them to contribute their own sensibilities and creative ideas into the mix before specific decisions are made. Before and throughout the world-building process, Caplin works with designers for ongoing "tweaking and contouring and evaluating" as the piece becomes more defined and delineated, both technically and emotionally (E-mail Interview).

Frequencies varied to create a sense of ambiguity during phantom interactions between Tess, the heart recipient, and Debra, the donor, looking to sound as ambient and performative. John Collins discusses sound design that translates the "treating the architecture of the performance space as a found object" (29). For example, he recalls plays that did not have physical sets but instead relied on ambient sound for set building. Through sound and silence, the stories of the performance are able to unite consciousness and action to move and empower audiences as the performance progresses.

Making locations feel "real" through sonic qualities helps create a resonant response among audience members, who hear with their bodies, or what Ross Brown calls the *aural body* that admits "hearing is *not* only a process of cultured intellect" (214). The ambient sounds strengthen the tactile sensations to sound. Brown writes that "theater sound provides a spatial continuity between the audience's psyche and the world of empirical phenomena—it unites thought, memory, and perception in one spatial field" (218), and soundscapes including silence therefore engage both the mind and body. Ory references sound designer Andy Evan Cohen: "What I think is so brilliant about Andy is he uses sound very purposefully, and so when there's absence of it, you know that it's on purpose and that you're meant to really pay attention" (Phone Interview). Ory stresses that a sound designer does not just pay attention to sounds themselves but also to the moments of silence: "It's really an art to be able to illustrate a feeling without it feeling contrived, and I think that that is probably the most artful state… [the audience is] not even aware of the soundscape [so] that it becomes interwoven into the storytelling and supports it without overpowering" (Phone Interview).

Although *I Carry Your Heart* avoided overpowering noises, Katharina Rost writes of "intrusive noises" in theater that are "not only used in order to illustrate or amplify the onstage action" but also to powerfully impact the audience through rhythm, atmosphere, and arrangement (44). Intrusive noise physically touches the members of the audience and captures their attention beyond emotion and stimulus (Rost 44). Rost considers that spatial, temporal, and cultural contexts influence the perception of noise and clarifies that the bodily impact of noise can be "caused by a certain sound feature like an unusual timber, pitch, rhythm, timing, loudness, continuation or melodic pattern" (47). The vibratory nature of sound also "touches" audiences by crossing "sensory thresholds in so far as it can be simultaneously palpable and audible, visible and audible" (Trower 5). Sound affects embodied experience, and the theater setting influences the material nature of sound as sound designers rely on rhythm, atmosphere, and arrangement to attend to the cross-sensory performance experience.

Sound and movement also interweave within theater, as Caplin shares: "I have a lot of years of dance and choreography in my background, and so my directing style is highly choreographed in all that I do" (E-mail Interview). Since music inspires her work, she finds it impacts the expressions, instincts, and impulses of the actors working with her, and she tells theatrical stories in ways beyond words but also through "body language, physical attitude . . . The visuals and sound enhance all those choices and sometimes things are adjusted to better align with those new ingredients as they are added into the collective mix" (Caplin, E-mail Interview).

Sonic Action Must Rely on Sound Stories and Compassionate Listening to Foreground Sound as Action Instead of Mere Background Noise

Sound stories and listening are necessary for sonic action that moves listeners from empathy and community and into action. To explore the importance of stories, this argument begins with narrative before leading further into evidence and examples from *I Carry Your Heart*. The sound stories from Caplin and Ory are rooted in their own histories and experiences in theater, as both were drawn to theater at a young age. In her youth, Caplin's family placed great value in the arts and often celebrated birthdays or holidays by "going to the opera, theater, and ballet" (E-mail Interview). Caplin's experience with performance began in childhood: "I started as a dancer at age five, went to dance camps and art academies over the summers including Interlochen Center for the Arts and the Royal Academy in London… and through my continued training and studies, I eventually auditioned and danced with three professional ballet companies" (E-mail Interview). Then, Caplin made her way to New York where she finds that "every step of the way, training has been of utmost importance . . . dancing, acting and singing in addition to physical training opens up and strengthens the performing 'instrument'" (E-mail Interview). As Caplin booked a variety of work crossing performing arts media (musical theater, television, film), she "just kept stretching, exploring, and exposing myself to all sorts of performing opportunities and professional networks" (E-mail Interview).

Ory was also drawn to theater at a young age. "Deep down," she says, "it was always storytelling for me. My earliest memories were of performing for my grandparents in their living room" (Ory, Phone Interview). She says there was not a

specific moment when she decided to pursue theater: "It was just always something that I knew" (Ory, Phone Interview). While attending college, Ory was provided with significant hands-on experience working with a theater company. During her work with this theater company, she was intrigued by the way there was always something in motion, and stories always being told, and it led her to seek her own theatrical "home."

In addition to serving as the producer of Athena Theatre's *I Carry Your Heart*, Ory is the founder of Athena Theatre, which she initially developed in Los Angeles with a friend from her college: "We were thinking of Athena, the goddess of wisdom, strength, and beauty, and how you can express that in relation to storytelling" (Phone Interview). Her goal was producing plays in which, even when characters are struggling, a core of strength powers the production alongside smart and thought-provoking storytelling. She emphasizes the development of productions that, "afterwards, the audience would still be thinking about [the play]. They would go have a drink and talk about it. And they… unpack it together" (Ory, Phone Interview). She elaborates that many of the plays she has produced do not always tell stories that end neatly with everyone "living happily ever after." Rather, the endings of the stories might be ambiguous and require the audience to think beyond the theater experiences. "Some of the beauty is that people will have different opinions about how things end or how the characters will end up" (Ory, Phone Interview). This means that conversations not only resonate after a performance but also years later, as a passing thought or overheard sound might remind them of a performance and the contemporary issues covered, leading to eventual action.

When Ory brought Athena Theatre from Los Angeles to New York City, the mission of the theater gradually developed further. After Ory produced a production of *True West* in 2010, a colleague commented, "'It was a really great production of True West, but why did you decide to produce this in New York when it's been done before?'" Ory laughs, "I… was silenced because I really liked the play… But it definitely gave me pause" (Phone Interview). This, she says, is when the mission of Athena Theatre began shifting to produce new works. With this change came opportunities to continue conversations after Athena Theatre shows—through partnerships with nonprofit and advocacy organizations. The theater company's first world premiere was *The Man Under* at 59E59, and the theater partnered with Stupid Cancer, a nonprofit organization that aims to empower young adults with cancer by building community. The organization "offers a lifeline to the young adult cancer community by connecting them to age-appropriate resources and peers who get it" (*Stupid Cancer*).

Because *The Man Under*'s plot involves references to a character who died from cancer at a really young age—a character who is never met in the play, but is, Ory says "the launching point of how we meet our protagonist" (Phone Interview)—it was a natural partnership between the theater company and the nonprofit. The organization being based in New York City, like Athena Theatre, was an immediate draw, but Ory was even more specifically excited about "raising awareness for people who have cancer at a really young age. And they did the talk back, and it was a nice way to cross-promote and to give our audience more awareness … It was a platform for advocacy so that if they were inspired to take action, now they have the tools in their hands" (Phone Interview).

Ory shares that initial experience set in motion the meeting of theater with social change as a way to continue that conversation after the show, allowing the audience to be empowered through the surrounding voices and soundscapes, continuing to "listen" after the performance ends.

Director Cate Caplin first encountered the play shortly after her mother passed away, and she hoped sounds would create connections and resolution for audience members. In the play, she was touched by the mother-daughter relationship, particularly "the words expressed and then ones never shared" (Caplin, E-mail Interview) and how the daughter could re-connect with her mother through the woman who now has her mother's heart (see fig. 4.3). In bringing the play to New York City, Caplin "wanted the audience to fully embrace and appreciate the fundamental connection with our mothers" (E-mail Interview). Beyond that, she says the play may help audiences "to perhaps look at the things that might have created conflict, resentment or anger towards our mothers— or families in general—and realize that there is much peace and growth through compassion understanding and grace" (Caplin, E-mail Interview).

Fig. 4.3. As Tess' partner Lydia worries, Tess is in a place between the living and the dead, the earth and another plane of existence, interacting with her heart donor Debra. Eventually, Tess will have a chance to meet Debra's daughter and connect the two families. Photo by Sehee Kim for Athena Theatre.

During *I Carry Your Heart*, individual stories are told through both sound and actions until they begin to weave and intersect as the show reaches an end (see fig. 4.4). "The challenge there is that it's still grounded in reality so that we're still muted and grounded through these characters' relationships," "but there's almost like a heightened reality. This is probably the most challenging thing in this style of theater: that it is an elevated world that is also supported by everybody committing to that world" (Ory, Phone Interview). The sounds in the production add to this experience, as the sound designer "took great care to compose original pieces for the show" (Ory, Phone Interview), along with developing intricate sound design uniting cultural reflections and nonverbal sonic composition. The world incorporated the sterile feel of a hospital, or other locations such as a bar or apartment, sounds that are familiar to our lives.

Fig. 4.4. Tess' partner Lydia and son Joshua debate if Tess is ready to make contact with the family of her heart donor. Later, Tess does elect to meet Debra's daughter. Photo by Sehee Kim for Athena Theatre.

For *I Carry Your Heart*, the embodiment of listening prepares the audience to contemplate the topic of organ donation, particularly given each performance ending with a "talkback session" with LiveOnNY, a nonprofit based in New York that focuses attention on organ and tissue donation. The collaboration with LiveOnNY was one way that Ory and Caplin aimed to move audiences from empathy and community, or consciousness, into action: "Because the story involves an organ transplant, we did homework on organ donor organizations and it was perfect synchronicity that LiveOn NY was having a month of Donor Awareness events at the same time [as] our production was going to be playing" (Caplin, E-mail Interview).

Ory says this production was unique in that these sessions were able to take place

after every performance: "When we were looking at the calendar, I remember our

director Cate Caplin said, 'I think we should have a talkback after every performance.'

And I remember thinking there's no way that we're going to be able to get people to

commit to do a talkback after every performance" (Phone Interview). Ory explains that

this is "a really big ask because essentially, they're getting people from their organization

to volunteer their time to do this. But they actually really supported it" (Phone Interview).

Through these talkback sessions, the audience members became aware of the positive

aspects of donating organs and were exposed to surgeons, donors, recipients, and the

family members of donors and recipients.

The major impact of the play and the talkback sessions was the ability for

people's minds to change. Through conversations with different members of LiveOnNY

after every performance, the audience was able to dispel certain preconceived perceptions

and beliefs. For example, Ory found:

> "Almost every single audience member, for one reason or another, had just sort of
>
> disqualified themselves from giving blood… [and many of] those beliefs turned
>
> out to be incorrect. It's eye opening that these things that we discount… By
>
> actually posing the question and being a part of the conversation, a lot of those
>
> limitations are lifted off." (Phone Interview)

As an audience listens in the theater setting, there is a shared interest in experiencing

something beyond themselves. Often, though, the sounds and experience around them

provide avenues to understand themselves. By considering the stories that surround us,

we reveal and discover new things about ourselves—and can, at times, be moved to action beyond ourselves.

Although this chapter focuses on *sonic action*, I want to end this chapter not with a call for action but with a call for contemplation. My call, based on the work of MIT CoLab's *Listening to the City* and the workbooks of sound art collective and AIDS activists Ultra-red, is to contemplate those sounds that move you, that change you, that save you, that hurt you, that empower you. What sounds inspire you to action? What sounds inspire you to feel? Caplin, for example, loves the sound of rain falling, ocean tide coming in and out: "I love the chime of specific bell tolls, specific clock ticking. The list goes on and on" (E-mail Interview). Reflecting on sensory interactions allows for deeper connections with the world around us. We are all situated within sounds, and sounds are situated within ourselves. An awareness of these sounds and their place in our lives is needed to move from sonic empathy and community and into action.

CHAPTER FIVE

AMPLIFYING AMBIENCE THROGH SOUND DESIGN PEDAGOGIES

In his work on soundscapes, Canadian composer and scholar R. Murray Schafer writes about an abstract idea called "the soniferous garden," or the dream of a comfortable, welcoming place of acoustic delights. I propose that educators have the opportunity to see (and hear) the classroom as a soniferous garden: a space of inclusivity, a space of retreat from oppressive noise, and a space of creative inquiry and contemplation. Much like the soundscapes of unity that bring cities together in times of despair, the classroom as a soniferous garden provides a "stage" for production, perception, and performance. To develop a soniferous garden in varied teaching spaces, instructors may apply insights from theater production to the writing classroom, ranging from conceptualizations of the sound design process to what I call "soundscapes for social change," or activist soundscapes created by students using both Foley sounds and digital production. My interviews with sound designer Andy Evan Cohen, producer Veronique Ory, and director Cate Caplin, all of whom worked on Athena Theatre's *I Carry Your Heart*, provide additional applications and models for the classroom as a soniferous garden, and for the potential roles of "soundscapes for social change."

In this chapter, I share my argument through two "acts" that consider how instructors and students can harness sound for social action and embrace possibilities for what Steph Ceraso calls a *multimodal listening pedagogy* of experiential pedagogies related to embodied sound. I ask, for all students and all classrooms, how might a composition course become its own soniferous garden? How might instructors combine

sound with empathy, community, and action in ways that enact social justice and provide students with meaningful assignments, activities, and assessments? In Act I, I apply these questions to my findings from previous chapters, developing scenes for instruction with empathy, community, and action, and the development of "soundscapes for social change." In Act II, I discuss ways that sonic composing may be applied to multiple environments—not just upper-level courses that focus specifically on sound, but a variety of courses in the open admissions and two-year college setting, including basic writing. An action-based sound design pedagogy is shared that presents opportunities for multimodality and sonic thought. The work of theater sound design inspires and complements the classroom as a soniferous garden through its focus on performance and perception. For the chapter's Epilogue, similar to the scene that marks the final moments of many theater productions, I consider the continued development of theater-inspired sonic pedagogy that creates a "soniferous garden."

In the opening pages of this dissertation, written in early 2019, I wrote about the sounds of New York City's Lexington Avenue Express train: a busy, active train typically used by more than one million people per day on their regular commutes. As I finalize my dissertation in April 2020, the sounds of New York City are startlingly different from the sounds around me when I began this manuscript. On Sunday, March 15, Mayor Bill de Blasio issued a citywide shutdown to avoid the spread of COVID-19, the novel coronavirus (Kirby). New York City schools were moved online for emergency remote instruction, and all nonessential businesses were closed (Kirby). On Friday, March 20, Governor Andrew Cuomo issued a statewide shutdown to ensure everyone

was socially distancing (Jacobs et al.), and similar shutdowns are happening across the country as the world faces a global pandemic and attempts to flatten the curve and slow the spread of infection. Everyone in our community is asked to remain inside or refrain from gathering with others unless absolutely necessary.

In train stations, the underground sounds changed from enthusiastic music of performers to a quiet emptiness at some stations, often the gentrified areas where wealthy citizens fled the state—as well as the sounds of rustling masks, coughing, and attempts to avoid overcrowding at other stations, where essential workers in healthcare, sanitation, grocery stores, food delivery, construction, and other vital professions face a limited train schedule. Outside of the stations and across boroughs, the sounds are also dramatically different as the streets begin to empty. New Yorkers more readily hear the chirps of birds previously quieted by traffic and construction—peaceful sounds, but sounds that are still often silenced, now by emergency vehicles. With New York City as the epicenter of the coronavirus pandemic, the rumble of excessive rush-hour traffic is replaced by constant sirens as the volume of calls to Emergency Medical Services in New York City is now greater than the volume experienced on September 11, 2001 (Watkins).

Inside apartments, where New Yorkers must stay as much as possible, people are either alone, hearing only the sounds of their own breathing, the hums of kitchen appliances, a television in the background; or sharing close quarters with multiple family members—who may be working from home, applying for unemployment, entertaining each other, or, for many parents, encouraging children to do their homework despite no longer being in the physical school environment. The inner sounds of other apartments

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also resonate more easily without the buffer of a constant cacophony outside, and every time a neighbor coughs, it's no longer ignored or assumed to be a simple cold but instead leads to the listener wondering: "Are they OK? Are they dying?"

The trauma of some sounds, particularly the constant sirens or the rattle of a dry cough, may now forever be ingrained in the minds of these urban listeners, but other soundscapes create a citywide connection and bring people together. Every day at 7 p.m., people in New York City and many cities across the world erupt in cheers and noise for all essential workers. People open their windows, sit on their balconies, or lean from their fire escapes, where they bang on pots and pans, whistle, clap, and cheer. In some areas, the time coincides with the change in shifts for healthcare workers (Leaden), whereas others find this time simply connects them in a shared soundscape creation. This soundscape developed collaboratively through moving, speaking bodies and found objects create what I might call a "soundscape for social change" – a soundscape that encourages empathy, community, and even action. This concept not only unites communities but also has far-reaching potential in the writing classroom.

The concept of "soundscapes for social change" and its application within pedagogy connects to two recent calls from sound studies scholars: Jennifer Stoever's call for a civically-engaged sound studies and Christie Zwahlen's call for a sonically-informed community engagement praxis that incorporates listening to local needs. My concept of "soundscapes for social change" responds to Stoever and Zwahlen through the development and analysis of civic-minded soundscapes that use listening, inquiry, research, and invention to consider the many ways that sounds mediate community,

collaboration, and communication. A soundscape alone is unlikely to solve contemporary problems, but the mindfulness, analysis, and development of soundscapes through "ear-witnessing," found sound, and audio editing software provides an opportunity to reflect on contemporary issues and invoke empathy, community, and social action.

Act I. Sonic Pedagogies for Empathy, Community, and Action

The textures of sounds and vibration surround us throughout our lives; simply by closing their eyes and feeling the sensation of sound, students can recognize the power of sound around them. Some sounds are prominently heard, creating the identity of a specific space, while others are more subliminal or muted, often ignored but serving a purpose in the environment's soundscape, such as an air conditioner running or the hums from a refrigerator in a student's home. Acknowledging and analyzing soundscapes in a wide array of settings prepares students to consider embodied or multimodal listening in their homes, schools, public spaces, or digital spaces. By practicing and building their own listening skills, students develop a stronger awareness of soundscapes and their ability to underscore points or heighten drama and tension, practices embraced by theater sound designers.

Concepts of sonic empathy, community, and action can play a role in any educational environment, not just the composition and rhetoric classroom. Keeping in mind the diverse experiences and perspectives students bring to the classroom, accessibility must be part of the course planning. Ideally, course design will allow engaged participation from *all* students, and many of these ideas presented can be completed with universal design practices that are inclusive of students who are deaf as

well as hearing. Audio assignments and "listenings" such as podcasts should include detailed transcriptions or in the case of sound art, can be "heard" through both ear-centric listening and more embodied listening. Students can develop soundscapes using both sound and vibration as well. English scholars George Thomas and Erin Templeton write on accessibility, and resources from their National Endowment for the Humanities (Office of the Digital Humanities) project on accessibility in the digital humanities may be used in any courses that incorporate digital pedagogy. Universal design means designing the course with all students, regardless of abilities, in mind, to avoid "retrofitting" the course afterwards.

Although I aim to provide inclusive and imaginative approaches to sound design pedagogy, the ideas that I present in this section will not work for every class or every student. As with any activity and project, context will drive the decisions and lesson plans used in a particular educational environment. Ideas presented in this chapter can also be remixed, revised, and hacked for different classroom audiences and expectations. It is worth noting that a great deal of research now considers universal design in the classroom (F. Smith; Yergeau et al.), but often from the instructional design perspective. There is limited research on teaching college students to consider universal design as well as accessibility in their own work, even with digital composing projects. Thus, teaching such projects also allows instructors to pose questions of accessibility: What rhetorical choices would students make in a digital writing or multimodal composition assignment if they were introduced early in the course to user-centered or universal design and accessible digital writing practices? What does this early exposure to accessibility mean

for final products—with accessibility as part of the original design rather than an afterthought? What types of projects might be created if sonic and visual composing incorporates elements such as Steph Ceraso's *multimodal listening*, found in scholarship on composition studies, and Kanta Kochhar-Lindgren's *third ear* found in scholarship on performance studies? Both concepts incorporate sound as dynamic and embodied, multisensory experiences.

Multisensory theater sound design serves as a metaphor for practices in the writing classroom. In an interview with George Rodosthenous, sound designer Mic Pool describes sound design as "creativity in the service of a higher goal" (244), advancing "the most perfect realization of a production we can achieve within the resources we have available" (244). Pool mentions that sound design resources and techniques in the twenty-first century allow for any number of aural stimulus, which creates what he calls the curse of infinite possibility. Writing teachers see this curse of infinite possibility within student assignments; for example, a student writing a research paper may have a broad idea in mind, and the instructor serves as a resource to assist students in narrowing the topic scope, helping them focus on what is most important. Pool takes a similar approach to his work in sound design: "To deal with this I use a simple conceit; that there exists only one correct solution for this particular production of this particular play at this particular time. So, the sound design consists of a narrowing down of the infinite possibilities to the one correct choice for this very moment of this production's duration" (244). Sound designers must make decisions and narrow down their ideas much like student writers.

Caplin, Cohen, and Ory stress that sound design is not to be "added" to a production but is part of a greater, immersive experience. Caplin, for example, says that all of the "ingredients" of the play should contribute to the overall experience. Although Caplin will often "dissect" individual elements, "making note of the sound design and separating myself from the collective ride of the story so I can evaluate the design" (E-mail Interview), she hopes that general audiences will instead be swept up in the experience and emotionally influenced without analyzing mechanics or technical details. Darren Copeland writes that, within theater productions, sound underscores "the emotional temperature of any given moment [and provides] sign posts to key aspects of the narrative or other structural elements. The sound design may draw attention to the emergence of important characters or events or it may designate time and place" (48). For a student writer, individual components of writing style must smoothly intersect and work together without specific elements breaking the overall argument or temperament of their writing.

Copeland extends the exploration to sound design to incorporate the soundscapes of public environments, explaining that sound design for public environments allows "the sound designer to make comments on the world that are not always possible in theatre (where the role of the designer is dictated by the demands of the text - or a theatre production's artistic interpretation of the text)" (49). In the composition classroom, writing pedagogy as inspired by theater pedagogy does not just include metaphors of sound design as writing, but also the development of soundwriting for social change. The development of "soundscapes for social change" in the classroom creates a sensation of

sonic activism, aligning performance and perception with sonic agency. Thus, I present three "scenes" aligned with "soundscapes for social change" as well as components from previous chapters, beginning with sonic action and then leading to sonic community and sonic empathy.

Scene 1. Teaching with Sonic Action

A project central to my dissertation is the development of "soundscapes for social change," which allow students to develop sound-based stories and arguments through inquiry, research, and found sound. As I discuss in Chapter Four, sonic action serves as a way to move past sonic empathy and community and into action, and soundscapes for social change exemplify such methods of empowerment. In the activist theater setting, an example of what I would consider a soundscape for social change is the sound-based work of Brunch Theatre Company in New York City, a collective of artists who promote diverse millennial voices by responding to social justice issues through art. This theater company incorporates visual and sonic rhetorics through performances on water crises, mental health, political in/attention, and contemporary activism. Recent performance pieces include two entirely sound-driven plays developed by a team of actors, musicians, and sound designers.

In 2018, a performance with Brunch Theatre Company immersed the audience in sound to evoke the Cape Town water crisis, a period of severe water shortage in the Western Cape region that included the water restrictions of Day Zero (when the City of Cape Town became the first major city in the world to potentially run out of water). This performance provided no visual stimulus but was rather an exercise in rhythm and linear

storytelling through found objects making sound to convey water constrictions, creating a modern example of sonic agency. The sounds incorporated into the sonic storytelling and argument included sound and vibrations to convey water constrictions—faucets running out of water, toilets flushing, the rationing of water.

Cohen's sound design for Athena Theatre's *I Carry Your Heart* also incorporates soundscapes for social change through the layering of heart beats and ambient sounds and music, making nuanced but subtle arguments about the power of organ donation and the importance of human connection. One such soundscape begins immediately in the play, as roars and textures are immediately present. In describing the sound design, Cohen shares, "You can hear that it's a combination of realistically recognizable sounds with musical music; in this case, taking folk music from Morocco—this is the Gnawa music that they refer to—and then combining the folk music with the sounds of the city with abstracted gestural sounds" (Personal Interview). While the Brunch Theatre soundscapes use objects and "found sounds," incorporating Foley art into the production, Cohen's sound design used digital effects such as flanging. In one scene, he creates a texture intended to act as a counterpoint to the heartbeat: "This was a recording that I had made—I play different instruments, so I had an electric bass. I played the low string tuned down to D and then applied what's called a flange to it. We can hear that 'wong,' and that's an old technique to create these sort of sweeps of flanging" (Cohen, Personal Interview). In my approach to student projects such as "soundscapes or social change," both Foley art and digital production play a role.

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Among pursuits of education that integrates social justice and disciplinary knowledge, the concept of "soundscapes for social change" creates an opportunity for students to use *all available means of persuasion*, using multimodal listening, reading, and writing skills that do not privilege only alphabet-based texts. Through "soundscapes for social change," students make arguments and tell stories through nonverbal and nontextual means that incorporate materiality and digital media. These projects align with the creation of *the world they want to see*, an idea from sound designer Gregg Barbanell of *Breaking Bad* and *Little Miss Sunshine*, who explains that a sound designer does not need to be intimately familiar with a sound they are portraying (Jones and Venable). Rather, the sound designer has an opportunity to envision, through sound, the world they want to experience (Jones and Venable). These worlds are constructed through both digital and "found" sound, such as Foley art made through the sounds of everyday items. Musical Instrument Digital Interface (MIDI) technology provides tools for theater sound design to incorporate new hardware and software and to immerse audiences with digital sounds through samples and synthesizers. Part of the development of a soundscape for social change will involve deciding on the best resources and tools, and I argue that each should be present, with students first experimenting with Foley sound and later learning about digital tools.

I present six steps involved in the development of a soundscape for social change:

1. **Finding the topic, or the contemporary issue that the student wishes to explore through sound.** This might begin by freewriting on areas of interest or conducting a "self-interview" on experiences, relationships, cultures,

places, accomplishments, or current events that matter to them. Continue to clarify the topics further by narrowing the scope and owning perceptions.

2. **Researching the topic.** A good argument or story begins with inquiry and exploration. I suggest that students *listen* to the research for how this may relate to their lives and the lives of others. How does this issue resonate with people, both figuratively and literally? Something to keep in mind is that, by developing a soundscape, a student is not solving a problem. Rather, they are presenting the issue through sound and vibration so others may "see connections," as sound designer Andy Evan Cohen says.

3. **Selecting the audience.** Most compositions are not aimed at "anyone and everyone," nor should they be. While a theatrical performance may have multiple people in mind as an audience, student projects tend to work best when students have a particular audience in mind and tailor their work to that audience. Who needs to hear this soundscape? Who needs to contemplate this issue and consider action? Knowledge of the audience will also impact the rhetorical appeals introduced through the soundscape. The student may also consider: Where would this soundscape potentially be shared?

4. **Considering the rhetorical appeals that are feasible within the soundscape.** In most composition classes, students will discuss the rhetorical appeals of ethos (credibility), pathos (emotion), and logos (logic). While the emotional components of sound immediately come to mind, students can also consider: Are there ways to sonically portray ethos and logos? Are there

sounds or approaches to sonic composing that strike a feeling of ethos, or credibility? Sometimes this is as simple as having a well-constructed project, much like having proper grammar can create a sense of automatic ethos in a written project. Are there ways to present logical arguments through sound? With the example from Brunch Theatre Company, sound accurately portrayed the amounts of water being rationed.

5. **Deciding how to construct the soundscape.** There are numerous digital media tools that students can use for soundscape compositions, but there are also opportunities to develop soundscapes as embodied events, incorporating Kochhar-Lindgren's concept of the "third ear." It is possible to "see" sound, so perhaps this is a goal of the student. Opportunities also exist through Foley art and live sounds, as well as embodied engagement or John Collins' concept of "performing sound." Beyond that, what sounds, vibrations, or "sound performances" best portray the issue or will start conversations?

6. **Assembling the soundscape.** The assembly process is impacted by the materiality and digitality of sounds, and students will need to consider the layers, textures, and modifications of sound, such as Cohen's slowing of a heartbeat to a crawl for the sound design of *I Carry Your Heart*. Students may wish to outline or visually map the soundscape to decide on the structure—much like storyboarding for a video project. Students can also decide what sounds are relevant, unnecessary, and complementary to their insights. The rhythm, pitch, and tone convey further meaning. These projects can be shared

in the classroom or, if the students choose, can be public-facing. In fact,

thoughtful digital projects provide opportunities to "change the story" about

college writing and students' literate strengths, as Linda Adler-Kassner

discusses in *The Activist WPA*.

Sound transports us to new places, or it brings people together in existing spaces,

and it allows listeners to make unexpected or necessary connections to their realities.

Cohen describes a soundscape that connects and unites characters in *I Carry Your Heart*,

as the stories of the family of a heart donor and a heart transplant recipient begin to

merge:

We're starting to see that these worlds are interrelated, which is about the time

that you as an audience realize the connections of why we're following the

mother, why we were following the daughter, why we are following this other

family getting the transplant… and now we're realizing they're all interconnected.

And now we're hearing musically, examples of the mother theme with the music

theme playing a heartbeat rhythm, and then the interconnectivity just builds,

builds more… If the music is tying everything together, that's cluing the audience

in that they can start tying things together… A projection, stop, and the transition.

(Personal Interview)

Similar thought must be present in student soundscape projects, as students consider how

to best make connections and leave listeners thinking about those connections through the

intersection and interactions of intentional sounds. Like theater sound designers,

instructors and students must consider how the Foley and digital sounds will impact the

psyche of listeners. Students should also consider the role that embodied listening play in the soundscapes, and how sounds will be *felt*, not just heard. Through sound, the embodiment of rhetorical agency is constantly renegotiated; as sounds are shared and performed, a sense of agency shifts between the audience, sound designer, and performer as the audience hungers for drama, pain, compassion, authenticity—and movement.

An additional suggestion for the development of a soundscape for social change involves consideration of other senses and how those influence the perceptions of a soundscapes. To make such projects even more accessible, for example, students can write a "transcript" of the soundscape, developed through the storyboard to describe the sounds through text. Accompanying lights or images may also be considered, or fluid movements to supplement the soundscape. Further, we may "body" sounds through physical interactions with sound and environments, applying physical, moving bodies as a source of scholarship, much like Jessica Rajko discusses in "'Bodying' Digital Humanities: Considering Our Bodies in Practice" as she explores connections between her work as a digital scholar, dancer, and somatic practitioner. To Rajko, the "soma" includes body, mind, and spirit, united and consciously aware of the relationships between each other and the outside world. Rajko's installation research project *Vibrant Lives*, developed with dancer and artist Eileen Standley and digital humanist Jaqueline Wernimont, incorporated haptic vibrational devices to reflect data and research. The research project includes a large, crocheted net that vibrates through haptic devices, playing the collective data shed in a room or network to help others "feel" the ebbs and flows of their digital output, asking how *touching* data changes the human relationship

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with data (Rajko). Rich resources exist through wearable technology and computing, or other art forms such as dance, to embody or "body" soundscape projects.

Vibrations are similarly felt in the theater environment. For one of Cohen's previous shows, he placed subwoofers underneath the seats in a venue, so that "when a ship was blown up, you could see the audience jump up because the physical sound forced them to jump up" (Personal Interview). This production, unnamed in our interview but a sound design experience prior to *I Carry Your Heart*, incorporated multiple modalities and material elements. The physical sound of the explosion was "timed with the set release" and flood gates holding water back were opened by stagehands. "That was a cue to open the floodgates, so explosion and the water starts rushing on stage" (Cohen, Personal Interview). Cohen adds, however, that many such performances incorporate warning in the program and in advance to ensure audience safety.

Although each instructor will approach such an assignment differently by remixing and reframing these pedagogical approaches, senses beyond touch and sight can also be included in a soundscape for social change, as is seen in theater across the centuries. For example, sixteenth-century theater in the Elizabethan era of England created a full-body experience for audiences through the smell of death and blood, fireworks, and fake blood and body parts ("Sights, Sounds, and Smells of Elizabethan Theater"). While fireworks and blood will not serve a strong purpose in the composition classroom, soundscapes shared in material worlds may be accompanied by smells—or "smellscapes," or descriptions of smells that attend to the project.

Instructors have room to consider the persuasiveness of smells, and the way these sensations impact our beliefs, our perceptions, our decisions, and even our teaching. How might smell interact with taste, sound, sight, or touch to create an affect and impact the material environment? A certain smell might evoke pain, anger, disgust, excitement, nostalgia; a smell, like any text, may be interpreted differently for each receiver. In "Smellscapes, Social Justice, and Olfactory Perception," Lisa Lou Phillips takes this a step further, contemplating what trauma might smell like, sharing an example of "our sense of smell and odors in our entangled environments" (36). Phillips writes: "Olfactory rhetoric … is concerned with how we write, think, talk about, and experience smell and scent in different environments, context, and disciplinary domains" (41). This may be readily applied to more contemporary works and situations where smells and the "agency of odor" (Phillips 41) within a context have been vividly described.

Soundscapes for social change deserve an audience, and instructors must also consider how they would like such projects shared. Students should also provide input. Will the students record their soundscapes and share them online? Will they be developed solely in the classroom or shared in an open lab setting? Are the soundscapes intended to be played in a public environment? Again, these answers will depend on the goals of the individual projects and the auditory "vision" for these projects in a given setting.

Scene 2. Teaching with Sonic Community

As discussed in Chapter Three, a community at work exists through sound-based projects. These may include a wide range of projects in the classroom and must incorporate the rhetorical and ethical dimensions of sound. If students are collecting or

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otherwise working with oral histories, an understanding of ethical practices must first be introduced. One resource that aligns such practices with oral histories is the Digital Archive of Literacy Narratives (DALN), a database of literacy narratives from people of all walks of life. The DALN includes audio-, visual-, and text-based literacy narratives. Topics explored in the DALN range from learning to read blueprints or the literacy of video games to writing a poem for the first time or moving to the United States and learning English as a second language. In the classroom setting, the DALN serves to introduce students to the gathering of oral histories. I suggest that students practice interviewing each other (using recorders) for their own literacy narratives during class and then lead into their own literacy narrative projects that incorporate sound or other forms of multimodality. The DALN provides a great range of suggestions for collecting literacy narratives, ethical best practices for collection and interviews, and activities to spark student creativity.

Incorporating sound into composition classes presents a chance for students to learn about the visual and sonic components of audio editing resources and tools, including digital audio workstations and get more hands-on experience with recorders and field recording. I suggest that such a unit should rely heavily on the MIT CoLab's handbook on *Listening to the City*, with students completing readings from the handbook and then "sounding out" the various activities, such as sound-walking, sound-mapping, and ear-witnessing (Williams and Coblentz). Students will contemplate the role of acoustic ecology and how it connects to community, action, and acts of resistance. As an example, students may conduct audio mapping to better understand relationships between

sensory experience and spatial patterns. Various sonic mapping tools are available online, and students can use such technology to develop a place-based sound map identifying community assets through recordings, either those personally recorded or those using free sound effects websites and Creative Commons resources.

Sound-mapping projects can incorporate any sort of community, from digital spaces to physical spaces and from sensations to movements. For example, the "community" explored for a sound-mapping project may be the student's local community, or it could be the community (physical or metaphysical) impacted by a contemporary social issue that the student would like to investigate for the remainder of the semester. For sound-mapping focused on issues, students might work with classmates, instructors, and library resources to conduct initial research and complete a proposal on the contemporary social issue that interests them before moving forward with this project.

Like theater sound design, this research will involve exploring the social issue to develop both concrete and abstract sounds. When Cohen approaches a topic, he states that reading the play and researching the topic allows him to figure out the world of the play—and what sounds the play needs (Personal Interview). In *I Carry Your Heart*, Cohen incorporated concrete sounds, such as "people talking in a hospital cafeteria or the sound of the player piano" (Personal Interview). "We also have semi-abstracted sounds like the music that I created for the bar scene, original music that fits in the world of the play but is designed to be read as just the bar background music, and you don't realize

where it is until you start seeing everything come together" (Cohen, Personal Interview). The textures weave in and out, ebb and flow, thoroughly researched and explored.

Sonic community is further developed through the collaborative development of soundscapes and performative action for community. Deena Kaye and James LeBrecht write that, in theater productions, "every member of the creative staff has to cultivate a sense of taste in order to trust their own artistic decisions" (2), while acknowledging that "sound design does not exist in a vacuum. It is dependent upon its relationship with the performer, director, stage manager, technicians, designers, and audience to make it meaningful" (15).

Outside of the theater setting and within classrooms and communities, the potential exists for students to "plant" and "prune" sounds together. In a multimodal article in the "Sonic Rhetorics" edition of *Harlot*, Kati Fargo Ahern and Jordan Frith write about social soundscaping and "speaking back" to our spaces, as well as "geo-locating" sound. They discuss public projects such as the Tactical Sound Garden, which provides participatory sound experiences for urban communities. Participants "plant" sounds to access within a public space, and others can listen to or "prune" (i.e. edit) the sounds. This connects to R. Murray Schafer's concept of the "soniferous garden," or a space with sounds for the public good. These meaningful and collaborative soundscape projects provide opportunities for students to collaborate and work together to create meaningful soundscapes, community, and action, much like the teams involved in a theater production.

These justice-focused projects are inclusive and process-based, much like Marit Dewhurst proposes:

> While people often assume that social justice art education must be based on controversial or overly political issues (i.e. race, violence, discrimination, etc.), this is not always the case. Rather, as long as the process of making art [or, in this case, soundwriting and soundscape design] offers participants a way to construct knowledge, critically analyze an idea, and take action in the world, then they are engaged in the practice of social justice artmaking. (7)

Relational practices impact social justice pedagogy and community-based writing projects, and this work contains the belief that anyone can create and cooperate by exploring and deconstructing contexts. Sonic community magnifies the awareness of issues, actions, and transformations.

Developing sonic community incorporates relating to others' perceptions of sound and noise. For example, much sonic art explores contemporary issues as well as the differences and similarities between how society interprets sound and noise (LaBelle; Voegelin). The work of Christine Sun Kim, a sound artist who is deaf, incorporates participatory performances and resistance to "hearing" sound culture, and, like Dame Evelyn Glennie and Steph Ceraso, she expresses an interest in the juxtaposition of embodiment and listening. Cohen believes that "everyone may have a different line of continuity between sound and noise… where they say this is sound and this is noise. For some people, all rap music is noise, or anything with distorted guitars, that's noise. Or the sound of traffic, that's noise" (Personal Interview). For Cohen, though, "I will just listen

to their points of view and just be more intrigued by what they think sound and noise is. I'm open for where anything can be in the spectrum" (Personal Interview).

Achieving community involves rethinking worldviews, and Cohen notes this importance within sound design and the spectrum of sounds: "I've been through that enough that I no longer have a worldview of saying this is sound, this is music, this is noise, this is this, this is not" (Personal Interview). Instead, he stresses the importance of being open to what sounds are needed and what is most effective for audiences at a given time (Cohen, Personal Interview). As students develop their own soundscapes and sound projects, meaningful discussion about individual and collective interpretations of sounds serves a prominent role.

Scene 3. Teaching with Sonic Empathy

Sonic empathy is the development of cultivating empathy, or an awareness of others and potential understanding, through sound. For students to contemplate sound that provokes empathy, I suggest activities that consider the affect, aesthetics, and emotion of sound. Victoria Deorio's *The Art of Theatrical Sound Design: A Practical Design* includes a variety of sound activities that lend themselves to this goal. These include immersion in the audio field, navigational spatial awareness projects, and spatial reverberation projects. Students spend time considering an element that is particularly important in theater sound design: aesthetic response. Students will work in groups to consider sounds that have collective aesthetic responses, such as those that indicate a certain season (sounds of birds or insects for the summer, crunching leaves for the fall), a certain religion (sounds of chanting, prayers, instrumental music), or even certain

feelings. Students will also explore Foley art as an opportunity to work collaboratively and create sound through found objects (such as using a cloth to create the sound of a heartbeat, or a windbreak to mirror the sound of running), and this will lead to experiences with the impact of space and spatial awareness on spatial response.

Sonic empathy incorporates embodied listening practices and contemplation of nonverbal and "background" sounds and vibrations, as opposed to focusing solely on ear-centric sounds. In Chapter Two, for example, I discuss Kochhar-Lindgren's exploration of listening practices in theater that engage a "deaf (and hard-of-hearing) aesthetic that begins to pull apart our notions of hearing" (417). Concepts of meditative listening are introduced in the MIT CoLab's *Listening to the City* handbook and attributed to the late Pauline Oliveros. To develop a deep personal listening practice, students may reflect on the ways sound affects our minds, hearts, and bodies by focusing on specific sounds within a soundscape, considering places and sounds they consider "peaceful," and contemplating their emotional and physical responses to different sounds and vibrations. Other activities ask students to become aware of sounds in public spaces and the ways in which others perceive them.

Sound impacts empathy not just with people but also with animals. A study in 2016 found that the ominous tones in documentaries about sharks lead to misperceptions, fear, and negative attitudes towards sharks, which hurt conservation efforts towards the animals. Nosal et al. write: "Despite the ongoing need for shark conservation and management, prevailing negative sentiments marginalize these animals and legitimize permissive exploitation. These negative attitudes arise from an instinctive, yet

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exaggerated fear." Sharing this study with students provides an opportunity to discuss: What types of sounds in documentaries on sharks may lead to greater empathy?

Matt Green, a sound artist and researcher, held workshops in Ireland and Portugal in 2017 and 2018, respectively, on "The Ears of Others: Activities in Listening Like Animals." By incorporating critical listening, field recording, sound processing, sound modeling, and mask-making activities, these workshops focused on the aural-perceptual abilities of animals to frame activities in activities in listening and creatively engaging with sound. Further, the workshops were designed to "build regard and empathy towards the animals with whom we share our environments, and in turn insight consideration of how we impact these animals" (Green), activities that highlight and encourage a development of sonic empathy.

Finally, partnerships with others serve as a way to co-create sonic empathy, as seen in the "talkback" sessions with Athena Theatre and the nonprofit LiveOnNY following performances of *I Carry Your Heart*. Ory speaks to the empathy and changes taking place within the audience, as many were touched by the story of the play and only realized through the talkback sessions that they, too, may be eligible to donate organs upon their deaths. *I Carry Your Heart* evoked empathy through sonic communication, in ways where "maybe they [the audience] can see things in a different way, [and] then maybe they'll take a different kind of stance or view the world in a different way" (Ory, Phone Interview).

Act II. Soundscapes for Social Change in Basic Writing and Beyond

Through the examples above, soundscapes for social change can be readily applied in upper-division as well as first-year writing courses. I argue, however, that additional opportunities exist for soundscapes for social change within basic and developmental writing courses. Basic (or developmental) writing, a course particularly common at two-year, open admissions colleges, was first developed to support the needs of students academically under-prepared for English Composition I and the rigors of college-level writing. These at-risk students need classes designed with best practices in mind—and faculty willing to question whether certain commonly accepted academic elements really are central to student success both in their future courses and professional careers. In higher education, tensions still exist between those who see this type of basic writing course as "a gate to keep unqualified students out of college-level courses" (as explained by Peter Adams et al.), and those who see these courses as "paths to success" (50). Such tensions ensure that basic writing faculty often face constraints on curricular choices as they battle the politics of remediation.

Composition studies has long considered writing to be a socially situated practice, one that is deeply impacted by students' cultural and linguistic backgrounds. Although evidence suggests that students from diverse backgrounds benefit from opportunities to draw on multiple literacies, such as aurality (Selfe) and from content that is personally and culturally relevant (Murie et al.), pedagogies that emphasize narrowly defined forms of academic writing remain common. To address this gap, exploring and applying a sophistic consideration of rhetoric to composition and basic writing pedagogy may allow

composition instructors to incorporate multimodalities, such as sound, that privilege

student voices, highlight students' creative potentials, and reposition marginalized

literacies as resources students can use effectively for a variety of academic audiences.

Looking to this understanding and historical background allows instructors to

develop assessment of student writing that moves beyond a reductive conception of

thesis-driven academic writing. Instead, it presents opportunities for a basic writing

pedagogy that espouses John Poulakos' sophistic definition of rhetoric: "Indebted only to

the poetry of their past, not to any formal rhetorical theory, they found themselves free to

experiment playfully with form and style and to fashion their words in the Greek spirit of

excellence" (36). This experimentation allows students to explore sonic rhetoric as art, of

"style as personal expression" (Poulakos 36). This rich definition of rhetoric is easily

witnessed in the multimodal composition opportunities popular in many first-year

composition courses, such as work with blogs, podcasting, soundscapes, digital

storytelling, and diverse visual and aural compositions. The same opportunities,

meanwhile, are more limited for students in basic writing courses, in which students tend

to focus on print-based production and receive fewer "meaningful literacy" experiences

that allow "the language learner's memory, experiences, feelings, beliefs, history and

social environment [to be] the context of language use" (Hanauer 109). Ultimately, this

means that basic writing students—who often represent minority, working class, and

other traditionally disadvantaged populations—are positioned at a further disadvantage as

the path between their existing literacy skills and those necessary for college success is

widened, furthering the possibility that these students will not be retained.

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Many instructors realize that, as Cynthia Selfe writes, "our contemporary adherence to alphabetic-only composition constrains the semiotic efforts of individuals and groups who value multiple modalities of expression" (616), but, as Barbara Gleason clarifies in the *Basic Writing Electronic Journal* special issue on multimodal composing, "a focused discussion of multimodal composition [is] yet to make headway in basic writing classrooms and publications" (2). Underlying this issue is "the expectation that basic writing classes teach students to be fluent in print-based literacy" (Reid), an expectation that, perhaps, explains the gap between scholarship and classroom practice: the fact that basic writing students are rarely given opportunities to go beyond written text and instead experience writing as art through creative pedagogies, through multimodal composition, and through a greater understanding of rhetoric that will benefit all modes of expression: music, sound, animation, image, and others. Such work, however, would enhance the academic preparation of under-prepared students in the basic writing classroom, as sonic rhetorics may provide an outlet to break hierarchical structures and open basic writing to soundscapes for social change.

Soundscapes for social change introduce a method to empower students to develop academic writing skills in ways that embrace marginalized literacies while engaging with multimedia texts and finding voice and agency in their writing. In "Voice in the Cultural Soundscape: Sonic Literacy in Composition Studies," Comstock and Hocks argue, "When students begin to hear their own voices and the voices of others in different ways and contexts, they develop a stronger, more embodied sense of the power of language, of literacy, and of communication in general" (145). To address these

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possibilities, I will explore the potentials for basic writing through the connection of basic writing to the Sophists' "three Rs," as outlined in Debra Hawhee's "Bodily Pedagogies." I argue that rhythm, repetition, and response—the three Rs—lend themselves to sound design in/as social action within basic writing and composition. Through these examples, I intend to highlight the ways that a sonic influences on rhetorical education provides unique opportunities for basic writing students in open-admissions colleges and two-year colleges.

The two-year college is an environment where research on pedagogy is often encouraged—and, in fact, recommended by the 2010 TYCA publication on *Research and Scholarship in the Two-Year College*. In this context, it is important to consider how instructors can enact disciplinary identities while at the same time working to foster cross-disciplinary alliances between fields such as communication, English, and program-specific and trades-related programs. The pedagogy in the Wisconsin Technical College System has, throughout the past hundred years, taken up practices and theories from both composition and rhetoric and speech communication. These collaborations help an open-admissions college meet the needs of returning adult students as well as a linguistically and diverse student population by exploring the multiple modalities students can use for meaning making.

When exploring the impact of such a pedagogy in basic writing, or in any course, we must consider the ways local departmental histories can complicate *or* enhance our ability to establish greater associative pedagogy and interdisciplinary communication— and how that collaboration might impact students. According to the American

Association of Community Colleges, forty-four percent of all U.S. undergraduate students are enrolled at community colleges. Holly Hassel and Joanne Baird Giordano write in *College Composition and Communication* that, overall, two-year campuses commonly include "comparatively heavy teaching loads and open admissions policies" that keep them from "enjoying the same cultural status as selective institutions" (118). However, it is *due* to the focus on teaching found in the two-year college environment that it remains an ideal location to explore the role of a sophistic pedagogy as a tool for basic writing. This allows us to see the basic writing classroom as more than a place for grammar drills—but rather as a space for the rhetorical training needed to succeed in writing practice, in school, and within society. As Debra Hawhee writes: "Sophistic pedagogy emphasized the materiality of learning, the corporeal acquisition of rhetorical movements… Rhetorical training thus exceeds the transmission of 'ideas,' rhetoric the bounds of 'words'" (160). Through such a pedagogy that aligns sophistic pedagogy with sound design rhetorics, instructors and students may build a learning community focused on expressing ideas through diverse pathways.

Debra Hawhee focuses on the connections between rhetorical training and athletic training in "Bodily Pedagogies: Rhetoric, Athletics, and the Sophists' Three Rs," published in *College English*. She suggests that the end of the twentieth century could, for rhetoric and composition, be considered "The Return of the Ancients," as scholars have "reclaimed, refigured, and reread Aristotle, Isocrates, and the sophists, delineating ways in which these ancient figures might help us reframe or reconsider contemporary debates about pedagogy" (142). In her work, Hawhee explores the ways both athletic and

rhetorical training among Sophists may "shape the entire self" and "draw from similar pedagogical strategies wherein the respective instructors impart to students bodily and discursive forms of expression" (145). Hawhee develops an overview of a style of pedagogy that she calls the three Rs of sophistic pedagogy: rhythm, repetition, and response. Although her article focuses on these elements in relation to athletics, the three Rs of sophistic pedagogy can also be applied to sound design pedagogy within basic writing.

Scene 1. Rhythm in Basic Writing

Hawhee makes an immediate connection between sound and rhythm, as rhythm for Plato was "tightly bound to order" (147), and these elements will each play an important role in basic writing pedagogy that meets diverse learners. In 2013, a seminar on "Rhetoric in/between the Disciplines" was held at the Rhetoric of Society Institute in Lawrence, Kansas, which resulted in the "Mt. Oread Manifesto on Rhetorical Education," published in the *Rhetoric Society Quarterly* (Keith and Mountford). Amid conversation on crossing disciplinary borders, the attendees at the seminar decided that in order to truly enhance students in rhetorical education, integrated rhetorical instruction should exist to encourage students to acquire foundational rhetorical concepts, to address authentic exigencies for writing and speaking, to connect with the outside community for meaningful civic engagement, and to demonstrate an understanding of the ethical dimensions of communication and rhetoric. The group envisioned opportunities for students that truly encouraged *all available means of persuasion*.

Two-year campuses and the basic writing classroom can and should play a key role in the Mt. Oread group's proposed repositioning of rhetorical education. For example, many of the Wisconsin Technical College System colleges approach rhetorical study with combined English and Communication departments, established early in the institution's history. This multimodal instruction lends itself to a sophistic basic writing pedagogy—through the rhythm, through education as a full-body experience.

Schafer asserts that when we know the sounds we want to encourage and multiply, the "boring or destructive sounds will be conspicuous enough" (96). He adds that "only a total appreciation of the acoustic environment can give us the resources for improving the orchestration of the soundscape" (Schafer 96). Building on Schafer's work, Kendall Wrightson explains that "awareness of sound—specifically your level of awareness of the acoustic environment at any given time—is an issue central to the (inter)discipline of Acoustic Ecology (also known as ecoacoustics)" (10). Meanwhile, Schafer believes that the soundscape is placed in any acoustic field of study, as listeners can "isolate an acoustic environment as a field of study just as we can study the characteristics of a given landscape. However, it is less easy to formulate an exact impression of a soundscape than of a landscape" (99). However, this may be because soundscapes are multisensory in nature, as the soundscapes impact other senses beyond hearing: smell, taste, touch, or even mental states.

More than ever, opportunities exist to explore the deliberative discourse and non-discursive qualities of sound, as the use of sound in rhetoric and composition has reemerged as a vibrant area of focus with rich metaphorical and material possibilities.

Cohen suggests activities from the world of theater sound design that introduce students to sonic thought, which begin with students locating something they can use to record sound:

> It can be their phones. It could be a handheld recorder. It could be a laptop, and start listening. Use your ears and start observing the world around you because the first thing for anything is what is the world that we're in, and to do that you just got to keep your eyes and ears open and be prepared for everything. And listen to the sounds of birds and sounds of crickets and sounds of cars. And listen for how the sounds of cars are different from the FDR [Franklin D. Roosevelt East River Drive, located on the East Side of Manhattan] versus how they are over on the West Side Highway because the acoustics of the two are different, [due to] different proximity to the river. The East River sounds different from the Hudson River. Listen to the sounds pigeons make. The coos aren't all the same coos.
>
> (Personal Interview)

Recording different sounds and analyzing these similar, but different, soundscapes allows students to develop new forms of multimodal literacies focused on sound as movement. Multimodal literacies allow students to engage in sonic thought, explorations of sonic agency, and considerations of contemporary social action and sonic activism.

Scene 2. Repetition in Basic Writing

The composing process in basic writing also benefits from repetition, or sustained engagement that links school to the public sphere (Hawhee 151), and sound creates unique opportunities to mentor undergraduate students on inquiry-based learning and

research. In "Class-Based Research in the Composition Classroom," Lilian Mina et al. frame the composition classroom as a vibrant site for undergraduates to engage in meaningful research. Much current scholarship on student research focuses on science labs and science-based internships or summer work, as shared in a national survey on undergraduate research from David Lopatto. However, Mina et al. explore possibilities for students in upper-level composition coursework to complete meaningful research and knowledge-generating activities. Whereas Mina et al. write about the benefits to students in a research-writing course typically offered as an "upper-level" composition course, similar opportunities for engaged research and response can exist in a basic writing course.

Basic writing is too infrequently seen as a site where students can engage in intellectually rigorous work. In fact, faculty members often encounter institutional expectations that students *not* engage in research at the basic writing level because "it would be "too much" to expect from underprepared student writers who are still struggling with the basic form and conventions of academic discourse. However, mentored, ethnographic research in the basic writing classroom may be a tool, aligned with a sonic pedagogy, to build community and enhance students' classroom experience in a measurable way.

Sonic experiences as social action does not only come from "experimental" projects for students. It is important to note that rhythm, repetition, and response differentiate from the recitations and grammar drills often associated with basic writing. Rather, this idea brings us back to *rhetoric as art* and the need for creativity and multiple

literacies. Alongside traditional definitions of literacy are new position statements from groups such as the National Council of Teachers of English and Council of Writing Program Administrators that shift the focus toward rhetorical composing and evaluating. One way that I have responded to this is to incorporate digital storytelling into my basic writing curriculum (Patterson et al.), as my basic writing students complete research and then develop multimodal, video projects related to literacy narratives. This form of undergraduate research and resulting digital learning connects closely to a sonic sophistic pedagogy for basic writing, as rhythm, repetition, and response play a role in the composing process.

Sound designers often develop "leitmotifs" for characters, a form of sonic repetition that connects to a specific character. In *I Carry Your Heart*, Cohen created "a leitmotif for the mother [the character Debra] all using these little Gnawa music excerpts focusing on a certain pitch… holding it using granular synthesis" (Personal Interview). The leitmotif for Debra begins as a soft sound but grows louder throughout the play: "You'll start to really start seeing it in presence where she's there, and we can now hear something going on, and that becomes the mother theme" (Cohen, Personal Interview). Cohen references other productions that incorporate leitmotifs, such as one present in the musical *Hamilton* when the Schuyler sisters appear. Cohen also used leitmotifs when designing sound for an off-Broadway play called *In Bed with Roy Cohn*:

> It was an off-Broadway run four years ago, and it's sort of a crazy comic *Fantasia* of the last day in the life of Roy Cohn as he's on his deathbed. And he sees visions, Ebenezer Scrooge style, of everyone he screwed over. So every time

Julius Rosenberg appears, we hear the sound of an electric chair… at first, it's

very thunderous and dramatic, and then after a while, the joke is the actor's like,

'I know' [reenacts the actor rolling his eyes]. (Personal Interview)

Leitmotifs have both comedic and dramatic power. In considering repetition, composition

students may find examples of such leitmotifs in film, television, and theater, or may

even create their own personalized leitmotifs, highlighting repetition as knowledge-

forming.

Scene 3. Response in Basic Writing

Hawhee explores response to/with an encounter, driven by the actors or

participants involved (149). In this sense, writing is inherently collaborative, and student

work responds to and interacts with previous scholarship. To consider response and sonic

rhetorics, an initial reading for students to explore sonic composition is Cheryl Ball and

Byron Hawk's special issue of *Computers and Composition* titled "*Sound in/as*

Compositional Space: A Next Step in Multiliteracies." The various essays look at sonic

literacy, rhetorical theory, and aurality within digital media. Thomas Rickert, Heidi

McKee, Jodie Shipka, and many others provide articles in this special edition. I would

not propose that instructors assign students to read all of the articles (unless they desired,

of course), but instead, small groups could each be assigned an article to read and

creatively share with the class through personal interpretations or acting assignments.

This collection provides a strong foundation and introduction to sonic rhetorics and its

role in composition studies. There are a handful of other special editions of journals that

focus on or include the use of sound in composition and rhetoric, including editions

edited by Diane Davis, Thomas Rickert, and others. However, I have selected the *Computers and Composition* edition because it is an early and nuanced look at sonic rhetorics and literacy, and it extends beyond a specific focus (e.g. music, as in Rickert's early special edition) and into multiple forms of sounds.

I propose the use of sound design projects, including sound-mapping and soundwalks, performative soundscape design and Foley art, oral histories and interviews, and podcast development. By studying the foundation, nature, and application of sound-based methods and research, students will explore contemporary issues and personal areas of interest—through sound and embodied listening. A composition course should provide opportunities for knowing, making, and doing, putting theory into practice. Although no current research connects theater sound design to composition and rhetoric, a great deal of research in multimodal composition focuses on film and video (Bump Halbritter). This means that the rising use of film in composition research and pedagogy presents an exploratory framework for sound design rhetorics.

Halbritter proposes multidimensional rhetoric through audio-visual writing assignments in *Mics, Cameras, Symbolic Action*. He uses Kenneth Burke's term "symbolic action" as a lens to situate music and audio, visual arts, and video production as a reflective writing process. His pedagogical research includes suggestions for listening situations in audio-visual writing, and an entire chapter of his book is devoted to microphones and their use. He implores readers to pay attention to background noise and distractions in their development of audio for video essays.

Multimodal composition through sound design is also present in a project called #HearMyHome, which invites students and community members to "ear witness" communities, examining soundscapes and how they connect us to cultural difference. This public-facing project, developed by Jon Wargo and Cassie Brownell to build pedagogical approaches to listening and sound for youth and larger communities, is rooted in sonic rhetorics, and incorporates soundwriting, soundscape analysis, and close listening. Even with this headway in sound design rhetorics and sound writing pedagogies, there is still great room for continued growth of sound design rhetorics with/in composition studies through engagement with theater sound design.

In basic writing, students have numerous hands-on opportunities for research that combine multiple literacies, including interviews and field recordings. Such multimodal research requires students to pay attention to both sounds and silences, whether in interviews or soundscape creations. Ory, who introduced the theme "A Deafening Silence" for Athena Theatre's 2019 playwright fellowship, has spent significant time considering silence and its transformative power: "When you think of silence on its own, you think, 'Okay. This is the absence of sound.' But you really only notice the absence of sound when you've heard sound to begin with" (Phone Interview). She relates sound and silence to the diverse spectrum of emotions: "It's all opposites being enhanced by experiencing the other, in the same kind of way that you can't experience joy without experiencing sadness… I was really compelled by the mood that is set after you've heard a noise or an event," both in a comedic way where the room silences after a person says something awkward, or situations where "something really terrifying is about to happen

and it's like the whole sound is stripped out of the room" (Ory, Phone Interview). A fundamental element of mentored undergraduate research is that it leads students to create work that holds a real-world, scholarly value that a typical classroom essay would not, and the use of sonic research methodologies creates complex, multilayered opportunities for multimodal research.

Epilogue. Reverberations for Future Pedagogy

There is a growing need for flexibility and creativity within writing pedagogy as colleges encourage new "pathways" programs to align basic writing directly with first-year composition (e.g. the Accelerated Learning Program). Further development of a sonic action-based pedagogy may encourage instructors to explore creative pedagogical practices that reach students from culturally and linguistically diverse backgrounds. Activities and assessments for basic writing and composition courses with a focus on "soundscapes for social change" would be inspired from a mix of scholars and resources: Steph Ceraso's *Sounding Composition: Multimodal Pedagogies for Embodied Listening*, the MIT CoLab's handbook on *Listening to the City*, Victoria Deiorio's *The Art of Theatrical Sound Design: A Practical Design*, and Ultra-red's guides to sonic activism and collective listening.

Ultra-red's work provides effective and meaningful possibilities for rhetoric courses. Ultra-red, a sound arts collective formed by two AIDS activists, initially served to help AIDS patients use audio as a tool for resistance and safety, recording interactions that held potential danger, such as needle exchanges (the idea being that the recordings could be used in legal situations). The reach of Ultra-red as a sound art collective has

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grown significantly, and recent work includes responses to gentrification and public housing rehabilitation. Their handbook provides ideas for collective listening and sonic investigation, and an activity that is particularly interesting involves "sound stories." Participants are asked to consider and describe the following sounds and noises: a sound that saved them, a sound that oppressed them, a sound that deceived them, and/or a sound that empowered them. Completing such an activity would be beneficial to students in thinking about the power of sound, and the use of sound technologies in the classroom may provide students with opportunities to consider how they might recreate or materialize such sounds as well.

Another possibility to be explored is the connection of podcasts to soundscapes for social change. A podcast project at the end of a course, for example, might incorporate (1) soundscapes developed for social action, possibly using the soundscape from the earlier unit on them; (2) interviews or histories connected to the topic, again using earlier resources when possible; and (3) additional research presented sonically and/or developed through sonic methodologies. The assignment may be intentionally left flexible to allow for an open-ended exploration of student interests, and this project may align with multiple learning objectives as noted below. While completing all of the following learning objectives may not be feasible in, for example, a basic writing class, parts may be used for any course, and each learning objective could be used in a course specifically on sound design as social action:

1. Reflect upon, analyze, and articulate sonic experience and rhetorics.

2. Read and listen to difficult texts closely and critically, and use them as models for sonic and textual exploration.

3. Frame and analyze contemporary social issues, and apply sound-based methodologies (oral histories, podcasting, soundscapes) to these issues.

4. Complete independent research, evaluate sources, and consider textual as well as nonverbal and non-textual ways to integrate such research into projects.

Each learning objective is supplemented through universal design, student-driven learning, and similarly inclusive teaching practices – elements that provide instructors with opportunities to make the classroom into what R. Murray Schafer describes as a "soniferous garden."

In *Antiracist Writing Assessment Ecologies*, which is open access and available online, Asao Inoue considers writing assessments ecologically, theoretically, and in practice, and he provides specific examples of antiracist writing assessment. He stresses that all writing instructors should use specific language about writing assessment, particularly as a tool to reach students who are linguistically and ethnically diverse. He connects his argument to Stephanie Kerschbaum's work on rhetorics of difference in the academy, and he posits that an antiracist writing assessment ecology is necessary to ensure social justice. This book provides instructors with helpful insights on writing assessment that does not privilege certain cultures or backgrounds, and it is particularly resonant following his College Composition and Communication keynote presentation in 2019 on the challenges of shocking white supremacy movements and racial inequity in today's society. Contract grading addresses some resounding issues of social justice, and

it also shifts the instructor to a writing "coach," a move that benefits students and adds to the collaborative, open experience within a classroom.

The use of sound as a composing practice enacts ways to change our world. Like writing, theater sound design involves extensive prep work—with the knowledge that things will fall into place. Cohen compares sound design to a painter developing their palette:

> They take the time to take every paint and put the paint and mix every paint and get every possible color right on their palette and get all their brushes and pre-prepare their brushes and get the canvas, choose the canvas, staple the canvas, gesso the canvas, all the preparation work to then execute a painting that can take maybe a couple of hours to paint. (Personal Interview)

In theater as well as in the classroom, the concept of sound design and theater sound and vibration in/as social action hosts opportunities for anyone to create worlds and, when used carefully and consciously, enact positive social change and socially-minded praxis through community building and interaction.

A truly "soniferous garden" is fantasy and not reality. Thus, through moves to incorporate soundscapes for social change into a writing course, there may be the occasional (metaphorical) alarm or siren. However, my hope is that more courses will reverberate and re-sound in the exploration of sonic rhetorics as social action, impacting students not just during the class but also by providing experiences that will make them more engaged listeners and citizens in the future. Soundscapes for social change present

students with the opportunity to explore sound, vibration, multimodal listening, and how

we can use each element for the social good.

APPENDICES

Appendix A

Application for IRB Approval

(version 3.2019)
IRB Exempt Review Application
Office use only **Protocol Number:**
Approval Date:
Exempt Category: D
1. Principal Investigator (PI): The PI must be a Clemson faculty or staff, per the PI assignment policy.
Graduate students may not be the PI if they are conducting the research for their thesis or dissertation. The PI must have valid human research protections training.
Name: Cynthia Haynes
E-mail: textcyn@clemson.edu
Department: Rhetorics, Communication, and Information Design Phone: (864) 656-6411
Campus address: 711 Strode Tower, College of Arts, Architecture, and the Humanities, Clemson, SC
Faculty Staff Other:
CITI expiration date:
2. Enter Project Title: Soundscapes for Social Change: Community and Consciousness through Sound Design Rhetorics
3. Research Personnel: Will other individuals assist with recruiting, obtaining informed consent, data collection or data analysis? No Yes If YES, complete and attach the Additional Research Team Members Form.
4. Study Purpose: Describe the purpose and goals of the research using plain language (avoid technical terms, acronyms or jargon, unless explained).
Description: Amy Patterson's research will incorporate a case study of a specific theatre production that took place in 2019, and its use of sound to evoke empathy, community, and action. A producer, director, and sound designer will share insights on the sound design of this production and other elements of sound in theatre. They will also provide background information on how this production raised awareness of contemporary issues (in this case, organ donation) and how their other experiences in theatre may have informed this experience. The researcher will use these case studies to develop ideas on what composition instructors can learn about using sound within the composition and rhetoric field, and how composition instructors might model or create similar opportunities.
5. Sharing of Results: Describe how research results will be shared (e.g., academic publication, evaluation report to funder, conference presentation)?
Description: Dissertation, academic and/or journalistic publications, conference presentations
6. Funding: Is the research funded? No Yes If YES, answer 6a-d.
a. Enter funding source (Do not use acronyms):
b. Enter name of PI on award:
c. Was the award processed through InfoEd? No Yes, enter ten-digit InfoEd proposal number (PPN):
d. Did the IRB office issue a developmental (temporary) approval for this research? No Yes, enter the IRB protocol number:

7. Research Sites: Will research activities occur at a non-Clemson site or outside of the United States? No Yes

If YES, enter site location(s):All interviews will take place off-campus, with the interviewer based in New York City. To allow the interviewees to be most comfortable, those interviewed will have a choice in where they would like to be interviewed (e.g. phone, their studio, the theatre, an office).

Non-Clemson site(s): Site permission may be required. Contact appropriate office/department and keep documentation on file. If collecting data at another institution that has an IRB, you may need permission from each participating institution's IRB office.

International projects: Additional approval may be required. See FAQs and OHRP International Compilation of Human Research Standards.

8. Exempt Review Categories: Select **one or more of the categories** below that appear to be applicable to your research **AND** provide the information requested for each category selected.

Category 1: Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

a. Are the research activities a part of the normal class activities? No Yes If NO, describe how the activities will not adversely impact students' opportunity to learn required educational content:

b. Does the project involve a team member who is responsible for evaluating the performance of the instructor(s)? No Yes If YES, describe how the activities will not adversely impact the assessment of the instructor(s) providing instruction:

c. Will the class instructor(s) be evaluated on the performance of the research activities? No Yes If YES, describe how the activities will not adversely impact the assessment of the instructor(s) providing instruction:

Category 1 may be applied to research involving minors.

Category 2: Research that **only includes** interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

Check all that may apply:

The information obtained is recorded in such a manner that the **identity of the human subjects cannot readily be ascertained**, directly or through identifiers linked to the subjects. **(Criterion may be applied to research involving minors.)**

Any disclosure of the human subjects' responses outside the research **would not reasonably place the subjects at risk** of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation. **(Criterion may be applied to research involving minors.)**

The information obtained is recorded in a manner that the **identity of the human subjects can readily beascertained**, directly or through identifiers linked to the subjects. **(Criterion may NOT be applied toresearch involving minors.)**

Category 2 may NOT include interventions. See Guidance on Interventions in Research Studies.

Observation of public behavior criteria: observation occurring in public settings where there are no expectations of privacy (i.e., public park, concert) and researchers do not interact with participants.

Category 3: Research involving **benign behavioral interventions** in conjunction with the collection of information from an **adult subject** through verbal or written responses (including data entry) or audiovisual recording if the **subject prospectively agrees to the intervention** and information collection.

a. Does the research involve benign behavioral intervention(s) as described below? No Yes

If NO, your project **does not** meet the criteria for Exempt review under category 3. Complete the Expedited application.

If YES, describe intervention(s):

b. Does the research involve deceiving the participants of the nature or purposes of the research? No Yes If YES, see guidance on Research Involving Deception or Concealment **AND** attach the debriefing form for review.

c. Will you **notify the participants in the informed consent document** that the research involves an intervention and/or deception of the nature or purposes of the research (you do not have to describe the details of the intervention or deception, just that the research involves an intervention and/or deception of the nature or purposes of the research)? No Yes

If NO, your project **does not** meet the criteria for Exempt review under category 3. Complete the Expedited application.

d. Check all that may apply:

The information obtained is recorded by the investigator in such a manner that the **identity of the human subjects cannot readily be ascertained**, directly or through identifiers linked to the subjects.

Any disclosure of the human subjects' responses outside the research **would not reasonably place the subjects at risk** of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

The information obtained is recorded by the investigator in such a manner that the **identity of the human subjects can readily be ascertained**, directly or through identifiers linked to the subjects.

Definition: For the purpose of this provision, benign behavioral interventions are brief in duration, harmless, painless, not physically invasive, not likely to have a significant adverse lasting impact on the subjects, and the investigator has no reason to think the subjects will find the interventions offensive or embarrassing.

Provided all such criteria are met, **examples of such benign behavioral interventions** would include:

• having the subjects play an online game;

• having them solve puzzles under various noise conditions; or

• having them decide how to allocate a nominal amount of received cash between themselves and someone else

If the **research involves deceiving the subjects** of the nature or purposes of the research, this **exemption is not applicable unless the subject authorizes the deception** through a prospective agreement to participate in research in circumstances in which the subject is informed that he or she will be unaware of or misled regarding the nature or purposes of the research.

Category 3 may NOT be applied to research involving minors.

Category 4: Secondary research for **which consent is not required**: **Secondary research uses of identifiable private information or identifiable biospecimens.**

a. Was the data or biospecimens **initially** collected for non-research purposes or from other research studies that did not require the participants' informed consent? No Yes

If NO, your project **does not** meet the criteria for Exempt review under category 4. Go to category 8.

b. Check all that may apply:

The identifiable private information or identifiable biospecimens are **publicly available** (either by paying a fee, submitting a request, or available without restrictions).

Information, which may include information about biospecimens, is recorded by the investigator in such a manner that the **identity of the human subjects cannot readily be ascertained** directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify subjects.

The research involves only information collection and analysis involving the investigator's use of **identifiable health information** when that use is regulated under HIPAA (45 CFR parts 160 and 164, subparts A and E), for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as described under 45 CFR 164.512(b).

The **research is conducted by, or on behalf of, a Federal department or agency** using government generated or government-collected information obtained for nonresearch activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U.S.C. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq.

c. List the data fields and/or describe the biospecimens that will be used:

d. Identify the data holder and/or source of the biospecimens:

e. Is a Data Use Agreement and/or Material Transfer Agreement required for you to access the data and/or biospecimens? No Yes – provide copy of agreement

f. Describe your management plan for storing and securing the data and/or specimens, including protecting the privacy of participants and maintaining confidentiality of data:

Category 4 may:

• be applied to identifiable private information or identifiable biospecimens collected from minors;

• involve future collection of identifiable private information or identifiable biospecimens if the data

or biospecimens are not being collected specifically for your proposed research study.

An Institutional Biosafety Committee (IBC) protocol may be required for secondary research use of biospecimens.

If requesting Exempt review under Category 4 only, then go to question 14.

Category 5: Research and demonstration **projects that are conducted or supported by a Federal department or agency**, or otherwise subject to the approval of department or agency heads (or the approval of the heads of bureaus or other subordinate agencies that have been delegated authority to conduct the research and demonstration projects), **and that are designed to study, evaluate, improve, or otherwise examine public benefit or service programs,** including procedures for obtaining benefits or services under those programs,possible changes in or alternatives to those programs or procedures, or possible changes in methods or levels of payment for benefits or services under those programs. **Such projects include**, but are not limited to internal studies by Federal employees, and studies under contracts or consulting arrangements, cooperative agreements, or grants.

Category 5 may be applied to research involving minors.

Category 6: Taste and food quality evaluation and consumer acceptance studies:

Check all that may apply:

Wholesome foods without additives are consumed.

Food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

Category 6 may be applied to research involving minors.

Category 7: Storage or maintenance for secondary research for which **broad consent is required**:

a. Check all that may apply:

Storage or maintenance of identifiable private information for secondary research.

Storage of maintenance of identifiable biospecimens for secondary research.

b. Was broad consent for storage, maintenance, and secondary research use of identifiable private information or identifiable biospecimens **obtained from participants**? No Yes If NO, your project **does not** meet the criteria for Exempt Category 7.

c. Was broad consent obtained in writing or did an IRB waive the documentation for written informed consent? No Yes

If NO, your project **does not** meet the criteria for Exempt Category 7.

If YES, describe the informed consent process:

d. Describe your management plan for storing and securing the data and/or specimens, including protecting the privacy of participants and maintaining confidentiality of data:

Data Use Agreement or Material Transfer Agreement may be required to share the data and/or biospecimens with other researchers.

Category 7 may be applied to identifiable private information or identifiable biospecimens collected from minors.

An Institutional Biosafety Committee (IBC) protocol may be required for secondary research use of biospecimens.

If requesting Exempt review under Category 7 or under Categories 7 and 8 only, then go to question 14.

Category 8: Secondary research for which **broad consent is required**: Research **involving the use of identifiable private information or identifiable biospecimens for secondary research** use.

a. All of the following criteria must apply:

Broad consent for the storage, maintenance, and secondary research use of the identifiable private information or identifiable biospecimens was obtained;

Documentation of informed consent or waiver of documentation of consent was obtained;

The research to be conducted is within the scope of the broad consent; AND

The investigator does not include returning individual research results to subjects as part of the study plan. This provision does not prevent an investigator from abiding by any legal requirements to return individual research results.

b. List the data fields and/or describe the biospecimens that will be used:

c. Identify the data holder and/or source of the biospecimens:

d. Is a Data Use Agreement and/or Material Transfer Agreement required for you to access the data and/or biospecimens? No Yes – provide copy of agreement

e. Describe your management plan for storing and securing the data and/or specimens, including protecting the privacy of participants and maintaining confidentiality of data:

Category 8 may be applied to identifiable private information or identifiable biospecimens collected from minors.

An Institutional Biosafety Committee (IBC) protocol may be required for secondary research use of biospecimens.

If requesting Exempt review under Category 8 or under Categories 7 and 8 only, then go to question 14.

9. Study Population

a. Enter projected number of participants that will be enrolled in the study: 3

b. Identify the group(s) **specifically targeted** for the study (check all that may apply).

Clemson students Clemson faculty/staff

Adults not affiliated with Clemson Minors, including wards of the state, or any other agency, institution, or entity

Non-English speaking individuals

Individuals with intellectual disabilities

Individuals with impaired decision-making capacity Individuals economically or educationally disadvantaged

DoD personnel

Pregnant women

Prisoners (requires Full Board Review Application) Human Fetuses and/or Neonates

Other-describe: A producer, director, and sound designer

10. Recruitment Procedures

a. Describe how potential participants will be identified and contacted: Amy Patterson already knows these participants through their work with the theatre company that produced the play.

b. Are there any inclusion or exclusion criteria for participation? No Yes

If YES, describe criteria and screening process to determine eligibility (provide copy of screening tool) and briefly explain why the inclusion or exclusion criteria is necessary for your research:

c. Check all recruitment methods below **AND attach** copy of recruitment documents for review. See Guidance for Recruitment Materials for more information on what is required on the documents.

Participants may not be contacted prior to IRB review.

Flyers/Advertisements

E-mail notice

In-person-describe: Internet-describe:

Dept. subject pool-describe:

Letter mailed to individuals

Other-describe: The interviewer (Amy Patterson) already knows the individuals through her activity with their theatre, and they have previously expressed interest in participating. For this case study, there will therefore be no recruitment as participants are already identified.

11. Participant Incentives

a. Will participants receive any incentive or compensation for participating in the study? No Yes

If YES, answer 11b-c.

b. Are there any conditions for receiving incentives (i.e., have to complete all research activities, answer attention check questions correctly)? No Yes

If YES, describe:

c. Check all that apply and provide requested information for each incentive checked (all incentives must be listed on informed consent document):

Course/extra credit for students (an equivalent alternative to research participation must be provided and described on informed consent document): Indicate number of credits that will be offered **and** if partial credits will be offered:

Gift(s) - describe gift(s) [include value and when gift(s) will be given]:

Monetary incentive(s): Indicate value of incentive, when incentive will be given and if partial payment will be offered:

12. Research Methods and Procedures

a. What data will you collect? Check all that may apply **AND attach** copy of data collection instruments/tools for review (i.e., surveys, interview questions).

Surveys/Questionnaires

Individual interview

Focus group

Observation

Student educational records (FERPA may apply)

Protected Health Information (HIPAA may apply)

Digital data (i.e., computer, cell phone, other equipment/devices)- describe:

Other-describe: Audio files in QLab of the sound design and musical compositions created for the specific theatre production

b. Will you audio/video record or photograph participants? No Yes

If YES, check all that may apply: Audio Video Photographs

If YES, will you use audio, video, or photographs in presentations, publications, and/or training materials? No Yes - a media release form is required

See Guidance on the Use of Audio/Video Recording and Photographs for more information on what is required on the informed consent document.

c. Will you use concealment (incomplete disclosure) or deception in this study? **(If you are requesting Exempt review under Category 3 AND your research only involves deception of the nature or purposes of the research, then check "N/A.")** N/A No Yes If YES, describe concealment or deception and provide rationale:

See guidance on Research Involving Deception or Concealment **AND** attach the debriefing form for review.

d. Describe the informed consent process, include who will obtain consent from all participants, when, and how this will be done. If participants are not competent to consent for themselves, then describe procedures for obtaining consent from legally authorized representative. Attach all informed consent document(s) for review: information letter, online script, and/or oral script.

Description: The interviewer will obtain oral consent. The interviewer will also use a signed media release form to leave that option open in case the audio will be useful for presentations, etc.

e. Describe, in detail, your data collection methods and procedures. Describe how data will be collected, what information will be collected from participants and what sessions will be audio/video recorded and/or photographed. Provide a timeline or schedule of events, if applicable.

Description: The interviewer will record and transcribe 1-3 hour interviews with three members of a production team for a specific play.

f. What is the total time (hours, minutes, days) that each participant will spend in the entire study, include follow-up sessions?

Description: From about 1.5 hours up to a maximum 4 hours

13. Data Management Plan

a. Will you collect information (i.e., names, ID numbers, audio/video recordings and photographs, demographic data) during the study that **could identity the participants** directly or through identifiers linked to the participants? No Yes

If NO, go to question 14.

If YES, answer 13b-d.

b. Describe your management plan for storing and securing the data, protecting the privacy of participants and maintaining confidentiality of data.

Description: The participants will not be anonymous. All three participants have already expressed interest in having their names used as this research engages with their theatre and work.

c. How long will you retain identifiable data?

Description: N/a as all data for this particular case study will intentionally be identifiable. For (d), below, identifiable data will not be directly shared with other institutions, agencies, or companies, but it will be available publicly through the dissertation and any publications.

d. Will you share identifiable data with other institutions, agencies, or companies? No Yes

Describe data management plan on informed consent document(s) and notify participants if data will be shared with other institutions, agencies, companies and/or used to support future studies.

14. Conflict of Interest Statement/Financial Disclosure:

Could the results of the study provide an actual or potential financial gain to you, a member of your family, or any of the co-investigators, or give the appearance of a potential conflict of interest (COI)? Refer to Conflict of Interest policy for more information.

No

Yes; indicate the status of the COI and/or financial disclosure:

On file with COI office Will be submitted to COI office

15. PI Confirmation:

Confirmation from the PI certifies that the information in the IRB packet is accurate and complete, PI is familiar with the Federalwide Assurance for the Protection of Human Subjects held by Clemson University and institutional guidelines regarding human subjects research, and agrees to abide by the provisions of the Assurance and the determination of the IRB. The PI is responsible for assuring that all team members listed on the protocol are properly trained and adverse events, research-related injuries, or unexpected problems affecting the rights or safety of research participants are reported promptly to the Office of Research Compliance.

Appendix B

Exempt Determination Letter

Nalinee Patin <npatin@clemson.edu>
To: Cynthia Haynes <texcyn@clemson.edu>
Cc: "apatte9@g.clemson.edu" <apatte9@g.clemson.edu>

Dear Dr. Haynes,

The Clemson University Office of Research Compliance reviewed the protocol titled **"Soundscapes for Social Change: Community and Consciousness through Sound Design Rhetorics"** and a determination was made on December 12, 2019 that the proposed activities involving human participants qualify as **Exempt under category 2** in accordance with federal regulations 45 CFR 46.104(d), http://media.clemson.edu/research/compliance/irb/new_exempt_categories.pdf.

Clemson's IRB determination only covers Clemson affiliated researchers on the project. External collaborators will have to consult with their respective institution's IRB office to determine what is required for their role on the project.

No further action or IRB oversight of the protocol is required except in the following situations:

1. Substantial changes made to the protocol that could potentially change the review level. If you plan to make changes to your project, please send an email to IRB@clemson.edu outlining the nature of the changes prior to implementation of those changes. The IRB office will determine whether or not your proposed changes require additional review.
2. Occurrence of unanticipated problem or adverse event; any unanticipated problems involving risk to subjects, complications, and/or adverse events must be reported to the Office of Research Compliance immediately.
3. Change in Principal Investigator (PI)

All research involving human participants must maintain an ethically appropriate standard, which serves to protect the rights and welfare of the participants. This involves obtaining informed consent and maintaining confidentiality of data. Research related records should be retained for a minimum of three (3) years after completion of the study.

The Clemson University IRB is committed to facilitating ethical research and protecting the rights of human subjects. Please contact us if you have any questions and use the IRB number and title when referencing the study in future correspondence.

All the best,
Nalinee

Nalinee Patin, CIP

IRB Administrator

OFFICE OF RESEARCH COMPLIANCE

Clemson University, Division of Research

Appendix C

Exempt Adult Consent

Information about Being in a Research Study
Clemson University

Soundscapes for Social Change:
Community and Consciousness through Sound Design Rhetorics

KEY INFORMATION ABOUT THE RESEARCH STUDY

Voluntary Consent: Amy Patterson (student) and Cynthia Haynes (chair of dissertation committee) are inviting you to volunteer for a research study. Amy Patterson is a PhD Candidate in Rhetorics, Communication, and Information Design (RCID) at Clemson University, and Cynthia Haynes is the director of the RCID program.

You may choose not to take part and you may choose to stop taking part at any time. You will not be punished in any way if you decide not to be in the study or to stop taking part in the study.

Alternative to Participation: Participation is voluntary so the alternative is not participating.

Study Purpose: Research will incorporate a case study of a specific theatre production that took place in 2019, and its use of sound to evoke empathy, community, and action. The researcher will use these case studies to develop ideas on what composition instructors can learn about using sound within the composition and rhetoric field, and how composition instructors might model or create similar opportunities.

Activities and Procedures: Your part in the study will be to participate in a recorded interview. Verbal consent will be required before the interview. At any time, you may end the interview or not answer questions.

Participation Time: It will take you about 1-3 hours to be in this study.

Risks and Discomforts: We do not know of any risks or discomforts to you in this research study. Participation will be entirely voluntary.

Possible Benefits: You may not benefit directly for taking part in this study; however, information from the interview will provide an understanding of connections between theater and social change, and what classrooms may gain from this knowledge.

AUDIO/VIDEO RECORDING AND PHOTOGRAPHS

Interviews will be recorded, and may be shared publicly per the media release form. Any recordings and photographs provided by those interviewed specifically for this study and potential publications may also be used.

EQUIPMENT AND DEVICES THAT WILL BE USED IN RESEARCH STUDY

Equipment and devices may include: Recording devices, Zoom, mobile phone, information such as photographs, audio, and additional or follow-up details sent over email.

PROTECTION OF PRIVACY AND CONFIDENTIALITY

The results of this study may be published in scientific journals, professional publications, or educational presentations. Data **will be identifiable**. Identifiable information collected during the study will be retained but will not be used or distributed for future research studies.

CONTACT INFORMATION

If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-0636 or irb@clemson.edu. If you are outside of the Upstate South Carolina area, please use the ORC's toll-free number, 866-297-3071. The Clemson IRB will not be able to answer some study-specific questions. However, you may contact the Clemson IRB if the research staff cannot be reached or if you wish to speak with someone other than the research staff.

If you have any study related questions or if any problems arise, please contact Amy Patterson at Clemson University at 573-261-0117.

CONSENT

By participating in the study, you indicate that you have read the information written above, been allowed to ask any questions, and you are voluntarily choosing to take part in this research.

A copy of this form will be given to you.

Interview Protocol

Soundscapes for Social Change
Interview Protocol
Interview Protocol
Institutions: Clemson University
Interviewees: Sound Designer, Producer, Director
Interviewer: Amy Patterson
Elements Used:
_____ A: Interview Background
_____ B: Participant's Theatrical Background
_____ C: Participant's Experience with Production
_____ D: Participant's Thoughts on Sound and Social Change
Other Topics Discussed:_____

_____
Documents Obtained: _____

_____
_____
Post Interview Comments or Leads:

_____

Interviews

Introductory Protocol

To facilitate our note-taking, we would like to audio tape our conversations today. Thank you for your agreeing to participate.

We have planned this interview to last approximately 1 hour, but it may go up to 3-4 hours. During this time, we have several questions that we would like to cover.

The dissertation looks at sound design (sonic agency) as social action and its connection to positive social change—and ways we might apply similar opportunities in the composition classroom. The research includes a theatre sound design case study. Interview questions cover the role of sound in creating, developing, and performing work on important contemporary issues.

QUESTIONS: The questions below are a **general overview of questions**, given that conversations during interviews (and topics that most interest those being interviewed) will guide the order, follow-up questions, etc.

I have split up potential questions for the producer, director, and sound designer.

<u>Producer</u>
Please share a bit about your background with theatre… and how you became involved (and remained involved) with theatre and/or social action.

Tell me more about your theatre company--anything that I wouldn't just see on your website, but might tell me more about your passions, experiences, and goals.

How do you decide on projects? What appeals to you?

What is your hope for the audience's connection to sensory details such as sound? Other sensory elements?

What sonic moments in I CARRY YOUR HEART most stick out to you, and why?

How did sound interact with other design elements such as lighting, props, costumes, scenery, and other elements in I CARRY YOUR HEART?

What do you see as the connection between sound and movement--both in I CARRY YOUR HEART, and in theatre, in general? How is sound embodied in performances?

Can you give an example of another show where the sounds really moved you, impacted you, or made you think? What were these sounds, and what was it about them?

How do you define concepts such as "social action" and "social change"? How does this play a role in your life and work?

<u>Director</u>
Your background and how you became involved with theatre and/or social action.

How do you decide on projects? What appeals to you?

What is your hope for the audience's connection to sensory details such as sound?

What do you want your audience to feel and think during this production? What subconscious emotions would you like to see stirred? How do you go about creating these feelings and emotions?

What sonic moments in I CARRY YOUR HEART most stick out to you, and why?

Can you tell me about the collaboratory components of I CARRY YOUR HEART?

How did sound interact with other design elements in I CARRY YOUR HEART?

What do you see as the connection between sound and movement--both in [title], and in theatre, in general? How is sound embodied in performances? How do you create juxtapositions between sound, movement, and visuals?

Can you give an example of another show where the sounds involved really moved you, impacted you, or made you think? What were these sounds, and what was it about them?

Do you feel theatre has the ability to truly change and move people? How? Any examples from your own experiences that you can share?

Do you feel sound and vibration can impact people in such a regard?

How do you define concepts such as "social action" and "social change"? How does this play a role in your life and work?

What are your thoughts on the accessibility (broadly defined) of theatre and how this connects to social change?

How does time play a role in this production, and how do you see sound as assisting in conveying passages of time?

Sound Designer
Please share a bit about your background and how you became involved with sound/theatre and/or social action.

How does your work balance creative and technical elements?

How do you apply abstract vs. concrete sounds? Examples?

What sonic opportunities did I CARRY YOUR HEART present to you?

What sonic moments in I CARRY YOUR HEART most stick out to you? Can you share your approach to sound aesthetics for these moments?

What does sound design mean to I CARRY YOUR HEART? How is it different from other plays?

Tell me about your experiences with sound design:
- Which productions have moved you
- Sound design that you are most proud of, and why
- Most challenging experience with sound design

As a sound designer, what technology do you use? What do you get most excited about using? How has the technology changed over time?

Are there any notable developments you feel are happening with/in sound design?

How do you see sound as developing an emotional connection with the audience?

Appendix E

CITI Certification

Fig. E.1. Certification for Amy Patterson for completion of CITI Human Subjects Protection course.

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