



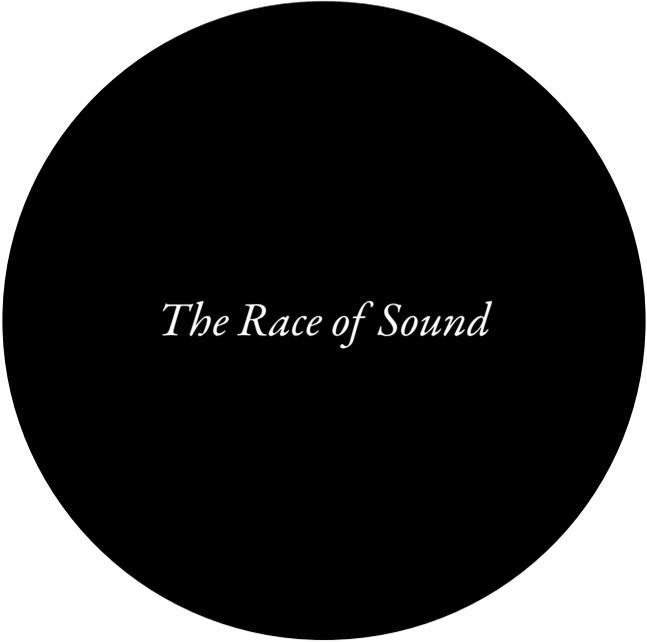
The Race of Sound

LISTENING, TIMBRE & VOCALITY

IN AFRICAN AMERICAN MUSIC [NINA SUN EIDSHEIM](#)

Refiguring American Music

A series edited by RONALD RADANO, JOSH KUN, AND NINA SUN EIDSHEIM
CHARLES MCGOVERN, CONTRIBUTING EDITOR



The Race of Sound

LISTENING, TIMBRE, AND VOCALITY

IN AFRICAN AMERICAN MUSIC NINA SUN EIDSHEIM

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To Julie

This is a call to enhance love, but not just private love. This is a call to enhance public love—justice. This is a call to intentionally support the creation of structures informed by and informing our sense of social justice and spirituality. This is a call to become responsible for the institutional structures we inhabit and that inhabit us. This is a call for self- and world-making and for the bridge between them, as well as recognition that the world is deeply spiritual even at its most secular. It is a call to create and live the predicate for a beloved community.

—JOHN A. POWELL, *Racing to Justice*

Widening Circles

I live my life in widening circles
that reach out across the world.
I may not complete this last one
but I give myself to it.
I circle around God, around the primordial tower.
I've been circling for thousands of years
and I still don't know: am I a falcon,
a storm, or a great song?

—RAINER MARIA RILKE, *Book of Hours*

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The idea at the core of the themes and topics with which I have wrestled in this book has been my companion since I was a teenager—but these themes came into sharper relief after I moved from Norway to the United States, where I experienced race as an insider to some communities and as an outsider to others. This change of location and culture also afforded me a clearer view of the listening practices of the culture in which I was brought up. A term coined by Mendi Obadike, “acousmatic blackness,” crystallized the many questions that arose from these observations regarding vocal and listening practice. Since I first encountered it in 2005, I’ve continuously meditated on and worked with acousmatic blackness as a concept and as an analytical framework. In addition to Obadike’s teachings, many interlocutors along the way have helped me work through them at whichever stage I found myself in our respective encounters. Even with the fear of omitting some, I still wish to name them.

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Introduction

THE ACOUSMATIC QUESTION

Who Is This?

JULIET: My ears have not yet drunk a hundred words
Of that tongue's uttering, yet I know the sound.
Art thou not Romeo, and a Montague?

—William Shakespeare, *Romeo and Juliet*, act 2, scene 2

UNWANTED VISITOR: I don't much like the tone of your voice.

—*Monty Python's Flying Circus*, season 1, episode 9

The second voice that you heard
sounded like the voice of a black man; is that correct?

—*California v. O.J. Simpson* (1995)

President Obama is “talk[ing] white.”

—Ralph Nader to the *Rocky Mountain News*, 2008

Whether the vocalizer is heard over the radio or the phone, as part of a movie soundtrack or in person—positioned far away and therefore hard to see or speaking right in front of the listener—the foundational question asked in the act of listening to a human voice is *Who is this? Who is speaking?* Regardless of whether the vocalizer is visible or invisible to the listener, we are called into positing this most basic question—a question of an acousmatic nature.

The specific term, originally connected with the concept of *musique acousmatique*, originates with Pierre Schaeffer. Deriving the term's root from an

ancient Greek legend that described Pythagoras's disciples listening to him through a curtain, Schaeffer defined it as "acousmatic, adjective: referring to a sound that one hears without seeing the causes behind it."¹ Originating with an electronic music composer, the term contains an assumption about the particular affordances of a particular historical-technical moment. That moment arrived with the introduction of recording technology, which made it possible to sever the link between a sound and its source. In playing back the recorded sound, the source did not need to be present or active. Famously, Victor Records' iconic logo showed a loyal dog desperately seeking the source of "his master's voice" (as the original painting was titled), even as the master lay dead in the casket upon which the dog sat.² While the acousmatic has been explicitly theorized in relation to the advent of recording and telephonic technology, scholars have even traced the phenomenon of the division between sound and source to ancient times, when tension was created by the unavailability of the source to the listener.³

While the circumstances of the severing of sound and source vary, the impetus behind asking the question is the same: the acousmatic question arises from the assumption that, in asking, it is possible to elicit an answer. It is assumed that if I listen carefully to a sound—in the absence of a visually presented or otherwise known source—I should be able to identify a source, and that any limitations are due to inexperience or ignorance. For instance, through attentive and informed listening, I should be able to know a lot about the vocalizer, and possibly about his or her identity. If I do not already know the person, I should still be able to glean general information about him or her—from broader identity markers to fine-grained assessments regarding health, mood, or emotional state—and discern the speaker's attempts to falsely communicate emotions or truth statements, or even to speak as another through imitation or impersonation.⁴

In the context of the human voice, this assumption about the possibility of knowing sound in the first place extends to a second assumption: that it is possible to know a person. The acousmatic situation arises from the assumption that voice and sound are of an a priori stable nature and that we can identify degrees of fidelity to and divergence from this state. This position is grounded in a belief—and truth claims—about the voice as a cue to interiority, essence, and unmediated identity.⁵

We assume that when we ask the acousmatic question we will learn something about an individual. We assume that when we ask the acousmatic question we inquire about the essential nature of a person. The premise of the acous-

matic question is that voice is stable and knowable. As Joanna Demers describes the act of *reduced listening* within an electronic music context, where we aim to hear the sound of a creaking door without associating that sound with the actual door, “Schaeffer starts from the point that we *must* already know,” and so the goal in reduced listening is to “ignore what we know.”⁶

In contrast to Schaeffer’s position, I posit that the reason we ask *Who is this?* when we listen to voices is precisely that we cannot know the answer to that question. In this book I will argue that we ask that very question not because a possible ontology of vocal uniqueness will deliver us to the doorstep of an answer but because of voice’s inability to be unique and yield precise answers. In Adriana Cavarero’s classic formulation, a human voice is “a unique voice that signifies nothing but itself.”⁷ For Cavarero, a humanist, the voice is “the vital and unrepeatable uniqueness of every human being.”⁸ Building on a story by Italo Calvino about an eavesdropping monarch, in which hearing a single and unrepeatable voice changes the king’s relationship to the world, Cavarero poses a challenge for herself and her readers. “This challenge . . . consists in thinking of the relationship between voice and speech as one of uniqueness, that although it resounds first of all in the voice that is not speech, also continues to resound in the speech to which the human voice is constitutively destined.”⁹ While I am extremely sympathetic to the project of listening intently as a humanizing endeavor, in contrast to Cavarero and Calvino’s king, what I identify as *listening through the acousmatic question* arises from the *impossibility that the question will yield a firm answer*. Therefore, despite common assumptions, we don’t ask the acousmatic question—*Who is this?*—because voice can be known and we may unequivocally arrive at a correct answer. We think that we already know, but in fact we know very little. We ask the question because voice and vocal identity are *not* situated at a unified locus that can be unilaterally identified. We ask the acousmatic question because it is not possible to know voice, vocal identity, and meaning as such; we can know them only in their multidimensional, always unfolding processes and practices, indeed in their multiplicities. This fundamental instability is why we keep asking the acousmatic question.

Therefore the question’s impetus is counterintuitive. In the face of common sense, the key to the question does not lie in its ability to produce a reliable answer when asked. Its import lies in the contradiction that it cannot fully be answered—and thus must be continuously pursued. In the totality of the chain of impossible-to-answer questions, we find our response.

Voice, Timbre, Definitions

Part of the reason many definitions of voice fail to capture its nuance is that the voice is a complex event that, in addition to its myriad acoustic signals, consists of action, material, and social dynamics.¹⁰ Voice's complexity, and the social and cultural fabrics within which both voice and listening are formed, remain underexamined. Thus, while they do not provide access to a stable essence, voice-based assessments regarding race result in a number of discriminatory evaluations and acts. They are used in court cases, as the epigraph from the *California v. Simpson* case exemplifies. Potential renters who telephone regarding advertised rentals are at a disadvantage if they are perceived as nonwhite.¹¹ Similarly there is historical precedent for expectations regarding singers' ethnic or racial backgrounds in relation to musical genre, vocal ability, and vocal sound. With a growing group of scholars, I seek to create awareness of timbral discrimination in the same way that consciousness has been raised around, for instance, skin color and hair texture.

While I consider my scholarly coming of age to have begun with readings in American, African American, gender, popular culture, and postcolonial studies, my background and expertise lie in experimental music, music theory, vocal performance and pedagogy, and voice studies.¹² I have observed the ossification of terms and concepts in both areas, from ideas as seemingly straightforward as pitch to concepts that are acknowledged to be more complex, such as genre, musical interpretation, gender, and race. To me, the racialization of vocal timbre exemplifies both sides' processes of ossification—from vocal training and music theory to critical studies. Thus I cross disciplinary boundaries and build on work from music theory, the scientific and material aspects of timbre, and voice studies in order to debunk myths about race as an essential category. The analogy I have observed is this: In the same way that culturally derived systems of pitches organized into scales render a given vibrational field *in tune* or *out of tune*, a culturally derived system of race renders a given vibrational field attached to a person as a *white voice*, a *black voice*—that is, “in tune” with expected correlations between skin color and vocal timbre—or someone who *sounds white or black*, meaning that the vocalization did not correspond to (was “out of tune” with) the ways in which the person as a whole was taxonomized.

In my earlier book, *Sensing Sound: Singing and Listening as Vibrational Practice*, I focused on the materially contingent aspect of sound. I called for attention to unfolding material relationships, for example, noting that what we conventionally think of as “the same sound,” say, the pitch A played in quarter notes at a pulse of 60 transmitted through air, would not be perceived as the

same sound if transmitted underwater. Sound travels faster when transmitted through water, and the body's material composition also transmits sound differently—primarily directly to the inner ear via bone conduction, compared to via the ear drum when receiving the signal through air. The two books are companion volumes, two sides of the same coin. *Sensing Sound* shows what the naturalization of sonic parameters and ways of measuring sound does to the general experience of listening to voice, while this book seeks to show the political and ethical dimensions of such practices as they produce blackness through the acousmatic question.

Specifically, in *The Race of Sound: Listening, Timbre, and Vocality in African American Music*, I extend my previous argument by drawing out the parallel between the multiplicity of the thick event and the multiplicity of a person. Both sound and person are complex events reduced to a moniker, a placeholder that nonetheless is taken to stand in for the unnamable event. That is, in the same way that what I have described as the vocal moment is complex as a *thick event*, with the limited parameter of *sound* selected as the aspect that defines it, complex phenomena such as human voices are further defined by socially, culturally, and economically driven categories such as race, class, and gender. In the former situation, voice is often reduced to its textually driven or notatable meaning content (language, pitch, rhythm, etc.). In the latter situation, *vocal timbre*—an elusive and understudied phenomenon¹³—is often used to make truth claims about voice and the person emitting the vocal sound. While most racial essentialization of physical characteristics has been critically confronted (if far from eradicated), the West's long history of entwining voice and vocal timbre with subjectivity and interiority has contributed to such truth claims remaining stagnant. Having noted this lack of research around vocal timbre, then, what *can* we know about timbre, the vocal apparatuses, and so on? Not much.

Vocal timbre is also often referred to as vocal “quality”: the color, vocal imprint, and sound of the voice.¹⁴ Vocal timbre is often described by analogy to color and, as the case studies in this book discuss, many of these analogies closely resemble or imply racialized descriptions. The origin of the idea that colors may be connected with music is not racial; rather it is based on mathematical and synesthetic principles derived in antiquity from the relationships between music and form, light, intervals, and timbre. Today timbre is the parameter most closely associated with color, possibly due to the German word for timbre, *Klangfarbe*, or tone-color.¹⁵ (The English *timbre* is derived from French.) Thus the terms “coloring” and “tone-coloring” can be used to signify timbral variation without necessarily implying any racial connotations. However, as I observe in chapters 1, 2, and 5, when colors are evoked in vocal descrip-

tions, they are drawn upon specifically in order to create a sonic analogy with skin tone, and thus to racialize the sound.

The American National Standards Institute (ANSI), an organization that offers precise standards for everything from the size of nuts and bolts made in different factories to the permitted decibel level in residential neighborhoods, defines timbre in the negative: “that attribute of auditory sensation in terms of which a listener can judge that two sounds similarly presented and having the same loudness and pitch are dissimilar.”¹⁶ In other words, in this definition timbre is everything except pitch and loudness.

What is “everything” except pitch and loudness when considering voice? If two voices sing the same pitch at the same dynamic and for the same duration, *timbre* is what allows us to distinguish between them. Timbre is also everything that allows listeners to distinguish between two different instruments that play the same pitch at the same dynamic, with the same duration. And it is important to point out that “everything else” is not an objective set of data. It is the *listener* who detects timbre and who names the “everything else.”¹⁷ Indeed “like pitch and loudness, quality results from an interaction between a listener and a signal,” as Jody Kreiman succinctly puts it. Here she formulates the dilemma of the acousmatic question in speech science terms.¹⁸ As there is no stable sound to be known, only that which comes into articulation because of a specific material relationality, there is no a priori voice to be known prior to the one formulated in response to the acousmatic question.

But if voice is a co-articulation, are its physical makeup and its sound unrelated? And what can we say about the physical makeup of the voice and the ways we can hear the overall physical structure of that materially specific organ and its vocal production? Generally speaking, the sound of the voice is determined by the diameter and length of the vocal tract and the size of the vocal folds. Neither of these components is fixed, and therefore they are adjustable and a number of modalities work together to create and refine vocal sounds. How does this translate to sound? Does it mean that those with statistically similar physical vocal apparatuses sound the same, or so similar that we group them together?

Comparing a large group that is distinguished into two groups—prepubescent boy and girl vocal apparatuses—there are no statistically significant physiological differences in terms of laryngeal size or overall vocal tract length.¹⁹ Boy and girl voices are split into these two distinctions through enculturation. And gender differentiation takes place for both vocalizers and perceivers. Vocalizers signal gender through word choice, intonation, speed, rhythm, prosody, level of nuance, and so on. Perceivers bring gendered expectations to the vocal scene

and are thus unable to hear a voice outside gendered terms. So, the girl/boy question exemplifies a case in which the physicality is the same, but the sound and the perception brought to the sound differ.

While we do have considerable knowledge about the general physical changes the vocal apparatus undergoes throughout a typical lifespan, it is important to acknowledge voices at the outer edges of these spectra as well as the considerable area of overlap between male and female voices. Moreover, while voices also undergo physical transformation with hormonal treatment, regardless of physical alteration, it is daily vocal practice that makes a given register feel comfortable.²⁰ In other words, we can begin with a set of statistics about the human body, but a number of forces combine to bring out one set of this body's potentialities while dampening others—and it is with this culture- and value-driven process that *The Race of Sound* is concerned. I aim to indirectly, but nonetheless intentionally, address the ways in which sociophysical conditioning (rather than skin color or some other measurement) structures the naming of race. I wish to enumerate some of the many ways in which the advantage of accumulated privilege is preserved, not only across historical time and geographic space but also in sounds, to create the recognition of nonwhite vocal timbre.²¹ Thus I build on Obadike's keen observation that hip-hop music may summon the presence of blackness without an accompanying black body. Extending this concept to the case of African American singers, I suggest that her term and concept *acousmatic blackness* may also capture the perceived presence of the black body in a vocal timbre, whether or not that body is determined to be black by other metrics.²² The acousmatic question is the audile technique, or the measuring tape, used to determine the degree to which blackness is present. And because of the acousmatic question's inability to yield a precise answer, any identification of black vocal timbre is, by definition, blackness formed in response to the acousmatic question.

If voices that are similarly constituted exhibit distinctly different vocal sonorous characters, are voices that have different physical makeups bound to physicalities? No. As we will see in chapter 5, a young girl can sound like a mature woman, and we know that impersonators cross not only race and class but also age and gender. Voices that are physically similar may sound completely different, and voices that are physically different may be mistaken for one another. In other words, the sound of a given voice transcends assumed physical characteristics and the ways in which we rely on such characteristics to make sense of one another. Thus while voice is materially specific, a specific voice's sonic potentiality—such as a girl's voice or a boy's voice—and, indeed, its execution can exceed imagination.

The image I have used to explain this idea is that of the falling tree, as in the classic question *If a tree falls in the forest and no one is there to hear it, does it make a sound?* Through this question our understanding of and relationship to a multifaceted event is reduced to what we perceive as sound. And, I posited, in the same way that we reduce the rich, multifaceted, heterogeneous, and undefinable composite event of a falling tree to mere sound, we reduce the *thick event* of vocality through another question: the silent acousmatic question *Who is this?* When we ask the acousmatic question, we reduce vocal events in a manner similar to the way we reduce the falling tree to sound, and in so doing we ignore multiplicity and infinity in order to fix what is unfixable under a single naturalized concept. In short, the question *What is the sound of the falling tree?* reduces the thick event to one aspect—say, sound—while the question *Who made that sound?* discounts enculturation, technique and style, and an infinity of unrealized manifestations in favor of preconceived essence and meaning.

The naming and critical analysis achieved with the aid of this question pair serve as “a portal, opening up a new and previously inaccessible way of thinking about something,” as Jan Meyer and Ray Land put it. They explain that such a portal is often enabled through the articulation of a “threshold concept,” a distillation that “represents how people ‘think’ in a particular discipline, or how they perceive, apprehend, or experience particular phenomena within that discipline (or more generally).”²³ Linda Adler-Kassner and Elizabeth Wardle describe threshold concepts as “naming what we know.”²⁴ Thus “a consequence of comprehending a threshold concept . . . [may] be a transformed internal view of subject matter, subject landscape, or even world view.”²⁵ For my particular work, *crystalizing how most people think about sound—they reduce it through naming—has been transformative.* This insight has given me the critical tools to understand the process through which vocal timbre is racialized.

Returning to the question about the falling tree, the first layer of this analogy is the reduction to sound of the physical and multisensory event of singing. The second layer is the reduction of the thick event to a *quantifiable* sound with inherent meaning and attendant value. As mentioned, *from the perspective of singing and listening as vibrational practice, meanings and values are not inherent; instead they are derived from listening communities’ values.* One of the primary values that drives the society and culture that give rise to the music discussed in this book is difference. This difference is imagined as race, which is not unconnected to other imagined categories, but is articulated within a complex matrix of intersectionality. Hence the thick event—a continuous vibrational field with undulating energies (flesh, bones, ligaments, teeth, air, longitudinal pressure in a material medium, molecules, and much more)—is

reduced to socially and culturally categorized and evaluated vocal sounds, such as pitch and voice, as essential markers.

An underlying assumption about vocal sounds' power to identify is present in a wide range of observations about voice. For example, as the epigraphs above illustrate, after minimal exposure to Romeo's voice, Juliet hears it as in tune with her recollection of his voice and his broader membership in the Montague clan. In the *Monty Python* comment the speaker considers his interlocutor to be attitudinally out of line, thus akin to a false note. His observation not only offers suggestions regarding the interlocutor's possible ranges of tones, but also carries information about the speaker himself: a person situated lower in a social hierarchy would not deliver such a judgment publicly. And the question in the 1995 court case *California v. O.J. Simpson*, "The second voice that you heard sounded like the voice of a black man . . . ?" is based on the assumption of a priori categories. Uncritically acting on the assessment that the voice "sounded like . . . a black man" assumes that voice points to the stable category of "black man who has emitted such a voice." And since the system sets up binaries of true or false and guilt or innocence, whether according to a pitch system or a racialized system, those who fail to fall within the "true" category are, by default, marked as false. President Barack Obama, for example, is called out for failing to align vocally with the timbres expected of the race the listeners have assigned to him.²⁶ While drawn from very different archives and ultimately with very different outcomes, assumptions about possible "misalignment" are fueled by listeners who use the voice as "truth statements," such as Juliet's perceived alignment of Romeo's true measure of love. In sum, an assumption about stable and knowable sound provides a conceptual framework that reduces the thick event to sound, to the question of being in tune, or to racial timbral categories.

What Does the Acousmatic Question Offer Insight Into?

Having established that there is no unified or stable voice, we may draw the following lessons from the in-depth readings of vocal cases treated in the chapters that follow. They can be summarized into three interrelated correctives that better capture what voice is and what we identify when we identify voice:

- Voice is not singular; it is collective.
- Voice is not innate; it is cultural.
- Voice's source is not the singer; it is the listener.

In extending my analytical toolkit in order to understand more about the thick vocal event, I am particularly concerned with vocal timbre—an elusive

concept that, as mentioned earlier, may be defined broadly as everything about the sound of the voice except duration and pitch.²⁷ Timbre is used as a basis for considerations of identity and state, including age, mood, and musical genre.²⁸ It is used diagnostically in terms of health and is considered part of the acoustic signal and airflow.

While these definitions address timbre's richness and complexity, what unifies these vastly different analytics, methodologies, and scholarly discourses is the assumption that timbre is static and knowable. In other words, there is a perceived sense of inevitability in each of these approaches. Vocal timbre is assessed when it is understood as a knowable entity, or in the context of correcting or creating a particular type of timbre. My suggested correctives address these false assumptions and provide an alternative explanation for the formation of timbral meaning. Hence in the following redefinitions of voice, the broader phenomena of voice, vocal timbre, and timbre are not knowable entities but processes.²⁹ The perception of vocal timbre thus entails dealing with slices of a thick event—a multitude of intermingling phenomena set within a complex dynamic of power and deferral over who gets to assign the meaning that ultimately affects the very medium it seeks to define.

First, voice is not singular; it is collective.³⁰ The voice is not a distinct entity, but rather part of a continuous material field. The so-called physical individual voice, then, is part of a continuum, a concentration of energy that we interpret and define as a distinct voice. (As we will see in this book, imagining separate and distinct voices requires many acrobatic framings!) The voice is composed of a collection of bodily organs involved in the production of sound, the acoustical conditions in which it is emitted and sensed, and the style and technique involved in its lifetime of training, what Farah Jasmine Griffin calls "cultural style."³¹ No one part of this collection of styles and techniques involves race essentially or entails the uniqueness of the speaker; it is instead a performance of cultural style. James Baldwin observes the collective performance of race thus: "I began to suspect that white people did not act as they did because they were white, but for some other reason."³² That is, Baldwin's insight is that "whiteness" is a particular performance of culture. The performance of whiteness is followed by the assumption that any such traits are either expressions or false performances of essence. Recall, it is this deep-seated belief that is expressed in the observation that Obama "talks white." In the absence of underlying assumptions regarding the (performed) sound of whiteness and which bodies have the right to perform such sonorities, there would be no reason to make such a point. Because the voice is not distinct and separate, it possesses neither

the capacity to signal innate and unmediated qualities nor a stable identity. This is the case in what I call the measurable and the symbolic realms.

Moreover the voice is not unique, in part because it is not a static organ. It is not an isolated and distinct entity; instead it is shaped by the overall physical environment of the body: the nutrition to which it has access (or of which it is deprived) and the fresh air it enjoys (or harmful particles it inhales). It is the physical body and vocal apparatus that are trained and entrained each time a voice voices, and that develop accordingly. Vocal tissue, mass, musculature, and ligaments renew and are entrained in the same way as the rest of our bodies. Research and knowledge that show how the body is a result of its overall environment also apply to the part of the body that is the voice. Because we often focus on the sound and assume that there is an unchanging relationship between the entity we believe to be a static, distinct human and the vocal sound we hear, we also assume that the voice is intrinsic and unchangeable. However, just as the body possesses different qualities, or is able to carry out different activities, depending on how it has been nurtured and conditioned, so too is the voice an overall continuation and expression of the environment in which it participates.

Second, in this way, voice is not innate; it is cultural. Vocal choices are based on the vocalizer's position within the collective rather than arising solely as individual expression. Vocal communities share an invisible and often unconscious and inexplicable synchronicity of vocal movements and vocal performance, gravitationally attracted by the dynamics of the culture in which the vocalizer participates. This takes place, for example, through the vocal body's movements, habituation of practice, proprioception (self-monitoring), listening, and the specific practices adapted to and expressing a given culture's ideal. Neither speakers nor singers use the entire range of their voices' infinite timbral potentialities.³³ In other words, the decisive factor in honing each voice's potentiality and developing expertise in a timbral area is not individual preference but collective pressure and encouragement.

With the multitude of timbral choices involved in learning how to use the voice, voices tend to be developed based on collective rather than singular preference. The process that determines which select areas of our vocal potential we attend to, and that therefore will be understood as innate, is a social one. What we conceive of as a single voice, then, is a manifestation of a given culture's understanding of the vocalizer and his or her role within that culture. That is, voice is a manifestation of a shared vocal practice.

Third, as we've already begun to see, the voice does not arise solely from the vocalizer; it is created just as much within the process of listening. This means

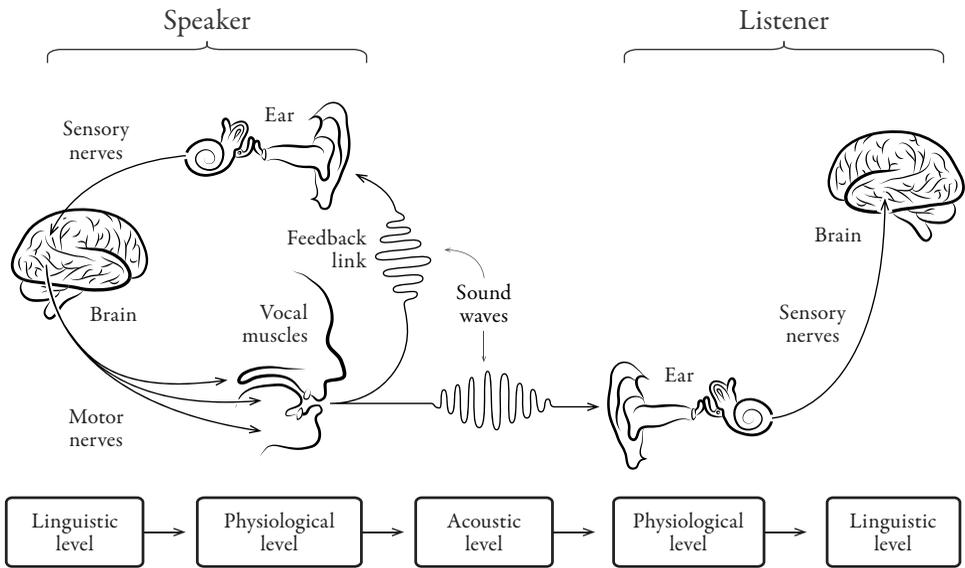


FIGURE INTRO.1 The speech chain. Peter B. Denes and Elliot N. Pinson, *The Speech Chain: The Physics and Biology of Spoken Language* (New York: W. H. Freeman, 1993), 5.

that the voices heard are ultimately identified, recognized, and named by listeners at large. In hearing a voice, one also brings forth a series of assumptions about the nature of voice. The speech chain—the now-ubiquitous model of the voice conceived by the linguists Peter Denes and Elliot Pinson—includes two general areas: the speaker and the listener (see figure Intro.1).³⁴ Information transmission from speaker to listener can be condensed into the following parts: the speaker's brain → motor neurons → sound generation → the listener's ear → the listener's brain.³⁵ This model usefully expanded the previous model of speech by considering speech in the context of communication (versus distinct and separate processes). As Denes and Pinson outline, the speech chain is incomplete without the listener.

I will go one step further in suggesting that the listener, including both other listeners and auto-listening, is so strong, and indeed so overriding, that in order to understand the process of evaluating and defining vocal timbre and voices, it is more useful to consider the process from the listener's point of view.³⁶ And I could flip the directionality of the speech chain, calling it the listener-voice chain, with the listener as the focal point (see figure Intro.2). This is because, on the one hand, actual vocal output is determined by the speaker's listening to his or her own voice and considering how the community hears it, and by the

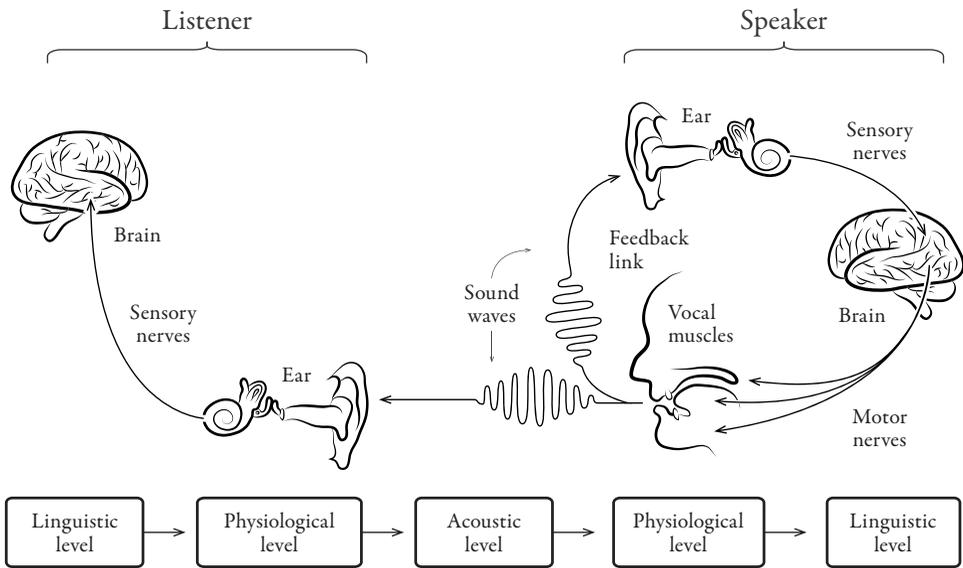


FIGURE INTRO.2 Listener-speaker model.

countless concrete instances in which he or she is vocally corrected, directly or indirectly, by other people. On the other hand, regardless of the actual vocal signal emitted, listeners will produce their own assessment of what they did hear. We actually *assign value* when we pose and respond to the acousmatic question.

Identifying the voice as located within the listener returns us to the first two correctives. Because a human vocalizer exists and vocalizes within a community, listeners' assessments directly affect and entrain the vocalizer materially and thus sonically, and direct the vocalizer's auto-listening. The assumptions, expectations, and conventions of a given culture, and that culture's impression of who the vocalizer is, are overlaid onto its acceptance or rejection of the vocalizer, akin to what Marcel Mauss describes as *bodily technologies*.³⁷ Furthermore, as Carter G. Woodson and Michel Foucault have both noted in reference to different cultural circumstances, adopting those listening practices and self-monitoring the voice is a condition of participation in a culture.³⁸ As Foucault indicates, monitoring is relocated within the individual and thus does not need to be reinforced on a level higher in the structures of power. In a nutshell, this tripartite cycle explains why, by asking the acousmatic question, the listener cycles between the vocal apparatus as part of a continuous material field and vocal acts that accord with the values and dynamics of the culture within which

they are practiced and heard. Ultimately it is why we cannot expect to yield a singular and unambiguous answer to the question *Who are they?*

Roadblocks and Processes on the Way toward Insights into Voice

In conversations and interactions with voice scholars working in a wide variety of fields, I have found that each study seems less interesting by itself than when considered together with seemingly related (and seemingly unrelated) voice research. However, while numerous fields and areas of research hold voice at the center of their work, their definitions of voice, methodologies, and epistemological and ontological assumptions vary widely. In some cases the object of study has no correlation, yet in other cases the same phenomenon (or aspects of it) is studied in multiple fields but vocabulary is not shared, or differences in epistemological horizons and methodology seem insurmountable.

Synthesizing across fields, I observe a split in ontology, epistemology, methods, and the very object “voice” into what appear to be two general camps: the position that assumes the voice is measurable and the position that assumes voice is an expression of the symbolic.³⁹ (Hereafter I will refer to them as *measurable* and *symbolic*.) The categories “measurable” and “symbolic” can broadly be thought of as “essential and strategic remappings of nature and culture.”⁴⁰ As a result of the split between these two major positions, the same phenomenon is approached, scrutinized, and discussed using two sets of disparate vocabularies, resulting in a roadblock separating disciplines. The *measurable* position is concerned with organizing the material voice in ways that can be defined and replicated. Examples include movement of the air molecules and tissue, articulations of the mouth and tongue, timbral definition, the metrics of a vocal genre, and more. This position understands voice as a measurable, material entity that develops in a linear, causal relationship. It considers factors such as bodily health and socially and culturally formed habits and practices that are directly vocal or that somehow affect vocal or listening practice. The definition of voice is limited to aspects that can be measured and quantified, such as acoustic signal, air flow, and articulation. These are all interpretations that slice the thick material event into segments that allow for the articulation of testable questions and replicable experiments. The measurable voice is understood as largely straightforward in regard to its signaling. To slightly caricature this position, any emotional, cultural, or social investments in voice can be generalized as stemming from an evolutionary explanation. Those who take this position formulate and address questions with the assumption and intention that

they can and will be answered in unambiguous terms. The answers to questions posed or the confirmed outcome of the thesis are aimed at broader application or transferability. *The measurable position aspires to show us something about the universality of vocal function.*

In contrast, the *symbolic* position is concerned with the ways in which vocal sound presentations are interpreted. Broadly described, this position considers how dynamics (of power, for example) are played out through the acceptance of meaning-making. Here, what I conceive as the thick material vocal event is also segmented, significant only in its symbolic capacity, and often conceptually detached from the material sound or phenomenon. Whether the voice is read and understood as sound, as text, or even as implicated with the body, this analysis assumes that the power and impact of voice take place only on the symbolic level. In other words, for voice to have a different meaning, it is the symbolism that must be changed. However, as with the measurable position, the voice comes to be so intimately associated with whichever symbolic position is taken that considering the connection between the thick event of the voice and the given symbolism as a true choice becomes challenging.

Scholars operating from this type of position investigate the historical and cultural reasons the voice is understood in such a manner rather than evolutionarily. They formulate and investigate questions in order to address a very particular situation and, indeed, to help formulate how this situation is distinct and how it contributes to an understanding of why an answer or position is not transferable to another situation. The value of such a research project's outcome lies precisely in its level of detail, in a fine-grained and finely textured engagement. *The symbolic position aspires to show us something about the voice's fine-grained specificity and overall complexity and the impossibility of any findings being directly ported to another situation.*

We may now turn to the roadblocks. Considering voice from only one of these perspectives fails to take into account both the ways in which the symbolic is derived from material positions and how the symbolic informs everything from the units of measurement used to the types of questions formulated in material positions. As mentioned, part of the reason for the divide between the two positions is that, due to its richness, voice is studied in multiple disciplines, which are often so different that they are not considered by one another.⁴¹ Voice is at the center of research in vastly different areas of inquiry, such as (to mention a few) musicology, ethnomusicology, anthropology, film, gender, and sound studies on the one hand; linguistics, biology and evolutionary studies, acoustics, mechanical engineering, and head and neck surgery on the other. As a result of their assumed ontologies, epistemologies, and research

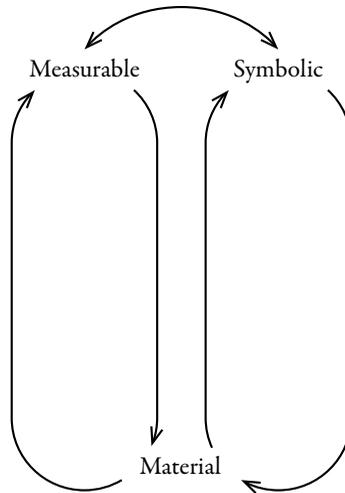


FIGURE INTRO.3 The model shows the interplay among the symbolic, the measurable, and the material.

methodologies, each of these positions yields distinct, often non-overlapping, voice objects, for example voice as subjectivity, voice as evidence of reproductive fitness, and voice as libretto.

In summary, voice scholarship in general, and the potential field of voice studies (which I see as explicitly transdisciplinary) in particular, possess built-in problems in regard to cross-fertilization. Within these two camps—the measurable and the symbolic—the voice has been formulated as two entirely different objects, and because of this there have been no grounds, reason, or purpose for their scholars to interact. The interactions have mainly consisted in pointing out the errors in the other camp’s assumptions about and definitions of voice. However, the past five years have seen a shift toward interest in transdisciplinary conversation.⁴² The third position I wish to advocate in this book is that the symbolic and measurable dimensions are never detached; they always already work in tandem with the *material* dimension. The symbolic and the measurable are both re-created in the material, and the material gives rise to that which we understand as the symbolic or the measurable (see figure Intro.3).⁴³

What is the tactic or perspective that shows us how to connect the symbolic and the measurable? How may we dissolve the roadblocks? For me, the answer is a practice-based methodological approach to vocalization, explained in more

detail below, that allows us to simultaneously address the naturalized aspects of both the measurable and the symbolic. This approach is grounded in the material and considers the flow among the three areas: symbolic, measurable, and material. In making these connections, I look to the pioneering work of Robbie Beahrs, Shane Butler, J. Martin Daughtry, Cornelia Fales, Sarah Kessler, Katherine Kinney, Jody Kreiman and Diana Sidtis, Theodore Levin, Caitlin Marshall, Kay Norton, Ana María Ochoa Gautier, Kasia Pisanski, Matthew Rahaim, Annette Schlichter, and Amanda Weidman, to name a few, all of whom work from a rigorous sensibility regarding voice's material- and meaning-making powers.⁴⁴

While most of these scholars would probably not describe their work in this way, I find that an interesting common thread among them is their sensitivity to the practical application or use of voice in their approaches. Here I want to gesture toward an area of inquiry into voice, involving vocal practices such as singing, acting, vocal therapy, and more, that is often not considered scholarship but that has allowed me and many of the above-mentioned scholars to consider the dynamic between the measurable and the symbolic. Specifically, in addition to these positions, I am interested in an aspect of the performative perspective that I call *critical performance practice* and discuss in more depth below. Such a methodology allows me to map the relations and track the consequences between the material and the semiotic.

Voice's Manifestations of the Measured and the Symbolic

It is a truism that the body has been objectified and used as a measure of race and as evidence of innate racial difference. This book shows that voice is equally objectified, entrained, and used as a “measure” of race (i.e., a feature that is believed to represent something specific but has the power to do so only through social consensus). Created internally and crossing from the internal to the external, the voice holds a special position in the sonorous landscape, herein addressed as experienced through Western thought. The voice is thought to reveal the true nature of the body. As I have discussed elsewhere, measurements of skull shape and size and taxonomies of the relative development of different races and ethnicities were graphically charted in *The Family Group of the Katarrhinen* and *Inventing the Family of Man* and *Types of Mankind*.⁴⁵ These figures sought to convey at a glance the idea that different human and animal groups that represented a wide spectrum of beings on a single evolutionary timeline—from the primitive (apes, Africans) to the highly evolved (Aryans)—lived side by side at the same time. Because of the medicalization of

vocal pedagogy that also took place at this time, the relative developments were believed to be audible or, in today's big data language, "sonified" through vocal timbre.⁴⁶ The term "measuring," then, refers to the ways in which the body's physical dimensions (crania and height) were, to some extent, measured. These dimensions, taken with those not measured (e.g., internal tissue and organs), were thought to be made audible to a given community of listeners through the voice, much like masses of data are sonified to make them easier to process.

These perceived quantitative findings on the measures of the subhuman not only arose from but also reinforced a belief in difference in the metaphysical sphere: the difference between fully human and not fully human, and the existence or nonexistence of the soul. The impact of such a perverse attitude is not limited to those claiming superiority, but, as W. E. B. Du Bois has shown, through enculturation "a peculiar sensation" develops. It is "this double-consciousness, this sense of always looking at one's self through the eyes of others." One begins "measuring one's soul by the tape of a world."⁴⁷ The metaphysical isolation of "black folk[s]" is totalizing.⁴⁸ And, when thinking back to Aristotle—"Voice (phōnē) is a kind of sound characteristic of what has soul in it"—we are reminded of the long-standing connection between soul and voice.⁴⁹

What the seemingly objective measuring and naming of the symbolic really allows is manifestation of the power dynamic at play—and that manifestation then takes on a life of its own. In the antebellum era, slave owners and non-slaves began to hear the sounds of slaves' voices as a distinct vocal timbre, first in what was understood as self-exclusion and evidence of subhumanness (in their "noisy" voices), then in the reification of blackness.⁵⁰ Ronald Radano has described the process in this way: "The tendency to devalue Negro music, to reify blackness and to turn it into a natural resource, also sustained the perception of its difference, its status as an objectionable, illicit form of black cultural property, which, in turn, established its negative value." The "inalienable, unexchangeable qualities of black musical animation" are traded in the exchange of blackness through the form of black vocality.⁵¹ Understood as a natural resource, vocal timbre is also measured in its value.

Echoing the language of Radano and Arjun Appadurai, through "exchange and re-imagined uses"—evaluated, quantified, given a sticker prize, and thus appraised, assessed, calculated, weighed and measured—body, soul, and voice take on the social life of things.⁵² This book tells stories about the ways such values are traded on the back of the voice but also instilled in the voice through formal and informal pedagogies. Throughout I do argue that listening *is* akin to measuring. The two techniques are similar in that they are both socially and culturally constructed: neither will work unless a community buys into them.

Assessments such as “a white voice” and “an overly loud voice” mean nothing unless the listening community that assesses the voice knows the designation to which these concepts refer—akin to the agreed-upon definition of “one meter” or “in tune”/“out of tune.”

The effectiveness of any measuring tool is reliant on a community’s agreement about and adherence to the measuring convention; thus the articulation of the two positions discussed earlier—the measurable and the symbolic—does not take place in a vacuum. It affects the definition, perceptions, and indeed the material makeup and expression of the voice. In any investigation that has articulated a measurable entity (decibel, pitch, enharmonic sound) or symbolic position (imitation, gendered performance, coy expression), a formulation of the vocal object has already taken place. Rather than dealing with the messy variables that accompany it, the thick vocal event has already been pruned into the select aspect of voice that was already assumed at the outset. I think of this as akin to working with rigged evidence.

Expressed as a formula, this process unfolds as follows: the symbolic (as manifested by concepts ranging from gender to decibel) is used to shape the material; the material is shaped accordingly and emits precisely the signal that the symbolic purports to describe or capture; this signal is then *measured*; and a (false and rigged) correlation is logged and used as confirmation of the existence of the phenomenon and/or meaning envisioned by the symbolic. Thus, considering the triangulation of the measurable-symbolic-material aspect of the voice shows us the dynamic and codependent processes played out in the perception of every utterance and evaluation (see figure Intro. 3). With attention to that process, preconceived aspects of the symbolic and the material are denaturalized.⁵³

The process of projecting, arranging, and manifesting the vocal object results in a self-fulfilling prophecy. Below I offer a list of some ways in which this takes form. In each case, a pivot is created around listener-determined timbral meaning or measurement. The listener then adjusts various aspects of his or her perception of the thick vocal event to offer coherence around the assumed or projected meaning. The specific areas I address include the sense of coherence (according to a given society’s measuring tools) between singer’s timbre and visual appearance, ethnic or racial identity, genre assignment, and affiliations with vocal communities. This process is born from the assumption that voice is unique and innate.

Scholarship seems to be continually refining the processes of raising awareness and critiquing such labeling. Thus when I assert that it’s not racism itself but what underlies racism (assumptions about essence and the need to define) that is the root of racist thought and action, I point to the assumption that *there*

is something there to recognize and define. Child, middle-aged woman, African American, or white—all of these definitions depend on the assumption that there is something there to name correctly. Work that makes these definitions salient is important, as it underpins untold nightmares that are played out daily. Where my own work differs, however, is that I am not primarily concerned with offering up more fine-grained discernment.

For example, Angela Davis reframed female vocalists within African American culture and African American artists within American popular music in her massively influential 1999 *Blues Legacies and Black Feminism: Gertrude “Ma” Rainey, Bessie Smith, and Billie Holiday*. While Davis and other scholars seek to address artists who have been marginalized in some way—including household names who have not received social or monetary recognition congruent with their artistic offering and cultural impact—to me, at the end of the day, these scholars are mounting arguments that deal in issues of fidelity. While I admire the overall thrusts of scholars like Davis, I cannot but note that the main ways in which such arguments and theses are forwarded relate to the types of contextual information that are considered or not considered when interpreting and judging an artist’s level of excellence, impact, beauty, relevance, and so on.

In her close readings of Gertrude “Ma” Rainey, Bessie Smith, and Billie Holiday, Davis makes a case for recalibrating the lens through which African American blueswomen are considered, thus recognizing an agency and artistry that were not originally attributed to them. Indeed, Davis corrects the idea that Holiday was someone who passively “worked primarily with the idiom of white popular song” to someone who “illuminated the ideological constructions of gender and . . . insinuated [herself] into women’s emotional lives.” Through her vocal work, Davis asserts, Holiday “transform[ed] already existing material into her own form of modern jazz” and “relocated [that material] in a specifically African-American cultural tradition and simultaneously challenged the boundaries of that tradition.” Bringing in comparisons to “African Americans’ historical appropriation of the English language,” Davis compares Holiday’s contributions to the “literary feat of Harriet Jacobs,” who, in the narrative *Incidents in the Life of a Slave Girl*, “appropriated and transformed the nineteenth-century sentimental novel and, in the process, revealed new ways of thinking about black female sexuality.” By bringing in additional context, such as Herbert Marcuse’s notion of the “aesthetic dimension,” Davis hears Holiday as “transform[ing] social relations aesthetically beyond the shallow notions of love contained in the songs.”⁵⁴

The assumption underlying these interpretations of Holiday’s work is that

the goal is to sharpen our interpretive lens, and that, by doing so, the reading will more closely capture the truth. One of its major premises is that the way we have heard Holiday before is not quite correct; that is, we have heard her correctly only after Davis's analysis heard her with proper fidelity. While I am in favor of expanding the ways we might listen to Holiday, and of Davis's endeavor to remove the myths and inaccuracies surrounding Holiday, my approach and contribution differ from those that seek to claim the most accurate interpretation. Ultimately I seek to disassemble any promise of "accuracy." I will go as far as to argue that its pursuit is a dead-end street.

In this area I align with Jacques Derrida's belief that the search for meaning consists of a series of deferrals. (But I do not align with his prioritization of written language.) By insisting on returning to the category of the listener, which embodies the category of the originator of meaning, I am not insisting on a more perfect understanding of the voice. Instead I aim to confront the continually developing understanding of meaning, the choices and power structures at its base, and the selective choices even the most conscientious listeners must carry out in order to make sense of a voice.

In this way scholars from different disciplines are committed to dismantling "transcendental racial categories."⁵⁵ However, as a scholar, what work is left for me once I have demonstrated that the categories are not transcendental? I am skeptical that it's possible to reinvigorate agency by offering up (another) fidelity, however nuanced. Measuring and invoking meaning (the symbolic), even if in a more refined way, will produce the same result in the long run—that is, will legitimize what I think of as the cult of fidelity. We may move further into style and technique, understanding what makes up the performance and focusing on the details, and ultimately coming out on the side of a vibrational field engaged through vibrational practice—and we may stop there without renaming. Thus I have used anomalous examples in order to move away from categories and names and toward intermaterial vibrational practice, and I analyze that practice from the perspective of style and technique.

So is there a way we might name or notate something without also ossifying it in the process? Looking to film studies, I find much resonance with the work of Michael Boyce Gillespie, whose work is "founded on the belief that the idea of black film is always a question, never an answer," and with his notion of "the enactment of film blackness," which relates to my notion of voice as the "performance/construction of the event." Gillespie contributes a refinement of the definition of blackness by examining twentieth- and twenty-first-century American cinema, showing that "film blackness" is a performance taking place within a production and that it is much more nuanced than any idea of blackness can

capture. Gillespie also articulates options for black film as starting points for interpretation. For example, in a reading of *Medicine for Melancholy*, Gillespie writes that the film offers “film blackness as a meditation on romance, place, and ruin.” In the end, because Gillespie resists the temptation to replace existing categories with another renamed, more finely grained category, he opens up spaces for additional ways to perform, inhabit, and imagine blackness.⁵⁶

While insistent that his work is not concerned with race specifically, the composer, improviser, and trumpeter Wadada Leo Smith offers an example in his notational system of opening space while avoiding the reassignment of meaning. Called Ankhramation, the notation system “is a compositional language he developed using multidimensional visual symbols as stimuli for improvisation.”⁵⁷ The notation system stresses that meaning is both personal and contextual. For example, if all members of an ensemble are assigned to play a red half-triangle, each will need to research the meaning of “triangle” and “red.” The half-triangle is a velocity unit. Smith explains, “Each person will take that velocity unit and determine how fast or slow that velocity unit develops, depending on which symbol it is—but even if they all have the same symbol, it would by nature never come out to be the same velocity.” For red, Smith uses the symbolic references of blood and cherry to illustrate the process the musician might engage. On the one hand, “if it’s referenced as blood, then they have to go and do the research and find out about all the properties of blood and come up with some reference of how blood is used in humans or other creatures. Then they start to transform that data about blood into musical property.” On the other hand, “if you take the cherry, the cherry’s got an outer skin that’s red, and it also has a pit inside of it. It has a stem that comes out of the center of it. And you would take all of those elements and break them down into different parts and research them.”⁵⁸ The Ankhramation system is realized through each participant’s individual associative chain, which, of course, has also been developed within a lifetime of enculturation. These individual reference points are emphasized and indeed make up the music. Smith’s system offers a radical departure from the traditional Western staff system and from interpretations of singers’ legacy and impact, as exemplified in the ubiquitous perceptions of and work on Holiday, whereby pitches and people are processed through a series of (Derridean) deferrals and an ongoing dispute about which interpretation is most accurate.

My listening-to-listening framework, addressed in detail below, attempts to consider all symbols and meanings from an Ankhramation point of view, asserting that there is no *in tune* or *out of tune*, no “voice of a black man”; there is no single *most accurate* red triangle sound, but rather each designation is already



the result of chains of associations made by an individual under the pressures of the social and cultural contexts in which that individual participates. Thus thinking about Davis and other scholars through Ankhration makes explicit a focus on both the context and the meaning based on it rather than on an improvement in meaning. There is no attempt at calibrating the lens for a more accurate assessment; there is instead an aim to be more explicit about the dynamism and instability of meaning-making, resisting the gravitational pull toward reassignment of meaning.

I am following Farah Jasmine Griffin, Emily Lordi, and Robert O’Meally, who represent “models of scholarly works designated to dismantle the myth that black women singers naturally express their hard lives through their songs.”⁵⁹ I want to stress that I deeply respect these scholars and that my work would not have been possible without theirs. While we have similar aims—to shed myths and inaccuracies—they tend to emphasize more detailed and complex contextualization that facilitates deeper reading. They also emphasize a more accurate analysis with the goal of higher fidelity (e.g., reading Holiday’s rhythmic sophistication as a Jazz Genius with an untimely death and as an *auteur* through her lyric interpretations). Taking Smith’s lead through Ankhration rather than aiming for higher fidelity, I use the data to point to what I conceive as the fiction of fidelity.

While my assumption is that all measurements and constructions merely label and manifest dynamics of power as they are played out, measurement and construction also constitute a game that works only when everyone participates and continuously re-creates and reifies. The measured and the symbolic paradigms take place within the body through explicit and implicit pedagogy. Vocal culture is performed and formed in the flesh. I examine this phenomenon by observing a very particular kind of vocal training. When listeners connect a singer with a particular community, their listening is filtered through assumptions about that community and the music and vocal genres with which its people are most commonly associated. For example, when an African American singer, such as Marian Anderson, is connected more with a community of minstrelsy and spirituals than with opera, she is heard, and expectations about her are formed, through that filter. When a timbre is understood as gendered in a particular way, and a singer’s voice precludes association with that gendered meaning, listeners create alternative identities for the singer. In the example of the jazz and ballad singer Jimmy Scott, the categories of female, sex, and death are inserted in place of Scott himself. Because the myth of vocal essentialism and innateness runs so deep, we create complex, schizophrenic, layered listening situations in order to compensate for confrontations with the non-

essential nature of voice—confrontations caused, for instance, by vocal likeness, imitation, or ventriloquism. And finally, the sound of a particular racialized genre—soul—is reproduced through vocal synthesis and dresses in the imagery of blackface. In other words, through listening, the symbolic manifested by way of the material is used to confirm itself. Consequentially voice as evidence becomes an unexamined truism: the evidence is rigged.

Let's return to the issue regarding the possible function, if any, of the acousmatic question. What I have realized, by attuning to sixty years' worth of instances of listening to race in the United States,⁶⁰ is that posing the acousmatic question—*Who is this?*—will never tell you who the singer is. Attending to the acousmatic question tells you only who is listening: who you are. Indeed, who *we are*.

The Micropolitics of Listening

Because listening is never neutral, but rather always actively produces meaning, it is a political act. Through listening, we name and define. We get to say, "This is the voice of a black man." We get to say, "That singer doesn't sound sincere." And we get to say, "This singer doesn't sound like herself." As I hope I have made clear by now, not only do we, as listeners, get to label the vocalizer; we also manifest the symbolic in the material. Because voices are communal technologies attuned to cultural values, what the community hears, and the meanings it assigns, are accordingly aligned. In other words, through listening we enact and activate.

This book advocates the return of the acousmatic question to the listener, and ultimately to ourselves: *Who am I, who hears this?* On which assumptions and values are my observations based (or, to put it more strongly, to which are they tethered), and from which position(s) within a given society do I observe? This book seeks to provide tools that can help denaturalize both the listening process and the voices it names.

Through such listening we enact the micropolitics of timbre: the process of discernment involved in listening to and naming voices. "Micro" refers to the smaller unit or entity of vocal expression, in comparison with "macro" units such as notes, durations, phonemes, words, phrases, sentences, and so on. "Micro" also refers to the way these sentiments are activated by a listener. While there is a relationship between hegemonic definitions and naming, the activation and realization of these definitions' potential take place one by one, ear by ear. The rubber hits the road where and when the neighbor, friend, family, stranger, and, most crucially, the vocalizer himself or herself hears and names

the voice based on these factors. It is both the curse and the beauty of the collective process that, through listening, we can either reinforce or refuse to engage naturalized notions and values. Listening is not a neutral assessment of degrees of fidelity but instead is always already a critical performance—that is, a political act.⁶¹

Because, within the figure of sound framework, vocal timbre and the so-called measurable object or given meaning (or symbol) seem to conform to one another so closely, there is no analytical space within which to assert a third point: the role of the interpretant. Therefore, again, rather than examining what is purportedly heard, I suggest we step back in order to examine listening practice and the frames around it that yield given outcomes. In other words, we can apply Peirce-like operations in order to acknowledge the third party.⁶² I propose that we examine racialized vocal timbre (and any other qualities that are understood as essential) in order to move from an analysis of sound to an analysis of *how that sound is listened to*.

With *The Race of Sound*, then, I wish to hurl against the wall the long-overdue and much-underexamined connection between the perceived meaning of vocal timbre and vocalization. By offering new methodologies with which to examine vocal timbre, sound, and listening, I wish primarily to offer an intervention in American studies, race and ethnicity studies, and cultural studies, and secondarily in sound and voice studies, musicology, and ethnomusicology. Specifically I wish to address the problematics of voice as they are played out through the dynamics of race in late twentieth-century American popular music. I do so by taking seriously the important and penetrating critiques offered by these areas of scholarship regarding race, gender, ethnicity, and identity, and by detailing how they take form in the broad and elusive arena of vocal timbre. Drawing on my knowledge in music, sound studies, and voice studies, I wish to offer an additional perspective on how social divisions and power relationships are carried out through the space of vocal timbre, which seems to be one of the last areas still viewed as an essential trait.

Because of general assumptions regarding music and voice—that their major currency is sound and that vocal sounds are essential and unmediated expressions—readings of vocal timbre have remained impenetrable to critical investigation. In the same way that hair, body movement, dialect, accent, and style have been critically examined and thus are no longer available as ammunition for arguments about race as essence, *The Race of Sound* shows how timbre is institutionalized and internalized as a meaningful measurement of traits believed by a given society to be essential to people, and demonstrates the falsity of such correlative argument. The internalization of the disciplining of ears—or,

in Jonathan Sterne's evocative term, "audile techniques"—is described by Du Bois, as noted earlier, as "souls being measured by the tape of a world."⁶³

As a musicologist, scholar of voice and sound studies, singer, and voice teacher, I consider vocal timbre here within a contemporary music context while keeping a keen ear tuned to historically situated racial dynamics surrounding physiology, how these dynamics are connected to notions of voice, and the ways in which racialized listening is formed. In carrying out this work, I build on critical-analytical traditions that detail the construction of identity and essential categories, including race and gender. I examine how structures of power burrow down into flesh and are realized through it; how the articulation of power structures is self-regulated by those who live within them; how the technology of narrative comes into play; how knowledge is situated; and how everyday life is performed.⁶⁴ I also dig into and listen deeply to the sonic archive in a detailed examination of vocal timbre.

Engaging perspectives from performance studies, I address concerns in critical race studies and sound studies and extend them to the site of vocal timbre. Thus my questions find a parallel in theater scholarship's inquiry into the performed spoken voice. Faedra Chatard Carpenter is also "struck" by the phenomenon that, "despite the widely accepted recognition that race is a social construct, Americans still talk about what *sounds black* or *sounds white* in simplified racial terms."⁶⁵ I share goals with scholars of avant-garde music, jazz, and literature, such as Fred Moten, who is concerned with the rematerialization of the visual through sound and with the objectification of persons based on the ways in which their visual presentation is understood.⁶⁶ I also share objectives with Daphne Brooks, Emily Lordi, Jennifer Lynn Stoeber, and Gayle Wald, all of whom critically engage the catalogue of the African American experience. Their activist approach to scholarship includes listening to that experience as it is archived in the form of vocal micro-sonorities and inflections within the context of popular music production, representation, and reception.⁶⁷

Moreover I build on Josh Kun's work on the "American audio-racial imagination," which posits that considering music's potential function as a form of survival—considering "audiotopia"—offers key insights into racial relations and dynamics.⁶⁸ Developing an awareness of and a vocabulary to describe the American audio-racial imagination is to better articulate and thus develop critical analysis with which to address the "peculiar sensation, this double-consciousness, this sense of always looking at one's self through the eyes of others"⁶⁹—or, to paraphrase Baldwin, this sense of always hearing one's voice through the ears of others. In developing our awareness, we take on the collective response to the acousmatic question. Since all predicates heard in the voice

are judgments made by acculturated listeners, heard voices reflect the norms and values of those listeners. Parsing encultured responses to the acousmatic question builds a critical apparatus that aids in denaturalizing, in the context of the belief that it is possible to know sound (e.g., F-sharp, quarter note, in 60 metronome tempo), or disidentifying, in the context of the belief that it is possible to know people and to know them through their voices (e.g., the belief that President Obama is “tal[king] white”), through critical interventions such as the micropolitics of listening. In building on these strategies and perspectives, I wish to understand and detail the material-symbolic projection, manifestation, performance, and perception of vocal timbre in general, and racialized vocal timbre in particular.⁷⁰

Listening to Listening

While working through specific issues related to voice, *The Race of Sound* is a book about how ideas and ways of listening manifest. Attuning to how we observe voices offers one poignant way of witnessing concepts and active processes of thought in manifestation and in practice. Thus by listening to listening we can trace voice back to ideas.⁷¹ And by doing so, we can consider the sound and the meaning attached to it as several of many interesting data points that can help us understand the voice as a collective expression of a cultural fabric, and as arising through listening.

In *The Race of Sound* I propose that we can better understand voice by examining *listening* to voice, because (1) attitudes around the voice as essential, innate, and unmediated are deeply engrained; (2) voice is always already produced through social relationships, within which it is heard and reproduced; (3) critique on the symbolic level remains a critique of systems of thought, seemingly separate from the material and sonorous voice and the sensorium involved in experiencing that voice; (4) research on the quantifiable material level is seldom connected to the symbolic power dynamic, a dynamic acted out through listening (whether with human ears or machines); and finally (5) the limit to knowing voice lies in what we understand about listening to it; hence to know voice we must examine the listening practices that structure voice.

That which is manifested through listening is consequently measured and used to confirm ideas and ways of thinking and the ways in which they manifest. That is, voice has long been believed to be essential, innate, and unmediated, and consequently any meaning derived from it is unavailable for critical examination. Listening to listening, I propose, enables analysis of the voice—even as it is an essentialized object—and offers a space within which we may do more

than automatically re-essentialize it. In order to listen to listening, though, we must first observe listeners' naturalized behaviors and assumptions.

Methodology

Because my basic definition of voice is that it does not exist a priori, I developed a methodology that responds to this perspective. By listening to listening in order to become clearer about the auditory practices that structure voice, analyses that are intended to identify the most accurate figure of sound are no longer relevant. Listening to listening urgently calls for new analytical tools so as not to replicate essentialisms. Fundamentally, listening to listening also calls previous data into question and expands our notion of what can count as data. In short, it reorients the researcher. To that new landscape, critical performance practice applies an analysis that resists renaming, resists replacing one existing category with another. In laying bare the ways voices are produced and listened to, and in building the ability to note where naming takes place, critical performance practice can also resist another renaming. When we consider voice through critical performance practice, a measurement of the naturalization of voice is introduced, and this analytical framework allows us to step outside of and question the endless loop of essentializations and of increasingly nuanced categorizations. Thus we can see that both naming and resistance to naming vocal timbre are political. It is this process that I call the micropolitics of voice.

As mentioned, considerations of the thick vocal event have tended to fall into two camps, involving attention to either the measurable or the symbolic. I often compare the rich vocal event to the falling of a tree. In this scenario, material considerations encompass considerations of the atoms; the shift in the tree's position from vertical to horizontal; the actualization of some of the shifting air molecules into sounds; and how the ecosystem shifts from living to dead, with the tree becoming nutrition for insects, fungi, moss, and more. Symbolic considerations can include concern with the pitch of the falling tree's sound and the range of possible meanings and interpretations of that sound. In a vocal event such as vocal fry, a material position would concern itself with the function of the vocal folds in sonic production; a reading of a spectrogram that could, for example, consider the pattern regularity or irregularity; the impact on the vocal cords; and more.⁷² From the symbolic position, vocal fry would be considered in terms of its meaning and signaling, including its gendered and generational dimensions.⁷³

Aiding me in coming to *The Race of Sound's* conclusions was an experiential and experimental approach based on embodied knowledge of singing and

listening. I developed multiple experiments into the more streamlined *critical performance practice methodology* expounded earlier. The methodological tool of critical performance practice synthesizes and combines the book's correctives (voice is a collective, encultured performance, unfolding over time, and situated within a culture) with my performance-based tenets concerning voice.⁷⁴ Carrying out critical performance practice means testing and examining materially and performatively symbolic positions on the voice and tracking any insights, findings, and conclusions to the symbolic realm—even if a symbolic interpretation seems beyond evolutionary logic. Critical performance practice methodology offers a tool that allows tracking between, among, and within the measurable, symbolic, and articulated (or performative) modes.

How is the methodology of critical performance practice implemented, in practical terms? Critical performance practice applies narrative analysis to objects, timbres, and discourse based on listeners' observations. It aims to tell the story not of whether a voice is authentic or maintains fidelity to a given idea, but of how a given vocalizer is associated with a particular category, culturally created group, or genre. In this way critical performance practice methodology can address performances carried out through listening. Responding to the myth of voice as essence, critical performance practice re-creates the isolated and bifurcated listening that takes place in upholding such a myth. For example, by working through the triangulated and mutually influential areas of the material, the measurable, and the symbolic; by testing through vocal teaching and practice; and by assuming that vocal events are collective, encultured, and manifested through listening, we can test and debunk hypotheses (e.g., that there is an innate black vocal timbre). And by tracking how vibrating air molecules are eventually performed, experienced, and interpreted by a human being who is situated within a particular cultural context, we can learn more about the ways the symbolic is embedded within the material and the material is not disconnected from the symbolic.

Built on the assumption that voice is neither innate nor unmediated, critical performance practice methodology is able to test any meaning that arises through listening, as well as track measurable categories back to the concept(s) and relational dynamics that gave rise to them in the first place. Moreover this work does not stop with a critical diagnostic. By engaging critical performance practice we are able not only to identify, analyze, and offer critical positions but also to propose critical performative strategies that can contribute to untangling notions of voice as innate, essential, singular, defined statically, and a priori.

To summarize, racialized timbre exists as a species under the figure of sound and is used as proof of race because the figure of sound assumes that it indeed

identifies an example of a phenomenon that exists in nature—an essence. However, there are two incompatible phenomena. The first paradigm, the figure of sound, is a particular way of listening to things. When you listen to it in this way, it produces a restrictive outcome: it allows only certain namings and situations wherein multiple naming possibilities nonetheless exist and within which reaching a certain threshold moves us into a situation of contested namings. Race exists vocally for most people because they approach voice through the paradigm of the figure of sound, wherein voice can be named and the naming ritual is limited to the names into which a given responder to the acousmatic question is enculturated.

The route to a better name is to step away from the paradigm of the figure of sound altogether—and here we use the acousmatic question to propel this lateral movement. Applying the acousmatic question to listening to listening allows a more precise question to come into relief: Why do *I* hear this person in this way? In our focal shift from the singer to the listener, we not only move to a second paradigm, from essence to performance, but we can also hear the performance as the product of combined processes of entrainment, style, and technique.

At first the answers to the questions—the singers' very singing is in itself an answer to the question "Who is singing?" and to "Why do I hear this person in this way?"—look exactly the same. However, what establishes the difference between entrainment as understood through the figure of sound and entrainment as understood through style is *agency*. Through agency, a space for discernment is cleared and the trick of race is subverted. If, as Ta-Nehisi Coates notes, "race is the child of racism, not the father," *style* is singers' and listeners' selective use of a lifetime of formal and informal pedagogy, even if this education took place within a racist society. Specifically, as a community member and a scholar, in order to discern style and technique I "listen in detail" to how we listen to timbre.⁷⁵ The acousmatic question introduces a technique that can lead us to the revelation that not only is timbre not essential, but when the figure of sound paradigm collapses, something is there. What is revealed is entrainment and style and technique. We move from immersion within the figure of sound paradigm to what is exposed when peeling off its veil.

Style and technique, then, constitute an approach, an analytical mode, and a description of a condition. They constitute an *approach* when a given vocalizer plays with the material condition and feels compelled to name the practice and its product. Here technique refers to an inner vocal choreography, the actual movements the singer executes, and, more specifically, singers' employment of vocal technique to create the types of sounds they want to make. Style refers to

the overall stylization of the vocalization and to the elusive differentiation that, for example, causes two equal, perfectly presented renditions to be identified as a romantic versus a baroque rendition of a piece. Style and technique constitute an *analytical mode* when, on being confronted with the acousmatic condition, listeners listen within an inquisitive frame. They may ask themselves: What is the material play? What are the ranges of ways I could name these performative choices? Doing so, listeners recognize the material-symbolic play on the part of both vocalizer and listener. Style and technique constitute a *description of a condition* when we understand that voice is not identified a priori.

If the meaning of vocal timbre is explained entirely through the singer's execution of technique and communication of style, and listeners' interpretations of these aspects, a certain type of imbalance may be felt. Analysis of technique and style does not seem to have the capacity to account for the racism played out through the voice as a tool of systematic oppression. For example, racial mimicry from antebellum to present-day minstrelsy cannot be excused as merely trading in stylized vocal techniques. As Eric Lott has noted, an imbalance of power and the related inability of one side to negotiate create a situation of cultural theft and imperialism.⁷⁶ To me, the very structure of power within which entrainment and subsequent vocalization take place is the issue, not which exact timbres were unconsciously entrained and which were deliberately performed. The issue is the fact that a timbre performed by one person is understood as essence (e.g., a so-called white timbre performed by a person understood as white), while the same timbre performed by another person is understood as an imitation (e.g., a so-called white timbre performed by a person understood as African American). In other words, the same timbral performance is assigned a different meaning depending on the power structure within which the vocalizer and listener are situated. And entrainment as essence, versus as style and technique, is not defined by any external, measurable parameters.

However, I would argue that, by carefully attending to style and technique, as listeners (both as vocalizers and as listeners of other vocalizers) we can develop tools that will help us to distinguish between, for example, "racial mimicry" and "mimicry of racial mimicry," to draw on Daphne Brooks's and Anne Anlin Cheng's vocabulary.⁷⁷ Within the context of the United States, the former trades in what Radano has described as "animation" of blackness.⁷⁸ The latter, however, engages vocal technique and style in a recognition of complex cultural origins—where any recognized sonic markers have developed through a fraught power dynamic in an explicit process of creating difference. Indeed, to invoke Radano again, "thinking about black music this way, finally, helps us recognize how it emerged and evolved according to identifiable social processes

TABLE INTRO.1. Beliefs about the Material and Beliefs about What Is Named

	<i>Belief about the material</i>	<i>Belief about what is named</i>
Essence	Material is essential	Names essence
Entrained	Material is given/formed	Names the condition
Style/technique	Material is chosen/selected	Names the choice

along the symbolic boundaries that structured a profoundly racialized world.⁷⁹

The actualization of any given phase within the politics of listening, as shown in table Intro.1, depends entirely on how listeners heed the acousmatic question.

By questioning erroneous ideas about sound as essence—fixed entities that are possible to know—we may turn our attention to what I call sound as a vibrational practice, a practice that is materially dependent and contingent. When we bring discussion regarding the metaphysics of sound into the realm of people’s voices and identity politics, the parallel is this: I have identified that a given sound does not exist as such a priori, and hence cannot be identified as correct or incorrect. Thus sounds cannot be considered in terms of their relative fidelity or falseness (*falsk*, as “out of tune” is phrased in Norwegian). I complicate this basic observation about sound and extend the problematics to voice. By doing so, I dispel the notion that timbre is unique, is singular, and arises from the singer. Hence the notion of voice as essence is also dispelled. In that way, I can show what the naturalization of parameters and ways of measuring sound do to the more general experience of voice and listening. I can also foreground the explicit political and ethical dimension of such practices.

While much of my previous work on voice and race has carefully traced the entrainment of timbre, here I attempt to account for overlapping possibilities of entrainment used in the service of the figure of sound and as a resource in the expression of agency. Entrainment may take place within a constrained existence, such as the conditions of slavery or gender inequality, where the entrainment of the body is total. Entrainment can also take place within the choice to undertake a particular vocal practice, within a vocal practice’s resistance against hegemony, and in a play whose vocal roles may be forced upon a person, within which the vocalizer may potentially redefine the very definition of that vocal practice. That is, what we have referred to as vocal “mimicry of racial mimicry” may be connected to familiar positions, what Gayatri Spivak describes as “strategic essentialism” and Jose Muñoz considers “disidentifications.”⁸⁰ By closely examining entrainment’s complex condition, we may conceive of certain uses of entrained vocal features as *technique and style*.

By extracting the thread of *technique and style* from the totality of entrainment, I can turn the acousmatic question into a productive one, a method of critical practice.⁸¹ This practice does more than name the choice the singer makes. In listening, we can be more precise, zooming in to aspects of “strategic essentialism” or performative “misrepresentations.” Listening in to how we listen and how we respond to the acousmatic question *Who is this?* opens us to a type of micropolitics of listening, where the determination of race, essentialism, and naturalized concepts can be analyzed and contested by the listener as well as the vocalizer.

Thus, by practicing listening to listening, applying the critical performance practice analytical framework, and either flagging or performing the micropolitics of listening—that is, by hearing that there is nothing unique or natural about voice while taking steps to decipher its encultured process—*The Race of Sound* offers a significant challenge. I challenge both everyday listening to and indexing African American voices, and Cavarero’s theory of the “vocal ontology of uniqueness.”⁸² While Cavarero ties the sound of the voice to the uniqueness of the vocalizer’s body in order to offer a relational ontology and politics, I advance the micropolitics of listening, a process that does not assume any indexical connection between voices and bodies. In fact I began by noting that racialized listening does not necessarily stem from racism, and I can now show that, (most likely) inadvertently, Cavarero’s “vocal ontology of uniqueness” assumes the very same logic that supports racialized perception of vocal timbre.

Chapter Overview

In each of the chapters I deconstruct how a given voice is created through (1) projection by the listener rather than by the vocalizer alone. I show how and where that process actively and concretely affects the singer’s body or vocal presentation and detail how these concepts are (2) manifested in the singer, explaining (3) which symbolic position is projected over them. The breakdown of this process offers details of the politics that are carried out through vocal timbre. Additionally, within the chapters I discuss and offer examples of the different phases of the micropolitics of listening. The micropolitics of listening includes both reinscribing essence through entrainment and moving away from essence by harnessing entrainment toward self-determined style and technique.

I can also offer another way to think about this book: it argues that when listeners identify vocal performances as black, they are really offering a naturalized shorthand for deeply informed and considered cultural expressions that are always, in the here and now, actualized through vocal style and technique.

Each chapter discusses different aspects of these naturalization processes and the performances of their connotations. In other words, singing is always made up of entrainment, style, and technique but is generally mistaken for essence. And when voice is mistaken for essence, other aspects of the vocalizer that are believed to be essential are conflated with voice and are forced into a causal relationship, performing the erroneous logic that an essential black body gives rise to an essential black voice.

In chapter 1, “Formal and Informal Pedagogies,” I set out a case against vocal timbre’s ability to sound the essence of a person. The chapter presents an alternative explanation that vocal timbre is a result of the material condition of the voice as formed through continuous entrainment. Specifically I offer a consideration of voice as always already a continuous formal and informal pedagogical enterprise. Voice teachers’ projection of race and/or ethnicity as unmediated essence, which would be expressed in an authentic voice and would result from the training, is used as evidence of the singer belonging to a given ethnic community. This chapter’s analyses and concerns join the tradition of critical pedagogy. By considering the deep impact that voice teachers have on the formation of vocal timbre, I investigate the ways in which overall perceptions of race and ethnicity, paired with convictions about voice as an essential and unmediated expression of interiority, play decisive roles in vocal training. I argue that what takes place during formal voice lessons, where teachers’ sentiments about their students’ identities (including race and ethnicity) are present in vocal evaluations and pedagogical prescriptions, is similar to informal voice lessons. That is, by investigating a very controlled situation of entrainment within formal voice lessons, I make a broader argument about the ways everyday vocal training is manifest corporeally and vocally. As such, we understand that voices are equally entrained through repetitions called forth at teachers’ urgings or in seeking recognition within a classroom or broader social setting. That is, the material voice manifests cultural and societal values and dynamics of power in its habituation of ligaments, muscles, and tendons, and sounds timbral identity categories accordingly.

In chapter 2, “Phantom Genealogy,” I show how the values of a historical-political moment set the agenda for entrainment. I not only show that the voice is entrained but also discuss how stories about essence are constructed. Thus I argue that perception of timbre is shaped through narratives about the singer and the voice—specifically by which artistic, genre, repertoire, ethnic, or racial genealogies are drawn around the singer. By arranging the narrative arc within which a voice is heard, perceptions can be radically directed, opportunities presented for the singers can open and close, and the artist’s voice and career can be

shaped. For example, applying such a reading, we see that Marian Anderson was placed within the narrative genealogy constituted by the historical perception of slaves' voices, burlesque opera, and minstrel shows. Her career, her voice, and its perception were thus shaped by such complex filters and identity markers, including the notions of black voice and the suffering voice of the spiritual, that became so strongly associated with her that she was not allowed to move beyond their projection onto her voice. As such, this chapter traces the fraught history of African American singers in integrated U.S. opera to the mid-nineteenth and early twentieth centuries. While a singer can certainly relate a narrative through timbre alone, individual singers are heard in particular ways depending on the context within which they are placed. In these cases the racial imagination may not manifest by directly shaping flesh and its consequent vocal production. Rather it manifests through timbre that is experienced as racialized simply through the musical, genre, or repertoire genealogies connected to the voice. The ways in which we hear a particular voice are drawn as networks among people, genres, repertoires, and racialized conceptions of music, and a singer's vocal timbre is directed through that filter.

In chapter 3, "Familiarity as Strangeness," I show that, although we are all subject to vocal entrainment, it is possible to use it as the basis of what I call "style and technique." Style and technique means that the singer is making choices in regard to his or her vocal sound and expression and has honed his or her vocal technique to reflect these choices. I also show that, ultimately, the listener is integral to recognition of the singer's voice as essence. Specifically this chapter examines timbre in regard to particular vocal pitch ranges and their relationship to gender. Gender is not primarily cued through pitch, as is commonly assumed; timbre is a stronger cue to gender. Jimmy Scott, who was born with Kallmann syndrome, which affects male hormonal levels and prevents the onset of puberty, is commonly believed to signal gender ambiguity through vocal tessitura. By considering Scott in relation to comparable black male singers, I show that his vocal range was also occupied by many of his peers whose voices were not read in the same gender-ambiguous ways. I posit that the gender ambiguity through which Scott is perceived is due to timbre, particularly through his failure to exhibit falsetto in the higher register. In other words, a singer can sing in a higher vocal register and signal (black) masculinity by exhibiting the otherness of that vocal register through falsetto.⁸³ In contrast, Scott sang with great timbral integration, sounding no timbral break into falsetto. Thus while Scott himself insisted on his heterosexual male identity, his producers and audiences manifested ambiguity toward his gender and state of being through imagery, descriptions, and castings. My discussion shows that listeners under-

take extreme measures when a voice does not fit within preconceived, culturally dependent notions—such as Scott’s voice, which challenged the popular image of masculine blackness.

The stages of the politics of listening are also reflected in the digital realm. In chapter 4, “Race as Zeros and Ones,” I focus on the ways audiences are integral to the process of creating the singer through digital entrainment—the fashioning of sound and image using digital tools—which is produced on the basis of assumed essence. Here I revisit the vocal synthesis software Vocaloid, which I first critiqued in 2008 for producing and reinforcing racial musical and vocal stereotypes. Surprisingly, over the past few years music producers and online user communities (with significant overlap with the anime community) have refused the racialized presentation of the vocal synthesis software, imposing their own characters over the voices. The Vocaloid vocal synthesis system and the artistic activities around it provide a striking example of how voices are manifested through a combination of sound, music, genre, and visual and textual (re-)presentation. Zero-G and other companies that work with the Vocaloid system eventually listened to their users’ application of the software and their full artistic creation of characters that subverted the companies’ original bid. Zero-G et al. have responded in kind, working with users in creative competitions and crowdsourcing the imagery, names, and textual descriptions of newly issued synthetic voices.

Chapter 5, “Bifurcated Listening,” showcases audiences’ oscillation between aligning the performer with style and technique and aligning him or her with essence. It is in this unsettled space that we can understand the singer as having agency. In examining the concrete tools of singing, this chapter reveals a new avenue in the reading and analysis of voices. I tackle how the reception of vocal icons such as Billie Holiday complicates and contradicts the simultaneously applied practices. On the one hand, Holiday’s voice is deemed unequalled in its power due to the authenticity it communicates, which is believed to be beyond the performer’s control. On the other hand, Holiday’s distinctive voice is a prized sound for imitation. And when that imitation is successful, the fact that Holiday’s life experience overlays that of the artist who erases herself while channeling the grain of her voice poses multiple intriguing questions, making the vocal moment even more poignant. Observing how the position that voice is essential, unmediated expression is upheld while recognizing *vocal imitation*, we can see that such attention requires a rearrangement of listening into a bifurcated perception that can simultaneously hold the “essential” voice of one singer and the recognizable voice of another in a contradictory grasp. In other

words, the recognition of ventriloquism counters the premise that an inimitable voice has been imitated.

The sixth and final chapter, “Widening Rings of Being,” calls for the study of voice as style and technique. By developing detailed knowledge about the arbitrary and adoptable patterning of voices, we can grasp the institutionalization and internalization of race that takes place through daily vocal and listening practices. I posit that race and ethnicity are merely aspects of a continuous field of style and technique that are distinguished from its limitless potentiality only through naming. In other words, *The Race of Sound* suggests that in order to more fully understand the operationalization of race through vocal timbre, we must turn our inquiry to the listener who materializes his or her own values when naming voice. The chapter and book close by posing an open-ended question: What protective mechanism does the naming of voice serve for the listener? What would listeners have to confront within themselves if they were not able to rely on the mechanism of measuring voice?

Notes

INTRODUCTION

1. Schaeffer, *Traité des Objets Musicaux*, 91. For a discussion of Schaeffer and the acousmatic discussion, see Kane, “*L’Objet Sonore Maintenant*,” 3.
2. Francis Barraud, *His Master’s Voice*, 1900, oil on canvas, EMI Music’s Gloucester Place, London.
3. Kane, *Sound Unseen*, 5–6.
4. Mladen Dolar and Slavoj Žižek consider the acousmatic condition specifically in regard to the acousmatic voice. As Brian Kane summarizes, Dolar and Žižek investigate “acousmatic voice as a form of social interpellation” and they “explicitly describe the Lacanian ‘object voice’ as acousmatic” (*Sound Unseen*, 6, 11). In fact Kane argues “that Dolar reifies the acousmaticity of the voice, making it into a permanent condition, and that his treatment of the acousmatic voice is phantasmagoric, masking the technique at play in the psychoanalytic session” (11). In contrast, as I exemplify throughout this book, the acousmatic *question* presents an opportunity to undo reification.
5. For recent summaries and overviews of the assumed primacy of the voice as interiority within Western thought, see Konstantinos Thomaidos, “The Re-vocalization of Logos? Thinking, Doing and Disseminating Voice,” in Thomaidos and Macpherson, *Voice Studies*, 10–22; Weidman, “Anthropology and Voice” and “Voice.”
6. Joanna Demers, email correspondence with the author, August 10, 2015.
7. Cavarero, *For More Than One Voice*, 5.
8. Cavarero, *For More Than One Voice*, 7.
9. Butler, *The Ancient Phonograph*, 18.
10. Butler, *The Ancient Phonograph*, 18. See especially the introductory chapter and chapter 5.
11. For an overview of this issue, see Smalls, “Linguistic Profiling and the Law.”
12. Early on, I took a seminar with George Lipsitz on race and popular culture, and I worked with George Lewis on issues of race in music generally, and in improvisation specifically. I also worked with Jann Pasler and Anne Seshadri on postcolonial theory and with Deborah Wong on the performativity of race in the United States. This eclectic training oriented my approach to scholarship.

13. These gaps in understanding of vocal production, product, and perception, often expressed as ambiguities, are found not only within a critical humanistic framework. Kreiman et al. noted as late as 2014 that “two important questions about voice remain unanswered: When voice quality changes, what physiological alteration caused this change, and if a change to the voice production system occurs, what change in perceived quality can be expected?” (“Toward a Unified Theory of Voice Production and Perception,” 1).

14. See, for example, Kreiman et al., “Toward a Unified Theory of Voice Production and Perception.”

15. “Color” was also a medieval Latin term used between the mid-thirteenth and mid-fifteenth centuries that pointed to repetitions as embellishments.

16. American National Standards Institute, *Acoustical Terminology*, 45, and Helmholtz, *On the Sensations of Tone*, both cited in Kreiman and Sidtis, *Foundations of Voice Studies*, 7.

17. Similarly, working within linguistic anthropology, Nicholas Harkness has dealt with the tension of the “ongoing intersection between the phonic production and organization of sound on the one hand, and the sonic uptake and categorization of sound in the world on the other.” He writes, “Treating the voice as a phonosonic nexus has allowed me to explore how vocalization is situated at the intersection of multiple frameworks of meaningfulness and distinction as a form of culturally regimented semiotic engagement with and inhabitation of social worlds” (“Anthropology at the Phonosonic Nexus,” 5).

18. Kreiman et al., “Toward a Unified Theory of Voice Production and Perception,” 2. They go on to explain, “A significant body of behavioral and neuropsychological data . . . shows that listeners perceive voice quality as an integral pattern, rather than as the sum of a number of separate features” (2).

19. Kreiman and Sidtis, *Foundations of Voice Studies*, 113.

20. For example, countertenor Patrick Dailey speaks in a normative masculine voice but sings in falsetto in a manner that does not signal the female register, as many drag performers’ voices do. For more on this, see chapter 3.

21. Lipsitz, *The Possessive Investment in Whiteness*, has served as a major text for me while addressing homeownership, education politics, inheritance patterns, and federal policy.

22. Obadike, “Low Fidelity,” 135–37.

23. Meyer and Land, “Threshold Concepts and Troublesome Knowledge,” 3.

24. Adler-Kassner and Wardle, *Naming What We Know*.

25. Meyer and Land, “Threshold Concepts and Troublesome Knowledge,” 3.

26. Relatedly, in an article addressing the perception of female voices in leadership positions, Jordan Kisner writes that Michelle Obama has shared that, as a young woman, she was taunted for “talking like a white girl,” only to be criticized later for sounding “too loud, or too angry, or too emasculating” during Barack Obama’s presidential campaign. Audie Cornish, an NPR host, is “frequently accused of ‘code-switching’ to sound more white for public-radio audiences,” Kisner reports. Cornish observes that she speaks with the same voice whether she is on or off the air. Jordan Kisner, “Can a Wom-

an's Voice Ever Be Right?," *The Cut*, accessed August 1, 2016, <https://www.thecut.com/2016/07/female-voice-anxiety-c-v-r.html#>.

27. Although, in reality, pitch also contributes to the timbral makeup, this is a frequent definition. What this definition *does capture* is that if two instruments or sound sources play the same pitch and duration, what distinguishes them from one another is timbre.

28. While it is impossible to entirely separate timbre from a statement's pitch, duration, and verbal content, one way we know that timbre influences our perceptions independently of these categories of communication is that, if a verbal statement conveys one message but its tone communicates another, adult listeners will tend to believe the tone of voice rather than the words. Thus timbre can contribute to listeners' consideration of identity, emotional state, truthfulness, age, and vocal genre, among other aspects of vocal expression. For the complexity and the enormous amount of literature addressing the recognition of identity, personality, emotion, age, and physical characteristics based on vocalizing, see Kreiman and Sidtis, *Foundations of Voice Studies*, 110–89, 302–98. For recognition of vocal (music) genres based on timbre, see Huron, *Sweet Anticipation*.

29. Such an argument has been made possible by the work of scholars such as Stuart Hall. "Cultural identity," he explains, is not "a fixed essence . . . but a *positioning*," and race is a matter of "becoming" ("Cultural Identity and Diaspora," 226, 225). Thank you to Shana Redmond, who reminded me about this foundational text.

30. It is noteworthy that voice as a signifier of uniqueness is set within an intensely Western metaphysics.

31. Farah Jasmine Griffin also explains recognizable vocal performances, such as "the black woman's voice," in terms of cultural style: "I do not mean the voice that comes out every time any black woman anywhere opens her mouth to sing. Nor do I want to imply that there is something in the structure of the black diaphragm, neck, throat, and tongue, teeth, or mouth that contributes to a certain vocalization. No, I don't mean a black voice as markedly different as skin color or texture of hair. *Instead I am talking of a cultural style*. A particularly New World style with roots in West Africa. . . . In the United States it is a style transformed, nurtured, and developed in the tradition of the spirituals, field hollers, and work songs and sustained in black church and/or blues and jazz venues" ("When Malindy Sings," 105–6, italics mine). While not using the terminology "style and technique," Jason King also addresses performance as authorship in his discussion of Roberta Flack. King writes, "If we consider the role of energy as a defining factor in the production and reception of music, Flack emerges as an auteur precisely because of her ability to use her voice and complementary musical skills to traffic in 'vibe'" ("The Sound of Velvet Melting," 172–73).

32. Baldwin, *The Devil Finds Work*, 6.

33. To date, no work has been carried out regarding a given voice's plasticity and possible vocal range and the actual amount that is used. One ongoing research project studies vocal patterns within everyday use. See Kreiman et al., "The Relationship between Acoustic and Perceived Interspeaker Variability in Voice Quality."

34. Denes and Pinson, *The Speech Chain*, 5.

35. See Kreiman et al., “Toward a Unified Theory of Voice Production and Perception,” 3.
36. This position resonates with Alva Noë’s argument that “sound is not a physical phenomenon but a perceptual entity, arising within the mind.” If this were not the case, “then variation between listeners’ experiences . . . could not be satisfactorily explained” (*Action in Perception*, 112).
37. Marcel Mauss, “Body Techniques,” in *Sociology and Psychology*, 104, 121.
38. Woodson, *The Mis-Education of the Negro*; Foucault, *Discipline and Punish*.
39. There are recognizable affinities between this position and that of actor network theory’s material-symbolic dynamic recognition. I address some of the relations between the two in chapter 2, on the discursive networks formed around Marian Anderson.
40. This phrasing, which I found very useful, comes from one of the anonymous reader reports, conveyed in an email from Ken Wissoker, September 19, 2017.
41. See the collaborative project I direct, Keys to Voice Studies, <http://keystovoice.cdh.ucla.edu/>, as an example of putting different scholarly areas in conversation.
42. For an overview on work and views on the voice surviving from Occidental ancient times, see Shane Butler, “What Was the Voice?,” in Eidsheim and Meizel, *The Oxford Handbook of Voice Studies*; Butler, *The Ancient Phonograph*.
43. Thank you to Monica Chieffo for the stimulating conversation (June 11, 2015) that got me thinking along these lines.
44. Beahrs, “Post-Soviet Tuvan Throat-Singing (*Xöömei*) and the Circulation of Nomadic Sensibility”; Butler, *The Ancient Phonograph*; Daughtry, “Afterword”; Fales, “The Paradox of Timbre”; Kessler, “Anachronism Effects,” 26–60; Kinney, “The Resonance of Brando’s Voice”; Kreiman and Sidtis, *Foundations of Voice Studies*; Levin and Süzükei, *Where Rivers and Mountains Sing*; Marshall, “Crippled Speech”; Norton, *Singing and Wellbeing*; Ochoa Gautier, *Aurality*; Rahaim, *Musicking Bodies*; Schlichter, “Do Voices Matter?”; Weidman, *Singing the Classical, Voicing the Modern*.
45. *The Family Group of the Katarrhinen (Die Familiegruppe der Katarrhinen)*, artist unknown, in Haeckel, *Die Natürliche Schöpfungsgeschichte*; Nott and Gliddon, *Types of Mankind*, 458.
46. For a detailed discussion of the relationship between anatomy, vocal pedagogy, and musical abilities, see Nina Sun Eidsheim, “Race and the Aesthetics of Vocal Timbre,” in Bloechl et al., *Rethinking Difference in Music Scholarship*, 338–65.
47. Du Bois, *The Souls of Black Folk*, 2.
48. I am here echoing Du Bois’s influential title, *The Souls of Black Folk*.
49. Aristotle, *On the Soul* 2.8.420b, in *The Complete Works*.
50. Cruz, *Culture on the Margins*, 43.
51. In “The Secret Animation of Black Music,” Radano provides the following quote: “Despite their kinship with hogs in nature and habit, the Negro has music in his soul” (anonymous Georgia physician, 1860). I include the quote here to illustrate the connection between a concern with the body in its material, concrete form and a focus on the sound of the voice and its assessment.
52. “The social life of things” is Arjun Appadurai’s well-known phrase, and Radano

evokes it when describing the ways in which “the abstract labor behind the record’s production in world markets gives way to the life of exchange and re-imagined uses” (“The Secret Animation”).

53. Considering Charles Sanders Peirce’s model of the sign, the signified, and the active role of the interpretant—the listener—we can synthesize the takeaways from this book’s case studies into the following patterns. Aspects of the voice that were framed or understood as material and “objective” were used to argue for a particular meaning. These symbolic dimensions directed daily practice, and hence shaped the material. In other words, a composite meaning directly affected the range of possibilities for the vocal body, its daily habituation, and the resulting material vocal body. This circularity acted as a self-fulfilling prophecy around various (often unarticulated) focal points. The very focal point or meaning that was reinforced triggered the practice. In other words, if sonic fidelity with overall presentation (visual, identity expressed, etc.) is not experienced by the listener and interpretant, we see that the interpretant actively arranges various aspects of the thick vocal event to create coherence according to a given cultural and societal frame.

54. Davis, *Blues Legacies and Black Feminism*, 163, 165, 163.

55. Quoted in Gillespie, *Film Blackness*, 6; Stuart Hall, “New Ethnicities,” in *Stuart Hall*, 443.

56. Gillespie, *Film Blackness*, 158, 155, 6. This argument resonates with those of other scholars. See, for example, Johnson, “Black”; Wright, *Physics of Blackness*. Thank you to Shana Redmond for pointing me to these works.

57. Iyer, “5 Expansive Wadada Leo Smith Recordings.” The word *ankbrasmation* combines the Egyptian word for “vital life force” (*ankh*), the Amharic word for “head” or “father” (*ras*), and a word for “mother” (*ma*).

58. All the quotes in this paragraph can be found in West, “What I Am Interested in Is Sound.”

59. Lordi writes this about O’Meally and Griffin, and I consider her work to offer a contribution toward the same end (*Black Resonance*, 9).

60. The sixty-year timeframe spans Marian Anderson’s 1955 Metropolitan Opera debut to 2015.

61. Others have addressed the political aspect of listening, including Bickford, *The Dissonance of Democracy*; Bretherton, *Christianity and Contemporary Politics*; Cusick, “You Are in a Place That Is Out of the World”; Dobson, *Listening for Democracy*; Goodman, *Sonic Warfare*; Lacey, *Listening Publics*; McDermott, and Bird, *Beyond the Silence*; Muers, *Keeping God’s Silence*; Schmidt, *Hearing Things*.

62. I return to a more in-depth discussion of Peirce in chapter 1.

63. Sterne, *The Audible Past*, 137–78; Du Bois, *The Souls of Black Folk*, 2.

64. Butler, *Gender Trouble* and *Bodies That Matter*; Mauss, “Body Techniques,” 104, 121; Foucault, *Discipline and Punish*; Bruner, “Narrative Construction of Reality”; Haraway, “Situated Knowledge”; Schechner, *Performance Studies*.

65. Carpenter, *Coloring Whiteness*, 195.

66. Moten, *In the Break*.

67. Brooks, “All That You Can’t Leave Behind”; Brooks, “Bring the Pain”; Brooks,

“Nina Simone’s Triple Play”; Stoever, *The Sonic Color Line*; Wald, *It’s Been Beautiful*. Echoing Moten (*In the Break*), while we share the approach of listening “in the break,” my work diverges from theirs (including Moten’s) in that I do not believe I can convey a more fine-grained story beyond tracing sounds and actions to their intermaterial vibrational node or performance and the perception and reception of that node, and observing that meaning is drawn. I also note that this meaning is recirculated into intermaterial vibrational practices but do my best to resist the urge to add another version to the mix.

68. Kun, *Audiotopia*, 25.

69. Du Bois, *The Souls of Black Folk*, 2.

70. As I do not parse the historically situated meaning of F-sharp, I also do not carry out historiographic readings of terms and concepts such as “black voice” and “white voice.” This book addresses the contextual dependency of meaning: as given pitches do not hold the same meaning across historical times and contexts, coding held within descriptions of voices are not static. While some readers will certainly think a book on voice and race should provide a detailed breakdown of the historic specificity of a vocal category’s coding, and I agree this is very necessary, I see as my main task in this particular book to establish the broader concept that people listen to vocal timbre according to racial categories.

71. This resembles Peter Szendy’s chapter “Listening (to Listening): The Making of the Modern Ear,” in *Listen*, 99–128.

72. Vocal fry goes under a number of other terms, including pulse register, laryngealization, pulse phonation, creak, popcorning, glottal fry, glottal rattle, glottal scrape, strohbass, irregular phonation, and evaluations such as an “epidemiological prevalence of vocal fry in young speakers” and vocal fry’s “potential hazards” to vocal health (Wolk et al., “Habitual Use of Vocal Fry in Young Adult Female Speakers,” 1115). See also, for example, Blomgren et al., “Acoustic, Aerodynamic, Physiologic, and Perceptual Properties of Modal and Vocal Fry Registers”; Hollien et al., “On the Nature of Vocal Fry.”

73. In the symbolic position, vocal fry would be considered in terms of its meaning and signaling, including its gendered and generational dimensions.

74. Within the disciplinary tradition of theater, Konstantinos Thomaidos probes “the role of voice in contemporary practice as research (PaR) in the performing arts” (“The Re-vocalization of Logos?,” 10).

75. I echo Alexandra T. Vazquez’s phrase from the title of her insightful book *Listening in Detail*.

76. Lott, *Love and Theft*.

77. Brooks, ““This Voice Which Is Not One,”” 38.

78. Radano, “The Sound of Racial Feeling,” 126.

79. Radano, “The Sound of Racial Feeling,” 129.

80. Spivak and Rooney, “In a Word”; Muñoz, *Disidentifications*.

81. I echo Shana Redmond here. Her opening line in *Anthem* is “Music is a method.”

82. Cavarero, *For More Than One Voice*.

83. See Alisha Lola Jones, “Singing High: Countertenors, Treble Timbre, and Transcendence,” in Eidsheim and Meizel, *Oxford Handbook of Voice Studies*.