

**SURVIVAL TECHNOLOGIES:
AFRICAN-AMERICAN MUSICAL MODERNISMS**

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TABLE OF CONTENTS

ABSTRACT	4
INTRODUCTION	6
CHAPTER 1. MODERNISM AMPLIFIED: LANGSTON HUGHES, RICHARD WRIGHT, AND MUDDY WATERS PLAY THE BLUES	39
“I heard a Negro play”: The “High” and “Low” Modernisms of the Racial Mountain.....	41
“The tension of our brittle lives”: Wright’s Uneasy Relation to Modernity and Folk Culture	50
“Voices are speaking”: Richard Wright’s oral strategies	55
“Our ‘spirituals’ of the city pavements”: Richard Wright’s blues.....	60
Muddy Waters’ “Screaming Blues”.....	66
CHAPTER 2. MODERNISM SYNTHESIZED: HERBIE HANCOCK’S <i>SEXTANT</i> AND THE CONVERGENCE OF JAZZ AND ELECTRONICS	84
Recording Technology and the Documentary Impulse	88
Hancock and the Musical “Techno-Dialogic”	97
Repetition as Resistance: Loops and Politics and Stuff.....	105
The Significance of Signifyin(g)	120
CHAPTER 3. MODERNISM EXEMPLIFIED: T.S. ELIOT, WYNTON MARSALIS, AND DIGITAL SAMPLING	127
Murray and Marsalis	130
The Majesty of the Blues	134
“The Present Moment of the Past”.....	139
CHAPTER 4. MODERNISM QUANTIZED: DETROIT’S TECHNO REBELS	175
Early Detroit Techno—The First Wave.....	183
Transnational Techno—The Second Wave	203
Conclusion—The Third Wave	236
WORKS CITED	239

ABSTRACT

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Title: Survival Technologies: African-American Musical Modernisms

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This dissertation focuses on a variety of African-American musical expressions of the later twentieth century, situating them along a continuum of musical modernism that constitute various modes of survival technology, inextricably connected to the cultures from which they arise. My application of the term *survival technologies* denotes two primary aspects: musical “technologies” in the sense that the term is commonly understood to refer to the construction of musical instruments and recording instruments both old and new, but also “technologies” in the sense of the term employed by Murray and Dinerstein: as modes of knowledge and strategies of resistance. My use of *survival technologies* as the conceptual underpinning that unifies my research entails bringing these two aspects together, and the two senses of the term converge especially when African-American musicians use musical instruments and tools in new, unexpected ways, as frequently happens throughout the history of African-American music in the twentieth century. I analyze how African-American musicians’ use of electric guitars, amplification, synthesizers, analog sequencers, studio effects, turntables, samplers, drum machines, and digital audio workstations constitute a uniquely African-American mode of musical knowledge and practice that is improvisational, heuristic, non-linear, and constantly aware of the past while simultaneously re-imagining the future. I link this analysis to works by twentieth-century literary authors and theorists in order to examine how African-American musicians’ *modus operandi*, varied and distinct as they are, are nonetheless consistent not only

across divergent musical styles and eras, but also function inseparably from other arts and broader cultural contexts.

Throughout this project, written words interact with musical recordings. I strive to “hear” written texts (literature and literary criticism) and to “read” sound texts (recordings), highlighting the resonances between “literary texts” and “sound texts.” The Chicago blues style of Muddy Waters interacts with Richard Wright’s literary documentary of life on Chicago’s South Side, *12 Million Black Voices*, to highlight how old rural black vernacular “folk” expressions could serve as the basis of a new urban African-American modernism. Likewise, the electronic experiments of Herbie Hancock, which innovatively combined European modes of music creation and African diasporic musical concepts, interacts with Henry Louis Gates Jr.’s *The Signifying Monkey* to highlight how African-American modernism entails Signifyin(g) on European precedents as well as precedents in African-American art. Additionally, the historically informed jazz of Wynton Marsalis interacts with T. S. Eliot’s ideas of tradition in order to highlight how artistic conceptions of the past inform African-American modernist expressions today, such as jazz and sampled electronic music. Finally, Detroit techno music interacts with the musical and cultural criticism of Theodor Adorno to highlight how African-American modernism uses survival technologies to construct visions of the future that resist what Adorno called the “culture industry.”

INTRODUCTION

At the Saturday Night Function primary emphasis is placed upon aesthetics not ethics. What is good in such circumstances is the beautiful, without which there can be no good time. What counts is elegance (not only in the music and the dance movement but in the survival technology inherent in the underlying ritual as well).

—Albert Murray, *Stomping the Blues*

Albert Murray first used the term “survival technology” in 1976, in his seminal work on African-American musical aesthetics, *Stomping the Blues*. In linking African-American music and dance with rituals such as the Saturday Night Function and the Sunday Morning Service, Murray emphasized the inextricable links between artistic expressions and the cultural community contexts that give them meaning. It is these links that constitute survival technologies, where in the face of institutionalized racism and other social injustices and inequities of American society, art and its associated rituals became for African-Americans an essential community-building construct, a matter of life and death. Murray would continue to use the term in passing throughout the rest of his life, but in 2003 Joel Dinerstein adopted “survival technology” as a key conceptual underpinning of *Swinging the Machine*, his study of African-American modernity during the 1930s and 1940s. Dinerstein elaborates and builds upon Murray’s term:

Survival technology consists of public rituals of music, dance, storytelling, and sermonizing that create a forum for existential affirmation through physicality, spirituality, joy, and sexuality—“somebodiness” as some African American preachers call it—against the dominant society’s attempts to eviscerate one’s individuality and cultural heritage. . . . African American musicians and dancers

could not revert to any specific folk tradition since there was no cohesive African past to hang onto; they played and danced the tempo of the time, and created the future in (musical) time and (physical) space. (22–23).

My project focuses on a variety of African-American musical expressions of the later twentieth century, situating them along a continuum of musical modernism that constitute various modes of survival technology, inextricably connected to the cultures from which they arise. My application of the term *survival technologies* thus denotes two primary aspects: musical “technologies” in the sense that is commonly understood to refer to the construction of musical instruments and recording instruments, both old and new, but also “technologies” in the sense of the term employed by Murray and Dinerstein: as modes of knowledge and strategies of resistance. My use of the term *survival technologies* as the conceptual underpinning that unifies the following chapters entails bringing these two aspects together, and the two senses of the term converge especially when African-American musicians use musical instruments and tools in new, unexpected ways, as frequently happens throughout the history of African-American music in the twentieth century. I analyze how African-American musicians’ use of electric guitars, amplification, synthesizers, analog sequencers, studio effects, turntables, samplers, drum machines, and digital audio workstations constitute a uniquely African-American mode of musical knowledge and practice that is improvisational, heuristic, non-linear, and constantly aware of the past while simultaneously re-imagining the future. I link this analysis to works by twentieth-century literary authors and theorists in order to examine how African-American musicians’ *modus operandi*, varied and distinct as they are, are nonetheless consistent not only across divergent musical styles and eras, but also function inseparably from other arts and broader cultural contexts.

Throughout this project, written words interact with musical recordings, highlighting the resonances between “literary texts” and “sound texts.” The Chicago blues style of Muddy Waters interacts with Richard Wright’s literary documentary of life on Chicago’s South Side, *12 Million Black Voices*, to highlight how old rural black vernacular “folk” expressions could serve as the basis of a new urban African-American modernism. Likewise, the electronic experiments of Herbie Hancock, which innovatively combined European modes of music creation and African diasporic musical concepts, interacts with Henry Louis Gates Jr.’s *The Signifying Monkey* to highlight how African-American modernism entails Signifyin(g) on European precedents as well as precedents in African-American art. Additionally, the historically informed jazz of Wynton Marsalis interacts with T. S. Eliot’s ideas of tradition in order to highlight how artistic conceptions of the past inform African-American modernist expressions today, such as jazz and sampled electronic music. Finally, Detroit techno music interacts with the musical and cultural criticism of Theodor Adorno to highlight how African-American modernism uses survival technologies to construct visions of the future that resist what Adorno called the “culture industry.”

I strive to “hear” written texts (literature and literary criticism) and to “read” sound texts (recordings). The goal is that the two modes of artistic expression may explain and resonate with each other. For instance, I “read” Chicago blues recordings as “community texts,” which, like Richard Wright’s *12 Million Black Voices*, adopts and adapts the rhetorical strategies of preacherly sermons, constructed with a specific community of participants in mind, and makes use of shared cultural knowledge with those participants. Similarly, I “read” Herbie Hancock’s *Sextant* album as an aural demonstration of Henry Louis Gates Jr.’s concept of Signifyin(g), in its various guises. Likewise I “hear” TS Eliot’s writing as a musical amalgamation every bit as

informed by the past as Wynton Marsalis's genre-defying jazz, and as rich in allusions as the best work of digital sampling musicians like Double Dee & Steinski. And I also "hear" the aphorisms of Theodor Adorno's *Minima Moralia* as a proto-techno snarl of defiance against the culture industry, just as I "read" the music of Detroit's Underground Resistance.

In other words, this is a decidedly interdisciplinary project, and the interdisciplinary perspective of American studies is central to my research on African-American musics. The theories articulated by American studies scholars such as George Lipsitz, Houston A. Baker, Jr., and Tara Rodgers—who have all advocated interdisciplinary approaches to understanding music—provide a conceptual framework for me to bring together research and insights from the fields of music, cultural studies, African-American studies, sound studies, political science, literary criticism, and technology studies. I see this approach as a necessary corrective to what Fischlin, Heble and Lipsitz describe as "the silo mentality of academic disciplines . . . which resists or prohibits thinking of music as a form of social practice with wider implications and that imagines rights struggles as being disaffiliated from creative forms of expression" (xxi).

A key reason such an interdisciplinary approach to African-American modernist music is important is that it uncovers aspects of the music that might be missed or would otherwise not be sufficiently explored within the confines of musicology or any other one discipline alone. For instance, several preceding writers (mostly journalists, for techno music has received scant scholarly attention) have noted that techno music was produced, distributed, and received across international boundaries, mainly occurring on a cultural nexus between Detroit, Michigan and Northern Europe, chiefly the UK, Belgium, the Netherlands, and Germany, particularly Berlin. But most commentary has simply noted this phenomenon and moved on, without trying to tease out its dynamics: why and how did this occur, and what makes techno's story different from

other African-American musical genres' reception in these cultures? As my fourth chapter aims to show, musical theories combined with theories of transnationalism from cultural studies, and foregrounding their interapplication to Detroit techno enables an understanding of how in the development of this music traditional notions of "local," "national," and "international" spaces and identities were subsumed and reconceptualized through Detroit musicians' resisting the national narrative of their marginalization in neoliberal American society, recasting their role as non-elite subjects into self-defined identities creating transnational Afrofuturist art that was simultaneously of one specific place, Detroit, and of the entire world. Only through such an interdisciplinary transnational framework do we have any chance of coherently answering Paul Gilroy's provocative question posed in *The Black Atlantic*: "How are we to think critically about artistic products and aesthetic codes which, though they may be traceable back to one distinct location, have been changed . . . by their displacement, relocation, or dissemination through networks of communication and cultural exchange?" (80).

There are several key themes running throughout my project. An important one is *time*. African-American musical modernism highlights distinctive ways of understanding time, and each of the chapters that follow mark particular ways that African-American musicians have understood time. In Chapter 1, feudal senses of time—which are circular, having as their reference seasons and celestial objects, in which time is fluid and unfixed and which dominated the rural agrarian society in which African Americans lived in the South—transforms to a modern sense of time—which is linear, based on a "universal standard time," in which time is measured in discrete, unvarying units—that is dominant in the industrialized cities of the North. Chapter 1 shows how this transformation, which Wright described in *12 Million Black Voices*, is made audible in the recordings that document Muddy Waters' change from a rural Mississippi

Delta blues singer to an artist of electric blues modernism. In Chapter 2, synthesized musical sequences are shown to represent conceptions of time as “loops”—a sense of time that is rooted in traditional West African and African-American musics but realized by Hancock through cutting-edge musical technologies—that is, as technological but non-teleological “spirals” of time. In Chapter 3, time is rooted in Eliot’s and Marsalis’s a-temporal understanding of the artistic past, which is non-progressive, and manifested in their art and in the practices of musicians engaged in digital sampling as a mode of Signifyin(g) on the past: what Henry Louis Gates Jr. calls “repetition with a difference.” And Chapter 4 shows how, in the hands of Detroit techno musicians, time becomes quantized, as in their creation of robotic, automated, trance-inducing rhythms of mechanized beats produced by drum machines such as the Roland TR-808.

Another important theme, of course, is *race*. My goal has been to link disparate styles of African-American musics, discussing Delta blues, Chicago blues, folk blues, early jazz, swing, bebop, free jazz, hard bop, modal jazz, free bop, neo-traditional jazz, jazz-rock fusion, funk, rhythm and blues, hip-hop, drum & bass, trip-hop, glitch, Chicago house, electro, and techno—teasing out what Amiri Baraka has called the “changing same”—without veering into essentialism or ascribing “authenticity” to certain African-American musical practices and identities.

Today’s scholars examining African-American musics exhibit a wide range of attitudes toward race, but which I see as falling into two distinct but sometimes overlapping groups. The first group—in which I would place scholars such as Fred Moten, Amiri Baraka, and Greg Tate—emphasize essential continuities and commonalities that can be heard in various styles throughout the history of African-American music. This stance is most strongly articulated by Fred Moten, who asserts that the “freedom drive” (resistance to objectification) not only is “the

essence of black performance” but is itself the very “essence of blackness” (16), calling for a linking of “identity and essence” (255). Fred Moten sees some musical styles, such as the avant-garde, as being incompatible with “blackness,” claiming, for instance, that the avant-garde movement has harbored a “desire for bohemian space,” entailing the displacement of non-white populations (40). A valid point, but beyond considerations of material living conditions, Moten further sees the musical avant-garde as an inherently racist movement, amounting to “fetishistic white hipsterism . . . whose seriousness requires either an active forgetting of black performances or a relegation of them to mere source material” (149). If Moten sees musical experimentalism and the avant-garde as a form of conceptual gentrification, then he does not resist it, rather he concedes the intellectual space of the avant-garde as a white realm which exists apart from the conceptual territory occupied by those musicians who express the “essence of blackness.”

In contrast, George Lewis sees a central mission of his own scholarship as working to challenge such attitudes: “Part of my task in in this book . . . is to bring to the surface the strategies that have been developed to discursively disconnect African American artists from any notion of experimentalism or the avant-garde” (*A Power Stronger than Itself* xxxii). Going further, Lewis questions any link between race and sound, a link that dominant critical discourses have tended to naturalize in the purported connection between jazz and blackness: In *A Power Stronger Than Itself: The AACM and American Experimental Music*, Lewis examines how the Art Ensemble of Chicago’s music, despite being met with significant critical and commercial success in Europe, was nonetheless still framed by the mainstream press as being primarily a form of racial discourse rather than locating it within a discourse of avant-garde and experimental music more broadly. Lewis sees this press reaction as contributing to the reification of an ostensible “natural” affinity between race and certain forms of musical expression.

Lewis is thus part of what I see as a second group of scholars—which also includes Kodwo Eshun, Ronald Radano and Aldon Lynn Nielsen—who interrogate the purported connections between “blackness” and music (as well as between “blackness” and other art forms). Kodwo Eshun forcefully articulates this view:

The term Black Music so often sounds stupid, so dated and pointless, a phrase only used by the most retarded R&B cheerleaders. Black Music: the term clamps the brain because it blithely ignores computerization by locating all of hip-hop back in the all-too-human zones of the soul or the street. . . . To use the phrase Black Music is to presume a consensus that has never existed, to assume a readily audible presynthetic essence which machines have externalized, manufactured, and globalized. No longer sheltering within an essence that never was, today’s Futurist understands the mythillogic [*sic*] of the soundmachine. (*More Brilliant than the Sun* 37)

Eshun thus sees musical technology—what he refers to metonymically as the “soundmachine”—as a liberating force that deconstructs assumed notions of essentialism and authenticity—the realm of “the soul” and the “street.” And not only does Eshun reject essentialized notions of black music, but essentialized notions of blackness itself. He denies “all notions of a compulsory black condition” and all notions of “a solid state known as ‘blackness’” (*More Brilliant than the Sun* 00[-003]).

However, despite this interrogation, scholars in this group—as well as other scholars—do also acknowledge that we cannot ignore the realities of how race has figured as a key construct in the history of African-American music, through today. This is expressed most eloquently by George Lewis, when he states in a recent essay that his work makes “no attempt to delineate

ethnicity or race, although [it is] . . . designed to ensure that the reality of the ethnic or racial component of a historically emergent socio-musical group must be faced squarely and honestly” (“Gittin’ to Know Y’all” 297). Crucially, Lewis sees this as ultimately a material issue, pointing out that notions of race are imbricated with class and geography. Race is a “historical construct whose borders are consanguineous with those of class and place. The fluidity that marks this intersection produces complex, mobile identities that do not respect traditionally monolithic taxonomies that assume race as a necessary precondition of musical method, infrastructure, and materials” (“Gittin’ to Know Y’all” 297).

With this in mind, I am inclined to take a position similar to that articulated by Ingrid Monson, who views the issue as a dialectical relationship, between “the reality of social differences (as well as the categories that name them) and the fiction of their boundedness” (*Freedom Sounds* 330–31). Eric Porter detects a similar relationship in what he identifies as key dynamics running throughout musicians’ own discussion of their art and their role in society—one such dynamic is rooted in the awareness of race as an unavoidable reality in the social conditions in which jazz is produced and listened to: the tension between recognizing jazz as a “racially or culturally defined black music” on the one hand and the aspiration to create art that speaks to “a broader human community and consciousness” on the other (xv). This dynamic manifests, for example, in “the tension between black nationalism and universalism” (xv)—both ideas that have been vigorously put forth by jazz musicians. Another closely related dynamic revolves around the tensions between an aesthetic concept rooted in European classical music and one that is more jazz-centric and thus more “American.” Porter finds that in their discussions about their own art, musicians sometimes uphold these distinctions while at other times they blur them. Black nationalism tends to be invoked when asserting the relevance and importance of

their art against racist conceptions of culture, and jazz-centric aesthetics are invoked when asserting the importance of their art against Euro-centric notions of “high” culture—both stances thus articulate forms of resistance. This dynamic is closely related to the improvisation/composition binary, and the jazz/popular music binary.

My project is largely one involving several kinds of reassessment—of people, musical styles, and ideas that are often despised or derided, and often rightly so, at least in some ways. One of my favorite aspects of my musical and literary research involves re-examining my own prejudices, so I will sometimes actively listen to or read the work of someone that I had “written off” as being artistically, stylistically, or politically “wrong” or in some way deficient. Often, my suspicions are confirmed, but sometimes I find at least some redeeming quality, and occasionally even am prompted to radically alter my previously held assumptions.

Fusion music, for instance, the genre associated with Herbie Hancock’s *Sextant* album, the topic of Chapter 2, is a musical style that is commonly derided from a variety of perspectives, high and low, perhaps second only to progressive rock as one of the seventies’ most disdained musical legacies. My own listening habits have tended to avoid this musical style. But listening back now to recordings made during the genre’s heyday in the seventies, I am surprised at how well many of them hold up. With perspective, the 1970s now seem to me an extraordinary era of wide-open cross-pollination and experimentation both musically and culturally, and this spirit is audible in Hancock’s *Sextant*.

Similarly, T. S. Eliot and Wynton Marsalis are two people who have been widely despised among academics and intellectuals, and often rightly so: Eliot’s racism and snobbery are well known, and Marsalis’s role in the institutionalization of jazz as “America’s classical music” and pronouncements against hip-hop are highly problematic. Yet with both of these

artists I feel that too many intelligent people have “thrown out the baby with the bathwater”— so it delights me to bring them into conversation with each other, and I take even more pleasure in bringing them both into dialogue with electronic sampled music, a mode of musical production that Marsalis is quite famous for disparaging.

Techno music has also been widely disparaged, especially in the United States, where many people erroneously understand it as a European import, associated with designer drugs, club culture, and mindless “raving.” My research works against these perceptions by uncovering techno’s Detroit roots, as an African-American musical expression that is a politically and racially aware response to the deindustrialization, institutionalized racism, and neoliberalization experienced in Detroit during the 1980s. Similarly, Theodor Adorno, though respected in musicological circles for his insights into musical modernism, has also been disparaged among scholars in music and cultural studies for his unenlightened, even racist views on jazz and other forms of “popular music” and popular culture in general. While acknowledging these problems, I also show how Adorno’s own theories on music can shed valuable light even on musical forms that he himself disparaged, particularly with regard to how techno music functions as a deliberate mode of resistance to what Adorno described as the “culture industry.” I maintain that Adorno’s elucidation of the culture industry is even more trenchant today than when he was writing, because today’s globalized corporate behemoths insidiously exploit much more of a stranglehold on so many aspects of music’s production, dissemination, and reception.

More specifically, my project of reassessment entails reexamining, questioning, and breaking down several traditional binaries: First, by highlighting modernist impulses in musical idioms that are typically thought of as postmodern, and by showing modernism to be an ongoing framework of these styles, I break down the modernism/postmodernism binary. African-

American musical idioms such as techno and styles based on digitally sampled material are often described as quintessentially postmodernist expressions. But my research into these styles as well as blues, jazz, and other musical genres has made it clear to me that African-American music operates along a continuum that is best understood as variegated iterations of a uniquely African-American form of modernism, of which postmodernism is an important aspect in the latter twentieth century. The specific aspects of this modernism are explored in the following chapters, but I want to take the opportunity now to explain my view of postmodernism not as a movement that supersedes modernism but is a part of it.

My thinking on modernism and postmodernism has been influenced by Marshall Berman, who, in *All That Is Sold Melts into Air: The Experience of Modernity* rejects the notion that modernity is defunct and has been superseded by postmodernity. Rather, he maintains that the various guises of postmodernity emerging since the 1960s and 1970s have actually been variations of modernity itself. Specifically, Berman notes that the work of self-described postmodernist artists and intellectuals of the 1960s—including John Cage, Lawrence Alloway, Marshall McLuhan, Leslie Fiedler, Susan Sontag, Richard Poirier, and Robert Venturi—can be more accurately understood as a development of what Berman calls the “affirmative vision of modernism” (31). Coinciding roughly with the advent of pop art, this affirmative vision was concerned with breaking down barriers between art and other human endeavors, as well as the barriers between the arts themselves, advocating instead for mixed-media, multidisciplinary expressions. Berman employs his knowledge of modernity’s and modernism’s historical development to critique postmodernism’s own ostensibly ahistorical stance. For instance, he derisively writes of the “mystique of post-modernism, which strives to cultivate ignorance of modern history and culture, and speaks as if all human feeling, expressiveness, play, sexuality

and community have only just been invented—by the post-modernists—and were unknown, even inconceivable, before last week” (33). In other words, the ironic implication is that it is the post-modernists’ own ignorance of history that leads them to mistakenly understand their own movement as something separate and removed from modernity itself. For Berman, then, a crucial component of modernism is its historicity—its historical understanding of itself, what Berman calls modernism’s “desire and power to remember” (346). Berman further elucidates the “post-modern mystique,” writing: “When contemporary modernists lose touch with and deny their own modernity, they only echo the ruling class self-delusion that it has conquered the troubles and perils of the past, and meanwhile they cut themselves off, and cut us off, from a primary source of their own strength” (346).

My thinking on modernism and postmodernism has also been influenced by my reading of Theodor Adorno and recent scholarly assessments and reassessments of this work. In Chapter 4 I bring Adorno into dialogue with Detroit techno music, a combination that may seem odd, but surprisingly I find Adorno and techno music to explain and reinforce each other in several ways, which will be explored in detail in Chapter 4. Here, I would like to make a case for why Adorno matters in cultural studies in the twenty-first century.

In a recent review essay for *American Quarterly*, Rebecca Hill identified a new trend among cultural studies scholars who seem to be engaging in a reassessment of critical theory “after years of relatively optimistic arguments about resistant readings of mass culture texts that were meant as a corrective to the dour attitude of the Frankfurt School” (345). Hill posits that the persistence of neoliberalism may have prompted many cultural scholars to rethink earlier optimistic attitudes about consumers’ “empowerment,” and to critically question just how much resistance and agency is really involved in the production and reception of “mass culture” or

“popular culture.” These scholars disagree about the exact way that they should make their own work a form of resistance, but each points out that neoliberal ideology tends to “suck activists into an individualizing vortex of empowerment babble” and Hill points out that if this new turn back to critical theory is “indicative of the future of resistance in cultural studies, it suggests that resistance is not exactly futile, but that finding it and pointing to it are no longer enough” (355). Hill’s reference to the Frankfurt School is significant, for this group of German intellectuals harbored a general mistrust of commercial popular culture—what Theodor Adorno aptly called the “culture industry”—because of what they saw as its role in maintaining social authority and enforcing conformity. Their argument that mass culture—inevitably functioning as ideological reinforcement of capitalist structures—tends to depoliticize its consumers, presciently resonates with recent scholars’ critiques of postmodern culture in our current neoliberal era.

Max Paddison speaks to this, stating that “Adorno’s writings on popular music may be approached so that the end result is something more than outright dismissal of his extreme and often dogmatic value judgments. It is an attempt to rescue the baby from the bath water, so to speak, as it seems to me that hidden in his theory there remains a potential which was never properly recognized by Adorno” (“The Critique Criticized” 201). Adorno’s misreading/mishearing of popular music can be overcome by applying his own theories to the blind/deaf spots that inhibited his understanding of popular music.

It is worth pointing out that what informs much of this resuscitation of Adorno is an implicit—and sometimes explicit—critique of postmodernism, even of the very idea that we inhabit a postmodernity that is fundamentally different from an ostensibly “past” modernity. It can be argued that much of Adorno’s recent reappraisal rests on a deeper critique of postmodernism, and a corresponding reassessment of modernist principles. Adorno himself can

be regarded as a quintessentially modernist figure. His position as a modernist hinges on his acts of defamiliarization; the notorious “difficulty” of his writings. Pericles Lewis points out that a major cause of confusion on the part of both audiences and critics of modernist art was that it is often difficult to understand, and this difficulty is due to artists’ attempts to challenge normative assumptions about art and language (27). Significantly, Lewis cites none other than Adorno: “Theodor Adorno argued that art that is familiar or easy can be too easily consumed. Great art, on the other hand, shows how reality itself is full of complexity and contradictions. Adorno wrote that the essence of great works of art ‘consists in giving form to the crucial contradictions in real existence’” (28).

Similarly, with regard to the difficulties presented in Adorno’s own writings, Steven Helmling identifies Adorno as “one of those high modernist figures who resist popularization on principle. His writing is deliberately, provocatively, difficult: driven, like the music of Schoenberg, the figuration of Picasso, the drama of Beckett or the poetry of Valéry to deny you any recourse to the habituations and familiarizations of reading, listening, looking, and thinking ‘as usual.’ . . . He aims, in good ‘modernist’ fashion, not merely to show you new things, but to change the way you see” (156). A chief component of Adorno’s provocative difficulty is his rigorous commitment to dialectical thinking. Martin Morris explains that “Adorno’s musical essays, like all of his works, were written as passionate criticism of a society and world he considered inhuman. Yet, his ultimate understanding of this inhumanity seems to have been based not on political, sociological, or even psychological grounds but on something very like a theory of reality itself” (552). This theory of reality constitutes Adorno’s negative dialectics, which reverses the traditional Hegelian notion of dialectics as a procession leading ultimately toward syntheses, emphasizing instead that the “essence of reality is historical change, that

synthesis is a fixed condition that contradicts this essence, and that the governing principle of reality is the endless and irreversible negation of syntheses into the tension of dialectical contradictions” (552). It is indicative of the importance Adorno places on music that in his writings, philosophical discussion of music transcends the area of aesthetics and encompasses epistemological and ontological concerns, and he understands music not in the orthodox Marxist sense, that is, as a super-structural expression dependent on an economic structure. Adorno’s own experience as a composer of music gave him unique insight into understanding music as a mode of knowledge, akin to, for instance, mathematics or logic, as Michael Thompson notes:

For Adorno, in true Hegelian fashion, art in general, and music in particular, are not simply cultural products, they are also forms of cognition. . . . Adorno’s ideas are influenced and, in a certain sense derived, from his assumption that culture plays a formative role in the process of human growth. Human beings also develop *in relation* to the forms of culture that are available to them. Since art works are not simply cultural products but also possess a cognitive character (*Erkenntnischarakter*), they are also ways of knowing: they are insights into the contradictions engendered by modernity. Cultural criticism takes a primary place in Adorno’s thought precisely because artworks have the capacity to either enhance or erode the capacity of individuals to possess insight into the political nature of their social relations. Although under capitalism, social life may breed conformity and a sense of passivity with respect to the contradictions it engenders, “art vehemently opposes this tendency; it offers an ever-sharper contrast to such false clarity.” (38–39)

Thus, “true” art—especially music—functions oppositionally, as resistance to the commodifications and reifications inherent in capitalism. The members of Detroit’s Underground Resistance collective understand their own music in precisely the same way. Underground Resistance adopted a militant stance in this regard, understanding themselves as combatants against the mainstream commercial entertainment industry, which they denoted as “the programmers.” Techno music, then, can be understood as both a technology of survival and as a means of resistance.

But the commercial music churned out by the culture industry is a very different matter. Such music, according to Adorno, functions as “entertainment,” and serves definite reactionary ideological functions because it is designed to induce, for instance, “relaxation” and serves the populace as as a mode of “escape” from the stultifying effects of living as alienated laborers in a capitalist society. Adorno “described the *need* of the masses for distraction or ‘fun’ as both a result of the existing (capitalist) mode of production and, as it were, one of its most characteristic products” (Calinescu 242). Commercial music, then, does not merely “reflect” the alienating effects of capitalism, but is itself a necessary component of the whole system. “The customers of musical entertainment are themselves objects or, indeed, products of the same mechanism which produces popular music. . . . The people clamor for what they are going to get anyhow” (Adorno, “On Popular Music” 458–59). And yet, there is a delicate dialectic built in to this condition; commercial music must simultaneously provide escape from boredom and relief from effort—the effort involved in any deep engagement with a musical work:

A fully concentrated and conscious experience of art is possible only to those whose lives do not put such a strain on them that in their spare time they want relief from both boredom and effort simultaneously. The sphere of cheap

commercial entertainment reflects this dual desire. It induces relaxation because it is patterned and pre-digested. Its being patterned and pre-digested serves within the psychological household of the masses to spare them the effort of that participation . . . without which there can be no receptivity to art. (Adorno, “On Popular Music” 458)

It is such statements that have led many musical/cultural critics to charge Adorno with not ascribing enough “agency” to the consumers of mainstream popular culture. Indeed, Adorno’s stance strikes a strong contrast to views of musical culture dominant since the late 1960s, which tend to stress resistant strategies and subjective agency in the consumption of mass-marketed commercial popular culture (Scherzinger 26–27). On the other hand, Adorno’s dialectical critique and suspicion of the culture industry, looked back on from our current situation, can serve as a useful antidote to and prescient preemptive critique before the fact of this postmodern view of culture. As Max Paddison states, Adorno’s modernist aesthetics of music “provides the tools for a devastating critique of postmodernist complacency” (*Adorno, Modernism, and Mass Culture* 132). More specifically, Adorno provides an antidote to much recent musical/cultural scholarship that all too often falls into an uncritical devotion to relativism and shallow celebration of multiculturalism.

Such scholarship more often than not fails to adequately address the fact that much of what passes for “popular” music today (as well as in Adorno’s time) is the carefully crafted product of mass media corporations. “Far from reflecting the public’s choices, Horkheimer and Adorno [in *Dialectic of Enlightenment*] would link such musical production with the ‘technical and personnel apparatus which, down to its last cog, itself forms part of the economic mechanism of selection.’ Today this pertains to an unprecedented degree” (Scherzinger 24–25).

But much recent musical/cultural scholarship, Martin Scherzinger continues, has tended to focus instead on the roles of gender, geography, ethnicity, race, age, religious affiliations, and sexuality, while downplaying the effects of class and economic factors. “This new musicology grounds its progressive claims in the rejection of grand, quasi-evolutionary narratives of music’s historical evolution” but this focus “has failed to prevent a paradoxical new totalization that marches in step with the ideological demands of late capitalism. That is, by rejecting all metanarratives of historical development, along with all totalizing notions of musical value, these nichelike musicological subfields can fail to reckon with the escalating control of unified corporate power on a global scale today” (Scherzinger 26). Scherzinger’s idea that much postmodernist scholarship can work (even if only inadvertently) to bolster reactionary agendas is strongly reminiscent of Jurgen Habermas’s sharp criticism of postmodernism. When he was awarded the T. W. Adorno prize in Frankfurt in 1980, Habermas delivered a speech entitled “Die Moderne: Ein unvollendetes Projekt” (later published in English as “Modernity versus Postmodernity”) in which he linked postmodernity’s view that modernity had failed with neoconservative tendencies. But Habermas maintained, in effect, that modernity is not dead, it’s only sleeping; modernity is a project that remains incomplete (Calinescu 273).

If modernity is unfinished, then any notions of postmodernity as a distinct and new phenomenon might be revised to see it as simply a new iteration of modernity. Matei Calinescu, devoting a separate section to the subject in the revised edition of his *Five Faces of Modernity*, ultimately deems postmodernism simply a “new face of modernity” (265). This can be clearly seen in the work of Detroit techno musicians, which in its apparent rejection of traditional musical components such as harmony and melody and embrace of a hyper minimalist aesthetic that employs repetition to an unprecedented degree has often been understood as a thoroughly

postmodern expression. But we can also see that these same musicians continuously strove to “make it new,” in Pound’s words, and also placed a high premium on artistic individuality and innovative uses of available technologies and tools. Pericles Lewis points out: “Postmodernism lives in the shadow of modernism, but both are devoted to a conception of the greatest art as always innovative. If we feel a need to label our own era ‘postmodern’ rather than ‘modern’ and thus to assert our originality, this is perhaps just a sign of the continuing modernist impulse, in the words of Pound, to ‘Make it New’” (247). With this in mind, the works of the staunchly modern Adorno might still have something to say to us in our current era, when music has become commodified to a degree that only Adorno had foreseen and described in such detail.

But resurrecting Adorno’s theories as frameworks for understanding a style such as techno music is not without its problems, not the least of which is the fact that Adorno himself was dismissive of popular music—“popular music” denoting any vernacular music that falls outside the purview of Western “art music,” what is commonly understood, problematically, as “classical music.” Adorno’s unfortunate mishearing of the vernacular musical styles of his own time, and his imbricating them with the reactionary forces of the culture industry, has turned off generations of subsequent scholars. One of the most insightful of today’s music critics, Alex Ross—who generally finds much of value in Adorno’s work—articulates this position: “When Adorno issued his own analyses of pop culture . . . he went off the beam. He was too irritated by the new Olympus of celebrities—and, even more, by the enthusiasm they inspired in younger intellectuals—to give a measured view. . . . He shows no sympathy for the African-American experience, which was finding a new platform through jazz and popular song” (“The Naysayers”). Adorno failed to make any essential distinctions between jazz, rock, folk, and other popular genres, rather hearing them all as poisoned products of the culture industry (Brown 20;

Alastair Williams, *Adorno, Modernism, and Mass Culture* 307). Because of this, the common reading of Adorno has seen him as an “elitist” (Brown 17) and a “prescriptive mandarin” (Watson 128) who harbored a “mordent hostility to popular culture” (Wragg 205).

And yet, despite the widespread derision for Adorno among musical/cultural scholars, many of these scholars do not seem quite ready to completely write him off. A common trend in recent works has emerged, which is involved in seeking ways to appropriate his ideas in ways that Adorno himself may never have envisioned. This suggests that while acknowledging the highly problematic nature of Adorno’s oversights, the worth of his ideas—and their continued relevance in the face of music’s increasing commodification—is recognized.

David Jenemann writes that Adorno’s resistance, his “unwillingness to capitulate to the seductions of the culture industry, is what makes Adorno worth studying in an age when the seductions seem less like seductions and more like what has always been so. For the late Edward Said, it was this unwillingness to give in to America while at the same time embracing it that made Adorno one of his intellectual heroes” (Jenemann xxiv). Adorno’s position as an intellectual in America (from 1938 to 1952), in exile, places him in a state of *Unheimlich*, articulating, as Said put it, “the morality not to be at home in one’s home” (184–85). Adorno’s articulation of his alienation—his self-consciously *Unheimlich* attitude—is persuasive, extending “to readers the courtesy of gesturing toward a future where everyone is brought together by their alienation” (Jenemann xvii). This acceptance of uncomfortable alienation can be read today as an impassioned plea to resistant, critical thinking at a time when neoliberal postmodernism threatens to snuff it out: “Adorno’s ‘message in a bottle’ can and must be transmitted to generations who have gotten comfortable with the world of appearance and who have forgotten just how uncomfortable and precarious their own situation actually is” (Jenemann xxviii). Steven

Helmling nicely sums up what is at stake, writing of Adorno's modernism as a kind of overdue post-postmodernism:

For devotees of poststructuralism and deconstruction, Adorno is a relic of the outdated phenomenological tradition (Hegel to Sartre) from which Foucault and Derrida have supposedly freed us. Nevertheless, Adorno is one of those figures whose eloquence and passion can make you a believer again, ready to credit his 'retro-' version of the modern, in which the modern startlingly appears, in our 'postmodern' time, as more modern than we: modern with consequences; modern, even, with tears; modern as if it still mattered. (157)

Now that postmodernism has been around for several decades, it is easier to understand it in historical perspective. What seemed to be radically revolutionary and antithetical to modernism in the 1960s through the 1980s can now be more accurately understood in hindsight as evolutionary new iterations of modernism itself. Susan McClary, one of the prime instigators of the postmodern "new musicology" during the 1980s, stated in 2015: "We're now in a phase some call Postminimalist, though the prefix 'post' in all these labels points more to rejection of what came before than to new directions. Indeed, the concept of 'modernity' itself announces that process of radically splitting off from the past. We seem destined to live in an infinite series of 'posts'" ("The Lure of the Sublime" 32). In this passage McClary points up how problematic the term "postmodernism" is. The crux of the matter is that "post" implies a temporal element; the temporality is built into the name. The very name "postmodern" is overreaching, implying an end of history, as if nothing new can come after postmodernism. But new artistic developments do occur, of course, and will continue to occur. The problem with the term postmodernism is that, as McClary points out, whatever new developments that occur can only be conceived as

“post-postmodernism”—a term that has recently in fact come into fairly common use—followed inevitably by a post-post-postmodernism, then a post-post-post-postmodernism, and so on. My argument is not that postmodernism is not an identifiable movement—that it is indistinguishable from high modernism—but that what makes postmodernism identifiable as an artistic movement is more accurately understood as another facet of modernism rather than something that supersedes it. “Postmodernism” seems to have been coined as a stop-gap term to defer identifying what exactly, makes it different from high modernism. It is understandable that the term would be employed in the 1960s, when radical new artistic developments seemed such an affront and challenge to older ideas of what modernism was. But as with all new artistic developments, what at first seemed revolutionary, even destructive to the older style, turns out in hindsight to have been a development, or even an intensification in some ways, of the older style.

The musicologist Alastair Williams has recently noted that “the once ubiquitous postmodernism is now an historical phenomenon. This is partly because terms such as ‘intertextuality’ and ‘deconstruction’ have become so commonplace that they do not require a larger framework, and partly because postmodernism turned out to be more an expansion of previous views than their antithesis” (“Alastair Williams Reflects”). Williams, along with David Metzger and Susan McClary, is part of a recent wave of musical scholarship that has been re-examining the received boundaries between postmodernism and modernism and postulating, in effect, that reports of modernism’s demise may have been greatly exaggerated. The recent work of Susan McClary in this regard is especially notable, because earlier in her career she had been a sharp critic of musical modernism, claiming that it perpetuated a “mystique of difficulty,” writing in 1988 that modernism was a “*reductio ad absurdum* of the nineteenth-century notion that music ought to be an autonomous activity, insulated from the contamination of the outside

social world” (“Terminal Prestige” 56). McClary grounded her critique in feminist theory and a cultural studies approach that highlighted the ways that musical modernism was imbricated in formalist musicology, teleological narratives, and claims to art’s autonomy. But in a reassessment of modernism in her 2015 essay “The Lure of the Sublime” McClary notes the rise of a compelling “twenty-first-century version of modernism” that is, according to her, more “humanized” and more “intelligible to audiences” (22). From the start of the essay, McClary hedges a bit, engaging in a bit of historical revisionism when she claims that in her earlier work she did “not attack modernism per se but only some of the ideologies that had upheld its hegemony” (21). But as writers such as Fredric Jameson were pointing out some twenty-five years earlier, these ideological justifications and explanations for modernism were little more than straw-man arguments in the first place:

One of the more commonly held stereotypes about the modern has of course in general been that of its apolitical character, its turn inward and away from the social materials associated with realism, its increased subjectification and introspective psychologization, and, not least, its aestheticism and its ideological commitment to the supreme value of a now autonomous Art as such. None of these characterizations strikes me as adequate or persuasive any longer; they are part of the baggage of an older modernist ideology which any contemporary theory of the modern will wish to scrutinize and dismantle. (“Modernism and Imperialism” 45)

By 2015, McClary finally seems to have reached much the same conclusion, describing staunchly avant-garde mid-twentieth century modernists such as Boulez, Babbitt, and Roger Sessions as “heroic,” and even going so far as to cite Adorno favorably in support of her new

stance (26). McClary seems downright apologetic, acknowledging that modernist artists were products of their culture, just as were subsequent generations of postmodernists:

I suppose this is something like the process that occurs to us all when we get old enough to view our parents not as tyrants of discipline but as vulnerable human beings who made the best choices they could, given their array of options. The post-war modernists did not create the cultural circumstances in which they found themselves as they embarked on their careers, any more than people of my generation invented the Cold War or the Vietnam War, to which we have responded throughout our conscious lives. (“The Lure of the Sublime” 27)

Furthermore, McClary also acknowledges that maybe there really isn’t so much separating postmodernism from modernism after all, although this acceptance seems to lie not so much in recognizing traces of postmodernism in modernism as it is about the dreadful realization that postmodernism is just as capable of committing “transgressions” as is modernism:

When I first started writing about Postmodernist music in the 1980s, I believed that we might be witnessing a break away from the modernist trajectory. Critiques of what Jean-François Lyotard called the Master Narrative and a swerve away from the ultracomplex machinations of post-war composers held out some hope for a different set of aesthetic priorities. But art historian Maggie Nelson’s *The Art of Cruelty* traces a lineage from Antonin Artaud that has valued ever-greater transgressions. (“The Lure of the Sublime” 29)

Sadly, one thing that most musicologists, whether of the modernist, postmodernist, or new-modernist persuasion, seem to still be in agreement on is that European art music—what is commonly understood to denote all the various types of “classical music”—is still the gold

standard. For instance, the work of Susan McClary and other scholars in the field of the “new musicology” (music scholarship informed by critical theory and cultural theory) has been groundbreaking and necessary in asserting the importance of cultural context, and of understanding music not merely as an isolated, artistically autonomous phenomenon. Nonetheless, much of this scholarship has still tended to focus on works of the established European classical canon. One of McClary’s most influential essays, for instance, examines the political implications of the music of Johann Sebastian Bach.¹ Another important scholar, Lydia Goehr, has argued in her highly influential *The Imaginary Museum of Musical Works* (2007) that the musical “work-concept” must be understood as historically and culturally contingent, and she aims to challenge its ostensibly “natural” status. This is a laudable goal, but the book’s focus is on Viennese classical music, in particular, the works of Beethoven—in Goehr’s model, jazz and other “popular musics” have no “work-concept.” Goehr’s book contains no substantive discussion of other musical traditions, let alone the role of technologies of music production and reproduction in contemporary music (Born 10). Thus, while such scholarship certainly reflects a more enlightened approach to considerations of culture in music, and the importance of historicizing works of art, much of this scholarship has the effect—even if inadvertently—of bolstering the traditional Western canon of classical music. It preserves classical music’s privileged position and leaves us without a conceptual framework for understanding work-like constructs in other musical idioms (Butler 28–31). Even within the field of recent jazz scholarship, there has been a similar tendency at work—reflective of jazz’s begrudging acceptance by mainstream culture as a real art form, “America’s classical music”—to establish

1. See Susan McClary, “The Blasphemy of Talking Politics during Bach Year” *Music and Society: The Politics of Composition, Performance, and Reception*, Ed. Richard Leppert and Susan McClary, New York: Cambridge UP, 1989, 13–62.

and maintain a jazz canon comprised of recorded masterpieces and a pantheon of “great innovators” (DeVeaux 483–84)

Similarly, when musicologists discuss “musical modernism,” the term is typically understood to denote the works of early-to-mid-twentieth-century composers in the European art music tradition—Schoenberg, Stravinsky, Boulez, Stockhausen, et al. Thus, a musical scholar as otherwise insightful as David Metzger can write of a trend he has noticed recently, of “the growing proximity between modernism and popular music,” without ever once considering the possibility that much of what gets classified as “popular music” (which, among these scholars, denotes essentially all music that is deemed to be outside of the European art music tradition) might already be full-fledged expressions of musical modernism in their own right. It must be clarified that Metzger does not consider popular music to be properly “postmodernist” either, for he is opposing popular music (non-classical) of any kind to “new music” (classical) of any kind, whether modern or postmodern—writing, for example, that the “increased closeness between new music and popular styles has not been identified as a larger historical development” (98).

But if musicologists still seem invested in older paradigms, the more interdisciplinary approach of scholars in American Studies has gone a good way toward bringing discussion of music and sound into the twenty-first century. In their introduction to a recent special issue of *American Quarterly* devoted to the topic of “listening to American Studies,” Kara Keeling and Josh Kun note that in the field of American studies, the study of sound, and of listening has become increasingly prominent in recent years, despite the continued dominance of the optic realm over the aural. They point out that vision has been linked traditionally to knowledge, science, reason, and truth; while sound is understood to be ephemeral, subjective, fleeting, and contingent (446). Nevertheless, they add, “the era of sound’s marginality in American studies

scholarship . . . seems to be over, as more and more scholars across a variety of disciplines are beginning to not only take the culture, consumption, and politics of sound seriously but are making it the centerpiece of their research, publishing, and pedagogy” (446). Moreover, they see this trend as concomitant with the larger overall project in recent years—on the part of scholars working in cultural studies, postmodernism, postcolonial studies, queer studies, feminism, critical race studies, and American studies in general—of challenging and dismantling dominant paradigms of critical thought and knowledge production (446–47).

This new interdisciplinary scholarship highlighting the conjunctions of music and culture is indicative of what Keeling and Kun identify as “new models and methods of what we might call a critical American studies listening” (450). Additionally, as they point out, sound and music as topics within American studies have a special importance in relation to African American cultural studies, noting that the ways “in which the sounds of the enslaved and exploited challenge the authority of the claims made about the United States in the songs of ‘the free’ has long been part of the bedrock of African American political and cultural resistance and opposition,” and noting that “the role of sound, listening, and music has been central to the work of scholars of African American history and culture” (456).

Thus, along with the modern/postmodern binary I am also concerned with breaking down the European / African American binary, a process that is aided by my interdisciplinary transnational perspective as a scholar in American Studies. Of course, this binary has a strong racial as well as national component, an overlapping that George Lewis highlights in his uses of the terms “Afrological” and “Eurological” to “refer metaphorically to musical belief systems and behavior which. . . . exemplify particular kinds of musical ‘logic.’ At the same time, these terms are intended to historicize the particularity of perspective characteristic of two systems that have

evolved in such divergent cultural environments” (“Improvised Music after 1950” 93).

Specifically, Lewis’s use of the term “Afrological” refers to “historically emergent rather than ethnically essential” modes of musical knowledge characteristic of African-American communities.

Some examples of the ways that I break down this binary include highlighting Detroit techno’s connection of European synth music such as Kraftwerk to African-American funk music such as Parliament; highlighting Herbie Hancock’s connection of European avant-garde aleatoric music to African diasporic musics; and highlighting Ellison’s connection of Eliot’s Anglo-American modernism to the modernism of African-American jazz music exemplified for him in the work of Louis Armstrong, and for me in the work of Wynton Marsalis.

From my own experience as a musician working in both the jazz and electronic music idioms, I bring a knowledge of and experience in music and technology to my discussion of cultural aspects of African-American music. Although I do discuss some lyrics in the following chapters, I focus mostly on the music’s actual sounds, and on how and why those sounds sound the way they do. This emphasis on the material production of sound means that I also forego any discussion or explanation that relies on musical notation. So much of the actual “content”—the life-force and relevance—of music such as blues, jazz, sampled music, and techno resides in its aural textures and tones, and its rhythmic nuances, all of which musical notation is inadequate to convey. This music must be experienced in “real time,” aurally. For this reason, each chapter is accompanied by a playlist, which is accessible online via the inks provided at the end of this chapter. The playlists contain all individual tracks or “songs” mentioned and discussed in the chapters. Although I discuss several “albums” and other extended musical works, these longer works are not included in the playlists, or else the playlists would have been absurdly long and

difficult to navigate. In my bibliography, however, I do include all albums and extended works discussed in the chapters.

In Chapter 1, “Modernism Amplified: Langston Hughes, Richard Wright, and Muddy Waters Play the Blues,” by historicizing the musical genre known as “Chicago blues,” I complicate even more Richard Wright’s already complicated attitudes toward “the folk” and modernity. Utilizing close readings of *12 Million Black Voices*, I show how Wright’s apparent denigration of the blues as an outmoded, pre-modern artistic form is dependent on his historical situation writing before the advent of a new electrified form of blues that developed in Chicago shortly after the book’s publication. Utilizing biographical details of the life of Muddy Waters, I show how his work as a musician first in Mississippi, later in Chicago, and his development of an electrified blues style, parallels and personifies the shift from an African American perspective rooted in an agrarian, pre-modern South to an industrial, modern North documented so effectively by Wright. Furthermore, the Chicago blues musicians’ transmogrification of the rural Delta blues into an electrified, urban expression manifests the vernacular-modernist artistic conception which Langston Hughes and Wright seem to be envisioning and pointing toward.

In Chapter 2, “Modernism Synthesized: Herbie Hancock’s *Sextant* and the Convergence of Jazz and Electronics,” using methods of African American literary and cultural theory, I examine Herbie Hancock’s album *Sextant* (1973), and explain how Hancock’s unprecedented use of nascent electronic music technologies (primarily analog synthesizers, sequencers, and recording studio tools) constitute an improvisational, African American mode of music production that greatly influenced subsequent musicians working in jazz and electronic idioms. I draw upon Henry Louis Gates’s concept of Signifyin(g) to consider how Hancock’s musical and technological interactions with Patrick Gleason, a white academic, illuminate cultural dynamics

of class and race that are crucial to understanding how African American uses of musical technologies are inseparable from musical content.

In Chapter 3, “Modernism Exemplified: T.S. Eliot, Wynton Marsalis, and Digital Sampling,” I explore how the idea of “tradition” has been and continues to be an important concept in artistic modernism. Building on Ralph Ellison’s insight that jazz is a form of high modernist expression, I analyze T. S. Eliot’s “Tradition and the Individual Talent” (1917) and Wynton Marsalis’s *The Majesty of the Blues* (1989), and unearth the connections between Eliot and Marsalis, arguing that both understand their work in relation to their respective artistic traditions. Specifically, Eliot and Marsalis both articulate a view of artistic tradition as non-linear and outlines a conception of art that “samples” from the past. Exploring the convergence of jazz and hip-hop, I argue that African American musicians’ use of digital sampling technologies expresses this same attitude toward the past and tradition.

In Chapter 4, “Modernism Quantized: Detroit’s Techno Rebels,” I focus on techno music. Just as Chicago in the mid-twentieth century served as the setting for the development of an industrialized, electric African American survival technology known as Chicago blues, so too did Detroit at the end of the twentieth century serve as the setting for the development of a de-industrialized automated survival technology known as Detroit techno. Emphasizing the material, geographical conditions of techno, I examine how Detroit musicians made creative use of ostensibly outmoded musical technologies, outer-space metaphors, and computerized rhythms to create cyborg manifestos in sound. I theorize Detroit techno musicians’ “machine aesthetic” as a transnational, Afrofuturist musical-social formation that has provided the foundation for African American electronic music into the twenty-first century.

In the essay that prompted and inspired my own extended explorations of African-American musical modernism's varied survival technologies, George Lipsitz states:

A theoretically informed American Studies would begin by listening for the sounds that Toni Morrison describes, the sounds capable of "breaking the back of words." These sounds cannot be summoned up by theoretical expertise alone. They cannot be constructed out of idealized subject positions emanating from reforms in discursive practices. They are to be found within the concrete contests of everyday life. Accessible by listening to what is already being said (and sung and shouted) by ordinary Americans, these sounds hold the key toward understanding the zoot suit and the Lindy-hop, and so much more. To paraphrase Ellison's narrator in *Invisible Man*: who knows; perhaps they speak for you. ("Listening to Learn and Learning to Listen" 633)

It has been my goal in working on this project that it serve as an adequate "response" to George Lipsitz's "call" back in 1990 for scholars in American studies to *listen* more closely, and to convey some of the possibilities for connection that arise when discourses in music are brought into dialogue with cultural discourses in American studies.

Spotify Playlists

A Spotify playlist accompanies each chapter. The order of tracks in each playlist corresponds with the order of specific tracks marked with an asterisk the first time they are mentioned in the text of each chapter.

Playlist for Chapter 1:

<https://open.spotify.com/user/c11dung8nwgt2a4b49ujhw29s/playlist/3cPZ1N8riPBcgzxcg9SYEGN?si=H8jwsvOqTx2bfsgOSb3r9Q>

Playlist for Chapter 2:

https://open.spotify.com/user/c11dung8nwgt2a4b49ujhw29s/playlist/1GOlNaZok7nnOTpAaaWbjU?si=Q4fraoS1SXXti6Mk-E7q_A

Playlist for Chapter 3:

<https://open.spotify.com/user/c11dung8nwgt2a4b49ujhw29s/playlist/6J77Bd2GBxadue06M4Ud3F?si=seNGrkTZTzyXpSn1hyur5A>

Playlist for Chapter 4:

<https://open.spotify.com/user/c11dung8nwgt2a4b49ujhw29s/playlist/1ktRmG8wX83TzpJtIHjleA?si=DLbkfitQRMi45mhW8eAl3g>

CHAPTER 1. MODERNISM AMPLIFIED: LANGSTON HUGHES, RICHARD WRIGHT, AND MUDDY WATERS PLAY THE BLUES

In the introduction that he wrote for Drake and Cayton's monumental *Black Metropolis: A Study of Life in a Negro City*, Richard Wright looked back on his time in Chicago, and the importance of Drake and Cayton's sociological research to his own budding sensibilities as a writer:

There is an open and raw beauty about that city that seems either to kill or endow one with the spirit of life. I felt those extremes of possibility, death and hope, while I lived half hungry and afraid in a city to which I had fled with the dumb yearning to write, to tell my story. But I did not know what my story was, and it was not until I stumbled on science that I discovered some of the meanings of the environment that battered and taunted me. I encountered the work of men who were studying the Negro community, amassing facts about urban Negro life, and found that sincere art and honest science were not far apart, that each could enrich the other. (Introduction xvii–xviii)

It is this fusion of “sincere art” and “honest science” that makes *12 Million Black Voices* (1941) such a powerful work. In it, Wright presents a historical narrative of the black population in America, focusing especially on the Great Migrations of the first half of the twentieth century, in which a vast number of African Americans moved from the oppressive conditions of the rural South to the crowded industrial cities of the North. As is befitting such a “grand narrative,” Wright employs a highly formalized style of writing, unique among his works, making use of several elements from the African-American oral tradition, particularly the sermon and the blues. This chapter situates the use of oral forms in *12 Million Black Voices* within a new African-

American modernism that arose in Chicago—first envisioned by Langston Hughes, then finding fuller expression in the work of Richard Wright and Muddy Waters—maintaining that this use reflects a development in African-American art in the wake of the Great Migration, of using traditional vernacular forms as the basis for a new, bottom-up kind of modernism arising among black writers and musicians in the early- to mid-twentieth century. My exploration of Richard Wright’s work as illuminative of Muddy Waters’, and vice-versa, represents my attempt at heeding Houston Baker’s “invitation to inventive play” in his *Blues, Ideology, and Afro-American Literature* in which Baker expresses hopes that his readers will use his “blues matrix” as a jumping-off point to “improvise their own distinctive tropes for cultural explanation” (14). This chapter therefore owes an immense debt to Baker’s writing on the “blues matrix” as an interdisciplinary means of understanding African-American literature and music.

Complicating the common understanding that Richard Wright took an ambivalent stance toward the relevance of African-American oral traditions in an increasingly modernized society, I emphasize that in *12 Million Black Voices* Wright draws heavily on elements of black vernacular forms, particularly preaching and the blues. Thus, for Wright, these forms remain an important component of African-American modernism. I begin with an examination of artistic precedents relevant to Wright’s own modernism, showing how a reassessment of the African-American vernacular was a crucial component of a new “low” modernism advocated by writers such as Langston Hughes. This is followed by a look at Wright’s own artistic modernism, which is informed, I maintain, both by his understanding of modernity and of African-American oral folk culture. Next, I show how Wright uses elements (including shared knowledge, call and response, and personification) derived from two important forms of the black oral tradition—the sermon and the blues—as rhetorical strategies in *12 Million Black Voices*, and how these

strategies work together with the book's photographs to create what Beverly Moss calls a "community text," in which the author/orator and the reader/audience both participate to construct meaning (203). Finally, I contextualize the above concepts in relation to concurrent developments in blues music, addressing the scholarly debate over Wright's assessment of the blues as a supposedly outmoded form of "folk" expression. While several scholars—including William Ferris, Jack B. Moore, John M. Reilly, and Karen Roggenkamp—have noted that Wright draws on elements of African-American vernacular culture in his writing, this chapter explores more deeply the specific oral techniques, styles, and rhetorical strategies used by Chicago preachers and blues musicians, maintaining that Wright also uses these in *12 Million Black Voices*. Further, by contextualizing *12 Million Black Voices* in the time and place of Chicago's South Side during the 1940s, I show how Wright's apparently contradictory attitudes toward the blues in the book are reflective of the specific time that he was writing, especially in relation to the material conditions and artistic development of the style that came to be known as "Chicago blues," particularly in the recorded output of Muddy Waters before and after his arrival in Chicago. The artistic and philosophical connections between Langston Hughes, Richard Wright, and Muddy Waters reveal that the new African-American, bottom-up form of modernism that arose in Chicago in the mid twentieth century was a "blues modernism," thoroughly grounded in the oral and aural traditions of the deep blues of the rural South, even as it extended and updated these traditions for a new life in the urban North.

"I heard a negro play": The "high" and "low" modernisms of the racial mountain

Modernist artists in the early twentieth century often sought inspiration in "the folk," some even aspiring to imbue their own works with the quality of folk art. As Jeff Allred notes in his discussion of Wright's use of folk idioms as part of a modernist aesthetic: "One of the

hallmarks of American modernism is the prominence of textual strategies that create an aura of direct contact with the pure expressive products of the folk” (562). And early twentieth-century African-American authors realized that they had their own unique folk cultural practices from which to draw.

One of the first to recognize this was Langston Hughes, who, in his 1926 poem “The Weary Blues,”* employed vernacular speech patterns:

Ain’t got nobody in all this world,
 Ain’t got nobody but ma self.
 I’s gwine to quit ma frownin’
 And put ma troubles on the shelf. (8-11)

Hughes’s use of vernacular language established his position in relation to an issue that had been a source of debate among African Americans. Writing in 1922, four years before the publication of “The Weary Blues,” James Weldon Johnson noted a recent tendency among African-American writers to “discard dialect,” and he deemed this a positive development, for the reason that “Negro dialect is at present a medium that is not capable of giving expression to the varied conditions of Negro life in America” (440). Weldon sees vernacular expressions as insufficient in the face of the conditions of modernity, resonating with Wright’s statement some twenty years later in *12 Million Black Voices* that the vernacular musical expressions of the blues “are not enough to unify our fragile folk lives” (75). Yet Langston Hughes, in his poetry, demonstrated that vernacular dialect was quite capable of nuanced expression, and his use of dialect served deliberate artistic purposes well-suited to the new modernism. This new modernism forged by Hughes was an important and necessary precursor to subsequent African-American modernist authors such as Richard Wright. As Michael North points out: “Black dialect is a prototype of

the literature that would break the hold of the iambic pentameter, an example of visceral freedom triumphing over dead convention. The dialect in modernism is a model for the dialect of modernism” (78). With the ascension of this new modernism in the 1920s, some writers, both white and black, recognized that black speech patterns could be used to challenge the dominance of received literary forms.

Implicit in these deliberate uses of dialect were strong political, as well as artistic, motivations. Rather than imitating the stylistic conventions of what many were increasingly seeing as white-dominated cultural forms, African-American artists began to assert a new aesthetic, questioning the assumptions of European artistic practices. In his influential essay of 1925, “The New Negro,” Alain Locke wrote that “the mind of the Negro seems suddenly to have slipped from under the tyranny of social intimidation and to be shaking off the psychology of imitation and implied inferiority” (962). Locke expressed a vision of hope and optimism, a new era for African Americans, in which art would play a crucial role:

With this renewed self-respect and self-dependence, the life of the Negro community is bound to enter a new dynamic phase. . . . The migrant masses, shifting from countryside to city, hurdle several generations of experience at a leap, but more important, the same thing happens spiritually in the life-attitudes and self-expression of the Young Negro, in his poetry, his art, his education and his new outlook. . . . From this comes the promise and warrant of a new leadership. (962).

Locke thus optimistically connects the change from rural to urban environments with a new self-confidence emerging in African-American arts. If this “promise” of new forms of self-expression was to be fulfilled, African-American artists would need to recognize that the tendency in upper-

and middle-class African-American society toward an idealization of whiteness was, in the words of Langston Hughes, a huge “racial mountain” that stood in the way of black artistic expression (“The Negro Artist” 964). As this chapter will show, Richard Wright would challenge this ideal of whiteness by employing African-American oral forms as the basis of his writing in *12 Million Black Voices*.

In his 1926 essay “The Negro Artist and the Racial Mountain” Hughes called upon fellow African-American authors to reject the ideal of whiteness and embrace instead a cultural aesthetic rooted in the blues. Hughes maintained that such a move would provide black artists with “a wealth of colorful, distinctive material” (965). In opposition to an American standardized whiteness, Hughes championed the cultural practices of the African-American working class, “the so-called common element,” among whom, Hughes pointed out, there was much less idealization of whiteness and much more of a uniquely African-American perspective (965). A key part of Hughes’s celebration of African-American vernacular culture was jazz and blues music.² Hughes was among the first to recognize the significance of this vernacular music, a music reflecting an aesthetic that challenged the dominant white, industrialist, capitalist culture in America: “Jazz to me is one of the inherent expressions of Negro life in America: the eternal

2. In this discussion I follow Albert Murray’s lead (see, for instance, his *Stomping the Blues*, in which throughout Murray refers to musicians as varied as Louis Armstrong, Duke Ellington, Count Basie, Charlie Parker, Miles Davis, and John Coltrane as “blues musicians”) in making no essential distinctions between “blues” and “jazz.” Although these are commonly understood as two distinct genres (however blurred the borders between those two genres may be), when it comes to discussions of African American musics, jazz and blues may be understood as representing generally the same aesthetic values. This is especially true during the first half of the twentieth century, the time of the Great Migrations, which is the focus of *12 Million Black Voices*. At this stage in both musics’ development—before the blues became commodified as a folk music and before jazz became enmeshed in the musical abstractions of the post-bebop era—each musical genre represented the same African-American artistic sensibilities: aesthetics rooted in vernacular expressions, black folklore, and oral traditions, while at the same time engaging with new social formations brought about by modernity and industrialization.

tom-tom beatings in the Negro soul—the tom-tom of revolt against weariness in a white world, a world of subway trains and work, work, work; the tom-tom of joy and laughter, and pain swallowed in a smile” (967). This idea of African-American music as a response and antidote to the alienation and modern urban life is one that will be explored further in this chapter, in the context of rural blues music becoming urbanized in Chicago subsequent to the publication of *12 Million Black Voices*. Hughes sought to imbue his poetry with this musical expression, first on a surface level, by writing poems that attempted to appropriate the “syncopated rhythms of jazz” (qtd. in Tracy 107). But this soon evolved into more nuanced realizations, in poems that were deeply rooted in the “folk idiom of the blues and the spirituals” (107). A prime example of this latter type of poem is “The Weary Blues.”

As befits its title, “The Weary Blues” exhibits formal elements borrowed from blues music. Standard blues songs are based on a twelve-measure form or “chorus,” which adheres to a three-part, A-A-B format. Hughes uses this pattern explicitly in the poem in lines 25 through 30, when he quotes from the song he hears the piano player perform:

[A] I got the Weary Blues
 And I can't be satisfied.
 [A] Got the Weary Blues
 And can't be satisfied—
 [B] I ain't happy no mo'
 And I wish that I had died. (504–05)

This blues pattern is also used more subtly in other sections of the poem. For instance, an A-A-B rhyme scheme is used in lines 1–3 (“tune,” “croon,” “play”), lines 4–7 (“night,” “light,” “sway”), and lines 12–14 (“stool,” “fool,” “Blues”). The pervasive use of the pattern suggests that in his

description of the piano player's performance of a musical blues, Hughes is performing a literary blues of his own. And the fact that both the narrator of the poem and the piano player are performing a blues suggests a blurring or merging of their roles and identities. This ambiguity is artfully established at the poem's very beginning:

Droning a drowsy syncopated tune,
 Rocking back and forth to a mellow croon,
 I heard a Negro play. (504)

Here it is not quite clear whether it is the narrator or the piano player who is doing the “droning” and the “rocking.” This blurring of distinctions between subject and object, between the role of the performer and that of the listener, is also significant on another level, for in traditional West African musical practices there is no clear division of roles between performer and listener; music serves a functional role in many western African societies, with all members of the community engaging in music and dance rituals. This practice carried over into both sacred and secular African-American musical practices, which, through such devices as call-and-response patterns and affirmations, demanded high levels of performer-listener interaction. Hughes demonstrates that the blues can be used in subtle ways as formal models for literary works, and, as this chapter will show, Richard Wright would later employ similar techniques to great effect in *12 Million Black Voices*.

Rather than seeing black dialects and blues music as something to be ashamed of, then, artists such as Langston Hughes found that these elements could instead be embraced as the basis of a uniquely African-American aesthetic. The beauty of this aesthetic was that it was simultaneously *sophisticated*, in the sense of being capable of expressing great subtlety and complexity—and *common*, easily comprehended by and thoroughly in tune with what Hughes

endearingly termed “the low-down folks, the so-called common element,” who “are the majority—the Lord be praised!” (“The Negro Artist” 965). Richard Wright fully embraces this aesthetic in *12 Million Black Voices*, for instance, in his use of the first-person plural as the narrative subject of the book, thereby giving voice to the “common element” that Hughes championed. Several scholars—including Jeff Allred, Leigh George, David Nicholls, and Vincent Perez—have focused on Wright’s use of the first-person plural voice in *12 Million Black Voices*. Most point out that the collective identity of the narrative “we” seems to shift throughout the book. At the beginning of the book, the “we” clearly speaks for African Americans, as in the mention of “us black folk” (39). But by the book’s conclusion, the identity of this “we” has broadened: “Look at us and know us and you will know yourselves, for *we* are *you*, looking back at you from the dark mirror of our lives!” (146). As Leigh George and David Nicholls have pointed out, this shift is reflective of Wright’s experience as a member of the communist party, and his own evolving understanding of the problematic relation between race and class. Wright had a strained relation with the Communist Party, ultimately causing him to leave it by the 1940s, as detailed in his “I Tried to be a Communist,” published in the *Atlantic Monthly* in 1944. In his influential essay “Blueprint for Negro Writing” (1937), Wright called for African-American artists to assert their collective voice in a form of black nationalism. But the Communist Party, of which Wright was a member at this time, held that racial inequalities were mere effects of the deeper problem of economic exploitation under capitalism. These conflicting ideas over the relative importance of race and class contributed to Wright’s relation to both modernity and African-American folk culture.

African American artists were not the only ones to recognize the power, beauty, and sophistication of black oral culture; even “high” modernists such as T. S. Eliot and Ezra

Pound, despite their racism and elitism, recognized the cultural significance of this aesthetic. This recognition has been assessed by Michael North, who, in *The Dialect of Modernism* sees a crucial connection between Eliot and minstrelsy, pointing out that most whites' stance toward minstrel shows paralleled Eliot's own stance as an American expatriate living in England. Whites' attitudes toward minstrel shows, North writes, were complex and contradictory, allowing them to reject received European cultural standards of sophistication while simultaneously ridiculing those who they saw as being less culturally sophisticated than themselves—contradictions that have been explored by Eric Lott in *Love and Theft: Blackface Minstrelsy and the American Working Class* (1993). This societal contradiction is also apparent in the work of Eliot, whose appropriations, with Pound, of black vernacular speech reflects how he saw himself in relation to the literary establishment of his day. For instance, *The Wasteland's* frequent allusions to black culture and to Shakespeare, and their juxtaposition—as in the comedic reference to “O O O O that Shakespeherian [*sic*] Rag” (59)—reflects not only Eliot's own feelings of deterritorialization as an American expatriate living in England, but also the cultural amalgamations and incongruities characteristic of the minstrel show itself. Eliot and Pound recognized, with a complicated mixture of admiration and anxiety, that black oral forms posed the most significant challenge to dominant, “pure” forms of English. Their use of black vernacular, in other words, served as a marker for Eliot and Pound's self-identification as upstarts and challengers to received literary conventions, and they regarded black vernacular speech as the very “model for the dialect of modernism” (North 78). Yet ultimately, Eliot and Pound's appropriation of this dialect was marked by more complex ramifications than a mere admiring emulation or identification with oppressed peoples: Michael North notes that “the language Pound and Eliot assume as part of their attack on convention is itself a convention; the

linguistic tool they use to mock the literary establishment is in fact part of that establishment” (79). Thus, North maintains, Eliot and Pound’s use of black vernacular speech ultimately served to reinforce the hegemony of the literary establishment, citing the fact that at the time Eliot and Pound were coming to prominence, James Weldon Johnson and other black literary figures had already repudiated black vernacular forms (78–79).

But, as has been discussed above, for Langston Hughes the real social significance of African-American vernacular lay not in its repudiation by black writers such as James Weldon Johnson—whose artistic identities hinged on being accepted by the literary establishment—or its appropriation by modernist white writers such as Eliot and Pound—whose artistic identities hinged on challenging the literary establishment—but in its potential as the basis for a form of American modernism as an alternative to that which was propounded and sanctioned by the literary establishment. The social awareness implied in Langston Hughes’s championing of the “common element” indicates that he was concerned not with the ostensibly esoteric, inward turn of “high” modernists such as Eliot and Pound, but rather with a decidedly vernacular, outward turn. And the central role of social and political awareness in this new artistic expression reinforces Fredric Jameson’s proposition in his essay “Modernism and Imperialism” that modernism was by no means uniformly apolitical and introspective:

One of the more commonly held stereotypes about the modern has of course in general been that of its apolitical character, its turn inward and away from the social materials associated with realism, its increased subjectification and introspective psychologization, and, not least, its aestheticism and its ideological commitment to the supreme value of a now autonomous Art as such. None of these characterizations strikes me as adequate or persuasive any longer; they are

part of the baggage of an older modernist ideology which any contemporary theory of the modern will wish to scrutinize and dismantle. (45)

Furthermore, vernacular modernism was not only fully congruent with political awareness, it was also a movement that could link political and artistic ideas in twentieth-century America. The impetus for this version of modernism owes a great deal to Langston Hughes, who, in the outward turn of his poetry idealized not an American standardized whiteness, but “the blare of Negro jazz bands and the bellowing voice of Bessie Smith singing Blues” (“The Negro Artist” 966), and whose vision of a modernism rooted in the African-American vernacular already articulated the scrutinization and dismantling that Jameson later recognized as essential to rectifying older modernist ideologies. Hughes showed how the embrace of older forms, such as folktales and the blues, could provide African-American artists like Richard Wright with a stable yet plastic framework with which to forge their own form of modernism. Furthermore, as will be discussed in this chapter, Chicago blues music, itself an expression of a new kind of vernacular modernism rooted in earlier folk forms, also functions as a kind of aural parallel to the deliberate embrace and transmogrification of vernacular forms in African-American modernist literature.

“The tension of our brittle lives”: Wright’s uneasy relation to modernity and folk culture

The writing of *12 Million Black Voices* afforded Richard Wright an opportunity to voice his own conflicted stance toward modernity and modernism. Wright understood the Great Migration not only as a mass spatial transplantation, from the South to the North, nor only a cultural one, from an agrarian to an urban society, but as a temporal one as well, entailing nothing less than the virtually instantaneous shift from feudalism to modernity. In his preface to the book, he writes of the Great Migration as “a complex movement of a debased feudal folk

toward a twentieth-century urbanization” (xx). But for Wright this was not a simple narrative of “progress.” On the one hand, Northern industrial cities provided real opportunity to escape the horrors of the past and to realize the promise of a happier future not in heaven, but here on earth:

They tell us we will live in brick buildings, that we will vote, that we will be able to send our children to school for nine months of the year, that if we get into trouble we will not be lynched, and that we will not have to grin, doff our hats, bend our knees, slap our thighs, dance, and laugh when we see a white face. We listen, and it sounds like religion. Is it really true? Is there not a trick somewhere? (87)

Of course, there was in fact a “trick somewhere,” as Wright and many other African Americans realized when they came up against the alienation, exploitation, and more oblique but no less pervasive forms of racism that awaited them in Northern industrial cities, where the disorienting logic of capitalism ruled with absolute authority, and moved in mysterious ways:

No longer do our lives depend upon the soil, the sun, the rain, or the wind; we live by the grace of jobs and the brutal logic of jobs. We do not know this world, or what makes it move. In the South life was different; men spoke to you, cursed you, yelled at you, or killed you. The world moved by signs we knew. But here in the North cold forces hit you and push you. It is a world of things. (100)

These passages highlight the degree to which Wright’s conflicted attitude toward modernity was rooted in his conflicted attitude toward capitalism—in his recognition that he and other African Americans simultaneously benefited from and were exploited by industrial capital. This conflict was also an essential component of Wright’s vision of himself as a black modernist artist, which rested on what Paul Gilroy calls an “intensity of feeling” (*Black Atlantic* 115), entailing

simultaneously Wright's recognition of his role in the artistic traditions of the West even as he rejected and was rejected by many elements of that culture (*Black Atlantic* 162). Wright's modernism, in other words, is not only a modernism from the bottom-up, as advocated by Langston Hughes, but also what Benjamin Balthaser has called a modernism "from the outside-in" (385), one rooted in class as well as racial consciousness. Focusing on the photographs in *12 Million Black Voices*, Balthaser finds Wright's interest in documentary photography an apt reflection of Wright's emphasis on visual metaphors throughout his writing, noting that Wright reformulated W. E. B. Du Bois's concept of double consciousness as "double-vision" in order to highlight African-American identity as existing both within and without the gaze of Western modernity (358). For Balthaser, this double-vision accounts for Wright's contradictory statements on modernity, as, for example, when he states that modernity is simultaneously rooted in the "deadly web of slavery" while being also the result of "higher human consciousness" (358). Thus, Wright understands documentary photography as a quintessentially modernist medium, being an "expression of a racial past as well as a liberatory future . . . containing technologies of liberation and domination" (358).

Double consciousness and double vision are apt metaphors for coming to grips with Wright, who clearly did not shy away from contradictions. It is Wright's willingness to fully explore and leave unresolved such contradictions that imbue his writing and thought with an energy that does not dissipate, because he does not seek easy resolutions. The contradictions in documentary photography noted by Balthaser also apply to Wright's understanding of music in relation to modernity. Here, Ronald Radano's concept of "double hearing" (*Lying Up a Nation* 45), yet another scholarly refinement of the concept of double consciousness, is useful for understanding Wright's contradictory stance toward the aural realm of oral tradition and blues

music. Double hearing is especially apt for understanding Wright's orally-infused modernism, because Radano uses the term to denote the areas of resonance between sound and text, and a process in fact of "listening" to the text—"a dynamic process in which orality moves through textuality and back around" (45)—which amounts to a new way of "hearing" the work of African-American writers as well as, for that matter, a new way of "reading" the "texted history" of African-American musicians.

While Wright maintained a complicated relationship to modernity and modernism, his relationship to "the folk" was no less complicated. As far back as the infamous literary "debate" between Zora Neale Hurston and Wright during the mid-twentieth century, Wright's stance toward African-American vernacular culture has been hotly contested. Hurston, in her review of *Uncle Tom's Children*, maintained that Wright was "tone-deaf" in his treatment of black vernacular speech (4), while Wright framed Hurston's use of dialect as a continuation of "minstrel technique" ("Their Eyes Were Watching God" 17). Since then, scholars of African-American literature have continued to weigh in on the matter, usually by choosing one side of the divide and rallying behind their favored author. Despite occasional calls for reassessing the supposed "antipathetic" relation between Wright and Hurston by scholars such as June Jordan in 1974 (288), the general trend seems to have been to increasingly play up the stakes of the debate and to draw a line in the sand between the two sides, with scholars such as Henry Louis Gates, Jr. proclaiming that the debate represents "the great divide in black literature" (182). With considerably less panache, William Ferris simply points out that "of all the twentieth-century black writers . . . Richard Wright has the most complex relationship to folk culture" because "unlike black writers such as Hurston and Walker who journeyed South to rediscover their folk heritage, Wright fled these worlds" (541). Following the lead of June Jordan, William J.

Maxwell, in his *New Negro, Old Left* outlines a more nuanced understanding of the Wright/Hurston debate, in which communism, for Wright, and anthropology for Hurston, functioned as modernist discourses that were enriched—not hampered by—folk cultures. Maxwell points out that for Wright the real worth of African-American folk culture lies in its “revolutionary significance” (178) when yoked to a broader nationalistic vision. Maxwell’s interpretation is borne out in works such as “Blueprint for Negro Writing,” (1937) in which Wright notes the important cultural role that African-American folklore plays in an emerging black national consciousness, because it expresses “the collective sense of Negro life in America” and “marks the emergence of a new culture in the shell of the old.” (406). In light of these points, and while bearing in mind his sometimes conflicted relationship to “the folk,” I maintain that a key point in understanding Wright’s artistry in *12 Million Black Voices* lies in recognizing the elements of the African-American oral tradition that lie beneath the surface and that invest his narrative with a logic and unity of expression. Wright himself acknowledged the influence of two of the most prominent African-American oral traditions, the sermon and the blues, on his artistic sensibilities. For instance, in *Black Boy*, he recounts the poetically-charged stories he heard in the sermons preached at his grandmother’s church:

The elders of her church expounded a gospel clogged with images of vast lakes of eternal fires, of seas vanishing, of valleys of dry bones, of the sun burning to ashes, of the moon turning to blood, of stars falling to the earth, of a wooden staff being transformed into a serpent, of voices speaking out of clouds, of men walking upon water, of God riding whirlwinds, of water changing into wine, of the dead rising and living, of the blind seeing, of the lame walking . . . dramas

thronged with all the billions of human beings who had ever lived or died as God judged the quick and the dead. (102)

Further, Wright likened his work as a writer to that of a bluesman, “who sings the blues and it becomes a part of, an expression of, his whole predicament—his place in society” (qtd. in Lennon 240). The oral tradition thus infuses all of his writings, but *12 Million Black Voices* employs these elements in ways that are unique in Wright’s body of work. As Jack Moore has written, “the prose of *12 Million Black Voices* . . . is more oral and aural than any of Wright’s other book-length works” (143). In the book, Wright makes use of several oral and aural strategies that are hallmarks of both the sermon and the blues, strategies that can be understood in terms of their dialogic features. These include the use of shared knowledge, call and response, and personification.

“Voices are speaking”: Richard Wright’s oral strategies

As John M. Reilly and Karen Roggenkamp have pointed out, the narrative type of *12 Million Black Voices* can be read as a kind of sermon, in which Wright makes use of several rhetorical techniques and strategies employed by African-American preachers. In African-American churches, the sermon, as Beverly Moss writes in her ethnographic study of Chicago preachers and their congregations, is “as important to its community as the academic essay is to the academy” (202). A key feature of African-American church sermons is their use of dialogic patterns, a characteristic most commonly known as *call and response*. Call and response makes the sermon a dialogue rather than a monologue. In other words, this event relies on active audience participation in order to make its text whole, and to complete the event of the sermon. The sermon thus becomes what Moss refers to as a *community text*, one that exists as a creation

of a “community of participants” (203). Many African-American church ministers are well aware of this phenomenon and leave room in the preparation of their sermons for the congregation to complete the text by entering with their responses. As one minister told Moss, “to have a silent congregation in a mainstream African-American church means that the minister and his or her sermon have failed” (203). The minister may give explicit markers through question words like *what?* and *how?* which denote that he is requesting or inviting response on the part of the congregation.

Formalized dialogic patterns such as this comprise a significant part of a class of rhetorical strategies that could be grouped under the general category of “shared knowledge.” It is these strategies that turn African-American preachers’ sermons into dialogues rather than merely monologues, making them a “community text” forged by a community of participants. It was in Chicago that Richard Wright came to understand the significance of this community of participants, primarily through the work of sociologists such as St. Clair Drake and Horace R. Cayton, who studied the black community in Chicago’s South Side. In *12 Million Black Voices*, Wright artfully weaves sociological statistics from Drake and Cayton’s research along with evocative photographs and a collective narrative voice rooted in the black oral tradition, to create a new kind of “community text”—a text that is created by a community of participants—speaking to the urban, industrial environment in which blacks from the South now found themselves. These dialogic patterns also figure prominently in the blues, which underwent a similar industrial transformation in Chicago, making Chicago blues a similar kind of community text, expressive of the same shared knowledges, as will be explored in this chapter.

In order for a community text such as a sermon to be collaboratively constructed—in order that the preacher and the congregation may fully participate—the participants must share a

vision of communal identity, and the sermon is a key site in the construction of this identity. The sermon is thus both a community text and a “community-building construct” (Moss 205), in which a preacher typically uses rhetorical techniques and strategies to encourage active engagement on the part of the congregation. This includes the use of first-person plural pronouns and the use of shared cultural knowledge. Furthermore, as one Chicago preacher told Moss, “to be successful at using shared cultural knowledge as a strategy, the ministers must know their congregations well, they must make judgments about what their congregations know, what their congregations’ expectations are” (206). In *12 Million Black Voices*, Wright makes effective use of these techniques of shared knowledge, most prominently in his use throughout the book of the first-person plural “we.” This repeated use of “we” has the effect of cumulatively blurring the distinction between author and reader, between narrator and audience, until by the last lines of the book, “we” are all together: “We are with the new tide. We stand at the crossroads. We watch each new procession. The hot wires carry urgent appeals. Print compels us. Voices are speaking. Men are moving! And we shall be with them. . . .” (147). The “we” at the beginning of the book, speaking for African Americans as “us black folk” (39) has by the book’s conclusion broadened to include all members of the working class, suggesting that vernacular African-American culture has become a blueprint or template not only for a new mode of modernism but for a new understanding of culture rooted in working-class identity at the national and transnational levels.

The sharing in the composition of an African-American preacher’s sermon, the collaborative construction of it, through techniques such as call-and-response and shared knowledge, represents another way that the boundaries between speaker/writer and audience/reader are blurred (Moss 205), just as the distinctions between subject and object were blurred in Langston Hughes’s “Weary Blues.” In this light, the photographs interspersed

throughout the text of *12 Million Black Voices* can be understood as a type of pictorial “response” to Wright’s textual “calls.” The photographs are a *collective* response both in the sense that they depict anonymous members of African-American communities and in the sense that the photographs are not the work of any one individual but are drawn from the Farm Security Administration’s collection. And because Wright wrote his text before he knew which photographs would be included in the book (Moore 145), he was acting like a preacher “leaving room” in his composition for this collective response.

The photographs also function as responses to the text on another level, apparent in the text that often accompanies the photographs, functioning as captions. A particularly illustrative example of this occurs on pages 49—55. First, Wright states, on page 49: “Our days are walled with cotton; we move casually among the whites and they move casually among us . . .” and the paragraph continues with a description of the oppressive plantation system. Then a new paragraph starts:

We plow, plant, chop, and pick the cotton, working always toward a dark, mercurial goal. We hear that silk is becoming popular, that jute is taking the place of cotton in many lands, that factories are making clothing out of rayon, that scientists have invented a substance called nylon. All these are blows to the reign of Queen Cotton, and when she dies we do not know how many of us will die with her. (49)

Then, over the next six pages, photographs of cotton fields are displayed, accompanied by the following six captions: “Our lives are walled with cotton — We plow and plant cotton — We chop cotton — We pick cotton — When Queen Cotton dies . . . — . . . how many of us will die with her?” (50–55). The learned, verbose wordings of the preacher, with his allusions to new

scientific developments, technological innovations, synthetic materials and alternative crops that may take the place of cotton, are followed by the response of the congregation, who repeat the main ideas of the preacher's but in greatly simplified iterations—an appropriate simplification in that it serves to foreground the photographs themselves. The narrative “we” in the textual utterances underscores that the congregation is engaged in a *collective* response to the preacher's calls. Thus, the photographs, or rather the interplay of the photographs with the text, prompt readers into more active “modes of engagement” (Allred 555), in the same way that a good preacher motivates his congregation into active engagement with his own text.

The reference to “Queen Cotton” in the last example brings up yet another rhetorical strategy that is used in sermons as well as the blues: personification. Preachers use this technique in order to convey abstract principles or ideas in a way that makes it easier for the people in their congregation to understand. And just as a preacher will illustrate moral lessons through the use of characters that personify a particular attribute, such as the Devil for evil or Job for patience, so too does Richard Wright impart societal structures with personifications: “Lords of the Land” designates the class of white Southern land owners, while “Bosses of the Buildings” refers to the Northern urban white factory owners. Abstract societal institutions, what Wright elsewhere in the book portrays as incomprehensible “cold forces” (100), are thus made tangible and comprehensible, in the form of personifications. Wright's personifications thus comprise a preacherly form of de-reification.

In addition to “cold forces,” material objects are also personified in African-American culture. When Memphis Minnie sang, in her 1929 recording of “When the Levee Breaks”*: “Mean ol’ Levee, taught me to weep and moan,” she employed this device, attributing the human role of “teacher” to a man-made object, the levee. Wright also ascribes human attributes to man-

made objects in his extended riff on the kitchenette, occurring on pages 104–111 of *12 Million Black Voices*, a passage that likens the kitchenette to a writer: “The kitchenette is the author of the glad tidings that new suckers are in town, ready to be cheated, plundered, and put in their places” (105). In this section Wright also employs repetition, another rhetorical device used both by preachers and blues singers. Each paragraph in this section begins with “The kitchenette . . .” and this repeated use of the phrase corresponds with a feature of sermons noted by Drake and Cayton, when they wrote in *Black Metropolis* that it was common to hear preachers on the South Side who “repeat phrases over and over with a rising and falling inflection of the voice” (624–25). These examples illustrate the varied ways that Wright in *12 Million Black Voices* makes use of the African-American oral tradition.

“Our ‘spirituals’ of the city pavements”: Richard Wright’s blues

Midway through the book, Wright calls attention to two distinct modes of the African-American oral tradition, the sacred and the secular, by including a mock sermon, printed in italics, immediately followed by an account of the Saturday night function at a “crossroad dancehall” where revelers dance to blues music performed on “an old guitar and piano” (73). This juxtaposition of the sacred and the secular is an important feature of the blues itself, and there has long been a great deal of cross-fertilization between sacred and secular African-American musical expressions. Despite the musical similarities between blues and sacred music, many African-American communities maintained a strict cultural divide between the two musical realms. Chicago musician Big Bill Broonzy, for instance recalls: “My mother was a Christian, my dad was a Christian . . . the whole family was all Baptists an’ they didn’t think it was right that I should go an’ play a fiddle, play the blues an’ barn dance songs and thing like that. But anyway we went on through with it” (qtd. by House 41). Broonzy’s protege, Muddy

Waters, recounts a similar story: “My grandmother, she say I shouldn’t be playing the blues. I should go to church, she’d tell me. But to this day I never figured out why people say that you sinning. Devil gonna get you if you play the blues. Yeah, call it devil’s music” (qtd. by House 41). Broonzy and Waters both articulate the sense that to play the blues was to violate a strongly held cultural norm and standard of morality.

Yet the blues and church music, despite serving very different functions and often being different in terms of lyric subject matter, nevertheless maintain a commonality of musical practices. Examples of common musical practices between the blues and gospel music include: call-and-response patterns, lyrical repetition as a rhetorical device, the use of flatted thirds and sevenths (“blue notes”), and lyrical personification of natural forces such as floods, droughts, and infestations. As Angela Davis has pointed out in *Blues Legacies and Black Feminism*: “Despite the new salience of this binary opposition [between the old spirituals and the new blues music] in the everyday lives of black people, it is important to underscore the close relationship between the old music and the new. The new music had old roots, and the old music reflected a new ideological grounding of black religion. Both were deeply rooted in a shared history and culture” (6). Davis, then, understands this “shared history and culture,” what Moss has termed “shared knowledge,” as a kind of nexus between the sacred and secular realms of African-American culture, a nexus that complicates the facile taxonomic divisions of African-American musical expressions into separate genres.

Davis’s insight is reinforced by Albert Murray, who in his seminal work *Stomping the Blues*, writes: “In point of fact, traditionally, the highest praise given a blues musician has been the declaration that he can make a dance hall rock and roll like a downhome church during revival time. But then many of the elements of blues music seem to have been derived from the

downhome church in the first place” (27). That the blues and church music need not be seen as a conflicting binary opposition but rather as different cultural expressions of the same aesthetic is key to understanding Wright’s statement in *12 Million Black Voices* that the blues are “our ‘spirituals’ of the city pavements” (128). Theologian James Cone has written that the blues “are secular in the sense that they confine their attention solely to the immediate and affirm the bodily expression of black soul, including its sexual manifestations. They are spirituals because they are impelled by the same search for the truth of black experience” (qtd. in Davis 8). Cone’s emphasis on “the truth” is significant, for the blues, unlike many mainstream popular songs, do not flinch from addressing the harsh realities—the joys as well as the sorrows—of material life in America. Unlike mainstream popular songs, the blues do not indulge in romanticized or idealized visions of love or of any other facet of life, and unlike church songs, the blues emphasize the importance of life here on earth rather than the hereafter. Davis emphasizes this point, writing that “fearless, unadorned realism is a distinctive feature of the blues. Their representations of sexual relationships are not constructed in accordance with the sentimentality of the American popular song tradition. Romantic love is seldom romanticized in the blues” (23). Thus, the aesthetic of blues music is rooted in a celebration of actual lived, sensuous (and sensual) experience. Blues music is not a romantic art form, and it is not falsely optimistic. Rather, it is rooted in truthfulness and honesty, and for a musician to successfully sing or play the blues requires not only honesty and truthfulness on the part of the performer, but the ability to convincingly convey this sense of honesty and truthfulness in a manner that will register with the performer’s audience. The blues performer, then, must understand her audience in order to construct an effective performance—an understanding, in other words, that makes use of “shared knowledge.” Cone’s idea of “the truth” is important then, but, as Davis points out, also

problematic, for while the blues certainly do seek to see and tell things as they really are, “it is not necessary to accede to Cone’s essentialist invocation of a single metaphysical ‘truth’ of black experience to gain from his description” (8). Thus although the blues and gospel music are distinct genres, it must be emphasized that there is a great deal of commonality between these sacred and secular musical idioms.

Blues music may thus be understood as an expression of a secular mode of spirituality and/or a spiritual mode of secularity. In light of this paradox, Wright’s statement that the blues are “our ‘spirituals’ of the city pavements” may be understood as indicative of what Houston Baker calls the “blues voice,” for the blues often reveal a similar love of paradox. This paradox extends well beyond mere verbal paradoxes apparent in many blues lyrics, and even beyond the paradoxical relation that often exists between the lyrics and the emotional tenor of the actual music that accompanies and interacts with these lyrics. Rather, the very ethos of the music itself is rooted in paradox—as in, for instance, its constant juxtaposition of major and minor harmonies and melodic patterns; in its complication of the distinction between individual soloist and collective ensemble, in its muddying of the emotional distinctions between “happiness” and “sadness,” suggesting a philosophical outlook that embraces contradiction—rendering the musical medium with a dynamic tension, rather than resolving the contradiction into a neat, cohesive, and coherent synthesis. Albert Murray has written extensively on these contradictions, highlighting the emotional complexity of the blues as an art form with an aim toward rectifying the common misconception that blues music is primarily a defeatist expression of suffering and despair. Murray makes a crucial distinction between what he calls “the blues as such” and “the blues as music,” with the “blues as such” representing the common notion of “blues” as denoting sadness, despair, and depression while the “blues as music” is a kind of tool or weapon (what he

has frequently referred to as a “survival technology”) that addresses this despair, but also confronts it and ultimately overcomes and rises above it. It is this essential resilience and optimism that Murray identifies as the most important part of the jazz/blues aesthetic (for, as noted above, Murray makes no crucial distinctions between jazz and blues as art). This last point is supremely important to Murray, implying that the blues is an autonomous art, but (paradox again) it is by heeding and honoring this autonomy that the art form serves its function in African-American culture:

The fundamental function of the blues musician (also known as the jazz musician), the most obvious as well as the most pragmatic mission of whose performance is not only to drive the blues away and hold them at bay at least for the time being, but also to evoke an ambience of Dionysian revelry in the process. Which is to say, even as such blues (or jazz) performers as the appropriately legendary Buddy Bolden, the improbable but undeniable Jelly Roll Morton, the primordially regal Bessie Smith, played their usual engagements as dance-hall, night-club, and vaudeville entertainers, they were at the same time fulfilling a central role in a ceremony that was at once a purification rite and a celebration the festive earthiness of which was tantamount to a fertility ritual. (*Stomping the Blues* 17)

Clearly, the blues are deep—as Albert Murray, Langston Hughes, and many other African-American writers and intellectuals have noted. Yet with the exception of the brief, intriguing passage on page 73 of the book, Richard Wright does not seem to place much importance on the blues in *12 Million Black Voices*. He admits that blues music does offer some trite enjoyment, a “string of ditties that make the leaves of the trees shiver in naked and raucous

laughter,” but ultimately he rejects them as being no longer relevant to modern, urban life, claiming that the blues simply “are not enough to unify our fragile folk lives” (75). Here, scholars such as Jeff Allred have understandably taken exception, asking, “Why must the blues be read as mere cultural residue?” (565). By way of positing an answer, Allred states that Wright’s claim represents an “important limitation” of his “metanarrative of progress-through-migration” (565). But, aside from the issue of whether Wright really saw his “metanarrative” as one of “progress,” which is highly questionable,³ perhaps there is another explanation for Wright’s seeming underestimation of the blues. Arriving at a new answer to this question requires situating Wright’s claim in its historical and musical-cultural context.

First, it is important to keep in mind the year in which Wright made this claim, while also taking into account the historical development of the blues as its musical expressions became more urbanized as a result of the Great Migration. At the time *12 Million Black Voices* was published, in 1941, the blues was still very much a rural musical style. While a style of blues that is commonly known as “urban blues” had developed in northern US cities during the 1920s and 1930s, this genre is quite different stylistically from traditional blues styles based in the rural American South. So-called “urban blues,” epitomized by the recorded output of Bessie Smith, featured vocalists steeped in the blues tradition and performed using many of the mannerisms of blues singers and instrumentalists, but much of the repertoire was drawn from Tin Pan Alley and Broadway show tunes. Furthermore, in search of a more lucrative commercial success, many of the traditional elements of the blues vocabulary—such as bent notes, grunts, harmonic clashes, extended instrument techniques—were toned down in recordings of “urban blues,” resulting in a

3. We have already seen that Wright found much oppression in the Northern industrial cities to which he and other Southern blacks had migrated.

sound and musical vocabulary more akin to vaudeville numbers than traditional blues. Bessie Smith herself, the highest-paid black entertainer of her era, was a fixture on the vaudeville circuit, selling 6 million dollars worth of records over a four-year period (Thompkins).

Meanwhile, due in part to the work of mobile recording projects like those of Alan Lomax, the more raw, down-home sound of Delta blues was also being disseminated throughout Northern American cities via the distribution of “race records” in black neighborhoods.

Muddy Waters’ “Screaming Blues”

Of course, although blues musicians, like other African Americans, had begun arriving in great numbers in Chicago from the South for many years before the publication of *12 Million Black Voices*, there was still no distinctly identifiable blues style unique to Chicago. The Delta blues musicians who did migrate to Chicago during the first decades of the twentieth century found it difficult to find an audience for their music. There was a small demand for Delta blues, serving a niche market for some displaced African-Americans who longed for the familiar sounds from down home—an example of what Farah Jasmine Griffith has called “the South in the City”—but by and large, most urban African-Americans were ready to move on. When Muddy Waters arrived in Chicago, eager to make a career of music, he found to his dismay that “the blues didn’t move anybody in the big city. They called it sharecropper music” (qtd. in Bone 101). Blues music was seen as a throwback to an earlier agrarian life, and consequently as a reminder of the hard times that many were all too eager to leave behind them. The general attitude in Chicago thus seemed to be in keeping with Richard Wright’s assessment that the blues were no longer relevant to urban, modern African Americans. But if we trace the development of Waters’ music, we can see blues music itself and people’s relation to it change dramatically as a result of the new urban environment.

This can be observed, for example, in the earliest recordings of Muddy Waters, widely recognized as the “father” of modern Chicago blues. Waters was recorded playing blues even before he arrived in Chicago. Alan Lomax, in his capacity as archivist of American Folk Song for the Library of Congress, was traveling through the South in 1941 using his mobile equipment to record musicians for the purpose of documenting the music for the Library. It was on this trip that Lomax encountered Waters and recorded him on the front porch of his cabin (Gordon 36–38). Lomax returned on another recording trip in 1942, and again recorded Waters at his home.

These recordings, collated today as *Muddy Waters: The Complete Plantation Recordings*, reveal a young musician thoroughly steeped in the Delta blues tradition: the recordings consist of performances by Waters—accompanied only by his acoustic guitar, and sometimes one or two other musicians—and the repertoire is drawn from staples of the early blues. These recordings document that as late as 1942, Waters was still performing in a traditional rural style, and had not yet developed the musical elements that would become identified with the Chicago blues style.

But the joy of hearing the recordings of himself that Lomax made, combined with increased frustration at trying to make a living at sharecropping seems to have prompted Waters to move to Chicago in 1943 (Gordon 64–67). Once there, Waters soon met Big Bill Broonzy, who, having already been in Chicago for over twenty years, was a veteran of the city's nightlife and music scene. Broonzy recognized the younger musician's talent and drive, and became a mentor to Muddy. Broonzy showed Waters around the house-party circuit, and also began hiring Waters for club gigs (Bone 101, House 8). Waters soon began leading his own band. In addition to his apprenticeship with Broonzy, Waters encountered a slew of other blues musicians—including fellow future luminaries Willie Dixon, Jimmy Rogers, and Otis Spann—also newly arrived from the South.

By the 1950s, the collective performance practices of these musicians would coalesce into what would become widely known as “Chicago blues,” characterized by the use of inexpensive solid-body electric guitars and loud, often distorted amplification, which in turn engendered a stylistic shift to heavier bass and drum patterns. These bass and drum patterns were the necessary outcome of musicians playing to be heard together in noisy venues where there was often dancing. In the older, rural blues music, musicians often performed in relatively intimate locations, such as a front porch or in someone’s living room, as solo acts or sometimes as loose-knit ensembles of two or three players.

Besides the scope and setting of musical ensembles, there were other musical differences in performance practice between the rural Delta blues and the urban Chicago blues. Rural blues musicians would switch to chord changes in the blues progression intuitively, when they felt like it. This resulted in blues forms that could be 13 bars in one stanza, 12 in the next, followed by perhaps an 11-bar or twelve-and-a-half bar chorus. But in Chicago, the necessity of musicians functioning together as a band, as a tight unit, resulted in the metrics of blues music becoming more measured and standardized. The primacy of the 12-bar blues form became established among urban musicians, and this form was largely unvaried from tune to tune.

The Chicago musicians’ primary determining innovation, the switch to electric from acoustic instruments, was prompted not so much by any aesthetic choices as by the exigencies of Chicago’s crowded, noisy, South Side nightclubs. As Muddy Waters succinctly put it, “Couldn’t nobody hear you with an acoustic” (Rooney 112). Solid-body guitars were capable of being played much more loudly through amplification than traditional hollow-body electric and acoustic guitars, which tended to feed back more easily, even at relatively low volumes. Thus, solid-body guitars were a more practical choice if a musician wished to play at loud volumes.

Solid-body guitars were essentially slabs of wood with the bridge and electronic pickups screwed directly into the wood. This construction made the solid-body guitar all but inaudible when played without an amplifier, but their lack of acoustical resonance became an advantage when plugged in to an amplifier, because the lack of vibrating parts made for a very stable, pure, electronic signal capable of loud amplitude. In contrast, traditional hollow-body guitars had the pickups mounted on top of a very resonant soundboard, and their bridges were also floating on top of the soundboard, as on a violin. This construction made for a loud resonant tone when played acoustically, but these resonances presented many problems when amplified.

Furthermore, the Chicago blues musicians' switch to solid-body guitars was also prompted by economic factors: the simplified construction of the solid-body guitar meant that they could be mass produced in factories rather than being handmade by skilled luthiers, which resulted in lower prices for solid-body guitars. In fact, many jazz guitarists of the time considered solid-body guitars to be mere toys, and not real instruments. But the Chicago blues musicians used the instruments that were economically accessible to them, and used their instruments' strengths to their advantage in constructing a new sound for a new urban environment. With the ensuing popularity of Chicago blues recordings, this new sound defined the musical aesthetic standard for a younger generation of musicians and listeners who would make it the cornerstone not only of blues but also of subsequent styles of rock and pop music. This principle, of using ostensibly second-rate instruments in new ways, and in the process defining new sounds, will also be seen at work in the Detroit techno musicians of the 1980s, who used *electronic* instruments in ways similar the ways that Chicago blues musicians used *electric* instruments.

In order to understand how the unique Chicago style of blues evolved in the middle of the twentieth century, it is illustrative to examine Muddy Waters' various recordings of his

composition “You’re Gonna Miss Me When I’m Gone.” This tune is especially useful for the purpose because Waters performed it throughout his life, and made recordings of it at three important stages in his career: 1. in 1942, when he was still living in the Mississippi Delta, 2. in 1948, shortly after he had relocated to Chicago, and 3. In 1981, shortly before his death. The three recorded versions of the tune thus are representative of the three main stages of Waters’ music—and by extension the stages of blues music’s development from a rural to an urban phenomenon—serving as an apt demonstration of how the blues developed from the Delta style to the early Chicago style, and then later to the codified performance practices of the standard Chicago Blues style. By listening to different versions of the same tune rather than three different tunes, these changes are made more apparent.

The first version of “You’re Gonna Miss Me When I’m Gone”^{*} was recorded by Alan Lomax as part of the series of field recordings he made for the Library of Congress in 1941 and 1942, mentioned above. Lomax recorded two similar versions of Waters performing “You’re Gonna Miss Me” on the front porch of his cabin in Stovall, Mississippi in 1942. Both renditions of the tune are solo performances, emblematic of the Mississippi Delta blues style, and featuring Waters singing and accompanying himself on an acoustic guitar. Waters plays the guitar with a slide, most likely a bottle-neck. Through the vantage point of historical hindsight, a notable aspect of the recordings is the similarity of Waters’ vocal and guitar stylings to that of Robert Johnson. This stylistic indebtedness is especially apparent in Waters’ guitar techniques, which combine sliding single-note countermelody lines played in the lower register with chords voiced in the upper register. These chords are often played in the same triplet rhythmic pattern that Johnson employed on many of his recordings.

What is most notable about these versions of the tune, however, in terms of their relationship to the later Chicago Blues style, is their sense of musical time and structure. In both versions of “You’re Gonna Miss Me” recorded in 1942, the blues form is not yet fixed as the 12-bar form it would coalesce into in Chicago just a few years later. In the first version of the song recorded by Lomax, designated as “You’re Gonna Miss Me (Number One)”* in the *Complete Plantation Recordings* collection, Waters deviates significantly from the standard 12-bar blues form. After a four-bar intro, Waters begins the first chorus (00:00:14), adhering to the standard form. The second chorus, however (00:00:53) contains only 3 beats in bar 4, deviating from the standard 4-4 metrical pattern of the rest of the song. The third chorus (00:01:30) also skips a beat in bar 4. The fourth chorus consists of a guitar solo played by Waters, and adheres to the standard 12-bar blues form. The fifth and final chorus (00:02:43) again skips a beat in bar 4, and adds one beat to bar 8, resulting in a five-beat measure.

“You’re Gonna Miss Me (Number Two)”* adds an extra verse to the first version, and takes even more liberties with the musical form. This version begins with an unusual 3-bar intro, then the first chorus (00:00:09) skips a beat in bar 4, just as the previous version did, but also adds two beats in bar 8. The second chorus (00:00:47) also skips a beat in bar 4, but otherwise maintains the standard form. The third chorus (00:01:21) skips a beat in bar 4 and also adds two beats in bar 8, resulting in a form identical to the first chorus. In the fourth chorus 00:01:56, bar 4 is 8 beats long, adding in effect an entire extra bar. In the fifth chorus (00:02:33), which is a guitar solo, Waters completely breaks down the form at bar 4, playing over the I chord (tonic of the key) for 13 beats before coming in with the V chord (dominant of the key), which would typically occur in the 9th bar of a standard blues form. From here Waters plays four more bars to finish the remainder of the chorus adhering to the standard blues form. This unusual 13-

beat section functions as a kind of harmonically nebulous substitute for the middle portion of a standard blues progression (bars 4–8), which would normally consist of 20 beats, or five measures in 4-4 time, creating a surprising sense of disorientation and disruption. The sixth and final chorus (00:03:02) adds two extra beats to bar 8.

Waters' deviations from the standard 12-bar blues form occurring in these two renditions of the tune are typical of the Delta blues. Solo performers in this style changed chords and altered meters at will, feeling no compulsion to adhere to consistent forms. Furthermore, the fact that the two recorded versions of Waters' "You're Gonna Miss Me" are so formally different suggests that these deviations were not meticulously worked out in advance, but rather were incorporated spontaneously, according to the whim of the performer. Musical time in this rural blues style, like the time of agrarian society in general, was fluid, non-standardized, and resisted quantification into neatly measured, repeated units. The Delta blues is very much an aural expression of the pre-industrial sense of time that Richard Wright describes in *12 Million Black Voices* when he writes, of life in the old South: "The seasons of the year form the mold that shapes our lives, and who can change the seasons?" (64). In this sense, the new rhythmic and structural concepts—such as the standardized 12-bar form described earlier—that were developed in the Chicago blues style are indicative of the larger change in the concept of time that occurs in the change from pre-industrial, agrarian rural cultures to industrialized urban cultures—with the shift from fluid notions of time based on the position of the sun in the sky and the changing of the seasons to a universal standard time, entailing a fundamental shift from circular and malleable senses of time to linear and rigid senses. Thus, we see carried out in musical performance practice Wright's theory of the Great Migration not only as a cultural transplantation from an agrarian to an urban society, but also as a profound temporal shift,

comprising “a complex movement of a debased feudal folk toward a twentieth-century urbanization” (xx).

Within a few years of arriving in Chicago for good in 1943, Muddy Waters recorded the song again, this time for the small, independent Aristocrat label. Aristocrat Records was formed in April 1947 by Charles and Evelyn Aron. The owner of the Macomba Lounge, a local bar (3905 South Cottage Grove), invested in the Arons’ fledgling company, and soon assumed leadership of the label’s sales division, and then joint ownership of the company (Campbell, et al.). His name name was Leonard Chess, who in 1950 would change the label’s name to Chess Records, and establish it as the preeminent label for Chicago blues music.

The recording session for “You’re Gonna Miss Me”^{*} took place in Chicago on 30 November 1948, and was only Waters’ third session as a leader, not counting Lomax’s front-porch recordings made in 1942. Waters’ previous recording session, also for the Aristocrat label, had yielded the single “I Can’t Be Satisfied,”^{*} with “I Feel Like Going Home”^{*} as the B-side, which were both remakes of tunes he had recoded earlier for Lomax. This earlier recording marked a milestone in the history of electric blues, being the first-known recording of electric bottleneck (slide) guitar (Vander Woude 9). It also had sold relatively well, becoming a hit in Chicago’s South Side (Campbell, et al.). Up until this release, the Aristocrat label had taken scant interest in blues music—preferring to record country and western musicians, gospel groups, pop crooners, and, most often, polka bands—but the financial success of Waters’ single prompted Aristocrat to reconsider its priorities, and began recording more blues musicians (Campbell, et al.). The label was undoubtedly looking to repeat this success for Waters’ third recording session. Rather than remaking a solo version of “You’re Gonna Miss Me,” as it was documented by Lomax, this session made use of accompanying musicians—“Babyface” Leroy

Foster on backing guitar and Ernest “Big” Crawford on bass (Wirze). The resulting record from the session was issued as a single in February 1949, catalog number Aristocrat 1307, with “You’re Gonna Miss Me (When I’m Dead and Gone)” as the A-side and “Mean Red Spider”^{*} as the B-side (Campbell, et al.; Wirze). Waters was listed as the composer of both tracks, and the performers were listed as “Muddy Waters with Rythm [*sic*] Accompaniment.”

Cashbox reviewed the single in its Feb 19, 1949 issue, describing the pair of tunes as “some real low-down country blues. . . . The pair show as as fair tunes that should meet with their fair show of coin play. Guitar work on the pair adds to the polish of the platter throughout” (“You’re Gonna Miss Me” 9). It is perhaps not surprising that a review appearing in a periodical entitled *Cashbox* should focus on the financial prospects of the recording, conveying the reviewer’s optimism over the amount of “coin play” the recording was likely to receive. What is more surprising is that despite the song’s upbeat tempo and the prominence of electric guitar, the reviewer described the single as an example of “low-down country blues.” This misperception is perhaps due to Waters’ use of bottleneck guitar, as this slide technique, Waters’ previous single notwithstanding, had heretofore been associated only with acoustic, rural blues styles.

The recording represents an important document in the development of the Chicago blues sound, being in many ways a halfway point between the intimate sound of rural delta blues and the raucous band sound of full-fledged Chicago blues. In musical-structural terms, the form of the 1948 version of “You’re Gonna Miss Me” had obviously been rehearsed beforehand, with each and every chorus featuring an unusual two-beat sixth bar. The haphazard, improvisational structural features of the 1942 versions of the tune are gone. And yet the fact that Waters chose to retain the weird eleven-and-a-half bar form at all rather than a standard 12-bar form suggests that the idiosyncratic forms of the Delta were still not entirely abandoned in the city by 1948.

The size of the ensemble for the 1948 version also suggests a blend of rural and urban elements. The 1948 version is rhythmically propulsive and the two guitarists and bass player generate a great deal of energy—they sound like a *band*. But there are no drums on the recording, and the ensemble is composed entirely of string instruments, lending a more subdued sound than what would have undoubtedly been transpiring on Waters's live gigs in South Side clubs. Leonard Chess, in addition to being involved in all business aspects of Aristocrat, took an active role in the recording process as well, going so far as to actually perform on some recordings. According to Waters himself, Chess seems to have had more of a knack for music than some of the members of Waters' own band, at least when it came to performing in a manner appropriate to the energetic style of Chicago blues. Waters describes the recording of "She Moves Me,"* a hit released in 1952: "Leonard Chess played the bass drum . . . because my drummer couldn't get that beat on 'She Moves Me.' . . . My drummer wasn't doin' nothin', just dum-chik dum-chik dum, but he couldn't hold it there to save his damn life, and Leonard Chess knew where it was. So Leonard told him, 'Get the fuck out of the way. I'll do that'" (qtd. in Palmer 164–65).

Furthermore, Chess took an unorthodox approach to recording, inadvertently devising several innovative techniques that became hallmarks of Chess's signature sound, in many ways just as unique as the sounds of the musicians themselves. For example, Chess's unique reverb sound was a result of Chess placing a microphone in the studio's toilet (Vander Woude 36); and additional idiosyncratic echo effects were created by placing a microphone and a loudspeaker at opposite ends of a sewer pipe located in the studio (Guralnick 227). Another key factor in Chess's sound was the prominence of drums in his mixes. His son Marshall recounts: "My father wanted drum, drum, and more drum. I think he was responsible for doing that to blues, to bring

out a heavy beat” (Guralnick 227). This unprecedented emphasis on drums would become a defining characteristic of Chicago blues and in turn a key part of rock and roll. The sounds developed by Chicago blues musicians thus found an apt corollary in their documentation by a record producer who was not only attuned to the musicians’ new mode of expression, but who himself also employed similarly unorthodox and uniquely personal methodologies in his recordings of this music. Both the musicians and the record producer used the available tools at their disposal in heuristic, idiosyncratic ways.

The last version of “You’re Gonna Miss Me When I’m Gone”* to be issued under Waters’ name appeared on the album *Muddy Waters and the Rolling Stones Live at the Checkerboard Lounge*, recorded on 21 November 1981, which was also the last album to appear under Waters’ own name before his death in April 1983. The Checkerboard Lounge was a club located in the Chicago neighborhood of Bronzeville, owned by Chicago blues guitarist Buddy Guy, frequently featuring local as well as national blues acts. While this last version of the tune appears as part of the album issued in Waters’ name, Waters does not actually perform on this track (and neither do the Rolling Stones). Rather, his backing band perform by themselves, with Waters’ guitarist John Primer delivering the vocals. The live show that yielded the recording was also videotaped, and watching this video today, it is notable that much of the camera time during the performance of this tune is devoted to showing members of the audience, mostly white, who had showed up in great numbers, presumably to see the Rolling Stones in one of their rare performances at a small venue (“Muddy Waters—You’re Gonna Miss Me When I’m Gone (1981)”). Waters’ band performs a competent, workmanlike rendition of the tune on their own, but all of the quirks of the 1942 and 1948 versions are gone. The fact that Waters himself is also missing on this rendition of the tune is thus oddly appropriate, with the performance functioning

as a kind of summary of what had by the early 1980s become stereotypical clichés of the Chicago blues sound: medium tempos, loping shuffle rhythms, lengthy guitar solos comprised of standard pentatonic licks and bent notes, and unvarying 12-bar blues forms.

But before the Chicago blues sound became laden with such clichés, it was a new, vibrant style. Elements of the earlier Delta blues had coalesced into an urban style that was loud, raucous, and featured driving rhythms—all enabled by the adaption of the standard 12-bar blues form, which allowed for drums, bass, guitars and vocalists to move together as a unit. The new electric blues sound was hard and aggressive, a reflection of the harsh urban industrial living conditions in which the music developed, and which Wright documented so vividly in *12 Million Black Voices*. The stylistic evolution that occurred in a matter of a few years in Chicago, as the blues morphed from a rural to an urban expression, was thus an aural iteration of the larger phenomenon Wright described in the book, that of the abrupt, jarring shift from feudalism to modernity. The new Chicago blues was perfectly suited to the environment in which it developed, which is probably why it initially met with such confusion, even outright hostility, when it was performed to audiences from outside of this environment. For instance, Robert Palmer describes the problems Muddy Waters faced in the 1950s, when he first played his electric blues to audiences in England, who were largely unaware of the new blues and in fact were only just beginning to appreciate the older, rural Delta blues styles:

Muddy, innocent of this audience's expectations, cranked up his amplifier, hit a crashing bottleneck run, and began hollering his blues. SCREAMING BLUES AND HOWLING PIANO is the way that Muddy remembers the morning's newspaper headlines. "I had opened that amplifier up, boy, and there was these headlines in all the papers. Chris Barber [English "trad-jazz" trombonist who led

Waters's backing band for the English tour], he say, 'You play good, but don't play your amplifier so loud. Play it lower.'" Paul Oliver noted wryly in *Jazz Monthly*, "When Muddy Waters came to England, his rocking blues and electric guitar was meat that proved too strong for many stomachs," but the tour turned out well after Muddy toned down a bit. He was more than willing to be accommodating. "Now I know that the people in England like soft guitar and the old blues," he told *Melody Maker*'s Max Jones shortly before he left to return to Chicago. (257–58)

Waters' toning down his blues in response to audiences' reactions is an example of how the blues functions as a "community text," being constructed by a community of participants, and also demonstrates how a blues performance, like a sermon, depends for its successful reception on "shared knowledge" specific to that community of participants. If the performance or sermon is delivered to an audience outside of that community—who do not share the same cultural knowledge, as was the case with the audience Waters encountered in Britain—the blues musician's and preacher's message is likely to fall on deaf ears.

As the electric, "Chicago style" blues became established as a musical form that was played primarily by and for working-class black urban audiences, the older, acoustic "country blues," which had previously been marketed as "race records" to black audiences, began to be marketed by record companies and concert promoters as "folk blues" to white audiences. This marketing phenomenon became known in the 1960s as the "blues revival." Many older, rural blues musicians, such as Mississippi John Hurt, Son House, and Sleepy John Estes, were suddenly called out of obscurity to enjoy a newfound popularity performing on the college circuit and at folk festivals (Narváez 32). This recycled form of "folk blues" carried an

ideological component that placed a premium on “authenticity”—with the genuinely authentic blues musician being an African-American from the Deep South who was also a hard-drinking nomadic hobo, riding the rails and renouncing commercial success as he (the nomadic lifestyle was not so accessible to women) documented the working class in his lyrics. In recent years, several scholars—including Jeff Titon, Elijah Wald, Marybeth Hamilton, Patricia Schroeder, and Karl Hangston Miller—have challenged this pervasive mythology (O’Connell 62). In the mid-twentieth century, however, before such revisionist scholarship occurred, “authenticity” was fetishized to such an extent that white promoters would sometimes alter the performance practices even of *urban* blues musicians, who were not playing in the acoustic folk style that had recently become popular and lucrative as a counterforce to the electric Chicago style.

For instance, when Bill Grauer, a producer for the Riverside label, recorded *The Folk Blues of John Lee Hooker*, he refused to let Hooker, a Detroit-based blues musician, use his electric guitar and amplifier (with which Hooker had already made several popular recordings), and “put him in the studio with only a Goya acoustic guitar” (Narváez 32). According to Orin Keepnews, who wrote the liner notes for the album, the resulting recording proved that Hooker was “a *most authentic* singer of the way-back, close-to-the-soil kind of blues” (Narváez 32, emphasis added). For the recording session, Grauer had intended Hooker to sing songs by Leadbelly—an itinerant laborer, ex-convict, and singer who had recently found widespread popularity among young white collegiate audiences—but Hooker was unfamiliar with Leadbelly’s songs, in fact had never heard them, which indicates the extent of the cultural gap that had quickly developed in the way folk blues and urban blues were marketed.

For that matter, the very concept of “folk music” as a separate style provoked the ire of many blues musicians, who astutely saw through the racialized marketing hype of concert

promoters and record company executives. Chicago blues musician Big Bill Broonzy, for instance, in a spoken-word introduction* to his rendition of “This Train,”* recorded some time in 1956 or 1957, stated that “all the songs I’ve ever heard in my life are folk songs, I’ve never heard horses sing none of them yet” (Broonzy). Robin D.G. Kelley has astutely noted that Broonzy’s statement constitutes a humorous yet pointed challenge to the constructedness of the “folk” (1403). In his critique of the term “folk,” Broonzy anticipates the work of scholars such as Kelley himself, who have argued that the term “folk” is imbricated with class, gender, and race—making the term ultimately not merely about musical tastes but about power (1408). Albert Murray was also suspicious of earlier attempts at marketing African-American musics as folk musics, pointing out that many of the “race records” of the 1930s that were presented as the work of musicians who were “instinctive” and “self-taught” were more often than not merely derivative and conventional (Titon 222–23). Such reactionary and cynical uses of the term “folk” by music industry marketers then, were a far cry from the vernacular folk modernisms envisioned by Langston Hughes, relegating the “folk” as a safe haven for musical conservatism and white consumption rather than as the basis of a radical new African-American modernism..

It must be borne in mind that before the so-called “blues revival,” the development of an electrified, urbanized style of Chicago blues occurred well after the publication of *12 Million Black Voices*. But by the time he was writing for the French periodical *La revue du jazz*, in 1949—after blues music’s electric turn had occurred, and after the new blues style was being heard on records that were being reviewed and selling well outside of Chicago—Wright made it clear that blues music was very much relevant to modernity: “The blues could be called the spirituals of the city. They are the songs of simple people whose life has been caught up in and brutalized by the inflexible logic of modern industrial existence . . . blues are as natural for the

black people as eating and sleeping, and as a rule they come out of their daily existence” (qtd. in Ferris 542). Now Write identifies the blues as an expression of “the city” rather than the country, and at this point he clearly seems to recognize the blues as an expression of modernity, finding that the music had become a technology of survival for “black people” eking out a “modern industrial existence” and fulfilling a spiritual need similar to the way that the religious songs of the black rural South had done, but now secularized and urbanized for the North.

Aided with the historical knowledge of Chicago blues music’s development into a modernist art form in the late 1940s and early 1950s, one can understand why in 1941, when blues music was still associated with rural Southern life, Richard Wright could state that the blues had no power to “unify” African Americans’ “fragile folk lives.” If he had written *12 Million Black Voices* only a few years later, when he was writing for *La revue du jazz* and by which time the hard-edged and industrial urban blues was in full swing, his assessment of the blues would have been very different.

Wright’s thinking evolved continuously throughout his life. His changing relationships with the Communist Party and Black Nationalism, for instance, are apparent in his writing and have been well documented in recent scholarship. What has received considerably less attention is the way Wright’s stance toward the blues, as an expression of both African-American folk culture and modernity, also evolved. As this chapter has shown, the claim made in *12 Million Black Voices* that the blues “are not enough to unify our fragile folk lives” cannot be taken at face value. First, contextualizing this claim reveals that it was made at a time before the blues had coalesced into the modern, urban, electric style that came to be known as the Chicago blues. Second, the narrative style employed throughout *12 Million Black Voices*, full of rhetorical techniques and strategies derived from the blues and African-American preaching, belies the idea

that the blues and other African-American vernacular forms were insufficient to provide the basis for a new modernism. Through his nuanced understanding of the sermon and the blues, as well as his skill in deploying these traditional oral forms in a new modernistic expression informed by the social sciences as well as art, Richard Wright, in *12 Million Black Voices*, demonstrated how these modes of the African-American oral tradition adapted to meet the requirements of modern life in urban environments, fulfilling Langston Hughes's promise that an African-American artist who embraced African-American vernacular culture, "especially for literature and the drama," would find "a great field of unused material ready for his art," and an inexhaustible supply of themes at hand" sufficient to furnish "a lifetime of creative work" ("The Negro Artist and the Racial Mountain." 965). Similarly, Muddy Waters, in his transmogrification of a rural folk music into a vital, modernist expression—through his use of new electric instruments and a codification of loose Delta blues forms into a tightly structured standard 12-bar urban blues form—is an example of the kind of musician Langston Hughes foresaw when he wrote that "our folk music, having achieved world-wide fame, offers itself to the genius of the great individual American Negro composer who is to come" ("The Negro Artist and the Racial Mountain." 966) Here, then, in the work of Wright and Waters, were the manifestations of the literature and music that Langston Hughes had envisioned as potentialities in 1926: "We build our temples for tomorrow, strong as we know how, and we stand on top of the mountain, free within ourselves" ("The Negro Artist and the Racial Mountain." 966). As we shall see in subsequent chapters, Muddy Waters' electrification of vernacular music would continue to be developed by other musicians in amazing ways throughout the remaining decades of the twentieth century, combining African-American musical idioms with analog synthesis, digital

sampling, and computer automation, as they explored new aspects of African-American musical modernism.

CHAPTER 2. MODERNISM SYNTHESIZED: HERBIE HANCOCK'S SEXTANT AND THE CONVERGENCE OF JAZZ AND ELECTRONICS

Chittering, cawing, creaking, shrieking, rattling, shaking: percussion becomes a nonlinear malevolence. Rhythm is a biotechnology. The Hancock PolyRhythmengine is a biotech in perpetual motion. Its texturerhythmfields are too distributed and too fugitive for the ear to catch. Percussion becomes a rhythm shower in which distributed beats—treacherous underfoot, glimpsed overhead—fall through the body like rain through lianas.

—Kodwo Eshun, *More Brilliant than the Sun*

Throughout its history, jazz music has existed in relation to popular music, taking on stylistic and sonic traits of various genres of popular musics. The electric guitar has been a popular instrument in jazz since the 1930s, and later eras saw the inclusion of electric organs like the Hammond B3, the Rhodes electric piano, and to a lesser extent, the Fender electric bass. In the 1960s, many jazz musicians began making greater use of electronic instruments including heavily amplified solid body guitars played through various effects, synthesizers, and also began making recordings that utilized new studio techniques that had become prominent on rock records, such as liberal use of overdubs, and the use of studio effects as tonal shapers. These developments coalesced in the style known as jazz-rock “fusion” in the late 1960s and early 1970s. But many listeners and musicians did not find the fusion of jazz and rock to be an easy alliance. Many rock audiences were perplexed or turned off by the extended song forms, open-ended improvisations, and pompous posturing that many fusion musicians indulged in. Meanwhile, many jazz audiences felt that jazz-rock fusion styles often abandoned some of the key defining elements of jazz, such as a rhythmic conception based on swing, a melodic sensibility rooted in the Africa-American blues feeling, and a harmonic sophistication rooted in European harmony. Much of the jazz world’s consternation over fusion was directed at the use of electric and electronic instruments. In 2000, Wynton Marsalis recalled the fusion era of the

1970s, remarking that fusion is “the death toll for jazz musicians. Because it puts the amateur musician on the highest level and it took the professional musician and demoted them to the point of being a has-been. The electronic instruments make the musicians sound like they’re playing toys when they play. Because the musicians lack the power and intensity, the volume gives them that power” (Milkowski). After a brief heyday in the 1970s, jazz-fusion quickly dropped out of style, replaced by a new historically-informed style of acoustic jazz spearheaded by Wynton Marsalis. And today, electronic instruments like synthesizers, drum machines, and samplers are largely anomalies in jazz, still viewed with suspicion by many “straight-ahead” jazz musicians. But there is also evidence that many younger musicians—such as Robert Glasper, Thundercat, Vijay Iyer, Marc Cary Jason, Moran, Stefon Harris, and Christian Scott, to name a few—are re-exploring the use of these instruments in improvised settings, perhaps prompting a reassessment of the developments of the fusion era, which may have been too hastily brushed aside with the rise of the jazz neo-traditionalist movement beginning in the 1980s.

Herbie Hancock’s *Sextant* (1973) is a fusion album that is artistically substantive, that holds up to repeated listening today, and serves as a useful site in which to explore the ways that free jazz and contemporary electronic musics—often thought of as distinct, unrelated realms—share similar methodologies and conceptual frameworks, operating along a continuum that may be understood as expressive of an African-American cultural practice rooted in an improvisatory aesthetic. This chapter explores these issues, first by situating *Sextant* in its historical and cultural context, then by engaging in a close reading/listening of a key track on the album, arguing that *Sextant* represents a crucial turning point in the convergence of improvised and electronic musics. This discussion of *Sextant* provides an illuminating context for the exploration of important issues in African-American jazz and electronic musics, including how uses of musical

technologies are racially inflected; how social, structural inequalities are encoded in the access to and uses of these technologies and how Hancock's *Sextant* marks a turning point, a shift in these power structures; how the African-American use of musical loops contains implications for new understandings of temporality; and how African-American uses of musical technologies can be understood as a kind of Signifyin(g), exemplified by Hancock on his *Sextant* recording.

After leaving Miles Davis's group in 1968, Herbie Hancock formed a group of his own, which came to be known as "Mwandishi." Beginning in 1970 Hancock's Mwandishi band set out to explore an interdisciplinary approach to music-making, incorporating stylistic elements from jazz alongside those from rock and funk, incorporating electronic instruments alongside acoustic instruments in new ways, incorporating African diasporic instruments and musical concepts alongside those from the European avant-garde, and incorporating "high-brow" avant-garde aesthetics alongside those rooted in "low-brow" popular musics. Hancock had spent the previous five years as a member of Miles Davis's celebrated quintet, and had also made seven albums under his own name for the Blue Note record label. Davis's albums from 1965 to 1968—recorded with a quintet comprising Wayne Shorter, Hancock, Ron Carter, and Tony Williams, widely known today as Davis's "Second Great Quintet"—are regarded as some of the most advanced and exciting group improvisations on record, and their recordings document a seemingly telepathic degree of interplay between all members of the ensemble. Hancock also begun expanding his sonic palette at this time, at Davis's prompting, by playing electric keyboards, primarily the Fender Rhodes. Initially, Hancock was resistant to the instrument, but Davis was persistent: "Even though I'd always loved electronics and mechanical gadgets, I had no interest in playing electric piano. The conventional attitude, shared by most jazz musicians and particularly piano players, was that they were cute but not substantial. . . . So when Miles

said he wanted me to play the Fender Rhodes [during a recording session for *Miles in the Sky*, in 1968] I wasn't too happy about it. I thought, *You really want me to play this toy?* I walked over, flipped it on, and played a chord. And, to my surprise, I thought it sounded kind of cool. It was prettier than I had anticipated, even if it didn't have the same fullness or depth of an acoustic piano. . . . This was one more step in overcoming my musical snobbery, and I vowed not to forget it" (Hancock 104). The Davis quintet's rarefied improvisational explorations, with their repertoire's harmonic structures pushed to the brink of atonal free jazz, had made their recordings increasingly abstract, and many fans of Davis's more accessible recordings such as *Sketches of Spain* and *Kind of Blue* no doubt felt left behind. Hancock, like Davis, felt a need to reconnect with his audience, and infuse his music with some of the new styles emerging from the counterculture of the late sixties: funk and rock. The resulting change in musical direction was additionally as much about responding to the political and social environment at the time, which is reflected in the band's adoption of Swahili names for themselves. Hancock elaborates: "The early seventies were a period following the different kinds of social revolutions that were happening . . . which included more of a recognition by the African American community of our heritage from Africa . . . and adoption of Swahili names became one example of recognizing the African part of our heritage" (qtd. in Pond 48).

Initially, with the release of 1971's *Mwandishi* album, the group consisted of Herbie Hancock "Mwandishi" (electric pianos), Buster Williams "Mchezaji" (bass), Billy Hart "Jabali" (drums), Bennie Maupin "Mwile Ayema Afya" (saxophone), Julian Priester "Mtoto" (trombone) and Eddie Henderson "Mganga" (trumpet). The group's next album, *Crossings* (1972) was more ethereal and experimental than the previous record, and marked the introduction of synthesized electronic sounds, added in post-production by Patrick Gleeson. *Sextant* (1973) was more

exploratory still, this time incorporating Gleeson on synthesizer as a full-fledged member of the ensemble. On this recording, Gleeson's synthesizers interacted improvisationally with the other instruments rather than being superimposed after they were recorded.

Recording technology and the documentary impulse

The recording techniques used in the sessions for the Mwandishi albums, particularly for *Sextant*, reflected the music itself—entailing a hybrid approach combining elements of typical jazz record production with new electronic sounds and techniques. David Robinson, who produced Hancock's early '70s albums, recalls that he “combined old recording techniques and new ones; recording a live group performance, and then using tons of modern post-production techniques.”⁴ (Gluck 90). More importantly, these recording processes are indicative of a new attitude toward music technology, one that is rooted in an emerging political and social awareness on the part of African-American musicians of how their roles in the production and presentation of their own music had been marginalized by the music industry.

In jazz, recording had been implicitly conceptualized as a *documentary* process. In a typical recording session for the Blue Note or Prestige labels, for example, the musicians would arrive at the studio, have perhaps a brief rehearsal to run through the tunes they would be playing, then record their performance and leave. Musicians had no or very little involvement in post-production decisions such as mixing, mastering, and album artwork. The musicians functioned similarly to subjects in documentary films, with the producers, engineers, and record label executives acting as the directors and producers of the films. Audio recording was

4. “Post-production” in this case entailed the liberal use of electronic processing, including effects such as pitch-shifting and tape delay.

understood as a “science,” idealized as a transparent, objective process, with producers aiming for the highest “fidelity” of sound and seeking to document as faithfully as possible the performance of the musicians. This model, of course—as with all documentary impulses, however well-intentioned they may be—is highly problematic, reflecting assumptions about technology and art, the documentary “eye” and “I,” and how these relate to structures of power. In “Killing the Documentarian: Richard Wright and Documentary Modernity” Benjamin Balthaser states that the “documentary impulse is one of crossing barriers and borders—an impulse that often works to reinscribe as much as to overcome the privilege on which the barriers are founded” (357). Balthaser’s essay is concerned mainly with the racial implications and ramifications of documentary photography, noting that the field “has been a significant means by which the West has constructed and codified modern ideas of race” (358). Of course, documentary photography is a visual medium, and as discussed in the previous chapter Balthaser points out the ways that Wright’s *12 Million Black Voices*, with its photographic images of the South and Chicago’s South Side at the time of the Great Migration expresses Wright’s “contradictory and dialectical concerns with black representation” (358). But as the typical recording process for a jazz session in the 1950s and 1960s illustrates, the documentarian impulse can also be expressed aurally, and recordings of black musicians are no less documentary than photographs or films, functioning as a sonic parallel to the visual modes of black representation at work in documentary photography.

Advances in recording technology in the 1960s allowed for the manipulation of sound to the degree that recording itself became as much art as science, and the aesthetics of recording were adjusted to allow for approaches that did not necessarily aim for a faithful reproduction of a live performance—this included overdubs, special effects such as echo and artificial reverb,

creative frequency equalization and filtering, and tape splices which allowed for sudden juxtapositions and decontextualizations of recorded material. The Beach Boys *Pet Sounds* (1966) and the Beatles' *Sgt. Pepper's Lonely Hearts Club Band* (1967) were two key albums that demonstrated the artistic potential of newly-available four- and eight-track tape recorders, which allowed for an unprecedented amount of sonic layering via overdubs. The commercial, critical, and artistic success of these albums ushered in a new era of sonic experimentation in popular music, in which musicians used the tape recorder, mixing board, effects, and other technologies of the recording studio as instruments in their in their own right, often to the extent that studio producers and engineers became, in effect, "members of the band," in terms of their contribution to the overall sound of a recording. This new paradigm could not have been possible without advances in recording technology; the musical technologies themselves were what drove the new experimental aesthetic in music production. In the late 1960s, prompted by the general reassessment of the ideals and goals of traditional recording techniques, some musicians and producers associated with emerging styles of rock music took the further, more philosophical and political step of questioning the hegemonic documentarian impulses and assumptions that undergirded the more traditional techniques and practices of the recording industry, as well as the structures—such as commercial recording studios, record labels, and management companies—associated with it. David Robinson elaborates:

The structure of the record business is basically a plantation where the white guys ran the record business and the studios. When you went to record an album for Frank at Blue Note, you did it his way. And when you went to Rudy van Gelder's studio, his way. And a lot of the impulse, a lot of the great creativity of a lot of musicians could never really reach their fullest expression because they were left

out of half the recording process. With them, the recording session ended when they finished playing and then Rudy or somebody, one engineer or the other would say “OK, guys, we’ll send you a reference [mastered recording]” and everybody would go home and that would be it. (qtd. in Gluck 119)

In contrast, Robinson recorded Hancock using an approach that he had employed with several West Coast rock bands: “There was no apartheid rule. There was no plantation. . . . They [the Mwandishi band] were there for the recording, they were there for the editing, they were there for the post-production, for the mixing, mastering. I mean, it was all part of the creative process” (Gluck 120).

It is perhaps unsurprising that such innovative approaches to musical creation would confuse and antagonize many jazz critics. Jim Szantor wrote in a review of Hancock’s 1970 album *Fat Albert Rotunda*, for *Down Beat* magazine, that Hancock’s playing such rock- and funk-inflected music was “akin to a distinguished actor spurning a long-sought Shakespearean role in favor of a TV soap opera” (qtd. in Gluck 60). In his invocations of Shakespeare as a marker of high culture, and TV soap operas as the lowest of banal mass-produced culture, Szantor seems to have sensed that what was at stake was nothing less than the preservation of the hallowed “high”/“low” cultural divide.⁵ Similarly, Leonard Feather wrote, at the beginning of 1973: “Happy return of the year. . . . Also to Miles Davis, all of whose glorious yesterdays seem to have been electrocuted. And to pianist/composer Herbie Hancock, Davis alumnus, whose brilliance has been lost in a forest of percussion effects played by sidemen who would be better

5. That the intended reference seems to be that Hancock’s acoustic piano work with the esteemed Miles Davis quintet of the 1960s is on par with Shakespeare is also arguably some indication of the “progress” that had been made in jazz’s acceptance as a serious art form in mainstream American culture.

off returning to—their horns” (Gluck 168). Here, the tradition/innovation binary manifests in the deployment of instruments: Feather’s disdain for electronics and percussion instruments is ironic, in that both the world’s newest (synthesizers) and oldest (African percussion) instruments seemed to be conspiring together to unsettle jazz purists.⁶

Hancock’s aural combination of the old and new, the heritage of ancient African instruments with the futuristic potential of electric synthesizers, is also reflected in the album cover artwork of recordings he made at this time. The cover to *Sextant* is a case in point. Here, two dancers move ecstatically under a giant moon, on what appears to be a purely abstracted plane that extends to infinity in the horizon. There are animals in the background, but they exist only as outlines filled in with a starry sky. The visual effect is one of blurring the past with the future: The setting could be in Africa sometime in the distant past, or in a different galaxy sometime in the distant future. Hancock, looking back on this period of his career remarked in 2002: “History is involved in the past and the future. . . . The humanism of the past and the earthiness of Africa and primary elements and the planets. . . . That, combined with my interests in science and technology and futurism is where I’m coming from. . . . The [album artwork and music] relate to each other in that sense” (qtd. in Christopher Porter).

But it is worth pointing out here that even at this early stage in the development of African-American electronic musics, this fusing of musical elements is not an isolated aesthetic decision. Rather, this musical fusion is inseparable from the political issue of Afro-diasporic identity—an identity reflected, for instance, in the Mwandishi band’s use of Swahili names. The embrace by African-Americans of Afro-diasporic markers of identity was fairly common in the

6. Feather’s comments seem to contain racist allusions as well, eg. capital punishment (“electrocution”), jungle/savagery (“lost in a forest of percussion”) and the “back to Africa” movement (“sidemen who would be better off returning to—their horns”).

late 1960s and early seventies, as pointed out by Hancock above. From today's perspective, this identity could be understood as problematic: After all, African identity and culture is not monolithic. Recent scholars such as Kofi Agawau have pointed out the dangers of essentialism that can accrue when considering a continent that contains over two thousand languages, arguing that a singular Afro-diasporic identity is too simplistic (Pond 34). Yet scholars such as Paul Gilroy, while acknowledging the distinctness and diversity of individual cultures and traditions, also point out that narrowly focused scopes run the risk of missing the bigger picture of how conceptions of Afro-diasporic identity can be and have been politically galvanizing for displaced peoples, a position Gilroy has outlined in *The Black Atlantic* (15), and even more pointedly in "Sounds Authentic," where he writes: "The dangers of idealism and pastoralization associated with the idea of the diaspora ought, by now, to be obvious, but the very least that it offers is a heuristic means to focus on the relationship of identity and nonidentity in black political culture" (112).

These broad cultural concerns are just as important in considerations of African music. It is generally agreed among musicologists that African music is different from European music, but this distinction is often rendered in terms that are too simplistic, for the same reasons noted by Agawu. Too often, analyses of African-American music's rhythmical patterns, for instance, have tended to characterize these as "African," glossing over the distinctions between drumming in sub-Saharan cultures (the more accurate focus of African-American stylistic progenitors) and that in other regions of Africa. Yet Gilroy again provides a thoughtful, measured rebuke to this stance, suggesting that the "possible commonality of postslave, black cultural forms be approached via several related problems that converge in the analysis of black musics and their supporting social relations" ("Sounds Authentic" 113). Gilroy, in other words, sees the

commonalities in Afro-diasporic musics as ontologically important in understanding Afro-diasporic identities.

Critics' nonplussed reactions to the Mwandishi band's blending of African percussion instruments with electronics is an indication of just how unprecedented the musical assertion of their Afro-diasporic identity was, and this foregrounding of identity was enabled by the unprecedented degree of artistic control (for a jazz musician) afforded to Hancock in the recording studio. The greater degree of control and involvement he enjoyed in the recording process is also reflected in Hancock's use of a greatly expanded sonic palette, achieved on *Sextant* through an extensive array of African percussion instruments, electronically treated acoustic instruments, and especially through the creative use of synthesizers.

Of course, electronic instruments had been used to good effect in jazz before. Sun Ra had experimented with synthesizers in his Arkestra, but his use was relegated to providing additional textures and timbres as a spice within the central framework of the traditional band instrumentation, as on albums such as *Atlantis* (1969), *My Brother the Wind, Vol. 2* (1969), and *Other Planes of There* (1969). And Miles Davis's late '60s and early '70s recordings—including *In a Silent Way* (1969), *Bitches Brew*, (1970), *Miles Davis at the Fillmore* (1970), *Jack Johnson* (1971), *Live-Evil*, (1971), and *On the Corner* (1972)—utilized electric guitars and electric pianos and made use of creative studio techniques such as tape splicing and ring modulation. But as sonically adventurous as Davis's electric albums were, they were nonetheless still very much a product of the older, "plantation" model of studio recording and production described by Robinson above.

Davis's *modus operandi* during these years was to arrive at the studio with his band without any pre-arranged material. Davis and his band would jam in the studio, and the engineers

would record these jams live, as they transpired. Sometimes Davis would provide oblique directives to the members of the band—such as pointing to someone when he wanted that musician to solo—but he typically refrained from providing extensive verbal directions to the musicians. The resultant recordings of these sessions were thus very unstructured, and far from fully realized compositions. After Davis and his band would finish recording for the day, his producer, Teo Macero would review the tapes in the studio playback room and, using tape-splice editing techniques, attempt to assemble the recorded jams into structured pieces of music. By splicing sections of tape and repeating and juxtaposing them with other splices, he could lend a sense of form to the unstructured jams. And studio effects, such as reverb, echo, and distortion could be also be added to the recordings, providing varied sonic textures after the fact. The resulting edited recording, with its repeated sections and heavily effected sonic palette, sounded for all intents and purposes as if it had been performed as a cohesive piece of music live in the studio (Rankovic).

Although the recordings were heavily edited and processed, with the final version of the recording sometimes ending up vastly different from what was recorded live in the studio, these edits were done with little to no input from Davis himself—he was virtually never present for these editing sessions. Davis, being perhaps the most financially successful jazz musicians of his time, would certainly have had enough clout in the music industry to exert artistic control over every aspect of his recordings, but he seems to have had no interest in the editing processes used on his recordings. Producer Teo Macero recounts:

With Miles' music . . . you could do anything with it. He said to me, "Do whatever you want." I say, "Oh yeah, okay, I'll take care of it." So you could use the front in the back, the back in the front, the middle somewhere else, or you didn't have to

use any of that. Many times when I was working on a Miles album, and editing it, I would take everything from the very beginning of the session, any little fragment, I would mix it down and put it all together. . . . Even on *Bitches Brew* and all that stuff, that was all mechanically done in the editing room. All subject to Miles' approval. He came to the session, I mean the editing room, about six times in his lifetime while I was with him at CBS [a period of twenty-five years, from 1958–1983]. (Rankovic)

These recordings, then, despite their musical and sonic artistry, still adhered very much to the “plantation” model of studio recording. Teo Macero, the white, Julliard-educated, Columbia Studios producer “oversaw” Davis’s musical creation. But the difference here in comparison to the Blue Note / Prestige label model was that instead of serving a primarily documentary function, the producers of Davis’s recordings were perhaps more akin to directors of modernist cinema, employing cut-and-paste techniques, and working with effected sounds in a way similar to the way that a contemporaneous film director such as Jean Luc Goddard employed “jump cuts” and other creative editing techniques in his films. Record producers, were—like film directors—auteurs, whether engaged in documentarian or artistic projects.

In relation to the use of electronics by Miles Davis and Sun Ra, then, the use of synthesizers on *Sextant*—for reasons that will be elaborated on in this chapter—represents a paradigm shift for African-American musics, which would significantly shape how subsequent black musicians working in hip-hop, techno, and other electronic genres would not only produce their music, but how they would conceive of musical machines and technologies in African-American musics. Hancock’s use of musical machines on *Sextant* constituted a re-working and updating of a particularly African-American stance toward and use of technologies.

Hancock and the musical “techno-dialogic”

Joel Dinerstein, in *Swinging the Machine: Modernity, Technology, and African American Culture between the World Wars*, has theorized a uniquely African-American relation to technology, which he calls a “techno-dialogic” between music and machinery. He sees the techno-dialogic as being a form of “resistance to technology in African American expressive culture” (25). The term “resistance” would seem to imply an aversion to or adversarial relation to machines, yet Dinerstein actually argues something very different—that the “presence (or ‘voice’) of machinery became integral to the cultural production of African American storytellers, dancers, blues singers, and jazz musicians” (126). The primary difference between this and white hegemonic conceptions of and relations to machinery is primarily that the African-American conception resists the sublimation of the human, of the body, into the machine. That is, it rejects the European, Futurist idea of the supremacy of the machine (Dinerstein 13) and instead represents a new way of life in the modern, urban, industrial machine age, an important component of which is a new conception of time prompted by African-American concepts of rhythm that hinge on the variegated meanings of the word *swing* in American culture: the “swing” rhythm—and musical time: the concept of “swing,” as a verb—to “swing” as a new understanding of musical time. Dinerstein astutely notes that swing represents a way of negotiating a new sense of temporality, a sense of sped-up time imposed by industrialization and urban life (33–37).

Thus, swing is itself a form of technology—being nothing less than a “survival technology” (Dinerstein 314), building on Albert Murray’s term. Given Dinerstein’s nuanced understanding of the African-American relationship to music, time, and technology, I propose that rather than “resistance,” this uniquely African-American mode might be best understood as a kind of Signifyin(g) on machinery and technology, in the sense that it entails what Henry Louis

Gates refers to as *repetition with a difference*—“a black difference, a compelling sense of difference based on the black vernacular” (Gates xxii). Furthermore, like the jazz of the swing era that Dinerstein focuses on, the electronic jazz of the early 1970s—in particular the recordings of Herbie Hancock’s Mwandishi band—represent new understandings of both music and machinery, which themselves point to new understandings of temporality. This chapter will explore in detail the idea of Signifyin(g) and the different ways it is manifested in the early electronic music of Herbie Hancock.

Ironically, this use of musical technologies rooted in an African-American aesthetic—musical Singifyin(g)—would be instigated by the only white member of the Mwandishi band, Patrick Gleeson. Gleeson is such an unlikely figure in this story, his fascinating role in the development of African-American electronic music warrants a closer look before delving thoroughly into why and how his use of synthesizers in Hancock’s band was so revolutionary.

Gleeson had only just officially joined the band shortly before recording *Sextant*, and his presence in the Mwandishi ensemble was problematic on several fronts: Besides being the only white musician in a band that so heavily foregrounded its collective African identity, he was, according to the typical jazz standards in place at the time, not even really a musician at all. He had a PhD in eighteenth century English literature, and was teaching English at San Francisco State University in the 1960s, where he began experimenting both with LSD and electronic music-making. Gleeson recalled:

I started getting all sorts of tape recording equipment out of the vis ed, whatever it was called, department. And began making *musique concrète*. . . . I had known about the Bell Lab at Columbia project, the computer music lab. And then I heard that there was a new kind of synthesizer that was being made by a guy by the

name of Don Buchla, and that it was over at the Divisadero Street Dancers' Workshop, so I got over there and got there just in time to see the thing being moved from there to Mills College. I mean literally. I followed the synthesizer across to Mills. . . . Just getting more and more involved with that synthesizer. I finally gave them a thousand dollars to help them buy a four-track recorder, and for that I got one night per week in perpetuity all night long on the Buchla. (qtd. in Pond 100–101)

Gleeson soon gave up on academia. Through his association with the San Francisco Tape Music Center, Gleeson met other composers working with electronic sound, including later luminaries such as Terry Riley, Steve Reich, Morton Subotnick, and Pauline Oliveros. The synthesizer developed by Donald Buchla at Mills College ranked with those at Columbia University and the University of Michigan as the state of the art at that time. Gleeson continued: "So at that point I quit teaching. And I had saved a little money to live on and also to invest with another guy in what turned out to be, I think, the tenth Moog synthesizer ever built. So with that . . . we had then this music commune, which became Different Fur [recording studio]. John Vieira and I—my partner in this synthesizer—began building this studio" (Pond 101). The name "Different Fur" was proposed by poet Michael McClure (Butler).

Soon, Gleeson had established Different Fur Trading Co. as a state-of-the-art recording studio in San Francisco, recording albums for several rock and funk acts, including Sly Stone, Larry Graham, Van Morrison, and Taj Mahal. David Robinson was the producer for some of these recordings, and Robinson had just recently become producer and manager for Herbie Hancock. Gleeson recounts:

I'd worked for a couple of different producers, David Robinson being one of them, doing little synthesizer tasks on a few pop and funk albums. And I had been telling David that I had been playing, which was true. I had been putting *In a Silent Way* and *Bitches Brew* as a two-track on my eight-track recorder. I had just gotten a sixteen-track before we started *Crossings*. . . . I had been overdubbing synthesizer stuff on it. I said, "Gee, it's really great, David. It really works. Let me—" I'd heard that he was signing Herbie, and I said, "Let me play with Herbie." So he told Herbie. He said, "Look this guy is not really a musician. He's a knob twister. But if you go down there, he can set the synthesizer up for you, and you can play it." (Pond 101)

Robinson arranged for Hancock to visit Gleeson at his studio. Gleeson continues:

So Herbie came down, and—thank God, you know, I'd be selling insurance today if he didn't. And he said, "Right here, I've thought of something." So I said, "Well, let me show you what I could possibly do here." And I had no idea that I was ever going to be employed, just as knob-twister. And so Herbie said, "To me it sounds kind of, maybe we could do that but maybe come out of the solo a little slower or faster or something." I said, "Fine." So I did that. And he was so noncommittal. He just said, "Well, why don't I come back in a couple of days and listen to what you're doing." So when he came back, he listened and he got that kind of funny smile. And said, "That's good. Well, let me get the rest of the album." He got the rest of the album, and I played on the rest of the album. But he said later that he—he was very generous about it. And he said in print several

times that I just blew him away, that he'd never heard anything like that. Of course, I hadn't either. I was just making it up, you know'" (Pond 101–102).

Hancock recalls, in his autobiography, *Possibilities*: "Pat met us at the door, and as he walked us into the studio I saw racks of electronic components lining the walls. This was some complex equipment and I didn't know the first thing about how it all worked. But I couldn't wait to hear what Pat could do with it" (145). Gleeson continues: "So I start patching the Moog 3, and I'm just rushing like crazy because I think I have no time to get this shit together. And then he says, 'Okay, did you record that?' And I tell him no because I was setting up the synthesizer for him to play" (Opperman). "I said, 'I was waiting to turn the keyboard over to you.' I thought I was just getting the synth ready for him to play, but he said, No, that's fine—just go ahead and record it,' which blew me away" (qtd. in Hancock 146). Hancock sums up, in his autobiography:

Pat was surprised, but I didn't know anything about synthesizers and he did, so I figured, why shouldn't he just record it himself? . . . Over the next few weeks I spent more time with Pat. . . . I asked him a lot of questions about how the equipment worked, and because of my engineering studies at Grinnell I could understand the language. There was no real reason for a piano player to know what resistance and ohms and capacitors were, but I did, so Pat and I were able to talk for hours about how exactly the synthesizers functioned and what kinds of sounds he could draw out of them. The more I learned, the more I wanted synthesizers as a permanent part of Mwandishi's sound. (*Possibilities* 146)

This meeting of Hancock and Gleeson and their ensuing working relationship is worth recounting in detail because it marks a profound shift in the traditional power structures surrounding the recording industry—specifically, the uses of and access to musical technologies

by African-American musicians. Here again, as with the plantation model established by jazz record labels, the African-American musician visits the white-owned studio, but this time with a crucial difference: Instead of the African-American musician visiting the studio, performing, and then going home, relinquishing control of the final product, here that dynamic is inverted and subverted: *Hancock* deploys Gleeson's performance on the synthesizer, and *Hancock* makes the decisions about how the synthesizer parts will then be added to the sonic textures of the band's performance.

The album that resulted from this meeting, 1972's *Crossings*, featured Gleeson's electronic textures, which were all added as overdubs to recordings of the band's initial performances. But after the album was released, Hancock went a step further and hired Gleeson as a full-fledged member of the band. Most other jazz bandleaders of the time would probably have relegated a supposed non-musician and academic such as Gleeson to the role of an advisor or technician, hired to deploy weird synthesizer sounds as a novelty, but it is indicative of Hancock's insightfulness that he recognized Gleeson could contribute as a member of the band, and hired him for the band's upcoming concert tour in promotion of the *Crossings* album.

Gleeson's privileged access to technology represented a position of high cultural capital, as suggested by his association with the esteemed San Francisco Tape Center and its collective of famous European-trained composers; and is also reflected in his purported role as "teacher" of electronic music synthesis to Hancock. It must be added that Gleeson was apparently not only in a position of high cultural capital but high monetary capital as well, as evidenced by the fact that he funded the San Francisco Tape Center's acquisition of a multi-track tape recorder, and that he owned a recording studio and several synthesizers, at a time when such technology was prohibitively expensive for the vast majority of musicians. Gleeson's involvement with Hancock,

then, highlights the social and racial inequalities imbricated in the access to and uses of music technology.

Getting hired to join the Mwandishi band and tour with them was a big break for Gleeson, but it also presented a new set of problems, because performing and improvising live on a synthesizer was, at the time, very challenging. Gleeson's synthesizers were too large to lug around on tour. Luckily, the ARP 2600 had just been invented, which represented a breakthrough in synthesizer design. Up until this time, synthesizers were typically modular systems, constructed of individual components that could be purchased individually and wired together by cables, commonly called "patch cords." This approach provided a great deal of flexibility in terms of sound design, allowing for various modulation "sources"—such as low-frequency oscillators, envelope generators, or the keyboard itself—to be routed to and to control various "destinations"—such as one or more oscillators (controlling pitch), filters (controlling timbre), or amplifiers (controlling volume). But this flexibility came at the expense of space and complexity—modular synthesizers were bulky conglomerations of components, and it was all too easy for a synthesist to get lost and confused in the veritable rat's nest of cables that connected these components together. Furthermore, modular synthesizers were impractical to perform live with, because the components were difficult to move, being large and heavy. A modular synthesizer would typically fill an entire wall of a recording studio room.

The ARP 2600, however, released in 1971, was the first commercially available, portable, "semi-modular" synthesizer—"semi-modular" denoting that the individual components were hard-wired together at the factory, and the sound-producing part of the instrument was all one piece, packaged in a carrying-case. Despite these conveniences, the ARP 2600 still allowed for extensive sound design capabilities through the use of patch cords, as in a modular system

(hence, the ARP company's own descriptor "semi-modular"). The sound-producing unit and its accompanying keyboard controller together weighed 71 lbs. ("ARP 2600")—rather unwieldy by today's standards, but indeed "portable" in comparison to a room full of modular gear.

Recalling his use of the ARP 2600 on tour with the Mwandishi band Gleeson states: "In performance I usually just tried to clear my mind, then go wherever my hands or an impulse led me. . . . When things were going well I really couldn't have told you why I plugged this patch-cord in there or what exactly the result was going to be when I then raised the slider associated with it" (Gluck 129). Gleeson's approach to sound creation, in other words, was highly improvisatory:

When the band was playing, things were moving so quickly that I was forced to think like a jazz musician. I'd take a patch cable and plug it in then plug another, and that would last until the band moved on to something else. I'd change patches maybe 300 times a night. I had 20-35 patch cords, and I thought I'd color code the patch cords to help myself, but there wasn't time for that — you'd just grab a cord. If you had to look for the color of the wire, you were already too late. So you just put the cord in the oscillator and you were on your way. (Opperman)

Gleeson's description of using modular synthesizers in a jazz-like way brings up a crucial area of convergence between improvisation and electronic musics. I am certainly not the first to notice connections between improvised jazz and contemporary styles of electronic music. For instance, Greg Tate has written that "as DJing has evolved into a standalone art form, it's become much akin to '60s freedom jazz, drawing crowds who don't feel weird about gathering to hear turntablists experiment in public with their craft" ("Why Jazz Will Always Be Relevant"). Tate's mention of free jazz of the 1960s is prescient, because in many ways asserting the essential

connectedness between jazz and electronic music involves reclaiming the legacy of experimental jazz of the 1960s and '70s over the intervention of the jazz neo-conservative movement, which has held primary cultural sway since the 1980s.

Repetition as resistance: The politics of looping

The rise of global neoliberalism in the 1980s coincided with a rising conservative trend in jazz that was reflective of a new conservatism in American culture, which manifested in frequent arguments as to what is or is not jazz, as well as questions over who is or is not a “real” jazz musician. At their root, these arguments were essentially about the jazz canon and the canon-making process, which had begun during this time. The perceived need for a jazz canon was both fueled by and helped to fuel the institutionalization of jazz, in terms of enshrining jazz as “America’s classical music” in the culture at large.

Key to this obsession with the canon was the idea of “tradition,” a concept that had always been important in jazz, but that took on a new institutionalized flavor as the “jazz tradition” was reconstructed in the neoliberal era. This reconstructed “official story” of jazz, which has taken hold in college textbooks on the subject, and which presents jazz as a coherent whole, has been rightly criticized as being too simple and tidy, with its neatly demarcated “styles” and “periods” organized according to discrete decades (DeVeaux 483–84). These textbooks are in essential agreement as to jazz’s characteristic features, its stylistic taxonomy, its pantheon of “great men,” and its recorded legacy, presented as a canon of great works. This uniformity “is both symptom and cause of the gradual acceptance of jazz, within the academy and in the society at large, as an art music” (DeVeaux 483–84).

In a sense, this newfound appreciation and general acceptance of jazz in the culture at large, especially in prestigious “high” cultural institutions such as Lincoln Center and the

Kennedy Center (Bourdieu's idea of "cultural capital" provides a useful framework) was well-deserved and long overdue, and adherents to the "official story" of jazz embrace this legitimization. According to this "official story," jazz is no mere popular music, but an autonomous art, the culmination of an "evolutionary progress" and "maturation" (DeVeaux 484). But this narrative also serves definite political purposes, sometimes with pernicious effects, such as American exceptionalism, black exceptionalism, and a trumpeting of the "individual" at the expense of collective social formations.

Needless to say, the "official story's" linear narrative of jazz as "progress" is an oversimplification that does not hold up to much scrutiny. This can be easily seen in the way that in many current jazz history textbooks, the rendering of a neat teleological arc becomes much more messy with the ascension of free jazz in the 1960s, at which point the books begin to portray an "inconclusive coexistence of many different, and in some cases mutually hostile, styles" (DeVeaux 484). Of course, this stylistic conflict and messiness may be more apparent from our vantage point simply because they occurred closer to our own time and so we are more aware of the lack of any stylistic unification. But this then begs the question, as DeVeaux points out, that "no one, apparently, has thought to ask, whether the earlier 'cohesive thread' of narrative might mask similarly conflicting interpretations" (484).

In contrast to this political and cultural conservatism, dominant since the 1980s, jazz styles of the 1960s and '70s were characterized by a heightened political consciousness among both jazz musicians and audiences. Prominent jazz musicians of the time addressed socio-political issues with works such as Charles Mingus's "Fables of Faubus"* (*Mingus Ah Um* 1959), referencing public school integration, Max Roach and Abbey Lincoln's "We Insist! Freedom Now Suite" (*We Insist!* 1960), John Coltrane's "Alabama"* (*Live at Birdland* 1963) a

memorial to the children killed in the bombing of a Montgomery church, and Gary Bartz's "Uhuru Sasa"* (*Harlem Bush Music* 1971) a protest of the Vietnam War from an African-American perspective.

It is important to note that—contrary to much of the focus in scholarly discussion of the political aspects of music—in each of these musical examples, it is not only the lyrics (if any) that are politically relevant, but the actual sounds themselves. It is not coincidental, for example, that each of the above-mentioned works employs elements of free jazz, so-called “*avant-garde*” music: extended instrumental techniques, pan-tonal or atonal (non-functional) harmonies and melodies, collective improvisations. It bears emphasizing that music—including instrumental music without lyrics—is never heard outside of some cultural context. The instrumental techniques and practices of free jazz function as forthright challenges to received hegemonic aesthetics of “beauty,” “harmony,” and “purity”—as such, these techniques and practices are themselves cultural-political signifiers, of which the musicians and their audience were generally well aware. It is also no coincidence that much of the history of avant-garde free jazz was swept under the rug and excluded from the jazz “canon” during the rise of the neo-conservative jazz movement in the 1980s described above. Thankfully, this perspective is being reassessed in recent years, with important texts by scholars such as Ajay Heble, Rob Wallace, Iain Anderson, and John Corbett published in the last ten years. Heble and Wallace, for instance, in their edited volume *People Get Ready: The Future of Jazz Is Now!* argue that the history of free jazz has been misrepresented, its continued influence on much of the music of today has been misunderstood, and that its overarching importance to the future of jazz has been underestimated (3–26).

The recent writing of John Corbett has been particularly relevant to a discussion of the links between jazz,—especially free jazz—and contemporary electronic musics. It is also notable for making use of literary and cultural theory to understand modern music. Using Deleuze and Guattari's *Toward a Minor Literature* as a theoretical framework, Corbett hypothesizes that free improvised music can be understood as a kind of minor literature, noting out that “music is a key component of minoritarian political struggles” (117). (Interestingly, this point has been taken up recently by scholars in American Studies such as George Lipsitz—who notes that minorities “have turned segregation into congregation through social movements that depict space as valuable and finite. . . . The creation of collectives of musicians by Horace Tapscott and Sun Ra . . . exemplify this alternative to the dominant spatial imaginary” (“Space”)— and Michael Denning, who writes that “music and sound are fundamental to social and political analysis. For music is inherently a social and political art” (10).) Corbett unravels some of the potentialities, as well as problems and pitfalls, involved in thinking of music as a form of minor literature.

Deleuze and Guattari discuss the relationship between content and expression in terms of “major” and “minor” literatures. A major literature “follows a vector that goes from content to expression. . . . But a minor, or revolutionary, literature begins by expressing itself and doesn't conceptualize until afterward” (qtd. in Corbett 116). Whereas in major literature content determines expression, a minor literature is characterized by “pure contents that mix with expressions in a single intense matter.” This implies that content is linked much more tightly with expression in a minor literature, while in major literature, content is removed, at a distance from, expression. There are also major and minor languages, and these relate to major and minor literatures as follows: Observing that Kafka (a Jewish person living in Prague) wrote in German (the dominant, or major language) rather than in Czech (a minority language), Deleuze and

Guattari postulate that “a minor literature doesn’t come from a minor language; it is rather that which a minority constructs within a major language” (qtd. in Corbett 116).

Deleuze and Guattari’s ideas of major and minor literatures and languages can be carried over to music, but it must be remembered that the concept of representation is more complex in music than in other arts. In music, the idea of content shifts between straightforward denotative representation to more slippery connotative, associative, emotive, and stylistic modes. Content often is not a discrete entity in musical works. “Meaning” in music is inseparable from materials (rhythms, pitches, timbres, harmonies, etc.) formal structures, and styles. Music has a variety of different syntaxes, but musical semantics are less straightforward (Corbett 116). In music, the connective threads between content and expression, between structure and significance, between form and meaning are more messy and entwined. It is impossible to understand the content of a musical work without considering its form. This implies that *all* music is a minority literature, since a defining characteristic of minority literatures is that content mixes “tightly with expression in a single intense matter” (Corbett 117). Musical elements are inseparable from musical meaning.

Despite its lack of a clear denotative code, music does have immense cultural significance. Music is a key component of political struggles. But, as with any ethnic or alternative social formation, the articulation of these standpoints risks becoming exoticized and ultimately subsumed into dominant mainstream culture. Gayatri Spivak elaborates:

When the card carrying listeners, the hegemonic people, the dominant people, talk about listening to someone ‘speaking as’ something or other, I think *there* one encounters a problem. When they want to hear an Indian speaking as an Indian, a Third World woman speaking as a Third World woman, they cover over the fact

of the ignorance that they are allowed to possess, into a kind of homogenization” (Spivak, “Questions of Multi-culturalism,” *The Post-colonial Critic: Interviews, Strategies, Dialogues*, ed. Sarah Harasym, NY: Routledge, 1990, 60, qtd. in Corbett 117).

A similar stereotyping occurs when minority musicians are placed in the role of “performing” as a given ethnic identity. They play as spokespeople for their identity or genre, which is understood to be monolithic, fixed, and essentialized (Corbett 117). To associate a given musical genre with a particular ethnicity or cultural group, risks placing a stamp of authenticity on that music. This leads to a kind of musical xenophobia—a trait observable in much of today’s mainstream jazz—in which the music must be played “correctly,” in accordance with clearly defined “rules” in deference to tradition and respect to the cultures that created it. This tendency negates the minoritarian aspects of jazz—its history of being permeable, open to growth and change. Rather, it seeks sanction from the dominant culture as its proponents attempt to prove its worth in relation to and gain acceptance by the dominant culture—it attempts to become a major music (Corbett 117). Thus, mainstream jazz aims to become a national music, “America’s classical music.” As Deleuze and Guattari have put it: “How many styles or literary movements, even the very small ones, have only one single dream: to assume a major function in language, to offer themselves as a sort of state language, an official language . . . ?” As a remedy, Deleuze and Guattari charge artists to “create the opposite dream: know how to create a becoming-minor” (Corbett 117–18).

The recent acquisition of cultural capital by today’s mainstream jazz musicians notwithstanding, for most of its history jazz has been a prototypical “minor” music, or, more accurately, what Deleuze and Guattari would call a “becoming-minor” music, in that it is

continually receptive to change. Jazz works with the major-music materials of Western art music (“classical music”) and hegemonic culture-industry commercial music (“popular music”). Like Kafka, jazz musicians worked with the materials of a major “language” to create a minor “literature” (Corbett 118). And, as will be discussed in a later chapter, exploring Detroit techno music, African-American electronic musicians have worked within similar constraints and have achieved similar results in the creation of their own minor music/literature.

Furthermore, the links between jazz and electronic musics extend to the ways that each of these musics is produced, performed and composed. Today’s electronic music is typically not only performed (*a la* Gleeson and “turntablist DJs”), but *composed* in ways that employ creative improvisatory practices in its uses of digital musical instruments and computers. These creative practices involve uses of technology in ways that are dialectical, non-linear, heuristic, contingent, open to unexpected outcomes, and non-logocentric. But in electronic music these improvisatory practices remain invisible and undetected to most listeners, because the improvisation is not performed “live” on a stage, but alone in a studio. The improvisation is documented as a recording or computer file, thus resulting in a “finished” “product” or “text,” but the traditional conceptual model of the “musical work,” which still dominates musical discourse, has led to the perception that these products which are captured in their fluidity are “solid” compositions that have been “written” or “composed” in the traditional musicological sense of the term.

A focus on the improvisatory qualities of electronic music creation serves as necessary corrective to some common misperceptions about the music. First, that it is “inhuman.” This view is surprisingly resilient today, even among relatively progressive critics. Greg Tate, for instance, contrasts digital media with “human feeling,” and he contrasts the prevailing digitization in our culture to his own steadfast resolve to resist and denounce it: “Just because the

cultural landscape has changed so drastically, so digitally, around black improvisational music, that doesn't mean I've also lost all human feeling in my heart, lungs, nuts, fingers, limbs, or my vivid memories of remarkable jazz things past" ("Black Jazz in the Digital Age" 224). He also sees digital consumerism as reflecting the fundamental artistic worth of the music itself that is being consumed, claiming that "modern hip-hop and rhythm 'n' blues have become virtual black musics, increasingly designed more for downloading than public dancing or displays of affection, more readily made to be enjoyed as ringtones and iPod Shuffle snippets than as album cuts, as disposable, beat-driven musical Ritalin for the Attention Deficit Disorder set" (224). The second common misperception is that the tools used in electronic music creation are not "real instruments." Again, an observer as perceptive as Greg Tate has expressed this viewpoint, writing, for instance, of Washington DC's go-go music scene that "outside New Orleans it remains the only black music that demands that young black musicians become instrumentalists" ("Black Jazz in the Digital Age" 219). As these examples indicate, not just technology, but humans' responses to and attitudes toward this technology have clearly had a deep impact on how music is perceived. In fact, music technology cannot be understood outside of its uses in culture. As Trevor Pinch writes: "sound technologies are socially embedded and reappropriated in a variety of cultures. . . . Throughout the esoteric history of electronic music . . . the common issue remains how humans give meaning to technology" (qtd. in Taylor, back matter). These meanings manifest in attitudes toward music technology related to such cultural markers as race and class, for instance.

Gleeson's description of using modular synthesizers in a jazz-like way is significant because it highlights a new way of working with electronic sound, a methodology rooted in an African-American aesthetic of improvisation. Rather than being focused on a Western European

concept of achieving a finished musical composition, it is more concerned with process—on the process of musical interaction and collective improvisation. This expanded role of the synthesizer is on full display on the album recorded after Gleeson’s initial tours with the band, 1973’s *Sextant*, in which rather than providing sonic overlays, here Gleeson is functioning on an equal footing with the other members of the ensemble.

Despite the problematic racial undertones of Gleeson and Hancock’s working relationship alluded to above, *Sextant* reveals a decidedly African-American musical-improvisatory aesthetic, a stance that warrants further examination through a close reading/listening of one track. Any of *Sextant*’s three tracks could hold up to such analysis. Kodwo Eshun, for instance, singles out “Hornets,”* the nineteen-minute track that takes up the entire second side of the LP, as exemplifying Hancock’s superb sense of rhythmic drive, what he calls “the Hancock PolyRhythmengine” (*More Brilliant than the Sun* 01[009]). I agree with this assessment, but “Rain Dance,”* the opening track on the album, is more appropriate for demonstrating points of my argument. “Raindance,” begins with a synthesized electronic repeated pattern, or “loop”: “For that I was using this thing called a Random Resonator, which was this box with a sample and hold and a few other analog circuits that you could control from the face, with a knob that allowed you to control the degree of randomness. We set it up, let it play, recorded it, and chose a sequence that we then looped” (Opperman).

Gleeson’s use of the word *looped* is significant. The Mwandishi approach to collective improvisation made frequent use of such repeated patterns or loops. what in musicological terms is called an ostinato: a repeated phrase or “riff.” Often, several ostinati or riffs are played at the same time, layered on top of one another, giving the music a dense, polyrhythmic texture. From today’s vantage point, it is easy to see that ostinati used in this way were forerunners to the

repeated sampled loops that later hip-hop producers would make frequent use of in their productions. In fact, earlier jazz styles also made frequent use of repeated riffs, exemplified by the “head arrangements” employed by the Count Basie band, comprising several interlocking riffs distributed among the different horn sections of the big band. This repeated use, despite stylistic changes, throughout the history of jazz suggests that the ostinato/riff/loop is a common thread in African-American music, one of the elements that Olly Wilson identifies as a “shared core of conceptual approaches to the process of music making” in Afro-diasporic musics, characterized by a “high density of musical events within a relatively short musical time frame—a tendency to fill up all of the musical space” (2-3). Ostinati used in this way are often described in musicology as having a “static” temporal effect. Because the musical themes are repeated over and over, and are not “developed” according to the traditional rules of classical music, they can give the sense of slowing down time, of stasis (Gluck 150). The normal Western sense of time as being a linear, teleological phenomenon is thus challenged.

But it is important to step back a moment and examine more closely the idea that ostinati, or musical “loops” are temporally “static,” for this idea has remained largely unquestioned in much writing about music, and itself reflects traditional Western assumptions and values with regard to musical time. And electronic musical technologies, which enable repetition on an unprecedented scale, prompt musicians as well as listeners to posit an alternative aesthetics that conceives of musical loops not as static but as dynamic. Mark J. Butler, who has written from a music theory perspective on contemporary electronic musical idioms, is among the forefront of scholars proposing a reconsideration of musical loops. He writes:

Existing scholarship, however, offers few tools with which to conceptualize the cycle as a musical technology. Discourse on cycles has too often cast them as

atemporal, spatial, static, and timeless. They are frequently conflated with circles, which lack a clear beginning and end. By contrast, this section develops an account of cyclical design that is inherently temporal. . . . I posit an understanding of cycles as having clear points of origin, distinct phases with particular qualities, and goal-directedness. They engage in-time attending and are intrinsically dynamic, working as an impetus that propels performance forward. (200)

Musical loops or cycles, then, constitute not so much a cessation of time as a different conception of it. It is too simplistic to think of loops as unchanging circular patterns that exhibit no variance and undergo no transformation. Instead of the circle, Butler proposes the spiral as a visual metaphor for conceiving musical loops, in that a spiral pattern suggests the process of “moving through cycles of varying sizes while also progressing forward” (205). Conceiving of musical loops as spirals asserts their dynamic, temporally cyclic nature (at least as they are most often used in African-American musics), while at the same time challenging older, hegemonic conceptions of musical time as a strictly linear phenomenon.

This non-linear aspect of ostinati and loops is an important political/cultural component of African-American free and electronic musics. Black feminist theorist Elsa Barkley Brown points out that European culture has long privileged a “linear, symmetrical (some would say Western) way of thinking,” and that offering alternatives that challenge this privilege from an African-American standpoint necessitates the recognition that “perceptions of alternatives in the social structure [can] take place only within a framework defined by the patterns and rhythms of our particular cultural understandings” (284). It is significant and appropriate that Barkley Brown articulates her call to resistance in terms that connote African-American music, the “patterns and rhythms of our particular cultural understandings,” because African-American

music provides the framework for alternatives to the dominant “linear, symmetrical . . . way of thinking.” Specifically, for Barkley Brown African-American music provides this alternative/antidote by way of its penchant for polyrhythms and layering of musical parts (“hearing multiple rhythms”): She maintains that an African American artistic aesthetic is rooted in “nonlinear ways of thinking about the world, of hearing multiple rhythms, and thinking music not chaos” (284).

In Hancock’s “Rain Dance,” the initial iteration of the loop (00:00:00–00:00:08) is augmented with a sustained rising electronic tone at 00:00:09, repeated four times. Additional electronic textural percussive and warbly sounds are then added one at a time on each repetition of the loop, layering gradually more sounds on top of one another, leading to a short trumpet solo by Eddie Henderson, who interacts improvisationally with these repeated interlocking electronic layers (00:00:35–00:00:56). At 1:00 there is a two-second pause, a silence, before a sudden burst of collective improvisation, followed by Julian Priester trombone solo beginning at 00:01:04, in which the drums also enter, at 00:01:09. At 00:01:17, Electronically treated bass clarinet growls by Bennie Maupin and increasingly dense synthesizer and Fender Rhodes textures provide the sonic backdrop for a bass acoustic bass solo by Buster Williams, lasting until 00:02:27, at which point Hancock solos on Rhodes. Hancock’s improvised lines and chordal patterns modulate freely and unexpectedly from the key center established thus far in the tune by the repeated ostinatos. This harmonic intensity is paralleled by an increase in rhythmic intensity, with Hancock employing short, sharp chordal stabs repeated in random off-beats and incorporating asymmetrical phrasing and hemiolas, which are picked up on and spontaneously reinforced by drummer Billy Hart. The harmonic and rhythmic intensification reaches a peak with Hancock playing a descending pattern at 00:03:27, ending on a single sustained chord in the low register

at 00:03:34. At this point all the instruments drop out, with minimal electronic textures and a faint hi-hat quatter-note pattern providing the only accompaniment to a second solo on acoustic bass by Buster Williams at 00:03:35. With the dynamic level suddenly reduced, it is barely possible to hear the machine-generated loop still percolating away in the background beneath Williams's solo. The machine-generated loop returns much more prominently at 00:04:09, and louder but still minimal drums return at 00:04:19, as Williams continues soloing. At 4:30 a new machine-generated loops emerges, in counterpoint to the first, and other synthesized loops are added. Williams drops out at 00:04:44, and the machines are left all to themselves, "soloing" in an interlinked ensemble of loops of varying lengths and timbres. At this point, the machines take over, with only electronic sounds heard from here until the end of the recording's conclusion, at 00:09:15. Throughout this fascinating passage, as the parts repeat over and over, the pitches and rhythms of many of the individual parts remain the same, but the synthesized timbres (which in 1973 still must have seemed shockingly new to many people) are continuously varied through the use of filters, and some parts are made to slowly pan across the stereo spectrum from left to right. Gleeson and Hancock's use of synthesizers and sequencers in "Rain Dance," unprecedented in a jazz context, suggests a blend of Western and African musical practices and traditions. On one hand, the sheer variety of sonic textures and timbres, all artfully blended with one another, suggest an orchestral approach to composition. On the other hand, with each electronic part contributing to the polyrhythmic complexity and textural density of the whole sonic picture, each part thus functions similarly to the individual members of a West African percussion ensemble, providing an ideal example of what Olly Wilson has identified as a key characteristic of Afro-diasporic musics, the "high density of musical events" (2-3). At 00:08:40,

the recording begins to conclude, gradually fading out to silence, paralleling the infinitely distant horizon suggested on the album cover's artwork.

Gleeson and Hancock set up a loop that allowed for randomness, and the musicians reacted in real time to this random loop. And Not only does "Rain Dance" feature a loop, but this loop is machine-generated, utilizing a sample-and-hold function, marking one of the early instances on record of using a sequencer to generate steadily repeated notes in a melodic pattern that could then be timbrally adjusted (using envelopes, filters, and further modulation) on-the-fly as the sequence repeatedly played back.

Using a machine as a musical instrument in this way has important resonances with the ways that African-American culture has envisioned machines, as noted by Joel Dinerstein, discussed above. With "Rain Dance," African-American modes of musically Signifyin(g) on the machine reach new heights, because on this recording, probably for the first time in the history of recorded music, we hear a musical machine functioning as a virtual member of a jazz ensemble. Employing musical machines in this way is something that would be used by later black electronic musicians, as will be discussed in later chapters. Today, a common practice in electronic music composition employs musical machines as virtual members of a band, with the producer/composer interacting with the machines similarly to the way that a jazz soloist would interact with a rhythm section. This interaction—as Ingrid Monson has emphasized in her *Saying Something: Jazz Improvisation and Interaction*—is crucial to improvisation. Today's electronic music composition practice, then, is rooted in an inherently African-American methodology, in the sense that it is based on a jazz aesthetic of improvisation and interaction.

This type of practice blurs the traditional boundaries in musicology between "composition" and "improvisation." Examining the uses of musical machines in this way

complicates the traditional improvisation/composition binary, adding to a more nuanced understanding of this dynamic. Not only do these new, more complicated models challenge the idea that compositional texts are lifeless artifacts, but the romanticized notion of improvisation as necessarily, in contrast to composition, “dynamic.” This compositional methodology, besides being rooted in improvisation, is also—in both jazz and electronic musics—heavily mediated by the technologies and practices of recording. Often, in a recording situation, the improvisation/composition is captured in real time as it happens, in a process in which the live performance becomes the actual finished musical work. Thus, in addition to the improvisation/composition binary being blurred, that of process/product is also blurred.

And what we are also hearing here in “Rain Dance,” again probably for the first time in the history of recorded music, is this discovery that machine-generated music works very well in an African-American improvisatory setting. In traditional musicology, in standard music criticism, probably the worst insult a critic can hurl at a musician is that their performance was “robotic,” “machine-like.” Because that means that the performance was devoid of the things that supposedly make a performance good: “humanness,” “emotion,” etc. But what “Rain Dance” demonstrates is that, far from being listless, uninteresting, the machine could actually enhance the groove of a rhythmic feel.

In a very real sense, the Mwandishi band, in their recorded performance of “Rain Dance” are Signifyin(g) on the musical machine, or, more precisely—given the lack of access that black musicians had to cutting-edge musical technologies (which were typically the realm of academic computer laboratories, high-end recording studios, and other monied institutions)—the musicians are Signifyin(g) in a particularly African-American way on the discourses and tropes associated with electronically-synthesized and machine-generated sound.

The significance of Signifyin(g)

Signifyin(g) is Henry Louis Gates's term denoting an Afrocentric mode of critical theory, expounded upon in his *The Signifying Monkey: A Theory of Afro-American Literary Criticism* (1988). Gates developed this theory through examining anthropological work in sub-Saharan Africa, which finds that a deity known as Esu-Elegbara—who is a god of divination, and is also a gatekeeper between the material and the spiritual worlds—appears in religious traditions in sub-Saharan cultures and in religious traditions throughout the African diaspora, including the United States. Throughout these African diasporic religious cultures, the figure known as Esu-Elegbra is identified by the tricks that he delights in playing on humans, and by his cryptic and oblique style of speaking, requiring humans to decode his meanings in order to determine messages from the gods. Gates sees Esu-Elebra's traits as a representative of an African-American mode of literacy and cultural practice, and by extension, the basis for a new mode of African-American critical theory. Thus, for Gates, Esu-Elegbra serves as a “figure for the nature and function of interpretation and double-voiced utterance” (xxi), a set of rhetorical tropes and language use that are subsumed under the general concept of what Gates refers to as Signifyin(g). More specifically, Gates maintains that black texts *signify*—that is, they employ these particularly black rhetorical tropes and uses of language—on other texts both within and without black cultural traditions and idioms. Signifyin(g), then, constitutes the process of an artist understanding and contextualizing her own identity in relation to her own culture and the broader culture at large—contemporaneously in her time and in relation to a received “tradition” or past, as well as in relation to imagined futures. Gates is primarily concerned with African-American literary texts, but the concept of Signifyin(g) also functions well for understanding African-American musics, a point he himself makes, noting, for instance, that “there are so many

examples of Signifyin(g) in jazz that one could write a formal history of its development on this basis alone” (63).

Ingrid Monson, in *Saying Something*, has utilized Gates’ concept of Signifyin(g) to understand and explain how jazz musicians engage in musical interaction. She focuses in particular on an important aspect of Gates’s theory: the uses of repetition in modes of Signifyin(g), specifically, the ways that black cultural producers use and reuse artistic materials (such content, concepts, and techniques) in transformative ways, what Gates himself describes as *repetition with a difference*:

Signifyin(g) is a black double-voicedness; because it always entails formal revision and an intertextual revision and an intertextual relation. . . . I find it an ideal metaphor for black literary criticism, or the formal manner in which texts seem concerned to address their antecedents, Repetition with a signal difference, is fundamental to the nature of Signifyin(g). (Gates 51)

Monson points out that jazz musicians’ use of musical quotation—of earlier recordings, or of a musical motif or rhythm that another musician has played earlier in the performance—constitute a form of “repetition with a signal difference.” And these musical quotations, which can be intended either as humorous send-ups or as acts of homage, correspond fairly precisely to Gate’s two main classifications of Signifyin(g): parody, which Gates also refers to as “motivated Signifying”—and pastiche, which Gates also refers to as “unmotivated Signifyin(g)” (xxvii).

Gates emphasizes that besides Signifyin(g) on other works within African-American arts, black artists also Signify on works in white cultural traditions: “Black people crafted their own unique vernacular structures and relished in the double play that these forms bore to white forms” (xxiv). An important aspect of “repetition with a difference,” then, involves the

transformation of white hegemonic discourses into black modes of expression, which Monson points out is also a crucial facet of a wide variety of African American musical practices, seen, for example, in the transformation of hymns by the English composer Isaac Watts (1674–1748) into African-American spiritual songs, the transformation of marching band songs into ragtime piano pieces, and the transformation of Broadway show tunes into jazz standards (*Saying Something* 104).

On “Rain Dance,” the Mwandishi band employ exactly this mode of Signifyin(g) during their improvisations, when each of the soloists, as well as their accompanists (in their backing parts on bass, drums, keyboards), react to the machine-generated riff as it twists and morphs throughout the performance. Even Patrick Gleeson reacts musically in real time in this way to the riff, which he himself instigates at the beginning of the recording. Besides the element of “repetition with a difference”—the African-American transformation of hegemonic white practices and discourses (here represented by the academic and technological associations and connotations of computer-generated sounds), it is also significant—and serendipitous—that this occurs on the recording in the context of a machine-generated “riff,” because Gates himself identified “riffing” as an important component of Signifyin(g): “The riff is a central component of jazz improvisation and Signifyin(g) and serves as an especially appropriate synonym for troping and for revision” (105).

Herbie Hancock, then, in addition to his skills as a musical improviser and technological innovator, is also a consummate Signifier. And this skill is by no means limited to this particular recording of “Rain Dance,” for he has employed various modes of musical Signifying throughout his recorded body of work. This has been pointed out by Steven Pond, who, in his book on the making of Hancock’s *Head Hunters* album has noted that on this album Hancock’s musical

concept can be understood as a kind of Signifyin(g), writing that Hancock's uses of electronic instruments and production techniques, "far from abandoning the improvisational aesthetic of avant-garde jazz, can be seen as Signifyin(g) on both the academic avant-garde *and* the avant-garde jazz movements," appropriating those camps' practices and materials for his own artistic ends" (104). Hancock's Signifyin(g) then, functions on two levels, both as a transformation of white hegemonic discourses *and* as another form of "repetition with difference," on black discourse.

Expanding on this point, it is worth looking more closely at how Hancock engages in another important mode of musical Signifyin(g), that of self-reference. As one example, Hancock's 1973 version of his own tune, "Watermelon Man"*—on the *Head Hunters* album—can be understood as what Gates classifies as "Signifyin(g) revision," in which "authors produce meaning in part by revising formal patterns of representation in their fictions. This production of meaning, in all its complexity, simultaneously involves a positioning or a critiquing both of received literary conventions and of the subject matter represented in canonical texts of the tradition" (113). Hancock's earlier 1962 recording of "Watermelon Man"* had by the early 1970s become a received, canonical text in jazz, which Hancock Signifies on in his 1973 recording. The *Head Hunters* version signifies not only Hancock's new concept of music, but also his new concept of music production, which emphatically moves beyond the "plantation" model of recording represented by the Blue Note paradigm, which the older recording of "Watermelon Man" epitomizes. Hancock's Signifyin(g) here reflects his new identity. It is as if the 1962 recording was made by a different person than the one doing the *Head Hunters* version (and in many ways, Hancock was a very different person, having undergone a political (black power), racial (Swahili, Afro-diaspora), and spiritual (Buddhism) awakening). Hancock's

newer recording of the tune situates himself in contemporary black musical culture, and thus represents an attempt to “create a new narrative space for representing the recurring reference of Afro-American literature [and music], the so-called Black Experience” (Gates 111). Hancock’s newer self is Signifyin(g), “throwing down” on his earlier self. As a side note, this type of self-referential Signifyin(g) also underlies Spike Lee’s 2017 remake of his “She’s Gotta Have It” (1986). The older Hancock and Lee are each Signifyin(g) on their younger selves “as if he’s nudging his younger self across the decades: ‘Can you do this, kid?’” (Poniewozik). Both Hancock and Lee’s self-referential Signifyin(g) embody what Ralph Ellison called “the Negro writer’s complicated assertions and denials of identity” (qtd. in Gates 117).

As Hancock’s “Rain Dance” demonstrates, far from being static and undynamic, the machine can *groove*—the machine contributes to the groove, and provides the impetus for grooving harder. And this insight was certainly not lost on subsequent producers of African-American musics. The producers of Detroit techno, whose music is explored in a later chapter, built on precisely this use of musical machines. That this aesthetic of sonic density carries over into other, subsequent idioms of African-American music is borne out by the fact that samples of “Rain Dance” have been featured in several later productions in hip hop and electronic dance music, including “It’s Good to Be Here”* by Dignable Planets, “The Extinction Agenda” by Organized Konfusion, “Roll & Tumble”* by DJ Krush, “Ring a Bell”* by Death Grips, and “Half an Edit” by Mr. Oizo, “Teknik dans le peau” by Les Sages Poetes de la Rue, and “Check-out Time” by Ed Rush & Optical. (“Rain Dance”).

Though electronic instruments had been used in jazz before, “Rain Dance,” and *Sextant* in general, mark a new conception of how electronics could be incorporated in a freely improvised African-American musical setting. The innovative use of the electronic sequencer to

provide the “loop”—representing an African-American understanding of time as non-linear over and with which the Mwandishi band members interacted and improvised—set the stage for subsequent uses of loops in later African-American electronic musical idioms. These later uses of loops add another artistic layer, by using beats and tones from recordings such as *Sextant* as sonic material in their construction. These innovative uses of sampling and working with sampled material breathe new life into the established jazz tradition, making it what Raymond Williams called a “residual tradition,” one that is fully formed, of the past, but still living and malleable in the cultural present, still operating in tension with and against the dominant culture (122). And in what is surely a good sign for the continued regenerative innovation in both jazz and electronic musics, this use of sampled material is not a one-way street, as Greg Tate notes in a recent essay: “Of late we’re seeing a revival within the jazz world of electro-acoustic forays that refuse any opposition between software-driven sonic modernity and a good old-fashioned bebop-infested blowing session—both in the studio or on the stage” (“Why Jazz Will Always Be Relevant”). With the ascendancy of jazz-informed hip-hop and electronic music, today’s jazz players are also listening and breathing new life into this residual tradition to such an extent that the existence of borders separating the two idioms is now being called into question.

The title of Herbie Hancock’s album *Sextant* is apt. Just as a sextant is an instrument used for measuring the angular distance between any two visible objects—most commonly between the earth’s horizon and a celestial object, for the purpose of celestial navigation—Hancock’s *Sextant* functions as a locus for measuring the horizon of earthy funk elements with the spacey sounds of electronic synthesizers, for the purpose of navigating between these two realms. Moreover, the two dancers on the album’s cover seem to suggest that this amalgamation of human and machine musics can propel listeners into an ecstatic response, to feel the funk more

intensely. This mix of human and machine would soon be explored more fully by African-American producers of sample-based musics and Detroit techno, and the countless electronic genres today that arose from those experiments. But more than forty years ago, Hancock's "sextant" instrument accurately charted these future developments, determining that the measured locations of improvised jazz and electronic musics were not so distant from each other after all.

CHAPTER 3. MODERNISM EXEMPLIFIED: T.S. ELIOT, WYNTON MARSALIS, AND DIGITAL SAMPLING

Tradition is that which continues. Tradition is not that which is old but that which survives. It's a stream of human consciousness. Eliot was saying that if you write something, even if it's but four lines, it should be informed, as far as possible, with the whole history of poetry. I understood that. I was telling my friend Wynton Marsalis when we were talking about jazz, if you have four bars, it should be informed by the whole history of jazz. That's when you are doing your do. Otherwise you'll spend a lot of time trying to reinvent the sonnet. But if you know what's in there, what the tradition is, then you are the cutting edge—that's what the avant garde means: the cutting edge that is going to continue tradition, but you're going to redefine it because your sensibility is different. The combination that exists in your mind that you are operating out of is different from anybody else's although it should be informed by everything that went ahead of you.

—Albert Murray

In 1935, Ralph Ellison, a student at Tuskegee Institute, discovered the works of T. S. Eliot in the university library. “*The Waste Land* seized my mind,” he recalled in 1964. “I was intrigued by its power to move me while eluding my understanding. Somehow its rhythms were often closer to those of jazz than were those of the Negro poets, and even though I could not understand them, its range of allusion was as mixed and varied as that of Louis Armstrong” (“Hidden Name and Complex Fate” 203). Not only does the young Ellison make a crucial connection, between Armstrong and Eliot, but in a subtle rhetorical move (justifying Eliot’s artistic merit as being worthy of comparison to Armstrong’s, rather than vice-versa), the older Ellison holds as axiomatic the idea that the best jazz music, in its elusive allusiveness, is itself a form of modernism.

It may seem odd, even today, that Ellison would detect a jazz sensibility in Eliot, who is often perceived as the very embodiment of erudite, stuffy, Anglo-American high modernism. Yet

this is not as big a stretch as it may at first appear. Eliot grew up in St. Louis, a major hub of ragtime music in the early twentieth century. The Eliot family home was located in a neighborhood of St. Louis where European immigrants and African Americans lived and intermingled in close proximity (Dickey). The Eliot family home, at 2635 Locust Street, was a mere five-minute walk from the home of Scott Joplin, at 2658 Delmar Boulevard. (Dickey; “2635 Locust St.”) A sensitive, perceptive budding poet such as Eliot would certainly have become attuned to the many styles of African-American music emanating from the windows of his neighbors’ parlors: ragtime, blues, early jazz, spirituals, perhaps vestiges of work songs and field hollers.

In this chapter I use Ellison’s insight as a launchpad for an exploration of the connections between Eliot’s idea of artistic tradition—as articulated in his 1917 essay, “Tradition and the Individual Talent”—and the music of Wynton Marsalis, a jazz musician who found himself at the center of debates over the idea of tradition in jazz. Focusing first on Marsalis’s relationship with Albert Murray (Marsalis’s key intellectual mentor and himself a devotee of Eliot and *confidante* to Ellison); then on the role of Marsalis at the end of the twentieth century, when the jazz world was engaged in debates over the role of tradition and the institutionalization of jazz in mainstream culture; then on the relation of Eliot and Marsalis’s concepts of artistic tradition to digital sampling. While sampling has typically been understood as a postmodern practice driven by technological advancements, I argue that the conceptual framework for sampling older works was already established by the modernist art of jazz—epitomized in this regard by the consciously modernist work of Wynton Marsaslis at the end of the twentieth century—and even the writing of T. S. Eliot at the century’s beginning. While sampling was enabled by advances in digital technology in the 1980s, this technology was used by African-American musicians in

ways that were not anticipated by the developers of those technologies; the impetus for these musicians' particular uses of the sampler as an artistic archive machine did not arise with the arrival of the sampler, but extend back into African-American modernist concepts of artistic tradition—the sampler merely enabled new expressions and realizations of these concepts. Eliot, Marsalis, and sampling musicians are, in Eliot's words, all artists who are “aware . . . of great difficulties and responsibilities” in . . . [their] relation to the past (“Tradition and the Individual Talent” 943). My goal in this chapter is two-fold: While showing how digital sampling can be understood as expressing a modernist attitude toward tradition, I also aim to demonstrate the corollary concept: that modernism, and more specifically, modernist ideas of tradition, can and must be understood anew, and that the tradition itself changes when we do so—that Eliot and Marsalis's attitudes toward tradition can be understood retroactively as a form of “sampling.”

Eliot's “Tradition and the Individual Talent” is widely recognized as one of the key statements of twentieth-century modernist aesthetics. Addressing issues of literary tradition and the role of the individual writer, as well as ideas of expression, personality, and impersonality, the work has strongly influenced thinking on artistic modernism in general, transcending its ostensible focus on poetry. As Giovanni Cianci and Jason Harding put it, in a recent volume devoted to a reassessment of the essay, “Tradition and the Individual Talent” “. . . has a strong claim to be seen as the most resonant and widely discussed critical statement of twentieth-century Anglo-American literary theory. It has certainly been a fountainhead and indispensable reference point for subsequent examinations of cultural and artistic traditions” (1). Yet they also point out that the essay has been widely misread, noting that it “is habitually treated by postmodern critics with misunderstanding, insouciance, or even resentment” (2). Cianci and Harding posit that these adversarial misreadings, constituting “superficial textbook travesties of

the animating spirit of Eliot's most influential essay" are primarily due to a widespread tendency to conflate the provocative stance of Eliot's early "modernist manifesto" with his later position as a "conservative cultural critic" (2–3). Whatever the reasons for this misunderstanding, Cianci and Harding assert that Eliot's essay warrants reappraisal, especially with regard to its innovative ideas related to artistic traditions. One way that "Tradition and the Individual Talent" may be reappraised is by reading it in relation to jazz music and digital sampling.

Murray and Marsalis

Albert Murray (1916–2013), though perhaps not as well-known as his fellow African-American modernists Richard Wright, James Baldwin, Ralph Ellison, Romare Bearden, and Toni Morrison, enjoyed close acquaintances with many of them, and profoundly influenced several key members of a younger generation of African-American artists and intellectuals, especially the cultural critic Stanley Crouch and musician Wynton Marsalis. Marsalis has stated: "He's my mentor, but it's more than that . . . *Stomping the Blues* [Murray's 1976 book that forged a new aesthetics of jazz] had a profound impact on me in terms of understanding the context of the art form and the society'" (qtd. in Holley). Marsalis met Murray in 1982, after Marsalis, then only in his early 20s, had already enjoyed several years of celebrity status in the world of jazz.

Understanding their meeting in the context of jazz's history is crucial to understanding Marsalis's idea of tradition, for by the late 1970s and early '80s, the time of Marsalis's ascension, jazz music was widely considered to be in a rut. The dominant style, jazz-rock fusion, had reached a stylistic dead-end, having become laden with disco-era clichés and displays of pyrotechnical instrumental virtuosity. In a sense, the jazz world had still not gotten over the untimely death of John Coltrane in 1967. Whereas each earlier style of jazz had been

spearheaded by the artistic vision and leadership of one or two key figures—Coltrane and Miles Davis in the 1960s, Davis in the '50s, Charlie Parker and Dizzy Gillespie in the '40s, Louis Armstrong and Duke Ellington in the '30s and late '20s—with Miles Davis secluded in his New York apartment throughout the latter half of the 1970s, no clear stylistic leader had emerged in the 1970s, and unlike earlier decades, there had arguably been no key stylistic innovations. Some critics were pronouncing the “death of jazz”; it seemed the music had reached the end of its development, and the end of its history.

Thus, when Marsalis rose to prominence at the close of the '70s, he was quickly hailed by many musicians, critics, and fans as a “jazz messiah.” Marsalis’s ascension, coming as it did at the supposed “end of jazz history,” places him in a relation to his art form that is similar to the way Eliot understood his own relation to past writers. As Aleida Assmann explains in “Exorcising the Demon of Chronology: T. S. Eliot’s Reinvention of Tradition”: “Eliot shared the mood of what we would now call *posthistoire*: the feeling of belatedness; of standing on a spot from which everything can be viewed at a glance; the impression that the end of history has been reached” (19). By the time he met Murray in 1982, Marsalis was among the most famous (and most financially successful) jazz musicians in the world, and he could have continued for the rest of his career repeating what had proven to be critically and commercially successful, playing the kind of abstract, complex music displayed on his early recordings.

The first three Wynton Marsalis albums—*Wynton Marsalis* (1982), *Think of One* (1983), and *Hot House Flowers* (1984)—showcase the young trumpeter’s fiery technique. They serve as evidence that Marsalis can really play, and seem designed to show the world just that; but all the displays of virtuosity leave little room for emotional depth, and these first three albums are, from an artistic standpoint, largely immature efforts.

But the next sequence of albums—*Black Codes (From the Underground)* (1985), *J Mood* (1986), *Marsalis Standard Time, Vol. 1* (1987), and *Live at Blues Alley* (1988)—represent a profound artistic maturation. The instrumental technique is still astounding, but now it is melded with a strong artistic conception and compositional sophistication. On *Black Codes (From the Underground)* meter changes abound; none of the album's tracks feature the standard 4/4 swing meter except the very last track, a brief, untitled blues in B-flat played as a duet between Marsalis and bassist Charnet Moffet. The harmonic vocabulary of the album is at once tonal and atonal, with modes and chord changes constantly shifting in unusual modulations. Rhythmic, harmonic, and melodic aspects of the music are all pushed as far as they ever had been in jazz, which could be a recipe for chaos. But Marsalis's strong conception for the group sound as a whole imparts a taut logic that renders the music not only comprehensible and accessible but incredibly dynamic and exciting. Each of the three albums after *Black Codes* developed and refined this concept even more, until by the time of 1988's *Live at Blues Alley* Marsalis's ensemble had developed its own rhythmic, harmonic and melodic dialects—epitomized by that album's leadoff track, "Knozz-Moe-King"*—with each member of the group attuned to each other, often with each playing at his own tempo (with independent, simultaneously occurring *accelerandos* and *deccelerandos*) and shifting key centers, and yet also managing to make it all gel tightly together. These unprecedented conceptions of how individual instruments could work together in a jazz ensemble were absolutely lost on most critics, who could hear and appreciate Marsalis's technical abilities, but charged him with rehashing earlier styles of jazz.⁷ One can

7. Among the hundreds of such reviews, one chosen more or less at random is representative of this critical reception: "His lack of creativity -- his failure even to recognize that great artists add to the

only wonder what similarly multi-meter, multi-modal, pan-tonal styles of earlier jazz these critics thought they had been listening to! Despite the obvious artistic achievements of this music, Marsalis has always seemed reticent to publicly discuss this era of his output, perhaps because his innovations seemed to fall on deaf ears. When, in an interview with Marsalis, pianist Ethan Iverson marveled to him about the extraordinary level of innovative artistry on display in that ensemble: “It was so incredible. . . . It was like: ‘Check out what those guys know: this language that *only* they know!’” Marsalis responded simply: “We used to work on that stuff, man. Playing in different times and stuff like that. It was fun. It was interesting stuff” (Iverson “Interview with Wynton Marsalis, Part 2”).

But as a result of his talks with Albert Murray, Marsalis’s music went through an abrupt change of style at the end of the 1980s. Murray prompted Marsalis to rethink what he thought he knew of jazz history, resulting in a new kind of musical conception for Marsalis, one explicitly rooted in the jazz tradition. As Tony Scherman, who conducted several interviews with Murray toward the end of his life, relates:

Within a few months of reading and talking, Wynton knew that Murray was the most important teacher he would ever have. When they had met, Marsalis was only minimally aware of Murray as one of America’s seminal writers and thinkers on jazz. Murray gave his new protégé a copy of *Stomping the Blues* . . . and the book upended Marsalis’s approach to the music, challenging him to go beyond

vocabulary of their art -- causes his improvising and composing to be slickly imitative at best” (Harvey Pekar, “The Downside of Wynton Marsalis,” *Isthmus*, 24 April 1998, <https://isthmus.com/archive/from-the-archives/the-downside-of-wynton-marsalis/>)

playing unreflectively, “just playing,” as Marsalis said, *into an awareness of his playing as part of a tradition*. (“Driving Mr. Murray” emphasis added)

This revelation would prove to be the turning point in Marsalis’s career, resulting in a radical revisioning/hearing of his music, and prompting a complete about-face from his earlier style:

I knew . . . that when I did that album at Blues Alley that I wasn’t going to do another record in that type of style—all those really complex rhythms, playing fast, wild. Now I’m trying to really put together an approach through which I can create a more accurate tonal picture of my experiences, of the world I come out of, of the things in my life that have the deepest meanings for me. A lot of it has to do with all the things I experienced growing up in New Orleans. (Crouch, Liner Notes)

This shift in Marsalis’s awareness of the past can be understood as a jazz version of Eliot’s dictum: “What is to be insisted upon is that the poet must develop or procure the consciousness of the past and that he should continue to develop this consciousness throughout his career” (“Tradition and the Individual Talent” 944). For the next few years, Marsalis considered how he might incorporate this “consciousness of the past” into his music, culminating in his landmark recording of 1989, *The Majesty of the Blues*, which publicly debuted his new style, and which he has continued to develop and refine throughout his subsequent career.

The Majesty of the Blues

The focal point of *The Majesty of the Blues* is an extended composition in three parts entitled “The New Orleans Function,” which makes up the second half of the album, the entirety of side 2 on the original LP release: I. “The Death of Jazz,”* II. “Premature Autopsies

(Sermon),”* and III. “Oh, but on the Third Day.”* The work is structured after a traditional New Orleans funeral service, which begins with a slow march-like dirge to the cemetery, followed by a few words at the gravesite, and concluding with a raucous, celebratory upbeat piece as the funeral party leaves the burial site. The centerpiece of “The New Orleans Function,” and the work’s longest movement, is “Premature Autopsies,” which is a kind of jazz sermon and funeral service for jazz, written by Stanley Crouch and performed on the recording by the Rev. Jeremiah Wright, Jr.⁸. The topic of the sermon is the supposed “death of jazz,” a favorite topic among jazz critics and pundits in the 1970s and 1980s. The sermon, which truly must be heard to be appreciated, frames the issue as a mythological fairy tale, in which jazz music is personified as a valorous knight and white mainstream society is cast as an evil dragon. Alluding to jazz’s roots in American slavery, the beginning of the sermon sets the stage: “Like a knight wrapped in the glistening armor of invention, of creativity, of integrity, of grace, of sophistication, of soul— this sound took the field. It arrived when the heart was like a percussively throbbing community suffering the despair imposed by dragons” (Crouch, “Premature Autopsies”). Strongly influenced by Albert Murray’s idea that jazz music has functioned as a “technology for survival,” the sermon poetically points out the hegemony of American mainstream society: “Now if a dragon thinks it is grand enough, that dragon will try to make you believe that what you need to carry you through the inevitable turmoil that visits human life is beyond your grasp. If that dragon thinks it is grand enough, it will try to convince you that there is no escape, no release, no

8. Jeremiah Wright, who has been a fierce critic of America’s ongoing history of institutionalized racism and exceptionalism, would later become much more famous in American mainstream culture when he found himself the center of controversy and corporate media attention during the run-up to the 2008 presidential election, at which time Barack Obama, who had attended Wright’s church in Chicago during the 1990s and early 2000s, publicly repudiated several of Wright’s statements, and withdrew his membership in Wright’s church.

salvation from its wicked dominion” (Crouch, “Premature Autopsies”). The salvation from this evil empire is delivered by jazz music: “But when a majestic sound takes the field, when it parts the waters of silence and noise with the power of song, when this majestic concantation of rhythm, harmony, and melody assembles itself in the invisible world of music, ears begin to change and lives begin to change and those who were musically lame begin to walk with a charismatic sophistication to their steps.” This presentation of jazz as a healing force in opposition to an oppressive mainstream society harkens back to Langston Hughes’s assessment of the music in 1926: “Jazz to me is one of the inherent expressions of Negro life in America: the eternal tom-tom beatings in the Negro soul—the tom-tom of revolt against weariness in a white world, a world of subway trains and work, work, work; the tom-tom of joy and laughter, and pain swallowed in a smile” (“The Negro Artist” 967). As the title of the sermon alludes, the bulk of the sermon addresses reports in commercial media outlets of jazz’s demise—a phenomenon that has occurred with regularity throughout the history of the music. The way this sermon addresses the purported “death of jazz” contains strong resonances with the way Houston Baker questions the Harlem Renaissance’s supposed “failure” (*Modernism and the Harlem Renaissance* xiv–vx): Who is it, precisely, who has consigned the Harlem Renaissance to failure, and for what reasons? Similarly, who has consigned jazz to cultural irrelevance? Who is proclaiming its death, and why? For the preacher of the sermon, the explanation lies in institutionalized racism, which is understood to be imbricated with capitalism:

We are told today that this great sound is dead. We are told that because it did not cosign the ignoble proclivities of the marketplace, because it did not lie back and relax in the dungeon with riff raff . . . it has died, for some a most welcome death. But we must understand that the money lenders of the marketplace have never

ever known the difference between an office or an auction block. They have never ever known the difference between the place where bodies were sold and the place where souls were saved. They have never known that there was any identity to anything other than that of a hustle, a shuck, a scam, a game. If you listen to them, they'll tell you that everything is always up for sale. (Crouch, "Premature Autopsies")

Furthermore, the preacher warns his congregation against the dangers of accepting the proclamations of jazz's death:

If we accept that [the death of jazz] however, we just might find ourselves ignoring the democratic imperatives of our birthright. We might fail to understand what was meant way back in the day when the sun of liberty had been cloaked by the ignoble practice of slavery. We might fail to understand that those living in the dragon's shadow of bondage fashioned a luminous and mighty chariot that could swing low and carry us back to the home of all human hope, which is heroism. I say heroism because it is ever the quality of bravery, of devotion, of the will to nobility that underscores the marvelous phrases of this music. It swung low and it swung upward, and it wore wings. It knew that its shining armor would fit it well because it tried that armor on at the gates of slavery's hell. It was the ethereal aerodynamics of musical art in America. (Crouch, "Premature Autopsies")

In casting jazz music as inherently heroic the sermon echoes another key tenet of Albert Murray, who in works such as *The Hero and the Blues* maintained that jazz musicians—as well as writers and artists working in all media—are archetypal heroes and Promethean figures because they

supply society with “visions” of what is possible, because “where there is no adequate vision the people perish” (13–14). These mythological dimensions resonate with *The Majesty of the Blues*’s cover art—a depiction of Icarus, from Henri Matisse’s art book, *Jazz* (1941) itself an iconic work of modernism.

Though strongly critical of the institutionalized racism and vulgar economics of US mainstream society as forces of darkness in a “wicked dominion,” the preacher’s sermon closes with an impassioned invocation of Duke Ellington as a knight exemplar in the fight of jazz against evil, registering a strong confidence that jazz will prevail in the end:

You have to beware of premature autopsies. A noble sound might not lie still in the dark cave where the dragons have taken it. A noble sound might just rise up and push away the stones that were placed in its path. A noble sound might just rise up on the high side of the sky, it might just ring the silver bells of musical light that tear through the cloak of the dragon’s shadow which blocks the sun.

You got to watch those early autopsies. A noble sound is a mighty thing. It can mess around and end up swinging low and swinging high and flapping its wings in a rhythm that might swoop up over the limitations imposed by the dreams of dragons. I said: You better check those autopsies. A noble sound, the birthright understood so clearly by Duke Ellington—just might swing low and it might tell *you* to get on board. It might move with so much grace and so much confidence that you will have to remember what I have been telling you: You had better not pay much attention to those premature autopsies. This noble sound, this thing of beauty, this art so battered but so ready for battle, it just might lift you high enough in the understanding of human life to let you know in no uncertain terms

why that marvelous Washingtonian, Edward Kennedy Ellington, never, NEVER came off the road! (Crouch, “Premature Autopsies”)

The choice of Ellington to personify jazz is apt, for Ellington’s career spanned most of jazz’s history, and the stylistic changes his music underwent paralleled those that occurred more broadly in the music as a whole. Earlier in the sermon the preacher notes that “Duke Ellington performed with Sidney Bechet, with Louis Armstrong, with Coleman Hawkins, with Charlie Parker, with John Coltrane, and wrote music for almost all of them” (Crouch, “Premature Autopsies”). Similarly, Albert Murray has stated that Ellington was “the preeminent embodiment of blues music” (*Stomping the Blues* 214).⁹ It is also significant that the preacher points out that Ellington never came off the road, essentially touring his entire career, for this emphasizes a key point of the sermon—that to play jazz music involves hardship and struggle: “In order to carry the candle, you have to accept the fact that when the wax on that candle begins to melt it will slide down and burn your hand. You must be willing to accept the fact that pain is a part of the process of revelation” (Crouch, “Premature Autopsies”). To be a candle-holder, then, is to guard the light of tradition against the darkness of dragons’ lairs, a task that entails suffering.

“The present moment of the past”

This view of struggle as the price of artistry is also emphasized by Eliot, who in Part I of “Tradition and the Individual Talent” argues strongly for a concept of tradition that is not merely a passive handing-down, but as something that the artist must actively struggle to attain: “If the only form of tradition, of handing down, consisted in following the ways of the immediate

9. Murray did not recognize any essential distinction between jazz and blues as separate genres.

generation before us in a blind or timid adherence to its success, ‘tradition’ should be positively discouraged. . . Tradition is a matter of much wider significance. It cannot be inherited, and if you want it you must obtain it by great labour” (942). The interpretation of countless critics notwithstanding, I don’t read these passages as an expression of cultural conservatism, of mindless devotion to the past simply because it has passed. There is no reverential bolstering of “the canon” here, and no trumpeting of artistic imitation. Rather, it is more a call to radical artistic struggle. Key to this struggle is the artist’s understanding of the past and the present not as non-overlapping *magisteria*, but each as dynamic, synergistic aspects of the tradition that exert their influence on each other. Marsalis has also articulated this understanding of the tradition not as something to be revered in and of itself, but as an atemporal source-pool that makes an artist simultaneously of her time and of all time. In speaking of his transition from the style of his earlier albums to that of *The Majesty of the Blues* and his subsequent albums, Marsalis has stated:

My [new] conception is holistic. Instead of being relegated to our time period, we can be in time. We had Afros in the ’70s. Everybody used suss [*sic*] chords then. Now we can use suss chords and triads and New Orleans grooves, and do the 1960 jazz imitation of what the avant-garde musicians played in Germany in 1912—the chaos element. All the music that’s in one consciousness is the same. We are free to utilize all that we know, because we don’t have to appeal to a tradition, and we can create a truly modern music that sounds like nothing you’ve ever heard, but is also traditional. It’s revolutionary in its implications. All of it exists at one time. (qtd. in Panken)

Marsalis's mention of what is mistakenly transcribed in the interview as "suss chords" refers to "sus chords"—jazz musicians' shorthand way of denoting suspended chords, which are comprised of intervals of a musical fourth rather than the typical tertian harmony (based on musical thirds) of older styles of jazz, and most vernacular musics. Sus chords were in vogue in the 1960s in the music of John Coltrane and Wayne Shorter, and in the 1970s in the music of Woody Shaw and Chick Corea. As such, during the 1960s and 1970s they were aural markers of modernity, of "hipness." Marsalis is pointing out that the use of such harmonic devices as mere shallow signifiers of modernity has the effect of actually dating the music, in the way that an Afro hairstyle would date a portrait as being of the 1970s. Marsalis thus explains his transition from the ostensibly "modern" style of his earlier recordings to the ostensibly "older" style of his later recordings in terms of wanting to escape both the confines of producing art that is merely a reflection of one's own time *and* of merely "appealing to a tradition"—thus creating art that is "truly modern." Crouch's liner notes to *The Majesty of the Blues* also express precisely this conception of the tradition, elucidating Marsalis's concept of what Eliot termed "the present moment of the past" (Eliot, "Tradition and the Individual Talent" 947).:

Perhaps the most important statement made here is a removal of the supposed generation gaps that have bedeviled jazz since musicians began to emerge who were able to play with authority in only one style. . . . Marsalis is reiterating a sense of musical wholeness that suggests the arrival of a musical renaissance in jazz, one in which the varied powers of the art are reborn through a sensibility broad enough to not only appreciate but *reinvent the tradition itself*. This would not be possible if Marsalis hadn't spent so much time studying the work of the masters of his art and seeking the connectives that transcend particular styles.

That level of involvement has allowed him to move beyond what could easily be a superficial breadth of sound that lacks the spiritual, emotional, intellectual, and technical bite of authority. Marsalis is intelligent enough to understand that when one truly grasps the conception that undergirds a musical approach it isn't necessary to imitate the execution. "I'm realizing," he says, "that a musician should not ape or imitate these styles. When you're imitating, you are on the lowest level of cognizance, which is technical." (Crouch, Liner Notes)

Crouch's writing here succumbs to some of the hyperbole that is endemic to album liner notes. Nevertheless, he does reveal a keen understanding of jazz history that resonates with Eliot's understanding of the poetic tradition. For instance, Crouch's statement that Marsalis's transcending generational styles of jazz imbues his art with a "musical wholeness" that allows him to not simply imitate earlier styles, but to "reinvent the tradition itself" contains strong resonances with Eliot's statement that "what happens when a new work of art is created is something that happens simultaneously to all the works of art which preceded it. . . . The difference between the present and the past is that the conscious present is an awareness of the past in a way and to an extent which the past's awareness of itself cannot show" ("Tradition and the Individual Talent" 942–43). This "awareness of the past" is a crucial component of modernism in general, one that has been elucidated by Marshall Berman in *All That Is Solid Melts into Air*. For Berman, what gives art its real political significance and what distinguishes artistic modernism from post-modernism is "its desire and power to remember, to remember so much of what modern societies—regardless of what their ideologies and who their ruling classes are—want to forget" (346). Far from constituting cultural or political conservatism, then, modernism's power to remember provides the strength to resist hegemonically induced states of

amnesia with which, as Habermas has argued, postmodernism is often complicit.¹⁰ Rather than articulating a reactionary reverence for the past, the modernist “tradition” is one of continual reinvention, of destruction and rebirth, of perpetually rediscovering the old in order to “make it new.” The real stakes of artistic remembering of the past is what it holds for the future. In a passage that is remarkably resonant with Eliot’s and Marsalis’s visions of the artistic past as crucial components of an artistic *now* and future, Berman states:

Going back can be a way of going forward . . . remembering the modernisms of the nineteenth century can give us the vision and courage to create the modernisms of the twenty-first. This act of remembering can help us bring modernism back to its roots, so that it can nourish and renew itself, to confront the adventures and dangers that lie ahead. To appropriate the modernities of yesterday can be at once a critique of the modernities of today and an act of faith in the modernities—and in the modern men and women—of tomorrow and the day after tomorrow. (36)

Eliot’s statement that ““what happens when a new work of art is created is something that happens simultaneously to all the works of art which preceded it. . . . The difference between the present and the past is that the conscious present is an awareness of the past in a way and to an extent which the past’s awareness of itself cannot show” implies that in remembering the past, the past is changed by the present—it is the artist’s conscious awareness of his relation to the

10. See Jürgen Habermas, “Modernity vs. Postmodernity,” *New German Critique* 22 (Winter, 1981), 3–14, in which Habermas links the view held by many postmodern intellectuals of modernism’s failure with a furthering of neoconservative agendas. Habermas’s critique of modernism’s alleged failure thus also resonates with Houston Baker’s pushing back on the idea that the Harlem Renaissance had failed, and with Crouch’s sermon ironically mourning the “death” of jazz.

past that changes his own art as well as the art that existed before it. This seeming paradox is elucidated by Gulbrandsen and Johnson in their introduction to *Transformations of Musical Modernism*. They provide the example of Arnold Schoenberg's purported "break" from tonality in 1909 when he developed the twelve-tone system of musical composition. Although widely understood throughout the twentieth century as a "rupture with the past," Schoenberg himself maintained that his innovations were a continuation rather than a flat-out rejection of European musical tradition. In Schoenberg's intensified deployment of a compositional technique that had existed in latent form, beneath the surface in all previous eras of Western art music—namely the permutations and development of motivic cells or fragments as formal elements of a composition—only then did it become apparent that in previous eras composers had employed fundamentally the same technique; but this fact remained hidden, obscured by an unquestioned emphasis on tonality *per se* as the overriding structural concern:

It was only through his "break" with tradition that this previously unreflected and latent aspect of music was taken up and articulated, that is, the recognition that structural integration, and not tonality in itself, was the decisive tool in giving musical form to a work. Schoenberg's contribution to the history of music is thus not restricted to the creation of new works of music; he also retrospectively changed our view of what, in fact, are the essential traits of that tradition. To put it more strongly, new music not only retroactively alters our view of tradition but may in fact change the tradition itself. (Gulbrandsen and Johnson 3–4)

Besides resonating strongly with Eliot's modernist understanding of the artistic present's relation to the past, this conception also rings true to African-American musical discourses, for instance, in the ways that hip-hop musicians and others involved in electronic, loop-based genres

make use of sampled material from earlier eras of African-American music. The crucial musical technology involved in these modes of African-American musical production is the digital sampler. In order to see how the sampler has enabled modernistic understandings of African-American musical pasts, it is necessary to understand what was significantly new about the technology, how African-American musicians employed this revolutionary technology in unexpected ways, and how sampling as an artistic technique and strategy relates to the African-American musical past itself.

The electronic musical instrument known as the “sampler” is a product of digital recording technology. A digital recording starts with a representation of an analog audio waveform, obtained (just as with analog recording) from microphones or electronic pickups. The analog signal is then passed to an analog-to-digital converter (ADC), which represents the waveform digitally by “sampling” the wave at a rate of thousands per second. The specific frequency of this sampling is known as the sampling rate, with higher sampling rates yielding higher cutoff rates in the frequency (“high-frequency response”) which results in higher “fidelity,” or a finer, more accurate representation of the analog waveform. The ADC generates a series of samples, yielding a continuous stream of ones and zeros, which enable this data to be stored onto digital media such as a computer hard drive. In order to actually hear this data, the sequence of ones and zeros must be reconverted by passing through a digital-to-analog converter (DAC), which transforms the data back into an analog signal, thus replicating (at least in theory) the original analog signal. This reconstituted analog signal is then electronically amplified through loudspeakers or headphones in order to be heard.

Digital recorders were first implemented in the late 1970s, when 3M began selling 32-track machines to recording studios at a cost of roughly \$150,000. These machines were initially

used by record companies for digitally remastering material in their archives as well as for the mastering of a limited number of new recordings (Chanan 159). The first commercially available sampler also appeared in the late 1970s, produced by the Fairlight Corporation, of Australia. But these machines were prohibitively expensive for most musicians, costing tens of thousands of dollars (Hamer). Thus, when the Mirage sampling keyboard, manufactured by Ensoniq Corporation, appeared on the market in 1985 for a retail price of \$1,500, the instrument proved an immediate success. The sampling quality was not as refined as that on the Fairlight, and a number of corners were cut to keep the production costs low, but this keyboard made sampling technology available to a broad market (Berk 194–95). Then in 1988 Akai introduced its S1000 sampler, which not only provided CD-quality sampling at an affordable price,¹¹ but also allowed for rudimentary digital “time-stretching” of audio files, a key feature of digital music production, which is discussed at greater length later in this chapter. The Akai sampler went through several model revisions throughout the 1990s and quickly became a staple of electronic music production in a variety of genres.

When sampling technology was first being developed and marketed in the 1980s through products such as Ensoniq’s Mirage keyboard and the Akai S1000 sampler, computer random access memory (RAM) chips were very expensive. In order to keep the costs of these samplers low enough for most musicians to afford, instrument manufacturers sought ways to reduce the

11. “CD-quality” audio is defined as employing 16-bit encoding at a sampling rate of 44.1 kHz (44,100 samples per second). All compact discs are manufactured to this standard, which has been in place since 1980, despite subsequent developments in computer and digital audio technology that easily allow for 24-bit/192kHz resolution. The sampling rate of 44.1 kHz was chosen as the standard in 1980 because the high-frequency range of human hearing typically extends to approximately 20 kHz, and the Nyquist theorem states that a sampling frequency must extend to twice the frequency intended to be recorded in order for a recording to be played back without undesirable digital artifacts (“aliasing”). Therefore, it was thought that sampling rates above 44.1 kHz would yield no audible improvement, a theory that has been widely contested ever since.

amount of RAM required to play back samples. One way they achieved this was through the clever implementation of a “loop” feature, which allowed for a specified section of the audio waveform of a sampled note to be seamlessly repeated, or “looped” for as long as the key of a piano keyboard controller was held down. Rather than sampling the entire sustained note of an instrument, which would use up massive amounts of RAM, developers could include only the initial attack of a note in the sample, followed by a brief sustained segment and then the decay of the note. So, for instance, on a sampled violin note, rather than recording the entire sustained note, which could last for several seconds, only a few seconds of the note were sampled. Loop start and end points (often comprising a section of audio lasting only a second or two) could then be determined by looking at a graphic representation of the waveform, which would allow for infinite sustain of a note as long as the keyboard note was held down. This drastically reduced the amount of RAM required to play samples, thus making the sampler more affordable.

This loop function was conceived of by the developers and manufacturers as a way to lengthen the sustained portion of a sampled instrument notes, and this was the only function of the loop function that was envisioned because at the time, the sampler was understood as a device that mimicked conventional instruments. But hip-hop producers quickly found that looping could be put to much more creative uses. Hip-hop musicians of the 1980s did not have much need for playing back sampled violin notes, because they were not concerned with producing convincing imitations of orchestral instruments. What was paramount in their production aesthetic was the use of drum beats. Because drum machines were still a cutting-edge technology at this time, and prohibitively expensive, hip-hop producers resorted to obtaining their drum beats from other records. Drum parts produced this way also had the benefit of

avoiding the drum machine's robot-like timing and instead retained the sampled drummer's timing nuances, strategically pushing and dragging the beat in certain places.

Soul and funk songs of the 1960s and '70s often featured a brief section in which the drums would play for a few seconds (two or four "bars" or "measures" in musical nomenclature). This brief section was known as the "break," and hip-hop producers since the 1970s had been looping breaks by the manipulation of records on turntables. This looped break could then be repeated for as long as necessary, becoming the basis for new beats, over which hip-hop MCs would rap, thus creating new songs. A few breaks, because of their infectious feel or groove (for instance, the breaks that appear in the songs "Funky Drummer"* by James Brown, "Amen Brother"* by the Winstons, and "Apache"* by the Incredible Bongo Band), became used over and over again by many producers, and these breaks are still often heard today in contemporary hip-hop as well as many other electronic and dance music genres.

Skillfully looping breaks from vinyl recordings was a cumbersome process. But with the advent of affordable digital samplers in the 1980s, producers discovered that these devices' loop function could be used not only to repeat individual notes of a sampled instrument, but entire drum breaks as well. Digital technology greatly facilitated the looping of drum breaks, because rather than relying on trial and error to find the best loop points on a vinyl record, musicians could precisely set the loop points based on a graphic representation of the drum break's recorded audio waveform.

This initial use of simply playing back breaks on repeat quickly developed into more creative applications. For instance, the sampler allowed for the tempo of the break to be sped up or slowed down, and pitched higher or lower. These new creative options became the basis for entire genres of electronic dance music in the early 1990s, such as drum & bass (which is

characterized by drum breaks that are sped up to twice the speed of the original, and thus also pitched higher) and trip-hop (in which breaks are typically slowed down and pitched very low). Additionally, samplers allowed for breaks to be sliced and “chopped up,” so that individual drum hits in a break could be isolated and saved as individual samples, and then either played back individually from a keyboard, or reconfigured and rearranged as entirely new beats and grooves. This allowed for the generation of completely new rhythmic patterns, sometimes resulting in breaks that would not have been physically possible for a human drummer to play. As with hip-hop, the aesthetic of these musical genres was not primarily concerned with imitating a real drummer (the intended use envisioned by the manufacturers), but with exploiting the use of the sampler as a creative instrument in and of itself, which could warp and mangle source audio material. The use of such micro-edited chopped-up breaks became in turn the basis of several other genres of electronic music in the late 1990s and early 2000s, such as glitch, microhouse, and several strains of so-called “intelligent dance music” (IDM).

All of these musical genres are defined chiefly by their use of sampled drum breaks, and looped drum beats are today a staple in many contemporary musical styles throughout the world. It is such a key feature, in fact, that it is often taken for granted, yet sampled drum breaks would not exist were it not for the creative insight of socially and economically disenfranchised inner-city hip-hop producers, who used samplers in the “wrong” way, in a way that had not been envisioned by the developers of that technology. This raises interesting questions about agency, specifically, in the ways that technology is used by those who are excluded from easy access to that technology. The manufacturers of early samplers did not have the musical needs of hip-hop producers in mind when they developed their products, yet it was hip-hop producers’ methods that became established as the “norm,” as the common “performance practice” of the sampler.

But it is important also to understand that the sampler itself and the greater degree of artistic detail and control that it provided did not itself generate the impulse to sample earlier material in the first place. African-American musicians' use of the sampler's loop function to repeat entire drum breaks instead of the sustained portion of individual instrument tones constitutes a new kind of artistic allusion, in which fragments of past works—a drum beat here, a bassline there, a horn riff from an old R&B track juxtaposed with a string motif from a disco record—become reborn as they are juxtaposed in the creation of new works. The allusions pile up, in a way that is not much different from the highly allusive poetry of Eliot, or the highly allusive music of jazz. It is in its connections to these modernist precursors that sample-based musics can themselves be understood as an African-American form of modernism.

A key aspect of jazz improvisation is the practice known as “quoting.” It is a decidedly modernist practice of artistic allusion—allusion to parts of a famous old melody or popular new melody, or to a more obscure melody (a marker of insider hipness), or to parts of famous jazz solos by other musicians, or even entire solos by other musicians.¹² This practice of quoting as an act of allusion occupies the same conceptual space as that occupied by digital samplers. Sampling is the art of allusion—the digital technology of sampling allows for the allusions to take place in unprecedented levels of control, manipulation, and deconstruction, but the will to sample is the same impulse as that which drives the art of quoting in jazz.

12. Perhaps the most famous instance of this last type of allusion occurs in the 1958 recording of “Straight, No Chaser,”* included on Miles Davis’s album *Milestones*. In his solo, pianist Red Garland plays, in its entirety, Miles Davis’s famous solo from Charlie Parker’s 1944 recording of “Now’s the Time.”* Garland’s solo was not mere mimicry, however—his scholarly intervention was to play the entire solo harmonized in his own unique block-chord style.

Sampling musicians are often quite conscious of their conceptual connections to jazz music. A case in point is pioneering samplist duo Double Dee & Steinski, whose series of three mixtapes: *Lesson 1: The Payoff Mix** / *Lesson Two: The James Brown Mix** / *Lesson 3: The History of Hip-Hop Mix**, are widely regarded today as a masterpiece in the canon of sampled music. Steinski (Steven Stein) has said: “Music, and especially jazz, has always been referential, saying ‘I’ll take a piece of that or I’ll take a piece of this’” (“Steinski Gives a Sampling History Lesson”). Because most jazz musicians in history were playing before access to digital samplers, they engaged in a kind of sampling using the technologies available to them—their instruments. Thus when Charlie Parker, on a live gig recorded at Birdland on 52nd Street in Manhattan on the night of 31 March 1951 quotes, during the course of his solo on “Blue n Boogie,” from “I Dream of Jeannie with the Light Brown Hair” at the beginning of the third chorus of his solo, and quotes from pianist Tadd Damerson’s composition “Ladybird” during the same solo five choruses later, he is engaging in the same act of allusion that samplists do. The same thing applies to Dizzy Gillespie, who in his solo on the same performance quotes from “A Hunting We Will Go” at the end of his first chorus. The next tune played by Parker and Gillespie that night at Birdland, “Anthropology,” a Gillespie composition, is likewise rife with similar musical allusions. In his solo Parker quotes, in quick succession, the tunes “Honey,” “Tenderly,” “High Society,” and “Temptation,” the sudden juxtaposition of melodies creating what we might retroactively hear today as a kind of carefully crafted mash-up of source material. What prompted such stream-of-consciousness displays of melodic recall? Did the titles of the tunes have some significance Parker was trying to convey? Lawrence O Koch, referring to this particular string of quotes surmises that Parker had glimpsed a woman in the audience who made a strong impression on

him! (212). While steering clear of intentional fallacy, we can nonetheless concur, whatever the motivating factors may be, that jazz is a highly allusive art form.

It is jazz's allusiveness that Ralph Ellison recognized in the poetry of T. S. Eliot. Ellison recognized that in its allusiveness, jazz music is, every bit as much as high modernist poetry, a highly allusive art form. This is why it is important to recognize this same modernist impulse at work in African-American sampled music. Digital sampling is often perceived as a postmodernist expression, but apart from the digital technology itself, sampling and jazz quotation are essentially both modernist acts of allusion. Steinski points out this connection: "When digital sampling happened, Douglas [Double Dee] and I, and obviously a number of other people, stumbled into it. . . . All of a sudden, you could be referential by taking the thing itself. Instead of recontextualizing it on your instrument in music as part of your composition, you could then decontextualize the piece by taking the actual piece and putting it in a new setting. It's always had questionable legality, but its utility and ease is not a question" ("Steinski Gives a Sampling History Lesson"). But it seems that many cultural commentaries on sampling have focused on the "utility and ease" of the digital sampler while ignoring the artistic precedents.

Recent technological developments have blurred traditional distinctions between musical production (which traditionally makes use of musical technologies known as instruments) and musical reproduction (which traditionally makes use of musical technologies involved with recording, mixing, and mastering music). But, as Scott Simon notes, the realms of production and reproduction are not mutually exclusive. Techniques such as sampling and beatmatching are carried out with ease today using digital technologies. Furthermore, as Simon also points out, these techniques are not new, having been also used by jazz musicians (41). Jazz musicians' improvisations have also featured modes of musical reproduction, via their use of musical

quotations of other musicians' solos and compositions, as well as their emulations of other musicians' styles, musical lexicons, and traits. But jazz musicians' real-time musical reproductions that occur in improvisations are never an end in themselves—the musical source material must be worked with, changed, and made new by the musician: “For jazz artists, improvisation is re-production, not in the form of a copy, but something new formed out of fragments of prior production” (Simon 42). With this in mind, Simon points out that the practice of using sampled material in musical works, while taking advantage of new technologies, is not so new conceptually, representing fundamentally the same stance toward earlier musical works and materials as taken by jazz artists.

Jazz musicians' appropriation of existing material is not limited to snippets of melodic fragments played in real-time during improvisation. Jazz musicians have also appropriated material on a much broader scale, making use of entire tunes from the standard jazz repertoire, taking the harmonic structure (known as the “chord changes” or simply “changes” in jazz parlance) of an older tune and writing an original melody over the top of it. In US copyright law, it has been generally accepted (Pinter)—though not strictly speaking a letter of the law (“Copyright Law of the United States”)—that a composer can claim an original melody as intellectual property, but not a harmonic progression or a rhythm—which means that any harmonic structure or sequence is legally up for grabs and may be used as the basis of a new work by anyone else. A tune consisting of a new melody written over pre-existing chord changes is known in jazz studies as a *contrafactum*, a Latin term borrowed from traditional musicology, originally denoting the practice during the middle ages of imposing material from sacred texts as the words for sacred chants based on pre-existing secular songs. During the bebop era of the 1940s the composing of jazz *contrafacts* became standard practice, chiefly because they

provided a way for jazz musicians to make recordings of standard-repertoire tunes without having to pay royalties to the composers of those tunes. Bebop was initially recorded by small independent labels with limited funds. If musicians wanted to record the well-known standard “I Got Rhythm,” for instance, they could simply use the standard chord changes but write a new melody, and thus avoid paying royalties to the estate of George Gershwin. Through sales of such recordings, these *contrafact* tunes would then frequently become standards in their own right, becoming staples at jam sessions throughout the United States. “Anthropology”* (by Dizzy Gillespie), “Dexterity”* (Charlie Parker), “Moose the Mooche”* (Parker), “Oleo”* (Sonny Rollins), “Rhythm-A-Ning”* (Thelonious Monk) and “Steeplechase”* (Parker) are well-known be-bop tunes all based on exactly the same chord progression, to Gershwin’s “I Got Rhythm.”* Such practices in African-American musical culture helped to establish a stance toward the artistic past as one that enables appropriation of pre-existing material as the raw stuff of new musical creations.

Digital sampling has typically been understood as a quintessentially postmodern practice.¹³ But even Jesse Stewart, for instance, who touts the postmodern aspects of a musician such as DJ Spooky, points out that it is crucially important that African-American postmodern cultural productions be understood in terms of their “origins in the African diaspora and . . . [their] continuities with earlier Afrological forms” (339). Writers such as Stewart, who have produced some of the most insightful commentary on the topic, view postmodernist African-

13. See, for instance: Peter Manuel, “Music as Symbol, Music as Simulacrum: Postmodern, Premodern, and Modern Aesthetics in Subcultural Popular Musics,” *Popular Music* 14.2, 1995, 227-39; Russell Potter, *Spectacular Vernaculars: Hip-Hop and the Politics of Postmodernism*, State University of New York Press, 1995; Richard Shusterman, “The Fine Art of Rap” *New Literary History* 22.3 1991, 613-32; Jesse Stewart, “DJ Spooky and the Politics of Postmodernism,” *Black Music Research Journal* 30.2, Fall 2010, 337-62.

American musics as being in many ways just new iterations of African-American modernist idioms such as bebop, seeing “Afro-postmodernism as an aesthetic strategy within polyculturalism that acknowledges the continuities between hip hop and earlier Afrological forms (including the Afro-modernist innovations of Charlie Parker and his contemporaries)” (340).

Likewise, DJ Spooky has explicitly stated that the driving idea behind some of his productions is conceiving “sampling as a new form of jazz” (Miller 53). He described his *Optometry* project, for instance, as being “constructed out of a series of audio metaphors about how people could think of jazz as text, of jazz as a precedent for sampling—of jazz as a kind of template for improvisation with memory in the age of the infinite archive” (Jordan). Jesse Stewart astutely notes the connections between DJ Spooky’s work and jazz, inadvertently articulating a conception of tradition that resonates strongly with TS Eliot and Wynton Marsalis’s understanding of the artistic past: “Just as jazz musicians improvise on prior musical and cultural forms through call and response, Signifyin’, and processes of musical abstraction, Spooky uses digital sampling to improvise with musical and cultural memory, combining fragments of the musical past to create something new” (Stewart 346). Furthermore, Stewart’s description of how listeners might make sense of such atemporal cultural mixes recalls Eliot and Marsalis’s explanations of how new works retroactively alter audiences’ understandings of the traditions from which new works arise: “The resulting mixes, like those on *Optometry*, invite listeners to improvise as well, discovering new aural and conceptual pathways through the music—and its attendant discourses and histories—with each listening” (346).

The idea that the artistic past is in some way altered by new creative expressions is thus a theme that keeps recurring in isolated scholarly discussions of Eliot, jazz, and sampling. But how

can such a seemingly irrational view—that the past is actually changed by the present—be explained to those who maintain that the understanding of art history, or any history, is an “objective” practice? Here Marsalis provides an ideal example—in this case, his relation to one of the key past masters of the music, Louis Armstrong. Throughout his career, Marsalis has championed the musical legacy of Louis Armstrong, and this championing prompted a widespread reassessment of Armstrong among musicians, in the wake of a long period in which he and his music had been derided and misunderstood by many African-American musicians and non-musicians. As Marsalis has stated: “I grew up knowing who he was. . . . I didn’t necessarily like his music, because I grew up in the Civil Rights era and the post-Civil Rights era and we felt like he was an Uncle Tom, always smiling with a handkerchief. His image was not something that was popular at the time” (qtd. in Catlin). This perception of Armstrong had been persistent since the bebop era. But many older African Americans had recognized that there was a deeper side to Armstrong than his stage persona alone suggested. Ralph Ellison, for instance, in a letter written to Albert Murray, said of Armstrong: “Shakespeare invented Caliban or changed himself into him—Who the hell invented Louie? Some of the bop boys consider him Caliban but if he is he’s a mask for a lyric poet who is much greater than most now writing. . . . Man and mask, sophistication and taste hiding behind clowning and crude manners—the American joke, man” (*Living with Music* xv). If so, then the joke was on those younger members of the community who were unable to perceive the Shakespearean dimensions of genius that lay behind Armstrong’s invention of his own Caliban mask. And the derision directed at Armstrong was not merely due to the perceived “Uncle Tomisms” of his showmanship or what was seen as remnants of minstrelsy in his stage antics, but also due to what was commonly perceived as his out-of-date, old-fashioned musical stylings: “We thought back then that if you played fast and did a lot

of fancy things like Freddie Hubbard played, that you were a good trumpet player. Louis Armstrong played more straight notes. It wasn't considered difficult" (qtd. in Catlin).

It didn't help Armstrong's standing with younger musicians such as Charlie Parker and Dizzy Gillespie that he frequently disparaged bebop and newer styles of jazz in print, complaining that it was incomprehensible "Chinese music." This may be written off as sour grapes from an older musician who was no longer in fashion, but it also must be remembered that to many musicians in the mid-twentieth century bebop did seem very foreign to traditional styles of jazz. These musicians' temporal proximity to the new developments of bebop made it difficult to hear the stylistic continuities between bop and earlier styles. This is borne out by none other than Charlie Parker, one of the key architects of the new style, when he claimed in 1949 that bebop was not jazz. A fascinating article appearing in the 9 Sep 1949 issue of *Down Beat* states: "'Bop is no love-child of jazz,' says Charlie Parker. The creator of bop, in a series of interviews that took more than two weeks, told us he felt that bop is something entirely separate and apart from the older tradition; that it drew little from jazz, has no roots in it" (Levin and Wilson). For Parker, this was largely due to bebop's distinct rhythmic feel: "'The beat in a bop band is with the music, against it, behind it,' Charlie said. 'It pushes it. It helps it. Help is the big thing. It has no continuity of beat, no steady chug-chug. Jazz has, and that's why bop is more flexible'" (Levin and Wilson). From today's historical perspective, it is easy to hear bebop as a dialect of jazz rather than "something entirely separate and apart from the older tradition," but in the mid-twentieth century the temporal proximity to older styles made it difficult for even knowledgeable musicians to understand what was revolutionary and what was evolutionary in the music's development. Similarly, it is easy to understand why, a few decades later, some artists and intellectuals described postmodernism as an entirely new phenomenon that was not only

distinct from modernism but antagonistic towards its principles. In the twenty-first century it is easier to understand modernity and modernism as unfinished, and to see postmodernism—which once seemed so alien to a modernist perspective—as simply another facet of modernism, a concept explored by Marshall Berman in *All That Is Solid Melts into Air* (31–33) and more recently by music scholars such as Susan McClary, Erling Gulbrandsen and Julian Johnson, and David Metzer.¹⁴

At his father's (pianist Ellis Marsalis) sustained insistence, Wynton took it upon himself "to learn about Pops" (qtd. in Catlin). When Marsalis listened to a tape that his father had sent him—Armstrong's solo on his 1938 recording of "Jubilee"*—he had an epiphany: "When I tried to learn one of his solos, just the endurance it took, let alone the type of soul and feeling he was playing with, it was revelatory for me. And then I began to study his music" (qtd. in Catlin). Through this experience Marsalis discovered that his understanding of jazz's past—as was the case with many musicians of his generation—was insufficient and inadequate. Marsalis speaks of this relation to the past among his own peers growing up in New Orleans: "Before that time, being from New Orleans, we didn't follow New Orleans jazz. We grew up with it around us, but we were largely ignorant with what it meant culturally. . . . Even with a father that was fairly well informed, I managed to remain ignorant" (qtd. in Catlin).

By the late 1980s, a widespread reassessment of Armstrong was under way by jazz musicians, prompted in large part by Marsalis's public recounting of his own experiences with Armstrong's musical legacy. Marsalis corrected his own and others' ignorance with such great

14. See Erling E. Gulbrandsen, and Julian Johnson, "Introduction;" Susan McClary, "The Lure of the Sublime: Revisiting the Modernist Project;" and David Metzer, "Sharing a Stage: The Growing Proximity between Modernism and Popular Music;" all in *Transformations of Musical Modernism*, Ed. Erling Gulbrandsen and Julian Johnson, Cambridge University Press 2015.

fervor that it amounted to proselytization. In the liner notes to 1989's *The Majesty of the Blues*, Crouch's writing reflects an understanding of Armstrong that is very different from the dismissive attitude of earlier decades. Crouch states that Marsalis had recently begun:

to understand the importance of Louis Armstrong, that aesthetic shepherd with a huge clarion tone and a sense of melodic elevation propelled by the rhythm of swing. Armstrong was a door to the recognition of the powers that lay inside the New Orleans tradition, that lay inside the very identity of America itself, a democratic synthesis of moods and meanings that even those born in barrels of butcher knives could use to create noble structures of rhythm and tune (Liner Notes).

Crouch, in invoking “the very identity of America itself, a democratic synthesis of moods and meaning” seems to locate a racially aware “myth and symbol school” of American Studies within Armstrong's artistic output, postulating an American identity that is synthesized from the artistic contributions of African Americans.

Because of the rehearing articulated by Marsalis and Crouch, by the late 1980s and early 1990s musicians and audiences were hearing the music of Armstrong differently than they had heard it in earlier decades. For all intents and purposes, the *sound* of Armstrong's music had changed. Again it must be emphasized that this was not simply a matter of going backward, of adapting and appropriating an earlier attitude —what Eliot called “the past's awareness of itself”—to hearing Armstrong, because Marsalis's reassessment and rehearing of Armstrong was the product also of the dominant ways that Armstrong had been understood in the 1960s and 1970s. On the contrary, Marsalis claimed that the music of Armstrong and other early New Orleans musicians “sounds modern” (qtd. in Scherman, “What Is Jazz?”), by which he seems to

mean that it sounds contemporary to our current cultural sensibilities. But Armstrong's contemporaneity had been hidden by his Caliban mask of showmanship, and, because Armstrong's most influential recordings were made using early recording technologies, by the outdated sound of early recordings. Marsalis's reassessment of Armstrong represents a jazz version of Eliot's statement that "the difference between the present and the past is that the conscious present is an awareness of the past in a way and to an extent which the past's awareness of itself cannot show" ("Tradition and the Individual Talent" 942–43). After Marsalis's reappraisal, to hear Armstrong's recordings in the old way, as the work of an Uncle Tom who played in an antiquated style is misinformed. We perceive this past music differently now—the music has, in effect, changed.

Rhetorically, the idea that past works of art are changed by the present recasts the issue in an explicitly subjective rather than an ostensibly objective framework. It suggests that in every present era there is at once a creative newness that is unique to that era, and at the same time there is a perpetually unfolding *renaissance* of earlier works that are heard and comprehended anew in that present era. Furthermore, that both Eliot and Marsalis seem to embody a keen sense of belatedness, what Assmann terms *posthistoire* resonate with Houston Baker's sense of artistic movements—such as, in Baker's object of study, the Harlem Renaissance—as they are understood historically, in a quotation by Aby Warburg that Baker employs: the worth of expressive legacies or artistic traditions "depends upon the subjective makeup of the late-born rather than on the objective character of the classical heritage. . . . Every age has the renaissance it deserves" (*Modernism and the Harlem Renaissance* xviii). Significantly, Crouch preemptively counters the argument that all this amounts to nothing more than a glorified conservatism:

For those who might think that Marsalis is going backwards, he has some concluding observations about what direction his music is now taking. "I'm not going backward in any way. What I'm doing is part of this time, too. I'm just seeking a much more comprehensive mode of expression. What I'd like to say to all the musicians is you have to deal with the blues. You have got to learn how to play the blues, not this misconception of folk blues that so many people run around with, misled and lacking the proper level of respect for that music. The blues is a very deep form in the myth of America. . . . Like Al Murray says in *Stomping the Blues*, which all musicians of my generation should read, there is this sense of affirmation in the face of adversity. Blues is like a tonic, or a home base: it's always there waiting for you, providing you with the strength and the sense of direction that you need to address the complexities of life. . . . What I am doing now is looking at it like the prodigal son. You can travel as far away from it as you want to, but it's there waiting for you with open arms, love, and complete support for everything you do. What you must do is endure the pain of coming to grips with your origins and your identity. Then your direction is absolutely clear."

(Liner Notes)

Marsalis's understanding of his artistic tradition, then, as well as his understanding of his identity as an artist, is rooted in a "deep" conception of the blues, which he describes as the "home base" for his art. Again, this tradition is not passively received, but involves enduring "the pain of coming to grips with your origins and your identity." And it is not a "going backward," but a realization that the tradition "is part of this time, too." As with Eliot, "this historical sense, which is a sense of the timeless as well as of the temporal and of the timeless and of the temporal

together, is what makes a writer traditional. And it is at the same time what makes a writer most acutely conscious of his place in time, of his own contemporaneity” (Eliot, “Tradition and the Individual Talent” 942).

Albert Murray elucidates precisely this complex view of tradition and individuality in *The Hero and the Blues*, published in 1972 and culled from a series of lectures. Here, Murray writes that artistic “experimentation . . . is an action taken to insure that nothing endures which is not workable; as such, far from being anti-traditional, as is often assumed, it actually serves the best interests of tradition, which, after all, is that which continues in the first place” (71).

Thus, Marsalis, Eliot, and Murray each express a paradox lying at the heart of an artist’s individual identity in relation to the artistic tradition of which he is a part. It is the artist’s acute sensitivity to the temporality of artistic tradition that both imbues his art with timelessness and heightens his sense of identity and “his own contemporaneity”—a profound sense of *individuality*, in other words, that only emerges with the awareness of her place in the tradition. Barbara Morden has discussed how Eliot’s understanding of tradition, as articulated in “Tradition and the Individual Talent,” informs his writing in *The Waste Land*. According to Morden, *The Waste Land* exhibits:

intertextual diversity of images and phrases wrenched from their context.

Snatches of Latin, Greek, French, and Italian as well as English are juxtaposed with lines drawn from the canon of European literature, so that Augustine, Dante, Shakespeare, Webster, Kyd, Marvell, Middleton, Spenser, Verlaine, and Baudelaire are variously heard in a disturbing jangle of voices. This plurality of discourse and the abrupt shifts of tone in the poem create a dislocated text suited

to a time when the “Grand Narratives” of history and tradition seemed reduced to mere “withered stumps of time” (I. 104). (35)

Eliot’s free, ahistorical mixing of allusions to and sources from the likes of “Augustine, Dante, Shakespeare, Webster, Kyd, Marvell, Middleton, Spenser, Verlaine, and Baudelaire” is similar to the ways that Marsalis has also freely juxtaposed the music of jazz’s past masters. For instance, on his album *Standard Time, Vol. 4: Marsalis Plays Monk* (1999) Marsalis presents a program of compositions by Thelonious Monk; but rather than approaching the compositions with a reverential respect for Monk’s original conceptions (as is so often done by jazz musicians, who strive to play Monk’s material with the original instrumentation, tempos, and stylistic traits, even going so far as to duplicate Monk’s quirky chordal voicings), Marsalis reinterprets them using an ensemble instrumentation and style based on early New Orleans jazz. This concept can be heard plainly heard on the album’s opening track, “Thelonious.”* The result is a bizarrely jarring “jangle,” and a listener unfamiliar with the music of Thelonious Monk might conclude that he was an early New Orleans jazz musician rather than the “High Priest of Bop,” as he was known among musicians. The effect is not unlike reading Eliot’s lines in *The Waste Land*:

O O O O that Shakespeherian [*sic*] Rag—

It’s so elegant

So intelligent (II. 128–30)

For both Eliot and Marsalis, their understanding of tradition as non-linear, of being able to draw from any elements of their tradition at will—and to freely juxtapose these elements, separating them from their historical contexts—reflects not so much a hands-off reverence for tradition as a healthy disrespect for the tradition, at least insofar as this attitude enables them to *play* with the tradition in their art, creating “new combinations” from traditional elements.

Eliot's complex, seemingly paradoxical ideas about artistic history, encapsulated in the phrase "the timeless as well as the temporal as well as of the timeless and of the temporal together" constitute a sense of time that is surprisingly consonant with the ways that African-American musicians have tended to conceive of their relation to their own artistic traditions, and is rooted in a similarly non-linear conception. Aleida Assman highlights this nonlinearity in her essay on "Tradition and the Individual Talent":

Completeness can only be discovered within a frame of simultaneity; while history causes one thing to disappear after another, tradition will keep a constellation of literary works in a continuous presence. The important innovation in Eliot's essay is that it does not simply oppose temporal history to a timeless tradition, but constructs a sphere in which they can interact in a controlled way. He thereby changes his concept of temporality from a fragmenting and distancing one to a relational and ordered one. The synchronic glance that encompasses the simultaneity of temporally separated elements does not altogether arrest, let alone exclude, time. This is why Eliot can refer to his new concepts of tradition (the sense of everything happening at once) as, somewhat ambiguously, the 'historical sense.' (19)

Assmann's statement that Eliot does not simply oppose artistic "timelessness" to historicization effectively zeroes in on what makes his conception of tradition and time so innovative, and what seems to have eluded so many of Eliot's—and Marsalis's—critics: that such a non-linear conception of artistic history does not constitute a kind of cultural conservatism in which art of the past is revered while current works are denigrated or ignored. Rather, the past and the present interact with each other in complex ways. A key aspect of this conception of time is that non-

linearity does not equate to atemporality. As Assmann states, the artist's "synchronic glance" does not altogether arrest, let alone exclude, time" (19).

The practice of sampling "loops"—drum breaks and other cyclic musical material that is appropriated as the raw material of new musical works—becomes an apt metaphor for this non-linear conception of time and tradition outlined by Eliot and Marsalis, for the concept of temporal circularity implied in the sampled loop can be understood as a challenge to dominant Western ideas of linearity, and the way that linear conceptions of time and space have been privileged in Western culture. Linearity is fundamentally tied to the visual realm, specifically the idea of visual "perspective" that Marshall McLuhan has persuasively shown to be the dominant mode of subjectivity in Western culture since the Renaissance (Erik Davis 53–54). Erik Davis writes:

Renaissance perspective . . . serves as an analogy for a much more general phenomenon: the power to create a distinct, single point of view that organizes thought and perception along linear lines. . . . Central to the concept of visual space is the axiom or assumption that "different" objects, vectors, or points of view are not and cannot be superimposed; instead, the world is perceived as a linear grid organized along strictly causal lines. (54)

While linearity has been tied to the visual realm in Western culture, it has also been tied to the temporal realm. And the use of the digital sampler as a creative tool involves highly complex temporal manipulations of loops, which suggests some interesting areas of convergence between theory and practice related to the dimension of time, particularly when temporally manipulating looped digital audio, a practice known as time-stretching.

“Time-stretching,” an essential component of sample-looping, refers to the technique of altering the duration of an audio waveform without affecting its pitch. This ability to alter time and pitch independently of each other is only possible with digital technology. Before the advent of digital samplers, if a recorded passage of audio was sped up on an analog tape machine, the pitch would rise correspondingly, creating a phenomenon known as the “chipmunk effect.” This reciprocal relation of pitch and time in the analog realm severely limited the feasibility of making alterations to the duration or pitch of recordings for either artistic or corrective purposes. Digital technology, on the other hand, allowed for subtle adjustments to be made in intonation (for example, to make corrections to a recorded performance such as raising the pitch of a note that may have been played slightly flat, in order to achieve a perfect “take of a performance; or to adjust the rhythms of notes that may have been played slightly off-beat). But as was the case with the looping function on samplers, some innovative musicians soon discovered that the time and pitch altering capabilities of digital samplers could be put to much more drastic uses. In their hands, these new capabilities were not merely a means to “correct” a performance, but opened up new areas for sonic creativity that were previously unimaginable.

These new creative areas have been especially prominent in the electronic musical genre known as Drum 'n' Bass. Artists working in this genre have made use of extreme time- and pitch-shifting effects; in fact, these effects have become defining characteristics of the genre. In Drum 'n' Bass music, classic drum breaks from old soul and RnB tracks such as the Winstons' “Amen, Brother” and James Brown's “Funky Drummer” are sped up to approximately twice their original speed. Additionally, by using dedicated sample-editing software such as Propellerheads' *Recycle* application, the individual drum hits in a break are sliced up so that each drum hit can be triggered from a MIDI keyboard and the pitch of each of these hits can then be

individually altered. This chopping up of the original drum break also allows for the rhythmic alteration of individual drum hits, thereby enabling even greater control of the music element of time.

In Ralph Ellison's *Invisible Man*, as Alexander Weheliye notes, Ellison "imagines history in the form of a phonograph record, offering a model of temporal change that 'spins around' a linear and progressive version of history" (*Phonographies* 13). This intriguing analogy can be expanded and built upon to theorize the manipulations of loops in the digital realm, thus updating Weheliye's critique of linearity through the circularity of time implied in the phonograph record by also locating circularity in "the loop." Weheliye writes:

Modernity, according to Bhabba, is transformed into a series of competing and, at times, conflicting singular spatiotemporal terrains marked by constitutive lag: 'It is the function of the *lag* to slow down the linear progressive time of modernity to reveal its "*gesture*," its *tempi*, "the pauses and stresses of the whole performance."' Additionally, this lag, imagined by Bhabba as primarily temporal, suffuses the (anti)ontology of the modern and finds its uncanny home in the poetics of relation that mark the node where the *phono* joins the *graph* and/or *optic*" (*Phonographies* 23).

But Bhabba's formulation of the lag as a "slowing down" of the linear mode privileged by modernity is intensified even more by the act of digital sampling, where linear time and progression is not only slowed down, but perpetually looped, reigned in and subverted into a kind of temporal circularity. In addition, Weheliye's project of joining the "phono" with the "graph," that is, the aural with the optic, is similarly intensified by digital sampling, which provides graphic representations of audio waveforms, enabling a degree of linear-temporal

subversion that is much less tenable when relying on non-visual representations of found sound objects through analog equipment such as phonographs and tapes.

When using Propellerheads' *Recycle* or a similar software application to chop up drum breaks or other looped audio material, the user is immediately made to see/hear, like Ellison's invisible man, that time is not, after all a seamless "flow," but rather a series of discrete (and often discreet) events. The software generates a series of markers in the graphic representation of the audio waveform. The software looks for peaks in the waveform and generates a marker at what are called "nodes"—that is, those places in the waveform where the amplitude has a value of zero. It is these zero-points, these nodes, that allow for the audio to be then chopped and rearranged seamlessly. In an uncannily remarkable congruence, this conception of time as a series of discrete nodes also figures, in Ellison's *Invisible Man*, when the protagonist of the novel becomes aware, through listening to Louis Armstrong recordings, of "an altogether different time-space continuum, one in which, according to Ellison, 'instead of the swift and imperceptible flowing of time, you are aware of its nodes, those points where time stands still or from which it leaps ahead. And you slip into the breaks [!] and look around'" (qtd. in Weheliye, *Phonographies* 63). *Recycle* and similar programs offer the user the ability to literally "slip into the breaks" or breakbeats, "and look around," that is, to see the audio graphically represented as a waveform, with nodes that allow for the audio to then be temporally displaced and rearranged. Weheliye emphasizes: "These nodes stage time as time; they generally remain absent from linear and chronological perception so as to enable its ostensibly seamless functioning. Black cultural discourses, those of the musical variety in particular, have repeatedly slipped into these nodes that spatialize time as beginning points for new cultural modalities" (*Phonographies* 63). Weheliye's project of joining the "phono" with the "graph," that is, the aural with the optic is

often framed by him as a way of asserting the aural realms over the optic realm. And Weheliye also sees this strategy as a means not only of subverting the privilege of the optic, but also the literary realms, building upon Derrida's critique of "logocentrism" and by emphasizing the importance of oral tradition over the written word in African American cultural practices.

But, as DJ Spooky, aka Paul Miller, notes, computer technology has also had its part to play in subverting logocentrism, and linear narratives, and he associates this, ironically, with the conceptual paradigm shifts engendered by the proliferation of the graphical user interface, in other words, in the optic realm itself. For digital musicians, it must be pointed out, the optic realm, in the form of graphical user interfaces, visual representations of waveforms (in samplers and in audio-editing programs), as well as in the mapping of small- and large-scale musical structures (as in the arrangement windows of digital sequencer applications), are a crucial component of creating works of music digitally. DJ Spooky reflects on how the non-linear aspects of the optic/graphic realms have impacted his own work as a digital musician and thinker:

What is rhythm science, and how do we measure its effects? A blip on the radar?

A database sweep? A streamed numerical sequence,? In a short space, my narrative has switched formats and functions, time and place—all were kind of like fonts—something to be used for a moment to highlight a certain mode of expression, and, of course, utterly pliable. As I sit here and type on my laptop, even the basic format of the words I write still mirrors some of the early developments in graphical user interface-based texts still echoes not only in how I write, but how I think about the temporal placement of the words and ideas I'm thinking about. *It is a worldview that definitely ain't linear.* The likes of Alan

Kay, Douglas Engelbert., and Ivan Sutherland pioneered graphical user interfaces more than three decades ago, allowing users to interact with the icons and objects on the monitor's surface. But what they accomplished was even more profound than that, their work lets us move into the screen world itself. Context becomes metatext, and the enframing process, as folks as diverse as Iannis Xenakis, Kool Keith a.k.a. Dr Octagon or Eminem can tell you, like media philosopher Freiderich Kittler, "Aesthetics begins as pattern recognition." (Miller 100, emphasis added)

For DJ Spooky, then, both the aural and the optic realms play with and play upon patterns, and depend upon the inherently human ability to recognize (or imagine) patterns. This implies, then, that both the aural and the optic have their roles to play in subverting logocentrism and linearity, suggesting that it is not "opticality" per se that fosters hegemonic linearity, but the way that opticality (or for, that matter, aurality and the literary) are *used*. The important underlying issue, then, is for artists and their audiences to be cognizant of how modes of perception, conceptualization, and knowledge are used in cultural production, and how each of these modes may further or hinder structures of power.

This relation of power to linearity has also been a topic of interest to Black feminist literary critics and social theorists. Elsa Barkley Brown, for instance, has written that an African American artistic aesthetic is rooted in "nonlinear ways of thinking about the world, of hearing multiple rhythms, and thinking music not chaos" (284). Brown's musical analogy is especially apt, for as this chapter has attempted to show, musical practice does not take place in an isolated world, separate from political and social structures, however much some critics (and some musicians) seem to wish this were so. Rather, European culture has long privileged a "linear,

symmetrical (some would say Western) way of thinking,” and that offering alternatives that challenge this privilege from an African-American standpoint necessitates the recognition that “perceptions of alternatives in the social structure [can] take place only within a framework defined by the patterns and rhythms of our particular cultural understandings” (Barkley Brown 284). What is at stake, then, is ultimately our understandings of power, and how creative musical practices such as digital sampling are thoroughly imbricated with challenges to hegemonic linear conceptions of time and space.

This idea that nonlinearity is a temporal, rather than an atemporal concept is a particularly apt description of the sense of time in much African-American music. As discussed in the previous chapter on Herbie Hancock, the visual metaphor of circular musical loops not as static atemporal discs but as spirals that move in time proves especially apt for describing musical repetition, or loops, as temporally dynamic rather than static and “timeless” phenomena. Assmann also highlights this non-linear sense of time in Eliot’s essay:

By using a systemic approach to tradition, Eliot can allow for movement and change in complete independence of external causes and chronology. . . . Eliot deconstructs the framework of chronology which had been the backbone of historicist thinking. But he does not do this by simply abstracting time and arresting his object in synchronic space. And . . . he does not invent the strong canonical norm of an atemporal essence. Instead, he stresses the internal dynamics of a system which is built on the co-adaptation of the old and the new” (20-21).

Assmann points out that Eliot’s nonlinear sense of time does not constitute a kind of “timelessness.” The fact that nonlinear senses of time tend to be understood as throwing out the

concept of temporality altogether suggests the degree of insidiousness that pervades traditionally Western, linear, teleological senses of time. Assman also connects Eliot's sense of time with Jurij Tynjanow's theory of literary processes and systems, in which the history of literature is understood not as an autonomous continuum but as a process of "rewritings and deformations" that operate like an individual's memories. Though Assmann, who points out that "the word 'deformation' has no negative connotations, because there is no standard of a binding norm that transcends history" (22) does not make the connection, this idea of "deformation" bears strong resonances with Houston Baker's ideas of "mastery of form" and deformation of mastery," further highlighting the connections between artistic tradition as Eliot understood it and as it has been understood in theories of African-American modernism.

Baker's concepts are especially apt for discussions of the sonic realm, as Baker himself seems to suggest in the introduction he provides to these concepts at the beginning of his *Modernism and the Harlem Renaissance*: "I suggest that the analysis of discursive strategies that I designate 'the mastery of form' and 'the deformation of mastery' produces more accurate and culturally enriching interpretations of the the *sound* and *soundings* of Afro-American modernism than to traditional methods. (xvi, emphases in original).

Furthermore, Baker writes: "The 'changing same' is Amiri Baraka's designation for the interplay between tradition and the individual talent in Afro-American music" (*Modernism and the Harlem Renaissance* 15). Perhaps Baker thought the reference to "individual talent" was too obvious, but it is surprising that after making such a statement he would make no connection to Eliot's "Tradition and the Individual Talent." In fact there are only four very fleeting mentions of Eliot in the entire contents of *Modernism and the Harlem Renaissance*, although, as the above passage suggests, there are many congruences between Baker's focus of study and Eliot's essay.

And yet, although he stops short of making an explicit connection, Baker's next sentence provides the crucial clue for conceiving conceptual congruence between Eliot's essay and African-American cultural production: "Invoked in reference to the Harlem Renaissance and Afro-American modernism, the phrase [the "changing same"] captures strategies that I designate as *the mastery of form* and *the deformation of mastery*" (*Modernism and the Harlem Renaissance* 15).

Baker explains "mastery of form" and "deformation of mastery" in terms that are remarkably similar both to Henry Louis Gates's concept of Signifyin(g) and Ralph Ellison's assessment of Louis Armstrong as a man and mask who is a master of musical modernism: "I shall use the term 'form' to signal a symbolizing fluidity. I intend by the term a family of concepts or a momentary and changing same array of images, figures, assumptions, and presuppositions that a group of people . . . holds to be a valued repository of spirit. And the form most apt for carrying forward such notions is a *mask*" (Baker, *Modernism and the Harlem Renaissance* 17). Baker's book was published one year before Gates's *Signifyin(g) Monkey*, and the footnotes in Baker's book show that he was at least aware of Gate's prior work. Yet it seems that both scholars were each in their own way seeking independently to explicate similar concepts in terms that are amalgamations of African-American and academic discourses, because the new concepts they were articulating were not yet expressible in standard academic discourse at the time. These amalgamations that Baker and Gates developed became themselves an example of the very things they were attempting to explicate in African-American cultural production: Baker employs a kind of Signifyin(g), while Gates demonstrates both a mastery of form and a deformation of mastery. Both strategies amount to a new understanding of and

intervention in how Eurocentric critical theory could be applied in new African-American cultural contexts, entailing an implicit critique of Eurocentrism.

Eliot's "Tradition and the Individual Talent" both helps to explain and is explained by recent issues related to tradition, the artist's individual personality, and self-expression in jazz as well as sample-based African-American musics. Marsalis's idea of tradition—which has been shaped by his friendship with Albert Murray—articulates a stance that, like Eliot, views tradition "as an incitement to, not a curb upon, artistic creativity" (Cianci and Harding 4).

It has become common to view "Tradition and the Individual Talent," written in the first years of the twentieth century, as a reactionary, regressive statement addressing an encroaching modernity. But the ways that Marsalis has consciously imbued his music with new and creative approaches to the jazz tradition, and the remarkable resonances between Eliot's and jazz music's aesthetics, suggest that Eliot's ideas about tradition, expression, and personality can be read as an *avant-garde* manifesto, which in its appositeness to African-American musical traditions continues to be relevant to new musical expressions such as techno music. In Detroit, techno musicians created a stylistically allusive music that used remnants from the past to build a vision of an African-American sonic future.

CHAPTER 4. MODERNISM QUANTIZED: DETROIT'S TECHNO REBELS

Down by the river souls are rocking
 On the East Side souls are stirring
 And the music of Detroit
 And the memories of the past
 Coming forward today
 Receive new horizons
 Hear new sounds
 Reaching for the real dreams
 The real hopes
 Of sharing peace and power
 To those who stayed,
 who are coming back,
 To Motown then,
 Motown now,
 Motown forever

—Omar Bin Hassan

Introduction: New sounds

In both academic and non-academic musical discourses, “techno” is often an ambiguous term, sometimes used as a catch-all to denote any of the many diverse styles of electronic dance music that have emerged since the disco and funk eras of the 1970s. Used more precisely, however, and in the way that most electronic musicians understand the term, “techno” denotes a musical style that emerged in Detroit in the 1980s—later centered in Berlin and other western European cities—characterized by prominent use of synthesizers, drum machines, samplers, and other analog and digital musical equipment to produce music featuring rhythms and melodic themes borrowed from funk, electro, and synth-pop musics in a minimalist aesthetic, exploring dystopian and utopian themes of futurism and automation.

Just as Chicago in the mid-twentieth century served as the setting for the development of an industrialized, electric African American survival technology known as Chicago blues, so too

did Detroit at the end of the twentieth century serve as the setting for the development of a de-industrialized automated survival technology known as Detroit techno. In this chapter I chart the chronological development of techno music in the 1980s and into the early 1990s to examine how Detroit musicians made creative use of ostensibly outmoded musical technologies, outer-space metaphors, and robotic, computerized rhythms to create cyborg manifestos in sound,¹⁵ theorizing Detroit Techno musicians' "machine aesthetic" as a transnational, Afrofuturist musical-social formation that has provided the foundation for African American electronic music into the twenty-first century.

Among African-American musical idioms, blues and jazz have been the topic of deep scholarship for several decades now. More recently, hip-hop has overwhelmingly dominated academic discourse on "post-soul" African-American musical culture.¹⁶ Meanwhile, the primarily instrumental musical style of techno has received relatively little scholarly attention. Sean Albiez has suggested that hip-hop's appeal to scholars is at least partly due to the genre's "lyrical immediacy" (135). This is understandable, as academics, by the nature of their profession, are often verbally-oriented people, and hip-hop is a verbally oriented medium. Techno music, in contrast, is an almost entirely instrumental genre characterized by gradual, looping variations in timbre and texture rather than linear, motivic variations of notes and

15. See Donna Haraway, *A Cyborg Manifesto* (1985), Macat Library, 2018. Haraway challenges traditional boundaries between humans and machines in order to critique patriarchal essentialism and cultural taxonomies based on gender and race.

16. See, for instance: Tricia Rose, "A Style Nobody Can Deal With: Politics, Style, and the Postindustrial City in Hip-Hop" in *Microphone Fiends: Youth Music and Youth Culture* ed. Andrew Ross & Tricia Rose, Routledge, 1994, 71–88; Bakari Kitwana, *The Hip-Hop Generation: Young Blacks and Crisis In African-American Culture*, Basic Civitas 2002; Mark Anthony Neal, *Soul Babies: Black Popular Culture and the Post-Soul Aesthetic*, Routledge 2002; Mark Anthony Neal, *Songs in the Key of Black Life: A Rhythm and Blues Nation*, Routledge 2003; Nelson George, *Buppies, B-Boys, Baps, and Bohos: Notes on Post-Soul Black Culture*, Harper Collins 1992; Nelson George, *Hip-Hop America*, Penguin 1998.

harmonies, making the style somewhat more difficult for non-musician academics to discuss with precision. David Albert Madhi Goldberg has pointed out that “the linear narratives of rappers are most readily transferred into the analytic context of social theory, while manipulations of bass, treble, and timbre can be difficult to conceptualize as political moments or forces in and of themselves” (130). But this neglect is not limited to academia, for American popular culture seems to have also given techno music relatively short shrift. Aside from the watered-down, homogenized approximations of techno that appear in advertisements, and the highly commercialized distillations of techno that appear in the recent pop music offshoot known as “EDM,” the music still receives little radio airplay in the United States. Even more disturbing, especially to the African-American techno pioneers themselves, is that techno is often thought of in the United States as being a “white,” European, music (Rubin, “Techno: Days of Future Past” 111–12).

Shuja Haider, in a recent essay for the *New York Times*, notes that “despite its heartland origins, techno gets a bad rap in America. We associate it with party drugs, velvet ropes, [and] glow sticks. Rave culture in England, club culture in Germany and a string of Scandinavian superstar D.J.s have made black artists like Atkins, May and Saunderson appear to be an anomaly in electronic music.” Haider posits that the reason for this situation may have a lot to do with the common perception—which will be explored in this chapter—that Detroit techno music does not seem to fit neatly into the tradition of African-American music. The early Detroit techno musicians, although themselves African American, had a complex and contradictory relationship to the tradition of African-American music—a relationship that has not been easy to assess and understand.

Detroit techno's relationship to the African-American musical past is so complicated, in fact, that the musical style has often been thought of as constituting what Sean Albiez has called a "new creative and political paradigm" occupying a "cultural sphere removed from previous gospel- and blues-informed black popular 'musics'" (132). But when examined more closely, one finds this relationship may in fact not be so "removed." The early Detroit techno musicians, after all, have freely acknowledged the huge influence that earlier African-American musicians such as George Clinton have had on their own artistic conception. The real issue, perhaps, is that African-American musics were not the sole extent of techno's influences. Rather, they also absorbed and have acknowledged the influence of musics from a variety of countries and ethnicities. The Detroit musicians borrowed freely not only from funk and jazz fusion styles by artists such as Parliament and Herbie Hancock, but also from a wide variety of musical genres not typically associated with African-American communities. The German band Kraftwerk, and the Japanese band Yellow Magic Orchestra, for example, were deep influences on the musical production of the Detroit techno musicians, as were other perhaps even more unlikely sources of inspiration such as Elton John, Peter Frampton, and Genesis (Deniaud; Pearl). The relation of Detroit techno musicians to African-American musical traditions was further complicated by some early press write-ups. For instance, in his insightfully linking music with automation, Atkins stated that "Berry Gordy built the Motown sound on the same principle as the conveyor belt at the Ford plant. Today the automobile plants use robots and computers to make their cars and I'm more interested in Ford's robots than Gordy's music" (Cosgrove, Liner notes). What could have been easily interpreted as a statement on techno's new futurist paradigm of automation and mechanization was instead read by some as a rejection of African-American musical traditions—a view which does not sufficiently take into account the racial dynamics

both of techno music and its inherited musical past. Stuart Cosgrove, in his liner notes to the influential compilation *Techno! The New Dance Sound of Detroit*, frames early techno musicians' stance toward musical traditions in the latter way: "think of detroit and you think of motown, but be careful not to think too loud because the new grandmasters of detroit techno hate history" (Cosgrove, Liner notes, capitalization in original). Cosgrove seems to have played up Atkins' apparent disrespect for Motown as a provocative attack on a revered African-American institution. Atkins, for his part, later refuted Cosgrove's interpretation, stating in a manner that makes the racial and national dynamics at work abundantly clear: "I've got top respect for Berry Gordy and Motown and I would never say anything to denigrate what he did. For a black man in America to achieve what he did in that era was a hell of a feat and I take my hat off to the man" (Shallcross 19). However one interprets the early pronouncements of Atkins and their interpretation by Cosgrove, it is obvious from listening to early techno that the musicians voraciously absorbed music from a variety of cultural sources and traditions. Such wide-ranging eclecticism can be messy, making it difficult or even impossible for many journalists and scholars to parse, at least insofar as it prohibits a neat summing up of an easily comprehended lineage of stylistic influences.

Another factor that makes Detroit techno music more culturally complicated than many earlier forms of African-American music is that almost from the very beginning of its development, essentially from the time of the influential UK compilation *Techno! The New Dance Sound of Detroit* in 1988, it was caught up in global and transnational currents of popular music. Early Detroit techno music is paradoxical in that it is at once the product of a very specific locale—in fact, probably could not have been invented anywhere else, for reasons that will be explored in this chapter—while also being a music that speaks to a widely varied

audience that transcends national and cultural boundaries. This chapter will uncover some of the ways that early techno musicians negotiated this paradox as they produced their art in what they clearly understood as simultaneously a local and an international forum. Related to this issue is another paradox explored in this chapter, involving the racial identity of the music itself—which is understood simultaneously as an explicitly African-American relation to technologies undergirded by an Afrofuturist outlook while also being expressive of a tendency to blur and obscure markers of racial identity, even of the human altogether.

As will be shown in this chapter, techno is a music fully imbricated with its place of creation, Detroit; and the problematic racial issues associated with techno music stem from Detroit's troubled history of racial inequality and injustice. In many ways, Detroit's inner city never recovered from the Twelfth Street riots of 1967, which touched off several years of "white flight" from the city, encompassing both the "flight" of middle- and upper-class white homeowners and employers, leaving a disenfranchised, primarily black inner city population (Smith 244). This in turn resulted in a largely abandoned downtown and economic decline throughout the city (Beauregard 238). During the twenty years subsequent to the riots, Detroit lost one-third of its population, and went from being 70% white to being 80% black, prompting the local NAACP chapter to proclaim Detroit to be "the most racially polarized city in the nation" (Rubin, "Techno" 112). Whites were not the only business owners leaving the city: In 1972, Berry Gordy moved his Motown enterprise—which hitherto had operated from a house on West Grand Boulevard, seeming to embody and symbolize Detroit African-Americans' contribution to a rich American popular culture—to Los Angeles, in order to be closer to the rest of the music industry (Trask, "The Techno Wave"). Although a black mayor, Coleman Young, was elected in 1973, whites continued their economic control, and several businesses, factories,

and stores left the city and moved to the outlying suburbs. In 1976, *Newsweek*, describing Detroit as a “wasteland that already numbers thousands of vacant and vandalized homes,” reported that over 800 properties were being abandoned every month in the city (Gabriele). Between 1967 and 1982, Detroit lost 45% of its jobs and by 1987 the majority of the city’s manufacturing, wholesale, and retail base was nonexistent (Rubin, “Techno” 113). Despite the increasing number of factories closing, most households in Detroit remained economically tied to the auto industry in some form (“Dummy Guide to Detroit Techno, Part 1”): In 1982, in the wake of a lingering recession, manufacturing jobs numbered half of what they were in 1962, and the principle of Fordism, which had previously served the ruling class so well, crumbled as residents of the inner city were no longer able to afford the products they themselves manufactured (Gabriele). Framed as an effort to compete with foreign automobile manufacturers, Ford plants in Detroit replaced many of its workers with computerized automation and robots (Trask, “The Techno Wave”). This move was met with suspicion among the city’s residents, who were told that while the new technologies would displace some workers, it would also create new jobs: “The kids of this generation grew up listening to their parents tell them about the robots that were being shipped into replace them and how they aided in mass production. Technology was an omnipresent, mythological force that was greeted both with suspicion and the hope that it might provide a road towards salvation” (“Dummy Guide to Detroit Techno, Part 1”). This dual view of technology’s perils and promises is reflected in various statements by the musicians themselves. On one hand, techno musician Lenny Burden recalls growing up in Detroit: “Detroit is a machine town—a factory town. Michigan made most of the cars that were driving on American roads. Every family that I knew had someone who worked in a factory; I had several factory jobs. The people of Detroit embraced technology and machinery. They weren’t afraid of

it, because it helped them put food on the table and send their kids through school. Technology was part of everyday life” (“Octave One”). On the other hand, techno pioneer Juan Atkins paints a less sanguine picture, noting the economic effects of workers displaced by technology, also speaking from his experience as a lifelong resident:

Detroit is the city in North America that’s probably experienced the technological revolution first, and I think that it affects all of the occupants of Detroit, including the artists, musicians . . . and I think that we probably wouldn’t have developed this sound in any other city in America, other than Detroit. . . . If you go downtown, the major shopping stores are closed . . . the biggest shopping store in downtown is boarded up, it’s almost like a ghost town. But I think, somehow, this lends to the creative juices, and I think that is prevalent in any artist coming from Detroit. (*Universal Techno*)

Short of romanticizing the real hardships wrought by automation and post industrialization, Atkins has also acknowledged that the urban decay of Detroit provided a suitably dystopian environment for futurist artistic expression: “It’s very bleak. But I love this city because of the bleakness. I think that people here look for innovative ways to stay happy. Or to create different realities, because of the bleakness of this Detroit reality. And I think there’s a lot of creativity that comes out of being such a gray city” (“Juan Atkins Interview”). Atkins’ mention of creating “different realities” alludes to Detroit musicians’ unique form of Afrofuturism—an Afrofuturist vision rooted in the economic, material conditions in which the music was born—an aspect of the music that will also be explored and analyzed in this chapter.

Early Detroit techno: The first wave

“Detroit techno” generally denotes the techno music produced by musicians in Detroit during the 1980s and early 1990s. The musicians credited with inventing the Detroit techno sound are Juan Atkins (b. 1962), Kevin Saunderson (b. 1964), and Derrick May (b. 1963), known as the “Belleville Three,” because they met at high school in Belleville, Michigan. Belleville, a suburb located 30 miles from Detroit, was a predominantly white community. According to Saunderson, because Belleville was “pretty racial at the time . . . we three gelled right away,” and May recounts that being at a remove from Detroit’s inner city shaped how the young men related to music: “We perceived the music differently than you would if you encountered it in dance clubs. We’d sit back with the lights off and listen to records by Bootsy and Yellow Magic Orchestra. We never took it as just entertainment, we took it as a serious philosophy” (Reynolds 34). Perhaps because of their isolation from inner city styles and trends, the three listened to an eclectic mix of music that crossed racial as well as national boundaries, ranging from Japan’s Yellow Magic Orchestra Germany’s Kraftwerk, England’s Depeche Mode, and white American new wave band the B-52s, in addition to recordings by Prince, Parliament, and Bootsy Collins.

It has become commonplace in assessments of techno’s historical development to point out the cultural incongruity of urban black youth responding so strongly to white, arty, European bands like Kraftwerk. But when one considers the pervasiveness of technology and machinery in Detroit, and its portents for a robotic future, it is not surprising that young black listeners should have resonated so strongly with Kraftwerk’s infectious brand of rhythmic technological futurism, epitomized by such tracks as “The Robots”* (1978) and “Pocket Calculator”* (1981). Lenny Burden explains: “You had black kids in the industrial heartland of American listening to a bunch of German dudes in suits playing 20-minute synthesizer songs . . . and it made perfect

sense to us. It didn't feel alien or weird; it felt like we were coming home, it felt like we were listening to the soundtrack of our own lives" ("Octave One"). For that matter, Kraftwerk were funkier and more soulful than common wisdom often gives them credit for. Burden continues: "On the face of it, Kraftwerk might seem a million miles away from Motown, the O'Jays and Funkadelic, but I have bumped into the guys from Kraftwerk over the years and they told me they were trying to make 'soul' music, too. Music with emotion and humanity. Detroit understood that; 100%, we got it" ("Octave One"). Indeed, they understood better than many music critics did at the time, and better than some scholars still do today. The young Detroit techno musicians of the 1980s were more astute listeners than many professional music critics and scholars precisely because they were able to hear across racial, cultural, and national divides, responding to what for them was obvious—the sheer funkiness of much European synthesizer music.

A common feature of all of the music mentioned as formative influences on techno, despite the wide range of styles, is the prominent use of synthesizers. Soon after hearing "Flashlight"* by Parliament in 1978, Atkins bought his first synthesizer—a MS-10 made by Korg, a Japanese company, and began making multitrack recordings with two cassette decks and a small mixer (Shallcross 21). What attracted Atkins to synthesizers was their ability to create otherworldly, space-age sounds and percussive sounds, providing him with a large sonic palette with which to create music, despite being limited to just a few pieces of equipment: "I just liked the weird sounds . . . the UFO and spaceship sounds you could make. So I was mainly into the synthesizer not so much for musical stuff but more for effects. But then I realized that it was dependent on how you tune the filters. You could tune the filter to make it sound like drums, snare sounds, or a hi-hat. So I would just combine all these sounds and ping-pong between my

cassette deck” (Thomas). Atkins would record one synthesizer patch onto the first cassette, then play it back through the mixer while recording the next sound. “I wouldn’t stop this kind of back-and-forth between the two cassette players before I had finished with a song. And in the end I made myself a demo with four or five songs on it. And at that point I went to university, to Washtenaw Community College” (Deniaud).

There, Atkins met fellow student Richard Davis, a Vietnam veteran ten years older than Atkins, who had already issued a record under the alias 3070, entitled “Methane Sea”—an impressionistic, ambient work featuring psychedelic synth textures and sci-fi electronic effects with spoken-word parts by Davis. Atkins recalls: “He was a bit of a hermit . . . he didn’t want to play with anyone until he heard my demo. His house was like entering the cockpit of a spaceship! It was pitch black and all you could see was the lights coming from the touch of his keyboard, his sequencers and drum machines. . . . He was a bit bizarre but very cultured . . . He was like a teacher to me” (Deniaud). Davis provided Atkins with access to an impressive battery of synthesizers with which to experiment, as Atkins recalls: “He had an ARP Odyssey, ARP Axse, Roland RS09 string machine, the ARP analogue sequencer and an early Roland sequencer, and the Boss DR55 Dr Rhythm. I had my little Korg MS10” (Trask, “Future Shock”). The aforementioned Roland Sequencer was a model MSQ-100, one of the very first devices to employ the newly created MIDI standard, which allowed for the realtime linking and control of any synthesizers equipped with a MIDI port. Atkins soon discovered that the sequencer, in combination with the arsenal of electronic instruments at his and Davis’s disposal supplied all the sonic variety they needed in order to create a complete, full sound. In 1993, in an interview with Jon Savage of the *Village Voice*, Atkins explained the advantages of a duo ensemble over a full band, especially when using MIDI technology to control several instruments at once in real-

time: "He [Davis] had one of the first Roland sequencers, a Roland MSK-100 [*sic*]. I was around when you had to get a bass player, a guitarist, a drummer to make records: you had all these egos flying around, it was hard to get a consistent thought. I wanted to make electronic music but thought you had to be a computer programmer to do it. I found out it wasn't as complicated as I thought" (Savage). In 1980 Atkins and Davis formed the duo Cybotron. A portmanteau of "cyborg" and "cyclotron," the name reflected their mutual engagement with and admiration for the work of Alvin Toffler, who often coined similar word combinations in his writing. Their first single, "Alleys of Your Mind"* (Deep Space 107043X) released on their own Deep Space label in 1981, sold 15,000 copies, with the bulk of those sales occurring in Detroit. Unlike most tracks meant for DJ sets on the dance floor, this single was not released in 33.3 rpm format, but rather as a 45 rpm single, a fact that reflects the economic realities of producing and releasing music as a small independent producer within the constraints of a tight budget. Atkins explains:

We only had a 45 release on *Alleys of your mind*. The disco era produced the disco version which was the 12 inch single. DJs like Ken Collier didn't play 45 records, he played 12 inch discs, but the 12 inch disc was kind of new, especially to the consumer. You had some promotional only 12 inches that you couldn't even buy, that were just straight up promotional copies. When you went to the store it was on 45. That was the thing with *Alleys of your mind*, a lot of DJs couldn't play it because it was on 45. It was funny because I saw one DJ actually have one pasted to a 12 inch record, in order to have the 12 inch format [laughs]. That's how bad he wanted to play the record, you know what I mean? Nobody still had their 45 thing [adapter] for 1200 turntables, so people just didn't play them. That was the drawback from *Alleys of your mind* and was one of the clashes

that me and Rik would have. I would say, although it would have cost slightly a little more money, ‘man, we have got to release this record on 12 inch format,’ but he didn’t listen to me. Economically it was a sound decision because we sold a lot of those 45s. Even though it was a single, it [a 12 inch] cost you the same amount that it would cost to press a full album for just one song. Big record companies were able to do that but independents, small upstart shoestring budget labels, couldn’t be paying album prices for just one damn record.” (qtd. in Bean)

Two follow-up singles, “Cosmic Cars”^{*} and “Clear”^{*} also sold well, prompting the Berkeley, California-based Fantasy label to sign the duo, releasing their album, *Enter*, in 1983. The album is musically impressive, but highly diverse stylistically, perhaps too much so for mainstream audiences in 1983, and certainly too much for record companies, who unimaginatively marketed music to narrow racially stratified demographic markets. Atkins’ lofty goals for the group proved to be too visionary for the time. Creative differences arose, with Davis wanting to explore a more rock sound and Atkins wishing to continue in the electro style the duo had established with “Clear.” The two split in 1985, and Atkins released “No UFOs”^{*} (Metroplex M-001) that year, his first record under his Model 500 moniker and the first record on his newly established Metroplex label. This track is representative of Model 500’s early output, featuring a strong Kraftwerk influence and prominent use of the Roland TR-808 drum machine.

The early Cybotron and Model 500 recordings featured a bevy of synthesizers and tightly sequenced electronic drums. Such music challenged the racially demarcated musical stylistic boundaries firmly in place in the early 1980s. Atkins remembers: “I had people come up to me and say they thought Cybotron was some white guys from Europe. People couldn’t believe we

were actually Detroit musicians” (Trask, “Future Shock”). The confusion over the nationality of Cybotron and Model 500 may have been fed by the fact that information about the group was scarce. Noted British techno musician Kirk Degiorgio tells of going so far as to write Tommy Boy and Cutting Records—independent New York labels on which Cybotron tracks had been included on UK compilations—attempting to receive any information on the group, but none was forthcoming. Degiorgio also notes that no mention of Detroit was made on any Cybotron releases, and it was not until tracks appeared by Model 500 on Atkins’ Metroplex label that a Detroit address was included, along with production credits to Juan Atkins, thus confirming Degiorgio’s suspicion that Cybotron and Model 500 were in fact the work of one musician (Degiorgio).

The confusion resulting from Atkins’ multiple identities highlights an important point in the culture of techno’s production—the use of aliases, a feature that since the 1980s has become a common practice among techno musicians, standardizing what has been referred to as techno music’s “aesthetic of anonymity.” On one hand, the use of aliases can be understood as part of a strategy to deliberately blur or complicate traditional ethnic roles and identities. For instance, Juan Atkins has said that he created the alias Model 500 because it sounded like the name of a machine, and was thus a way of “repudiating ethnic designations” (Rubin, “A Tale of Two Cities” 107). On the other hand the use of aliases is also related to more material considerations: Kevin Saunderson points out that the use of multiple aliases was initially a way to bolster the Detroit musicians’ community, and to make the Detroit techno scene appear stronger than it really was, “to help Detroit seem bigger,” to give the impression “that there was more going on” (Rubin, “A Tale of Two Cities” 107). A common practice was to use a different pseudonym for each particular musical genre or sub-genre in which an artist issued recordings.

Aliases, in other words, served as markers for the styles and genres that a musician may choose to work within. This can function on one level as a marketing device—for establishing a brand name—as an indication of the type of music that a consumer can expect to hear. But aliases also function on a more conceptual level, as a means for the musicians themselves as well as their listeners to make sense of their recorded output, which can often be extremely eclectic. Atkins, for instance, explains what determines whether the records he releases today will be attributed to his Model 500 or to his Infiniti alias:

Model 500 is really a continuation of Cybotron. That's one thing I've always stayed the course with and I've always wanted to not deviate when I do stuff with Model 500. In the past year it's probably what Cybotron would have done had the partners not split. It's more song-oriented with melodies, not just dance tracks—that's always been my experience with Model 500. Now if I do stuff under the name Infiniti, that would be the more straightforward form of pure techno, the purest techno that is deemed as techno right now in North America and in Europe.

(“Juan Atkins Interview with Wolfgang Gartner”)

In a style such as techno, in which the music can often be difficult to categorize according to traditional taxonomies, the use of different aliases—the very act of naming—by individual musicians can be understood as an epistemological function of the music, as it is understood and practiced by the musicians themselves.

As much as the sonic aspects of the music itself, early Detroit techno also represented a paradigm shift in the ways that African-American musicians handled the business aspects of their careers. Adapting a similar do-it-yourself ethos to that of early punk musicians, the first wave of Detroit techno musicians changed the way that African-American music was produced,

reproduced, distributed, and sold on the marketplace, taking the means of record production into their own hands. Each of the Belleville Three founded their own labels early on, at the outset of their careers—Juan Atkins founded the Metroplex label in 1985, Derrick May launched his Transmat label in 1986, and Kevin Saunderson established his KMS label in 1987. Each of these labels is still owned and operated in Detroit today, with each of the founders closely involved in the daily operations of their respective businesses. These labels have maintained a strong brand identity, as they became inextricably associated with the styles, musical trademarks and calling cards of the individual musicians themselves.

The standard behavior for musicians in the recording industry had typically been to concentrate on “creative” aspects, while leaving the nuts and bolts of the business side—sales, promotion, distribution—to managers. But the Belleville Three’s commitment to running the actual business of their careers established a model for subsequent Detroit techno musicians, who have made it standard practice to release music on record labels that they themselves own and operate (“Dummy Guide to Detroit Techno, Part 1”). Detroit techno musicians’ management and ownership of their own record labels may be understood as a form of African-American signifying on the tropes of entrepreneurship. After white business owners left Detroit in droves, techno musicians stepped in, setting up their record label operations in downtown offices that had been abandoned, and, as we will see later in this chapter, even expanding the scope of their distribution to international markets.

The work of Cybotron is today widely considered to represent a prototype of techno music, actually exhibiting stylistic characteristics closer to the electro genre—defined early on by popular recordings such as Afrika Bambaataa’s “Planet Rock”* (1982) and Herbie Hancock’s “Rockit”* (1983)—than to techno music as it has since become known. But the recordings

Atkins made on his own under the Model 500 moniker, and other early recordings issued on his Metroplex label, along with recordings issued on Derek May's Transmat label, established the stylistic template for techno music. While 'Atkins's early solo output such as "No UFOs" is largely a development of the electro sound of Cybotron, May's early work on his Transmat label defined a distinctly new sound for Detroit techno.

A prime example, and an extremely influential early Detroit techno track by May—recording under the alias Rhythim Is Rhythim [*sic*—is 1987's "Strings of Life"* (Transmat MS-004). The record bore a strong similarity to the house music that was coming from Chicago at the time: House-style piano and strings played in octaves feature prominently, an arrangement device itself that was an extension of the "Philadelphia Sound" style of disco records made in the 1970s. Cornelius Harris, manager of Detroit label Submerge and Underground Resistance, speaks to the socially and politically transformative power of techno music when he says: "Derrick May comes up with "Strings of Life" and, you know, it's not called "Strings of Death." It's all about this great future that we're a part of; it's about looking for something else. We're trying to find a place where we can do what we want to do and not be tied into other crap. I think that that's what gets missed — the fact that techno actually served to be a very inspiring aspect of Detroit life, for the whole region actually" (qtd. in Glasspiegel and Bishop). "Strings of Life" features a sampled acoustic piano part that would become a key aspect of early techno and house, played in syncopation between the left and right hands. The track also features prominently one of the first uses of an "orchestra hit" sample— a sample of an orchestra playing a short fortissimo chord—which would become an extremely popular sound in many electronic dance music genres throughout the 1980s and into the 1990s and beyond, gratuitously overused to the point that it became a kind of tongue-in-cheek aural pop-culture reference. In "Strings of

Life” this orchestral chord sample is transposed across the keyboard, allowing the sound to be played melodically. The “strings” in the title also alludes to another key feature of May’s early productions: parallel-minor-seventh chords played by a sampled string patch, with the notes of the chord mapped to one key which is then transposed in parallel across the keyboard, allowing for the pitch-shifted chord to be played melodically. In comparison to the more electro stylings of Juan Atkins’ Model 500 tracks, May’s productions were less overtly funky and instead zeroed in on subtle, flowing grooves in which timbres morphed and motifs evolved gradually over the course of a track, reminiscent of the minimal music of Steve Reich and Philip Glass. Neil Rushton points out that May’s revolutionary minimal sound was due in large part to the limitations of the recording equipment he was using: “At that time, Derrick was recording on very primitive analog equipment: ‘Nude Photo,’ for instance, was done straight onto cassette, and that was the master. When you’re using that equipment, you must keep the mixes very simple. You can’t overdub, or drop too many things in; that’s why it’s so sparse” (Savage). “Strings of Life” was given its title by legendary Chicago DJ Frankie Knuckles (“Derrick May Remembers Frankie Knuckles”), a reminder of the cross-pollination that was occurring between Detroit and Chicago in the early days of house and techno.

Atkins and May had been DJing and recording together as Deep Space Soundworks since the early 1980s. In 1981, The Electrifying Mojo (Charles Johnson), an influential disco jockey on Detroit’s WGPR, began playing mixtapes from Deep Space Soundworks on his radio show, “The Midnight Funk Association,” which aired nightly from 10 pm to 3 am (Trask, “Future Shock”). The Electrifying Mojo’s radio show featured tracks from a variety of musical genres, blurring mainstream stylistic distinctions between rock, hip-hop, new wave, funk, electronic, and soul artists. And he delivered all this music while dispensing a philosophy strongly rooted in a

George Clinton style of Afrofuturism, cosmopolitanism, and a philosophy that propounded the power of music to bring people together across cultural divides. In a recording of Mojo's radio show made around 1983, he states, in a spoken intro over a wash of ambient synthesizer noises and found sounds:

Your radio has now been placed under mothership surveillance. Do not attempt to change stations, insert 8-track tapes, cassettes, video discs, or other musical sound paraphernalia. Paraphernalia is simply a derivative of the real. We now take you on a journey. . . . On the night of April 1st, the year of our Lord, 1977, I first entered into earth's atmosphere, aboard the mothership, an extraterrestrial space cruiser. The space vessel is now activating front and rear deflector shields. . . . Deflector shields have been activated. . . I now return, on my continuing mission, to the planet earth, for the purpose of musical exploration, groove manipulation, another journey to the bottom line of music. The bottom line is for the realness of it all lies—the bottom line is a conductor. It combines all of the grooves of the world. It reunites music in its original form. In the days of antiquity, and even until now, at the outer galaxies, music is the universal language. In order for galaxies and star systems to communicate, music is the form that we use to communicate. I, Electrifying Mojo, do hereby descend down to the surface of the planet earth, for the purpose of conducting musical-linguistic experiments designed to bring us all closer together, designed to offer the deepest musical communication on the planet. As I descend down to you, let it be known that in late '76 and early '77, the cosmic emperor, while on a routine training mission in the planetary empire, did receive signals from a faraway galaxy. This galaxy was

identified as the galaxy of the Milky Way, containing the great planet earth. Hold on tight, don't let go. Don't say "damn," say "whammy-whoa." ("Mojo WGPR circa 1983")

Atkins has acknowledged the deep influence that Mojo's eclectic tastes and his intergalactic philosophy of music had on him and other Detroit techno musicians, stating: "Mojo really had a lot of impact on music in Detroit. He used to play a lot of German and British imports. The first place I heard Kraftwerk was on his show, in '78 or '79. He'd play anything from the B52s to Jimi Hendrix to Kraftwerk, Peter Frampton. . . all kinds of stuff" (Trask, "Future Shock"). The Electrifying Mojo also regularly played cutting-edge synth-pop music newly arrived from Europe, by musicians such as Gary Numan, Ultravox, New Order, and Depeche Mode (Albiez 135). The eclectic range of music played by Mojo willfully transgressed the rigid, racially stratified boundaries imposed by commercial corporate radio in the 1980s, providing the conceptual template for a similar disregard for stylistic pigeonholing that would form the basis of the Belleville Three's ethos. As Derrick May vividly described the catholic range of influences in techno: "The music is just like Detroit . . . a complete mistake, it's like George Clinton and Kraftwerk are stuck in an elevator with only a sequencer to keep them company" (Cosgrove, Liner notes).

The mixtapes that Deep Space Soundworks supplied to Mojo featured creative manipulations of other artists' records, and the individual tracks on these mixes were not sequenced with turntables—the standard DJ tool—but with cassette-tape editing. Atkins explains:

We'd do a megamix on one record, extend a record, do tricks with it . . . We'd have two copies of the same record and do flanging and backtracking on the

turntables, just weird stuff that would give the record a little bit more of a pep. Eventually we started doing 20-minute mixes where we'd run a whole lot of records together. Basically we were blending; this was before scratching and all of that came in. We'd do mixes on tape. A lot of our mixes were done onto cassette using the pause button. (Trask, "Future Shock")

This technique of producing mixes, employing tape edits of records rather than transitioning between tracks using turntables, marks a significant difference in methodology from that used by contemporaneous producers in hip-hop. In fact a rivalry developed between Deep Space and Direct Drive, a more hip-hop oriented Detroit production team whose name referenced the Technics 1200 turntable, which featured a "direct drive" mechanism rather than the more-common belt drive, making it a new favorite among DJs because of its more accurate cueing and beat-mixing capabilities. Direct Drive used the Technics 1200 in their sets, but such equipment was beyond the financial means of Deep Space (Trask, "Future Shock"). Faced with the technical and sonic limitations imposed by the cassette medium, Atkins heuristically developed production skills that compensated for the reduced frequency response and limited dynamic range inherent in that medium:

I had two Kenwood cassette decks and a little Yamaha four-channel mixer, and I'd make up my drum beat and record it on one deck, then bounce it across onto the other and overdub another part at the same time. I became a real master at doing that; I knew how to EQ my drum sounds to start with so that by the time I'd finished four or five overdubs the music still sounded clean. (Trask, "Future Shock")

Working with overdubs of cassette recordings may have its disadvantages sonically, compared to working directly with vinyl recordings, but it also allowed for deeper edits and more creative production, as alluded to in Atkins's comment about making his drum beat: Atkins was apparently the first person to hit upon the idea of incorporating a drum machine as an additional element in DJ live sets and mixes—a practice that would become common in House music in the late 1980s. The drum machine was used both as an additional sonic layer, overdubbed or added live to existing tracks, and on its own to provide transitional material between tracks. Atkins explains: "At that time you could get records that were just rhythm tracks of popular songs, and it had become popular for these rhythm tracks to be spun in between other records. As I was already making my own music, I had the idea that Derrick and me could bring a drum machine into a party for mixing in between records." The Roland TR-808 and later, TR-909, drum machines became, in Atkins's words, Deep Space's "secret weapon" (Trask, "Future Shock"). Fellow Detroit DJ and producer Eddie Fowlkes, who was in attendance at one of these early parties, recalls:

We played and played and when the party hit its peak you would hear Juan's snare, he was on the beat. We left just one record on, it was the best around at the time, and then we start to lower the volume. Then it was just the 808 playing. We had left the turntables and turned everything off, they had no idea where the sound was coming from. They went nuts! Because no one had ever heard a drum machine take centre stage. People were screaming, the girls went mad! Juan played for 15 to 20 minutes and then we mixed a record back in. (Deniaud)

Fowlkes recalls that this happened in 1984 (Hoffmann), and he identifies Atkins' use of the 808 in live sets as a turning point in the development of the music: "Juan introduced it at one of our

Deep Space parties and it was sweet! At one point we stopped the turntables and Juan would start to work on his 808. He would start switching that shit and motherfuckers just went nuts. The next thing you saw was Jeff Mills using an 808 and all of a sudden every DJ had a drum machine” (Hoffmann np).

This innovation was to have a profound effect on the development of electronic dance music, for the practice of incorporating drum machines quickly spread from Detroit to Chicago, where House music was being developed concurrently with Detroit techno.¹⁷ The Chicago-Detroit connection was spurred by the fact that Derrick May’s parents had recently relocated to Chicago, and he was making frequent trips back and forth between the two cities. May would play Deep Space tracks for producers he came in contact with, and the track “No UFOs” quickly caught on with Chicago DJs. Atkins recalls: “Because of our relationship with Chicago, when we released records, in particular ‘No UFOs,’ Derrick took the record to Chicago and they wound up playing the record more in Chicago than in Detroit. So our records began to flourish in Chicago when we began doing four to the floor Techno tracks, instead of more electro-based Techno tracks” (Mason). The Chicago house producers not only adopted the general “four-to-the-floor” kick-drum patterns and rhythmic feel of Detroit techno tracks, but took the further step of appropriating the actual equipment used by Detroit musicians, passing it around amongst themselves in a kind of time-share arrangement. Atkins remembers:

Derrick sold Chicago DJ Frankie Knuckles a TR909 drum machine. This was back when the Powerplant was open in Chicago, but before any of the Chicago DJs were making records. They were all into playing Italian imports; “No UFOs”

17. For a discussion of the corollary discourse, Chicago House’s formative influence on Detroit techno see Jacob Arnold, “When Techno Was House,” *Red Bull Music Academy*, 4 Aug 2017, np.<http://daily.redbullmusicacademy.com/2017/08/chicago-house-detroit-techno-feature>

was the only US-based independent record that they played. So Frankie Knuckles started using the 909 at his shows at the Powerplant. . . . One thing just led to another, and Chip E used the 909 to make his own record, and from then on all these DJs in Chicago borrowed that 909 to come out with their own records. (Trask, "Future Shock")

Thus House music was born.¹⁸ Eddie Fowlkes explains the Chicago-Detroit stylistic continuum:

The common ground between Chicago and Detroit then was that the kids wanted to listen to four to the floor, music from overseas, and the first New York releases. The only way to be sure you had an exclusive was to make it yourself. So Jackmaster and Chip E made their own house records, but our tunes were played more than those from Chicago. We had more futuristic elements in our music. Theirs was more based on soul music, disco, and ours on something new, it was a fresh sound. Trax Records in Chicago tried to imitate the sound and called it acid house, but really it was techno. (Deniaud)

With the popularity of Chicago House music on the rise in the UK, English DJ, impresario, and entrepreneur Neil Rushton approached Atkins, May, and other Detroit musicians with the idea of putting together a compilation featuring their music. Rushton had Detroit

18. The etymology of "House" music has been a subject of debate in electronic music circles, but Atkins offers his own first-hand explanation of the term: "The word 'house' comes from a record that you only hear in a certain club. The DJs would search out an import that was as obscure as possible, and that would be a house record. You'd hear a certain record only at the Powerplant, and that was Frankie Knuckles' house record. But you couldn't really be guaranteed an exclusive on an import, 'cos even if there were only 10 or 15 copies in the country, another DJ would track one down. So the DJs came up with the concept of making their own house records. It was like 'hey, I know I've got an exclusive because I made the record'" (Trask, "Future Shock").

connections through his previous experience as a DJ and a fan of Northern Soul, and had released compilations of that musical style in the UK. The Northern Soul movement, an outgrowth of the UK mod scene, was a social phenomenon associated mainly with the north and midlands of England, centered around record-collecting and general appreciation of African-American soul music of the 1960s, particularly recordings issued on relatively obscure independent labels based in northern American cities, including Detroit, but excluding recordings on the Motown label, which Northern Soul enthusiasts considered to be too mainstream (Nowell 79). In 1986, with house music gaining mass popularity in the UK, Rushton realized that the imported recordings arriving in the UK from Chicago bore a similar socio-political context—both in terms of their creation in the US and their reception in the UK—to the Northern Soul recordings of the earlier era. He recalled, in 2000: “After I’d done the Northern Soul thing, I’d actually gone back to work as a newspaper reporter. But as the house explosion started to filter through, I was drawn more and more towards buying records every week” (Brewster 2000). Rushton hit upon the idea that the new African-American electronic music arriving from the US might be promoted in a way that fostered the same kind of devoted following in the UK that Northern Soul had enjoyed. From his extensive knowledge of lesser-known soul musicians in Detroit, Rushton guessed that Detroit musicians must similarly be involved in the production of house music. In his search for the next big thing to come out of Detroit, he became aware of Atkins, May, and Saunderson, and made a trip to Detroit to negotiate the terms of a compilation featuring their work.

The resulting record, released in early 1988, was entitled *Techno! The New Sound of Detroit*. Rushton had intended to name the compilation *The House Sound of Detroit* (Arnold), more than likely as a means of associating it with the Chicago house sound, which was quickly

gaining mass popularity in Europe. But Atkins was adamant that the music he and other Detroit electronic musicians made was different from that made in Chicago, a point that he wanted the title of the record to reflect. The genre description, “techno,” suggested by Atkins, was thus chosen as a means of distinguishing the Detroit sound from the “house” music that was being released by Chicago musicians at the time. The record marked the first time that “techno” was used to denote the the electronic music of Detroit. Atkins recalled in 2011:

In Chicago they had kids that were having parties the same as we were. The only difference is Chicago was more predicated on a Philly International sound, which was disco, so all of the house music was a sort of an offshoot of disco music. They had kids making independent records as well just around the same time we were. And with Chicago being a bigger city, and being a more cosmopolitan city, they had more mix shows on the radio, more DJs on the radio. And they had a mix show called “The Hot Mix 5,” and the DJs were playing Detroit records. And the thing is that when the record companies from England came to investigate this sound, they all landed in Chicago and discovered Detroit. They asked about my record “No UFOs,” and the Chicago kids told them, “That’s them Detroit boys.”

(“Juan Atkins”)

The early founders of Detroit techno are in agreement that Atkins came up with the term. Atkins himself continues:

So they came to Detroit and Neil Rushton came up with the idea to do a compilation for Virgin and call it *The House Sound of Detroit*. And my track that I put on this record was called “Techno Music.” And they were like “wait a minute, if he's deeming this record “Techno Music” and all the rest of this stuff is

similar sounding, let's call it *Techno: The New Dance Sound of Detroit*.' And hence, that album was released and the name stuck. ("Juan Atkins")

Atkins took the word "techno" from his reading of Alvin Toffler's *The Third Wave* (1980), which contained a section entitled "The Techno-Rebels"—a term Toffler used to describe people who used various technologies in novel ways that had not been foreseen by the manufacturers of those technologies, a group of people more commonly known today as "hackers" (Haider): In *The Third Wave*, Toffler describes the techno rebels in quaintly teleological terms as people who are, "whether they realize it or not, agents of the Third Wave. They will not vanish but multiply in the years ahead. For they are as much a part of the advance to a new stage of civilization as our missions to Venus, our amazing computers, our biological discoveries, or our explorations of the oceanic depths" (qtd. in Cosgrove, Liner notes). In an odd congruence, each of the topics identified in Toffler's description—space travel, computer technology, biology (pertaining to mutant underwater-breathing human mutants), and oceanography—would become key themes of Detroit techno group Drexciya, whose music will be explored later in this chapter.

However tempting it may have been for Rushton to capitalize by association on the rapidly growing fad for "house" records in the UK, the decision to use "techno" to differentiate Detroit electronic music from that of Chicago was a wise one, not only from a marketing standpoint, but because the electronic dance music being produced in Detroit really did seem to come from a different psychic space than the music from Chicago, precisely because of the more drastic effects of post-industrialism on Detroit, discussed above. As UK electronic music producer James Wiltshire has insightfully stated: "Techno may have a similar rhythm base to house music. In other words, a 4/4 rhythm with a kick drum on every single one of those beats. But it has a completely different design ethic. If house is a feeling then techno is a landscape.

And it's a reaction, an artistic statement, about the actual automated world that we live in. It's kind of half machine and half human." Whatever the motivations, Rushton's decision, at Atkins' behest, to go with "techno" as the central descriptor for this music provided the key conceptual unifying framework for presenting this new sound as a discrete musical idiom to European audiences.

Furthermore, techno and house music seem to articulate different relationships to the traditions of African-American musics: With its syncopated keyboard rhythms and a sonic palette rooted in the classic disco era, Chicago House implicitly maintains a reverential stance toward the past, while Detroit techno adopts a more irreverent stance that places more value on what Ezra Pound called "making it new," looking to the future. Derrick May explains that "it's a question of respect; house still has its heart in '70s disco. We don't have any of that respect for the past; it's strictly future music. We have a much greater aptitude for experimentation" (Cosgrove, *Liner notes*). Juan Atkins shares May's healthy disregard for artistically rehashing the past and tradition of African-American music, its subject matter, and its associated cultural structures, emphasizing instead techno's ethos of artistic experimentation and innovation: "The Detroit underground has been experimenting with technology, stretching it rather than simply using it. . . . Basically, we're tired of hearing about being in love or falling out, tired of the R&B system, so a new progressive sound has emerged" (Thomas). For all the talk of techno as a postmodern musical phenomenon, Atkins, with his emphasis on sonic innovation and experimentation, articulates a decidedly modernist artistic stance—an aspect of the music that will be explored more fully later in this chapter.

Transnational techno: The second wave

Techno! The New Dance Sound of Detroit proved a great success in the UK, both financially and in terms of the lasting influence it has had in defining techno music as a genre distinct from house. Why was this new music embraced so enthusiastically first in the UK, and quickly in the rest of Europe, but ignored in the Detroit musicians' home country? Rushton thinks it's down to trend mongering: "The U.K. likes discovering trends. . . . Because of the way that the media works, dance culture happens very quickly. It's not hard to hype something up" (Savage). But in the intervening years, techno music has endured throughout Europe; there must have been something more going on than mere marketing hype. European music fans were able to comprehend the cultural significance of the new Detroit sound in a way that the vast majority of Americans at the time apparently could not. London journalist Tony Farsides points out the differences between UK and American audiences for the music: "I think the compilation *Techno! The New Dance Sound of Detroit* . . . was really the UK doing what it does best in terms of taking contemporary black American music and showing it the understanding and respect it deserves. Treating it in a way that would have been impossible in the US itself" (Degiorgio). The European reception of techno music thus exhibits strong resonances with the way that earlier African-American musics, particularly jazz and blues, were received abroad, suggesting that these styles, varied as they are, nonetheless function along a social continuum that is marked by similar national and transnational currents.

These currents are especially apparent in charting the extraordinary commercial success of one early techno track in particular, "Big Fun"* (KMS 015), released in 1988 by Kevin Saunderson, recording under the alias Inner City, with vocals by Paris Grey. Saunderson's early productions displayed a keen pop sensibility—with an ear for deep basses, infectious beats, and simple melodic hooks—making his mixes sound good on the radio and in a club, and making his

productions more accessible to mainstream audiences than those of Atkins and May, who often reveled in a grittier, more lo-fi sound. “Big Fun” reached no. 8 on the UK singles chart. It also reached no. 1 on the US “Hot Dance Club Play” chart, and no. 50 on the US “Hot Black Singles” chart—but only *after* its success in Europe, having previously been ignored on US radio, the irony of which was not lost on Saunderson, when he ruefully noted at the time: “When you start to get known in the UK, America pays attention to you” (Trask, “The Techno Wave”).

Inner City’s follow-up single, “Good Life,”* released later the same year, was also commercially successful, again reaching no. 1 on the US “Hot Dance Club Play” chart, no. 4 on the UK singles chart, and, as an indication of how popular techno was becoming throughout Europe, also charting in the top 10 singles charts in Belgium, Finland, Germany, the Netherlands, Norway, Sweden, and Switzerland (““Good Life’ (Inner City Song)”).

As Saunderson’s comment suggests, Europe’s embrace of Detroit techno music was not unwelcome by the musicians themselves, but they nevertheless also recognized the ironic tragedy of a music that grew out of a specific American urban place not being suitably recognized in its homeland. Juan Atkins pointed out in 1988, during his first visit to the UK, just when Detroit techno was breaking into Europe: “A lot of things have been happening in Detroit for a long time now, and it’s all starting to come to the forefront. It’s a shame for America that the music’s happening first in the UK as opposed to there, though” (Trask, “Future Shock”).

Detroit techno musicians also were keenly aware that the reasons for this discrepancy were primarily racial. Noting that Europeans proved much more receptive to techno music than the vast majority of Americans, Atkins has also stated, of the disorienting feelings he had when performing for European audiences: “It was crazy to see that many white kids dancing to the music I was playing. I thought this could never happen in the US . . . that thing in itself blew my

mind” (Shallcross 21). So, while the sorry state of racial relations in the United States must be acknowledged, as well as the sorry state of US culture, which allows artists such as the early Detroit techno musicians to go virtually unrecognized in their own country, it must also be acknowledged that European audiences, while arguably engaged in a form of cultural appropriation, nonetheless recognized the artistic worth of Detroit techno. European audiences picked up on cultural similarities between Detroit techno and UK punk, hearing similar creative impulses and attitudes. For instance, UK music journalist Alan McGee recalls how in the late 1980s, Detroit techno rekindled his love of music, stating that “the early Detroit techno and Chicago house scenes were like reliving the punk rock year zero again” (McGee). Likewise, Wayne State Professor Barrett Watten has pointed out: “There is an element of ‘the outside’ in techno. It’s recognized in Europe; it’s not entirely even understood to *exist* here [in the United States]” (*Techno City*).

The early Detroit techno musicians are themselves quite aware that the discrepancies between European and US reception of their music parallels ways that earlier forms of African-American musics have been appropriated by white European musicians before being exported back to the United States, whereupon the music finally gains commercial and critical recognition. Derrick May states: “Nobody thought young, black kids from Detroit would be able to create something like [techno]. . . . We came through the back door, and nobody expected it. But basically, [techno] became a white-boy thing. And it's really kind of sad. Kevin, Juan and I know music history. We know it very well. We know what happened to the early blues artists” (McGee).

After techno music became popular in Europe, Juan Atkins, Derrick May, Kevin Saunderson, and Blake Baxter, each of whom had tracks on *Techno! The New Dance Sound of*

Detroit began DJing in Europe as part of the burgeoning “rave” scene there. Meanwhile, in Detroit, a new wave of techno musicians rose up. Prominent musicians in this group include Carl Craig, Octave One, and musicians associated with the loose collective known as Underground Resistance—including Jeff Mills, Robert Hood, and Drexciya. These musicians were transnational, both because they were highly cognizant of their music’s reception by Europe, and because their own music was influenced in part by European electronic musicians who were making music that was itself heavily influenced by the first wave of Detroit techno musicians. While the first wave of Detroit techno musicians had given their music a conceptual underpinning by rooting it in terms borrowed vaguely from science fiction, paranormal phenomena, and popular theories of technology propounded by Alvin Toffler, the second wave musicians, while maintaining the science-fiction ethos, at the same time articulated a more intellectually rigorous and racially forthright stance undergirded by their unique form of Afrofuturism.

That inner city Detroit residents experienced the impact of post-industrialization, mechanization, and automation as lived, *racial* realities is crucially important for understanding techno music’s appropriation of computerized, digital technologies. Just as techno music represented a new, more complicated stance toward the African-American past, it also represented a new imagining of an Afro-future. The philosophical framing by some musical journalists notwithstanding—“techno is a post-soul sound” (Cosgrove, “Seventh City Techno” 88)—the futurism propounded by Detroit techno was no mere “escape” from the harsh realities of racism, but rather a reimagining of the *uses* of technology and of the cityscape itself, functioning as an oppositional challenge to what Paul Gilroy has identified as a “pernicious metaphysical dualism” (*The Black Atlantic* 97), which has persisted in the “white mind / black

body dichotomy” that has been and continues to be all too common in popular as well as scholarly discourses surrounding African-American musics (Albiez 141). The Detroit techno ethos, in other words, is an affront to essentialism and regressive notions of “authenticity,” and constitutes a musical expression of the paradigm shift identified around the same time in African-American culture more generally by Trey Ellis, who in 1989 noted a change in the tenor of African American culture, a “New Black Aesthetic . . . that shamelessly borrows and reassembles across both race and class lines” (qtd. in Neal, *Songs in the Key of Black Life* 111).

Although Afrofuturism is more commonly associated with second-wave Detroit techno, even the early first-wave Detroit techno musicians’ use of science-fiction themes and imagery constituted more than a mere camp fascination with robotic rhythms and bleepy synthesizer sounds. In a manner similar to Sun Ra, the early techno musicians politicized sci-fi by racializing it. The musics of marginalized sub-cultures have often been theorized as “authentic” practices, existing as ostensibly “pure” ideal expressions removed from, and untainted by, the dominant culture. This view can clearly be seen in much early writing on the blues and early jazz, where African-American musicians were often portrayed as savants or noble savages, whose genius may be recognized and acknowledged, but nevertheless with the qualification that it was of the intuitive variety, rather than a result of any serious thought or work on their art. This line of thought extended into the marketing of blues and jazz music by record companies and promoters—as covered in Chapter 1’s discussion of “folk blues” in the 1960s—and persists to this day, as evidenced, for example, by recent debates over “authenticity” in hip-hop.¹⁹

19. See, for example: Mark Anthony Neal, “No Time for Fake Niggas: Hip-Hop Culture and the Authenticity Debates,” *That’s the Joint!: The Hip-Hop Studies Reader*, , edited by Murray Forman and Mark Anthony Neal, Routledge, 2004, pp. 57–60; Kembreu McLeod, “Authenticity Within Hip-Hop and

Afrofuturism has functioned as a means for musicians to counteract and circumvent notions of authenticity, in that by employing costumes, masks, and aliases, and by constructing elaborate space mythologies around the music, it calls into question the identity of the musicians themselves. Ken McLeod writes: “By employing metaphors of space, alien beings or futurism, metaphors that are by definition unknowable, such artists and works constantly ‘differ’ the notion of ‘authentic’ identity” (McLeod, “Space Oddities” 339). Second-wave techno musician Carl Craig identifies this tension—between “street credibility” and “authenticity” on one hand and abstract futurism on the other—as the crucial reason for the music’s very different reception in Europe from the US: “Rap stayed street, rap stayed urban, it stayed within the community . . . techno went somewhere else” (qtd. in Rubin, “Techno” 121–22). The difference in artistic scope is one of social realism versus futurism. Compared to the hard-hitting lyrical content of much rap, techno music is also more abstract, because the music is largely instrumental. Craig continues: “Techno is no words, no lyrical content. . . . We were like, ‘Here it is, like it or not, let your body move to it. It’s African rhythms mixed with European melodies, let’s see what you can do with it,’ and they were like, ‘Fuck you.’ So we went to Europe” (qtd. in Rubin, “Techno” 121–22). It is ultimately a question of power: as Afrofuturism offers a means of complicating and confusing outsiders’ understanding of the identities and environments of the musicians involved, rendering them “unknowable,” it circumvents attempts at labeling and classification, whether for scholarly or commercial purposes.

Although the term “Afrofuturism” was coined in 1993 by Mark Dery in his essay “Black to the Future,” musical expressions of what can retrospectively be understood as Afrofuturism

Other Cultures Threatened with Assimilation,” *Journal of Communication*, vol. 49, no. 4, 1999, pp. 134–150; Alexander Weheliye, “Keepin’ It (Un)Real: Perusing the Boundaries of Hip Hop Culture,” *The New Centennial Review*, vol. 1, no. 2, 2001, pp. 291–310.

extend back much earlier, appearing in the 1950s—most notably by Sun Ra, with such works as *Sun Ra Visits Planet Earth*, recorded in 1956–58, *The Nubians of Plutonia* (1958–59), *Interstellar Low Ways* (1959–60)—then continued in a more electronic vein the 1960s with Ra’s *Cosmic Tones for Mental Therapy* (1963), *The Magic City* (1965), and *Atlantis* (1967–69). Bob Moog personally gave Sun Ra a prototype of his groundbreaking Minimoog synthesizer in 1969, and when the Minimoog became commercially available in 1970, Sun Ra was one of the first musicians of any genre to employ it on recordings, notably on *My Brother the Wind* (1970) (predating more famous uses by Emerson Lake & Palmer and other progressive rock groups), and *Space Probe* (1974) (Holmes). Afrofuturist themes also appeared in the electronic recordings of musicians such as Jimi Hendrix in the late 1960s—in recordings such as “Up from the Skies”* (1967), with lyrics sung from the perspective of an alien visitor to earth, and “Third Stone from the Sun”* (1967), inspired by Hendrix’s reading of George R Stewart’s *Earth Abides*—Miles Davis in the 1970s—for instance on his *Agharta* (1975) and *Pangaea* (1976) albums—as well as a series of cassette recordings made by Alice Coltrane in the 1980s and compiled on her *World Spirituality Classics 1: The Ecstatic Music of Alice Coltrane Turiyasangitananda* (2017). But the most extensive musical realizations of Afrofuturism were documented by George Clinton, in a series of albums appearing in the 1970s by the Parliament-Funkadelic collective. These recordings, including *Mothership Connection* (1975), *The Clones of Dr. Funkenstein* (1976), and *Funkentelechy vs. the Placebo Syndrome* (1977), have been acknowledged by the early Detroit techno musicians as formative influences, both because of their sonic palette—which featured prominent use of synthesizers—and their subject matter, which explored such concepts as space travel, alien beings, and extra-terrestrial civilizations from African-American perspectives.

The cultural environment of Detroit in the 1980s, however, prompted a new take on Afrofuturism by the electronic musicians there, contributing to a philosophical emphasis on mechanization and the human/machine interface that was directly informed by the musicians' personal experience with the economic and social effects of automation and post-industrialization in Detroit. For instance, Cybotron's "Techno City" (1984) is not a song about some abstract, science-fiction Megapolis, but rather a site-specific ode to an imagined future Detroit. Similarly, the Afrofuturist fantasy "Cosmic Cars." (Deep Space 1982), also recorded by Cybotron, was inspired by a strange vision Atkins had after watching cars on the stretch of Interstate-94 that ran through Detroit: "On 'Cosmic Cars,' I envisioned being in a car and driving on the highway, and all of a sudden just taking off and going into space. . . . There are times that you can be in a city like Detroit and it can get really bad. You just want to fly away. Sometimes you wish you could just sail off to another time and space. A lot of my tracks allude to that kind of adventure" (qtd. in Glasspiegel and Bishop).

The particular Detroitian despair Atkins alludes to in his description of his music highlights another way that the unique cultural environment of Detroit has been a crucial component of techno's Afrofuturism. Because of the economic conditions brought about by shifts to global neoliberalism in the US auto industry in the late 1970s and early 1980s, Detroit functioned as an early test case of the effects of newly implemented neoliberal strategies by US industries, and the population of Detroit thus experienced the effects of deindustrialization before most other US cities. This post-industrial environment provided the mental and psychic backdrop to a new electronic music that used metaphors of technologization and automation to mix themes of extraterrestrial aliens with terrestrial alienation, constituting a new form of Afrofuturism.

The Detroit take on Afrofutirism finds perhaps its fullest expression in the work of Drexciya. Part of the Underground Resistance collective, Drexciya consisted of Detroit musicians James Stinson (1969-2002) and Gerald Donald (b. 1980). The duo, active from 1992 to 2002, were notoriously reclusive compared to what has become the typical model of professional musicianship, avoiding self-promotion and instead cultivating an aura of secrecy by always performing masked and refusing to divulge information about their personal lives to the media. While fellow Detroit techno musicians often looked to outer space for inspiration and conceptual underpinning, Drexciya looked to the ocean, constructing an Afrofuturist mythology centered around the idea of Drexciya as a nation that existed underwater, and whose citizens consisted of the unborn children of pregnant African women who were thrown overboard from slave ships during the Middle Passage. During the first several years of their recorded output, from 1992 to 2000, this underwater mythology was constructed and revealed piecemeal through cover and label artwork, track titles, and occasional bits of spoken word material on their tracks (Ryce). As first explained in the liner notes to their compilation *The Quest* (1997), the children of the African women thrown overboard in the Atlantic adopted to breathing underwater while in their mothers' wombs. Kodwo Eshun has posited that Drexciya's mythology amounts to a creative re-reading of Paul Gilroy's *The Black Atlantic* (1993) as a work of science fiction that speaks to black subjectivity (Eshun, "Further Considerations" 300). Over the course of eight albums released from 2001–2002—under the Drexciya name but also under various other names including Transllusion, The Other People Place, Abstract Thought, Shifted Phases, and Lab Rat XL—collectively known as the Storm Series, the duo continued the construction of this elaborate mythological history. In this series, it was revealed that the Drexciyans were actually from a distant planet, known as Ociya Syndor. Corresponding with this unexpected twist, the sound of

the duo's music changed from the aquatic electro-techno of their early years to a more spacey, ambient style (Ryce). *Grava 4* (2002), Drexciya's final album before James Stinson's untimely death in 2002, depicts the Drexciyans' return to Ociya Syndor. While previous musicians had explored Afrofuturism, Drexciya's sci-fi musical mythology is beyond parallel in all of electronic music. In fact, throughout the entire history of Western music its epic scope is matched perhaps only by Wagner's musical re-telling of Norse myths in his *Ring des Nibelungen*.

Another specific way we can see Detroit's mode of Afrofuturism at work is in the uses Detroit techno musicians made of the musical technologies and instruments at their disposal. With the advent of digital musical instruments in the late 1980s, older analog equipment began to lose its value. The Roland TR-808 (produced from 1980–83) and TR-909 (1984–85) were analog drum machines that were originally marketed as being capable of creating realistic-sounding drums; the intention of the manufacturers was that these machines could replace a “real” drummer in a band. Similarly, the Roland TB-303 (1982–84) was marketed as an analog synthesizer specializing in bass sounds and capable of replacing a “real” bassist in a band. But musicians soon found that the sounds made by the TR-808, TR-909, and TB-303 were in fact hopelessly unrealistic, sounding nothing like “real” drums or bass, and the machines were widely considered to be out of date by the time that digital sampling drum machines and synthesizers hit the market later in the decade. In Detroit, young musicians seeking to create synthesized sounds but unable to afford fashionable digital synthesizers such as the Yamaha DX7 and Roland D-50 resorted instead to older analog machines like the Roland TR-808, TR-909, and TB-303 that were then languishing in the bargain bins of music stores across the United States. Their use of

the TR-808, in particular, illustrates the Detroit techno musicians' use of musical technologies as an expression of their unique form of Afrofuturism.

The Roland TR-808 was released in 1980 and discontinued in 1983. Although on the market for just slightly over three years, and only 12,000 units were ever made, the 808 drum machine is nevertheless one of the most important instruments in all of twentieth-century music. It was one of the earliest programmable drum machines, meaning that the user could program her own rhythms in real time rather than relying on preset loops. The device allowed for the storage of up to 32 such user-defined rhythm patterns. Another notable feature of the 808 is that all the sounds were generated through means of analog synthesis rather than prerecorded acoustic drum sounds. This allowed for a great deal of manipulation in programming, such as the decay and timbre of individual drum sounds, but also meant that the sounds themselves did not resemble "real" drums played by a human drummer, but rather sounded unabashedly "synthetic" and machine-like.

It is thus easy to see why such an instrument would have appealed to musicians like the Belleville Three, who embraced a sci-fi, robot aesthetic. Part of the genius of the early Detroit techno musicians lay in the fact that they recognized that the beauty and power of cheaper, older machines like the 808 was due to this non-human quality. As noted earlier in this chapter, Juan Atkins has described Berry Gordy's Motown productions as reflective of the same "principle as the conveyor belt at the Ford plant." If so, then Atkins's and other Detroit techno musicians' use of the 808 represents music production that operates on the same principle as Ford and other auto makers' introduction of automation and robots in their factories during the 1980s. While the rest of the electronic music world had become obsessed with replicating in electronics the minute idiosyncrasies and inconsistencies of "human" performance, the Detroit techno musicians took

exactly the opposite approach. Instead of trying to make the 808 conform to a human standard (which was arguably a romanticized notion of what it means to be human, celebrating the humans' inability to precisely perform rhythms), they instead embraced the machine-ness of the machine, and relied on the 808 for what it accomplished with ease: precise, machine-like rhythms. This marked a new rhythmic conception in African-American music, one that had been prefigured in earlier decades of jazz, which aimed for a rhythmically precise ideal, and was continued in funk music of the 1970s, much of which employed intricately interlocked rhythms, presaging the machine concept of rhythm which was finally realized with drum machines like the 808. Second-wave techno musician Carl Craig recognizes precisely these aspects:

The robot funk of George Clinton was played by a real drummer playing like a drum machine. So we took those influences and put it into our music with the pure idea of keeping the funk there and developing something new. You can use the 808, and what is produced around it can inevitably make it feel more human than just an 808 machine by itself. The human aspect that comes from Detroit techno comes from the idea of trying to actually get an 808 to not sound like a typical 808. Lots of tweaks and tricks can get the sound to be more organic, but the idea was not to program it like a drummer, or to replace a drummer. It's programming it to make it an instrument in its own right. (Battaglia)

With its strong timbral characteristics and immediately recognizable palette of sounds, the 808 became a defining sound of Detroit techno.²⁰

20. The 808 sound has transcended genres, being also an important aspect of other electronic musical styles such as Miami Bass, and most popularly, hip-hop. The 808 was featured prominently in

Much has been made of how the early Detroit techno musicians made creative use of machines that were considered *passé*, because this was the only technology that was economically accessible to them, but it is also worth pointing out that the Roland engineers in Japan also employed a similar aesthetic in their design of the 808. Shortly before his death, Roland founder and engineer Ikutaro Kakehashi revealed that much of the unique sound of the 808 may have been due to faulty transistors. In the documentary film *808* (2016), directed by Alexander Dunn, Kakehashi recounts how he had sourced a supply of transistors that had been rejected as “out of specification” by the manufacturer. He explains that in a typical production run of 10,000 transistors, perhaps 2–3 % would be designated as defective, or not within the required tolerances:

Solid state electronic components were quite new when he started Acetone and then Roland, by the early 1980s component manufacturing processes were becoming quite mature but each batch of semiconductors such as IC’s and transistors had a significant reject rate, perhaps due to unevenness in substrate materials, temperature differences across dies and so on. Manufacturers tested each batch, graded the parts depending upon their electrical characteristics and marked them appropriately before shipping them out. From any given batch several different transistor part numbers might emerge depending upon how they

popular hits such as Marvin Gaye’s “Sexual Healing”* (1982) and “Planet Rock” by Afrika Bambaattaa (1982). Despite being discontinued in 1983, the 808 was an integral part of several hit songs through the 1980s, including Phil Collins’s “One More Night”* (1984), Aretha Franklin’s “Who’s Zoomin’ Who?”* (1985), and Whitney Houston’s “I Wanna Dance with Somebody (Who Loves Me)”* (1987). By the late ‘80s the 808 had become a staple of hip-hop productions, appearing on countless tracks thereafter.

performed. Some were so different than expected that they were rejected altogether and discarded. (Sue & Jones)

It was these rejected transistors that Kakehashi purchased for use in the TR-808, presumably because these could be bought more cheaply than fully functional transistors. When this batch was used up, production of the TR-808 had to be stopped, because the unique characteristics of the defective transistors could not be duplicated in normal, fully functional transistors. As Mr. Kakehashi himself put it, “No way to come back!” (808).

The limitations of the 808’s circuitry, implemented because of economic contingencies, became a key aspect of the aesthetic beauty of the machine. Electronic musician and software developer Robert Henke maintains that the circuitry of the 808 is a brilliant work of art in itself:

The TR-808 is a piece of art. It's engineering art, it's so beautifully made. If you have an idea of what is going on in the inside, if you look at the circuit diagram, and you see how the unknown Roland engineer was making the best out of super limited technology, it's unbelievable. You look at the circuit diagram like you look at an orchestral score, you think, how on earth did they come up with this idea. It's brilliant, it's a masterpiece. (qtd. in Walmsley)

The material reality of economic frugality thus imposed a degree of elegance in the design of the 808, as Roland engineers came up with creative, simple executions in engineering within the limits which they were forced to work.

Early Detroit techno musicians immediately understood the beauty of the TR-808, even though the machine had been discontinued by Roland by the time of Cybotron’s first album. Cybotron’s Juan Atkins commented in 1988:

I still use the 808 and 909. I don't like Roland's latest drum machines, but the 808 and 909 are classics. The 808 has a real techno feel. Everything on that drum machine has an electronic feel, it's not like digitally-sampled real drums. When Roland discontinued the 808 and 909 to come out with the 707 and 505, they tried to come out with a more true drum sound, but the whole beauty of Roland was that they had drum sounds which were different from everybody else's. (Trask, "Future Shock")

By embracing the robotic aspects of the TR-808 rather than trying to make the machine sound "human," and making these robotic elements a key part of their music, early Detroit techno musicians established a sonic template for subsequent forms of African-American electronic music. The TR-808 still features prominently in many techno, hip-hop, and EDM productions today. Furthermore, rather than diminishing the music's rhythmic impact, the early techno musicians showed that the 808's robotic feel actually imparted *more* funk and groove into the music. By melding machine rhythms with an African-American rhythmic conception the early Detroit musicians thus made audible the Afrofuturist outlook that undergirded their music and their world view.

The idiosyncratic "unrealistic" sounds of the TR-808, along with the TR-909 and TB-303 became the sound of techno music, and after the music achieved widespread recognition in Europe, many musicians attempting to emulate the Detroit musicians' sound would adopt a purist stance of using only analog equipment. But the Detroit musicians used this equipment initially because of the exigencies of the economic conditions in which they found themselves, rather than because of any overriding aesthetic choices.

The situation is very much like that Chicago blues musicians found themselves in forty years earlier: As detailed in Chapter 1, after blues musicians arrived from the South in northern cities like Chicago and Detroit, they began to use electric guitars and basses instead of acoustic instruments, and began using microphones and amplifiers in order to be heard in loud, busy urban nightclubs. As Muddy Waters succinctly put it, “Couldn’t nobody hear you with an acoustic” (Rooney 112). Importantly, the electric instruments the Chicago blues musicians chose were inexpensive: electric guitars—such as the Fender Stratocaster and Telecaster, solid-body guitars that were considered to be toys by many professional musicians—and amplifiers that distorted when turned up. A distorted signal was something that musicians of the time generally avoided. But the piercing sound of the Chicago musicians’ solid-body guitars and the distorted tones of their amplifiers became the sound of a new, urban style of blues. Demonstrating the material aspects of transnationalism, this sound became a new standard as young, middle class white youth in England bought imported recordings of Chicago blues and sought to emulate its style. Similarly, by the 1990s, many young musicians in Europe were coveting the sounds of Roland 808s, 909s and 303s. By then the formerly budget-class instruments were long since out of production, and were commanding high prices on the used market. European musicians’ and fan’s reception of the Detroit musicians’ music, then, profoundly shaped the aesthetics of this music—ideas of what constituted a “good” sound, just as British musicians and fans in the 1960s had done with the African-American blues and early rock music being exported from the United States.

The cultural dynamics at work in the European reception of African American musicians’ use of non-privileged musical technologies to make futurist art, and—as will be shown—the Detroit musicians’ own reception *of* that reception, highlights the point that Detroit techno

musicians' own form of Afrofuturism was rooted in their self-awareness as transnational subjects creating their music within what they explicitly understood and experienced as a transnational framework. The second wave of Detroit techno musicians functioned as what Gramsci termed "organic intellectuals" as they lived, worked, and created their art within a milieu that was simultaneously local and global—the very definition, in other words, of "transnational" as the term was also being explored concurrently by intellectuals such as Paul Gilroy, who may as well have been writing about techno music when he asked: "How are we to think critically about artistic products and aesthetic codes which, though they may be traceable back to one distinct location, have been changed . . . by their displacement, relocation, or dissemination through networks of communication and cultural exchange?" (*The Black Atlantic* 80).

In order to attempt an answer to Gilroy's question, it is important to clearly define—for the purposes of understanding their application to African-American techno musicians' subjectivities in relation to both Detroit and Europe— what is meant by such terms as "transnationalism" and "transnational frameworks." In this chapter, I use *transnationalism* and *transnational frameworks* to describe the varied ties and interactions that link individuals and groups beyond the boundaries of nation-states. These links comprise social formations that may be either bigger or smaller than a nation-state, and foster individual and collective subjectivities that are not invested in national identities. *Transnational* formations are distinct from *international* formations in that in the former, "identities, things, finances, and places are not bound by national identifications and investments" (Pease, "Re-mapping the Transnational Turn" 5). *Transnational* is thus a more accurate term than *international* to describe the culture of Detroit techno music, as the musicians are not vested in national identities, having been ignored in their own country, largely due to structural racism. The connection between racism

and nationalism has been highlighted by scholars such as Etienne Balibar, who has written that racism is a “supplement of nationalism or more precisely a supplement internal to nationalism, always in excess of it, but always indispensable to and always insufficient to achieve the formation of the nation” (qtd. in Pease, “National Narratives” 5), and Wahneema Lubiano, who in regard to racism in the United States has as pointed out that “the state and the political economy of the United States are themselves entirely dependent on the internal imperial racialization of the population” (qtd. in Radway 11). The term *transnational* can function either as an adjectival qualifier or as a noun—it can denote either a conceptual framework or the objects taken up for study. Donald Pease explains: “As an adjectival qualifier, the transnational can describe everything from neutral representations of imperial exchanges to their diasporic critiques,” while “when used as a noun, the transnational refers to a condition of in-betweenness (the ‘trans’), and to a behavioral category that imputes the traits of flexibility, non-identification, hybridity, and mobility to agents of conduct” (“Introduction: Remapping” 4). This distinction is important when considering techno because Detroit techno musicians are transnational subjects whose art is experienced and understood through a transnational framework.

Using transnational frameworks to understand transnational subjects can create a powerful congruence, in which the scholarly methodologies match their subject matter, resulting in a resonance that leads to new perspectives and insights that would likely be missed within a cosmopolitan framework, retaining nationalist paradigms. For instance, George Lipsitz’s call for American Studies scholars to “listen” to the marginalized “voices” within popular culture reflects an important aspect of much recent transnational scholarship (and which serves to further highlight the importance of distinguishing between “international” and “transnational”): the shift away from state-centric frameworks and nation-states as primary actors—which tend to reinforce

national and international paradigms—and toward frameworks that focus on “the people,” as non-elite subjects (“Listening to Learn” 310–31). As Micol Seigel explains: “International models have guided diplomatic history, military history, and related fields; their state focus proves less compelling for historians of nonelite subjects, which in part explains the embrace of transnational method by social and cultural historians” (63). Building on Seigel’s insight, it could be said that shifts to transnational frameworks simultaneously engender and are engendered by a corresponding shift in focus from traditional, national frameworks—“elite subjects”—to “nonelite subjects.” As Winfried Fluck puts it, “transnationalism makes self-expansion possible, and, by doing so, provides new possibilities of agency that were suffocated before and that may now be mobilized as protection against the nation-state. (371). It is in the self-assertion of people, such as AfricanAmericans in Detroit, who have been marginalized by the state that new, self-defined identities are formed, identities formed in the recognition of these subjects’ transnational characteristics.

In this regard Fluck maintains that in fact the real stakes of transnational social formations are not their implications for the nation-state, but how these transnational formations affect identity formation within nation-states. In other words, transnationalism does not describe merely the phenomenon of national frameworks working across national borders, which is, after all, a rather old idea. Rather, the real significance of transnationalism is that it

raises basic questions about the meaning of national belonging and identification, or cultural identity, when a population is dispersed broadly spatially, following different historical trajectories in different locations. It also assigns a formative power to encounters between people of different and national backgrounds, who are transformed by the encounters in different ways. (375)

The significance of the disorienting effect of transnational spaces, then, and of the new, malleable and multifaceted forms of identity they engender and demand, is ultimately a political one. “Transnational spaces . . . are of special interest for transnational American studies, because they can be considered privileged spaces for unsettling stable identities. And the political promise of this unsettling is that flexible identities make agency possible again” (Fluck 376). That is, transnational formations support transnational subjects in their resistance to national identities and national narratives. Another aspect of this de-privileging of state-centric frameworks can be seen in the recent trend in transnational scholarship to emphasize “the local” over “the national,” in which ostensibly insular local spaces and geographies are revealed to be transnational “contact zones.” Transnationalism, then, used accurately and precisely as a phenomenon distinct from internationalism and cosmopolitanism, denotes a blurring of the traditional distinctions between the “local” the “national,” and the “international.” Contemporary music such as techno is an ideal site in which to observe and hear these ideas lived and worked out in practice. Connell and Gibson point this out when they state: “Despite globalisation, transnationalisation, international migration and the commercial underpinning of music, each musical genre, in every place, required at least some local identification, and had its own internal musical structure, its particular technology, performative contexts, and social and political environment” (191). In other words, at least when it comes to music, there is no “local” scene that is ever hermetically sealed off from global flows of cultural change and musical practice. Conversely, there is no Platonic idealized transnational space that is not experienced in the tangible material world of some local space.

In this light, European rave culture of the late 1980s, centered around its cultural importation of Detroit techno music, may be understood as a quintessentially transnational social

formation that blurs traditional distinctions between the local, the national, and the international; and constitutes its subjects in contrast to and disregard for state-centric identities:

In Detroit and the early techno scene, the ‘subject of this music’ was a defined, largely black, sub-community/culture with a developing infra- structure. When techno travelled elsewhere in the late 1980s, new techno communities and networks operating beyond US borders and across Europe developed. These were transient communities formed in the ‘ecstasy’ of the dance moment, through the ‘socially experienced perception’ of the rave experience that could be described as a “we-feeling,” “collective corporeality” or “*Uber-Ich* ’”—a perception of shared transcendence. These temporary communities (or what Bey would call ‘temporary autonomous zones’) were the generator of new modes of collective perception and action, resulting in an implicit critique of everyday life and explicit political action over governmental attempts to suppress the scenes; most specifically in France and the UK. (Albiez 146).

Besides Europe, the inner city of Detroit itself became a transnational contact zone after Detroit techno became popular in Europe as a result of compilations like *Techno! The New Dance Sound of Detroit*. Juan Atkins recalls:

When the record companies came and they discovered Detroit and our records got put on these different compilations, we started to get invitations to come and play and DJ in different cities in the UK and Europe – Belgium, Holland, Germany. So we were able to bring all this new music back and we wanted to be able to have a venue to be able to play this music to our homeboys, our people here in Detroit. Hence, the Music Institute became a club. Derek was the resident DJ, . I played

there regularly, Kevin played there regularly. . . . and it was amazing because every week, somebody would be coming back in town and bringing us the latest stuff, grabbed from Black Market Records which was the big record store in the UK. And kids would come hear you play your set. (“Juan Atkins”)

Detroit’s exposure to such cutting-edge electronic music from Europe fueled second-wave musicians’ urge to create their own music, and gave them a keen understanding of how their own music fit into what was rapidly becoming a transnational community of techno. The second-wave musicians, although based in Detroit just as the first wave musicians had been, were thus creating music in a different cultural environment than their predecessors, in that they were aware of their music’s reception abroad just as much as at the local level, and the second wave musicians were self-aware of their identities as transnational subjects.

Just as the first wave of Detroit techno musicians signified on tropes of entrepreneurship and business models by owning and operating their own independent record labels on which they released and distributed their music, second-wave Detroit techno musicians expanded this local-business model to a global scale, updating and adapting their own style of signifying to play on the rhetorical tropes of globalized neoliberal business practices, as, for example, when Carl Craig states: “I’m fortunate, because I exported my business. If I’d kept it in the US, we would have failed a long time ago” (qtd. in Glasspiegel). In 2010, Craig’s label, Planet E, shipped 20,000 vinyl records out of its Detroit-based office, 70% of which went directly to Europe (Glasspiegel). The standard practice of Detroit techno musicians running their own independent record labels presented special challenges for getting their records to Europe. Because they could not rely on the international business presence of a major label, the musicians took a DIY approach to exporting their records to foreign markets. The most common global business strategy in the

early days of techno was for the musicians to travel to Chicago with boxes of their records, which they would take to record shops such as Gramophone and Importes, Etc, who had been exporting Chicago house music to European markets (Mixon). Chicago being a 4–5 hour drive from Detroit, this arrangement proved too cumbersome to maintain, so Detroit musicians began exporting their work through the newly established Submerge Records, a record store / record label / record distribution company located on Grand Avenue in Detroit, which was run by musicians associated with the Underground Resistance collective. In a practice that was unusual for the time, Submerge made sure that in their negotiations with European distributors, Detroit musicians retained control of the publishing rights and international licensing of their music (Mixon).

Submerge soon began exporting the musicians themselves to Europe. It was Submerge's delegation of musicians from Underground Resistance—whose residencies at Tresor in Berlin, begun around the time of the fall of the Berlin Wall ("The Birth and Growth of Detroit Techno")—which helped to establish that famed nightclub as the cultural center of techno music in Europe (Mixon).

These transnational currents moved both ways: in addition to Detroit musicians finding a receptive audience for their own records and performances, European musicians who had become enthralled with Detroit techno began producing their own tracks rooted in a similar aesthetic. With the advent of European techno musicians releasing records in the United States, techno music ironically became an import in the very country in which it was originated.

The second wave of Detroit techno rose to prominence as a response to the European success of the first wave of Detroit techno musicians, and as a response to the adoption of the style by European musicians, especially in the UK, Belgium, the Netherlands, and Germany.

By the late 1980s and early 1990s Berlin, in particular, had become the European center of techno music. There are several commonalities between Berlin and Detroit that may help explain why Berlin resonated with the sounds coming out of Detroit. Both cities at the time contained many abandoned spaces, thus they shared a similar psychic and physical landscape. Furthermore, techno music served as an appropriate soundtrack for the fall of the Berlin Wall in 1989, as Berliners were ready for new sounds to accompany their new lives and visions of the future. Walter Wasacz, a Detroit native who writes on techno music culture, states: "After the wall fell in 1989 it was new. . . . It was like now we can do things that we couldn't do before, there was a freedom to do more things creatively, [and] Detroit techno fit into that. It was a reunification of east and west Berlin, of east and west Germany, and Detroit techno was the soundtrack of reunification" (Mixon). Wasacz has on other occasions further described techno music as providing a new "common ground," and "common language" between East and West Germany, in which "Detroit techno became the soundtrack for reunification, part of a social revolution that helped build and sustain community life through electronic dance music" ("The Birth and Growth of Detroit Techno")

This new sound and the culture that sprung up quickly around it found its center in the Tresor nightclub, located in an abandoned Wertheim department store building in the Mitte borough, in the center of the former East Berlin. Tresor booked Detroit techno musicians and DJs to perform, and in 1991 launched its own record label, featuring Detroit techno music.

Tresor's first release was entitled *X-101* (Tresor 1, 1991), also the name of the artists, which was a collaborative project comprising three important musicians of Detroit's second wave: Mike Banks, Robert Hood, and Jeff Mills. Each of the musicians involved in *X-101* was already an established producer in their own right, and each was also a member of Underground

Resistance, the influential collective of Detroit techno musicians. *X-101*, in tracks such as “Sonic Destroyer”^{*} was representative of the second-wave sound that was quickly gaining popularity in Europe, being harder and more minimal in its production than first-wave techno. This style would launch many sub-genres and sub-sub-gneres of techno throughout Europe, including acid, minimal techno, dub techno, dark techno, often with a great deal of blurring between these styles. As techno became increasingly popular throughout Europe, the music also spawned more commercial and slickly-produced stylistic variations such as trance and its many offshoots. The Detroit musicians meanwhile kept abreast of these European developments through their participation in the transnational contact zone that Detroit had become, leading to the development in Detroit of a harder, more minimal style of techno that was much further removed from Chicago House than the first wave Detroit techno. Andy Thomas has pointed out that this new sound was a deliberate act of reclaiming the music from Europe, where the music had flourished, but had also become pasteurized in some cases, in its popularity.

If the approximation of techno became in many cases a watered-down or misrepresented version of the raw electronic soul of the original pioneers, back in Detroit, the second wave went deep. At the head of the pack, Carl Craig took the jazz influences that ran through the work of Derrick May to the next level with releases on his own Planet E label such as Innnerzone Orchestra’s “At Les”^{*} and “Bug in the Bassbin,”^{*} a journey that would lead to his recent collaboration with elders from Tribe Records. (Thomas).

In this regard, the second wave of Detroit techno, with its harder rhythms and anti-commercial stance, functioned similarly to bebop, in the way that African American musicians in the 1940s developed that musical discourse as a reply to the homogenization and commodification that

swing music had undergone during the hey-day of commercial big-bands such as those of Tommy Dorsey and Glen Miller.

Two important record labels representing the new harder style of techno were Underground Resistance and Plus8. In addition to its role as a record label in the traditional sense, Underground Resistance also functioned more broadly and conceptually as a musicians' collective rooted in a strong sense of political activism. Underground Resistance explicitly and deliberately highlighted what they understood to be the political aspects of techno music, situating their work in Detroit's racial and economic environment. Founded by Jeff Mills, Mike Banks, and Robert Hood, Underground Resistance functioned as a loose umbrella covering a group of second-wave Detroit techno musicians who, while each making music in a highly individualistic, even idiosyncratic style, nonetheless are united by a general sonic tendency toward minimalism, musical content that is at least partially derived generatively through computer algorithms, and an explicitly political stance rooted in racial identity.

Underground Resistance situated itself as "combatants" against the mainstream commercial entertainment industry, which they denoted as "the programmers" in tracks such as such as "Predator" (UR002, 1990), "Elimination" (UR009 1991), "Riot" (UR010 1991), and "Death Star" (UR022 1992). Underground Resistance's suspicious, antagonistic view of mass entertainment resonates strongly with an unlikely fore-bearer—Theodor Adorno, and examining this unlikely connection in detail proves to be very illuminating for a better understanding both of Adorno and Underground Resistance. However much Adorno seemed, on the surface, to despise vernacular musics such as jazz during his lifetime, he nonetheless articulates in much of his writing on music a vision of a future "possible music" that stands in opposition to what he

termed the “culture industry,” and which from our vantage point today seems to anticipate the music and philosophical stance of Underground Resistance.

Employing Adorno’s writings on music to examine and explain music that he himself would have been thoroughly perplexed and repulsed by involves reading him against the grain to some extent, but also taking his statements at face value yields surprisingly apt insights into the ways that the defiantly non-commercial music of Underground Resistance is situated both within and against mainstream culture. Adorno is one of the few cultural theorists to have given any serious consideration to music. As Robert Witkin points out, the majority of Adorno’s published work pertained to music (Witkin 2). This is even more remarkable when one considers that Adorno did not concern himself—as most cultural theorists who have written about music have done²¹—with the lyrics of music or the sub-cultures associated with particular musical genres, but rather with the abstract idiom of instrumental music. As Susan McClary has written of Adorno: “In his hands, the presumably nonrepresentational instrumental music of the canon becomes the most sensitive barometer in all of culture. It is thereby made available to social criticism and analysis” (*Feminine Endings* 28–29). As such, McClary maintains that Adorno’s work points the way for “getting beyond formalism” in studies of instrumental music (*Feminine Endings* 29), showing that instrumental music in itself, though often thought of as existing in a realm removed from the materiality of everyday life, is politically and culturally relevant. Therefore, despite Adorno’s own professed disdain for “popular” music as he understood it in the mid twentieth century, his theories can help to understand the ideological and cultural forces at work in and around the production of techno music.

21. Edward Said and Angela Davis are notable exceptions.

Furthermore, Adorno himself was a composer, and he focused much of his theoretical discourse—especially his writings on art and aesthetics—on the ways that music functioned within a capitalist society, where music is commodified, marketed, and consumed. This makes Adorno’s theories especially pertinent to today’s musical/cultural environment, in which recent technological and political forces (digital sampling, downloads, file sharing, consolidation of recording industry corporations, deregulation of radio stations, music-streaming, satellite radio, etc.) have radically altered the ways that music is produced and consumed. More than ever, music exists as a commodity, and recent scholars have found that Adorno, writing in the mid-twentieth century, presciently described the forces we see at work today, and how these would affect music.

Adorno believed that 12-tone music, as a rigorous system and application of atonality and chromaticism, was the ultimate musical expression of modern alienation in a modern world of increasing rationalization and mechanization. By implicitly acknowledging this alienation, 12-tone music, as developed and codified by the second Viennese school—led by Schoenberg, Berg, and Webern—was an intellectually honest art form, in contrast to popular music, which in reinforcing mechanization constitutes a false consciousness. In Adorno’s view, popular music reinforces mechanization because it is highly standardized, with individual works (“songs”) constituting only slight, superficial variations on the fundamental characteristics of the idiom. In its rigid standardization, popular music merely reproduces itself over and over through individual songs that superficially consist of some easily recognizable identifiable marker of false individuation (what is today referred to as a pop song’s “hook”)—thus Adorno maintains that no real innovation or creativity is possible within the constraints of popular music, and “nothing fundamentally novel will be introduced” (“On Popular Music” 438). In popular music, “position

is absolute. Every detail is substitutable; it serves only as a cog in the machine” (Adorno, “On Popular Music” 440). By contrast, in modernist art music, and especially in 12-tone music, surface details of musical materials (musical themes, motifs, tonal arrays, rhythmic and harmonic patterns), are all reflective of the larger structure of a given work—the micro level of detail reinforces the macro level of structure, and therefore these surface details are unique to each work.

On first consideration, Adorno’s criticisms of popular music seem to function as an especially trenchant critique of techno music. Techno is, after all, composed of the type of “cogs” Adorno disdains, being built up of cyclical structures (“loops”) that are brought in and out of the mix of a track, and which are combined and recombined in various ways throughout the duration of a track. The large-scale structures of techno tracks are not reflective of these smaller units; in fact, most techno tracks adhere to a common standardized structure, consisting of an intro comprised of rhythmic loops; a buildup in which more instrumental parts are sequentially introduced and layered on top of one another; a drop, where sub-bass frequencies are suddenly introduced; a breakdown, where the multi-layered sounds are suddenly taken out of the mix; then a gradual buildup where the individual parts are reintroduced, often with some new melodic motif; followed by the peak of the track, where all the previous parts are played at once; and finally an outro section, in which the individual parts are gradually stripped away, ending with rhythmic percussive elements playing alone, as in the intro section. But the micro-level structural units within the structure of most given techno tracks are apparent at the larger level of structure within a DJ’s set, in which several tracks are played continuously, beat-matched by the DJ to achieve seamless, non-stop transitions between tracks. Techno tracks do function as self-contained entities, yet they are typically structured to allow for their easy incorporation into a

DJ's set. The reason that intro and ending sections, for instance, are usually comprised solely of rhythmic percussive elements is to avoid harmonic and melodic clashes with the next and the previous track that the DJ is mixing into or out of. Furthermore, although a good DJ is cognizant of building the emotional and rhythmic intensity over the course of an hour or longer set of continuous music, each track in the DJ's set is more or less interchangeable with countless other tracks—each track indeed serves as a “cog in the machine.”

And yet, the standardization and repetition inherent in techno music does not seem to function in the same way as Adorno finds the repetitive and interchangeable elements do in a typical pop song, as a means of dulling sensibilities. Rather, many listeners have pointed out that the machine-precision of the music tends to have a liberating effect, inducing trance states and euphoria. Minimalist music such as techno, unlike a pop song, is not structured around a narrative. As such, minimalism in both the aural and visual arts lacks references that can be decoded. This point is reinforced by Simon Reynolds, who argues that techno music, unlike most other forms of “popular” music, is not based on storytelling. Rather than decoding the meaning of a song, close listening to techno involves paying attention to how the track (“song”) *works* (9). In this regard, techno music functions like jazz, in that both styles are primarily instrumental in nature, with only minimal use of vocals whether sung or spoken. Being an instrumental form of “popular” music, the two styles exist both within and without the standard pop music world. Just as jazz has functioned as a kind of commentary on and extrapolation of popular music, techno productions function as commentaries on and extensions of popular music production. Techno and contemporary popular music share similar sonic palettes—electronic drum machine beats, synthesized textures, deep basses—and techniques and methodologies that appear first in techno productions often surface a few years later in mainstream vocal-oriented pop productions.

Furthermore, the types of extreme repetition that machines are capable of generating—the types that are used in techno music—function differently to “repetition” as a general concept deployed in minimalist music. As Ken McLeod notes, “In contemporary club/dance music . . . the use of technology, and its attendant hypnotically repetitive beats allows a type of technological spirituality—a literal transference of spirit from the machine to the body. In this manner, techno dance music defeats what Adorno saw as the alienating effect of mechanization on the modern consciousness” (“Space Oddities” 339). Because the repetitive mechanized beats of techno serve as a means of coping with and even overcoming the alienating effects of mechanization, techno music can thus be understood similarly to the way that Albert Murray frequently described jazz music: as a “technology of survival” for modern life. Joel Dinerstein, expanding on Murray’s idea, has written extensively in *Swinging the Machine* on how jazz music functioned as an aural artistic corollary to industrialization in the first half of the twentieth century, providing listeners and dancers of the swing era with a conceptual model for surviving and flourishing in the sped-up, temporally precise, potentially disorienting world of industrialized North American cities—Dinerstein understands jazz a kind of industrial music. Building on this insight, techno may be understood as a post-industrial music, being an aural and artistic corollary of the postindustrial world that has been in place in many urban areas since the late twentieth century. The repetition in techno music, then—a degree of repetition that Adorno could not have foreseen—provides the same liberatory effect that Adorno ascribed to aleatoric musical composition, becoming a way of subverting alienation, even as the music implicitly acknowledges that alienation.

Ironically, given Adorno’s disdain for popular music, some scholars have noted that Adorno’s ideas corroborate movements of resistance in popular music, despite how difficult it

must be for champions of a popular music genre to get past Adorno's unenlightened disparagement. In fact, this difficulty has often seemed insurmountable. In *Running with the Devil: Power, Gender, and Madness in Heavy Metal Music*, Robert Walser writes that "for those working in the area of popular music, the need to recoup that music from Adorno's damning criticism has taken precedence over the possibilities of adapting his methods to other ends (35)" Nevertheless, some writers have worked to adapt Adorno to such ends. Greil Marcus, in his magnificent reading of twentieth-century American history through the lens of punk music, *Lipstick Traces: A Secret History of the Twentieth Century*, states: "Probably no definition of punk can be stretched far enough to enclose Theodor Adorno. As a music lover he hated jazz, likely retched when he heard Elvis Presley, and no doubt would have understood the Sex Pistols as a return to Kristallnacht if he hadn't been lucky enough to die in 1969." But, he continues, "you can find punk between every line of *Minima Moralia*: its miasmic loathing for what Western civilization had made itself by the end of the Second World War was, by 1977, the stuff of a hundred songs and slogans" (67–68). Alex Ross cites an extraordinary passage from *Minima Moralia* in support of Marcus's claim, in which Adorno seems to prophecy a future possible alternative culture rising up from the people—a culture that is genuinely subversive, and which embraces discarded modes of production:

Progress and barbarism are today so matted together in mass culture that only barbaric asceticism towards the latter, and towards progress in technical means, could restore an unbarbaric condition. No work of art, no thought, has a chance of survival, unless it bear within it repudiation of false riches and high-class production, of color films and television, millionaires' magazines and Toscanini. The older media, not designed for mass-production, take on new timeliness: that

of exemption and of improvisation. They alone could outflank the united front of trusts and technology. In a world where books have long lost all likeliness to books, the real book can no longer be one. If the invention of the printing press inaugurated the bourgeois era, the time is at hand for its repeal by mimeograph, the only fitting, the unobtrusive means of dissemination. (Adorno, *Minima Moralia* 50–51)

This passage could be read as a manifesto of early techno music, which was after all characterized by a rejection of slick, “high-class production” standards. Adorno’s celebration of the mimeograph could just as easily be applied to the sampler—which is a kind of aural mimeograph machine—in that both mediums subvert bourgeois ideas of “intellectual property” that have been upheld by printing presses and record labels. Furthermore, the Detroit techno musicians’ own record labels, pressing limited runs of 12” singles by artists operating under a variety of aliases constitute Adorno’s “only fitting . . . unobtrusive means of dissemination.” It is also significant that here Adorno, who professed to despise jazz, pins his hopes for the success of the rebel forces on their capabilities for “improvisation” as a mode of “exemption” as he imagines how these future rebels might make use of outmoded technologies. Alex Ross points out that in this passage, Adorno “codified a mode of musical resistance that has spontaneously replicated itself through the decades. . . . Every decade, *Minima Moralia* finds fresh unconscious fulfillment” (“Young Adorno” 176).

Such interpretations suggest that Adorno’s work still holds a great deal of potential for application to musical styles that he himself disdained, and styles that he could not have envisioned prior to the musical-technological developments of the 1980s. With this in mind, it is

possible to reassess the common understanding of Adorno as an elitist snob, and instead to read his off-putting surliness as a quasi-punk snarl of resistance aimed at everything that truly sucks about the culture industry.

Conclusion: The third wave

It has been debated whether a third wave of Detroit techno actually exists. But in the mid 1990s, yet another new style of Detroit techno seemed to arise, centered around the musical production of what has become known as the Three Chairs collective, comprising Theo Parrish, Rick Wilhite, and Marcellus Pittman. If the first wave of Detroit techno could be thought of as an analogous development to swing music—in that both genres were African-American inventions that were quickly adopted and popularized by white musicians—and the second wave of Detroit techno was analogous to the developments of the bebop era of the 1940s and 1950s—in that both bebop and second-wave techno were artistic replies to the commercializations and commodifications of the previous era—then third-wave techno could be understood as analogous to the free jazz era of the 1960s—in that both genres politicized the artistic developments of the previous era, understanding their art as a form of politics.

The third wave's philosophical connections to free jazz have not gone unnoticed by some critics. In a retrospective overview of Detroit techno written in 2011 for the periodical *Wax Poetics*, Andy Thomas notes: “Whereas the original pioneers of electronic music in Detroit were sometimes penned in by the myth that had been created around their music, the understandably press-shy third wave refused to be boxed by media-friendly titles, producing instead what the Art Ensemble of Chicago termed just ‘great Black music.’” Detroit’s third wave of techno musicians understood their defiantly non-commercial stance not only as an aesthetic issue, as it had been in

the second wave, but understood it also as a political issue in that it challenged hegemonic power structures manifested in racial and class divides.

The comparison with earlier styles of African-American music is apt, for the story of Detroit Techno suggests, as do similar narratives in jazz and blues, that key musical movements in the United States have arisen and will continue to rise from marginalized communities without privileged access to cutting-edge technologies, but who nonetheless create art with the tools available to them—these key musical movements, in other words, are improvisationally-based. As Fishlin, Heble, and Lipsitz point out, rather than working from a pre-planned score or script (a prescriptive document rooted in a way of seeing (hearing) things “as they should be,” improvisers work with the materials they have on hand; they start with an open-eyed, open-eared acknowledgment of things “as they are.” From this basis they engage with and act upon these realities to change them. Improvisation is thus a model for effective social political change (xi–xii). And given the past patterns, it seems that these key musical movements will continue to have profound transnational implications and effects. Detroit techno musician Derrick May, in describing what made Detroit such a fertile ground for musical innovation, emphasizes this improvisational mindset when he says: “I think the impact of what happened is totally tied to the fact that it’s a city of improvisation. And that improvisation is more or less tied to an impoverished community that has had to find new ways of entertainment and new ways of survival” (qtd. in Thomas np).

May’s characterization of techno music as a survival technology is a fitting close to this examination of how African-American musical modernism has continued, through an ethos rooted in improvisation to express and respond to change, articulate resistance to the hegemonic

forces that attempt to impoverish communities, integrate sources from a variety of cultures, and use the past to envision the future.

WORKS CITED

- “2635 Locust St., Directions to 2658 Delmar Blvd, St.. St. Louis.” *Google Maps*,
<https://www.google.com/maps/dir/2635+Locust+St,+St.+Louis,+MO+63103/2658+Delmar+Blvd,+St.+Louis,+MO+63103/@38.6356803,-90.216415,18z/data=!4m13!4m12!1m5!1m1!1s0x87d8b35d2a802daf:0xf690e4aa9b95477c!2m2!1d-90.2149556!2d38.6346226!1m5!1m1!1s0x87d8b343557c2df3:0x6a02ce7b0bd55191!2m2!1d-90.2149591!2d38.6370359>
808. Directed by Alexander Dunn. *You Know Films*, 2015.
- Adorno, Theodor W. *Minima Moralia: Reflections on a Damaged Life*. Verso, 2006.
- . “On Popular Music.” *Essays on Music*, edited by Richard Leppert, U of California P, 2002, pp. 437–69.
- Afrika Bambaataa & the Soulsonic Force. *Planet Rock*. Tommy Boy, 1982.
- Albiez, Sean. “Post-Soul Futurama: African American Cultural Politics and Early Detroit Techno.” *European Journal of American Culture*, vol. 24, no. 2, 2005, pp. 131–52.
- Allred, Jeff. “From Eye to We: Richard Wright’s *12 Million Black Voices*, Documentary, and Pedagogy.” *American Literature*, vol. 78, no. 3, 2006, pp. 549–83.
- Arnold, Jacob. “When Techno Was House.” *Red Bull Music Academy Daily*, 4 Aug. 2017, <http://daily.redbullmusicacademy.com/2017/08/chicago-house-detroit-techno-feature>
- “ARP 2600 Synthesizer.” *Matrixsynth*, 27 Dec. 2010, <http://www.matrixsynth.com/2010/12/arp-2600-synthesizer.html>
- Assmann, Aleida. “Exorcising the Demon of Chronology: T. S. Eliot’s Reinvention of Tradition.” *T. S. Eliot and the Concept of Tradition*, edited by Giovanni Cianci and Jason Harding, Cambridge UP, 2007, pp. 13–25.
- Baker, Houston A., Jr. *Blues, Ideology, and Afro-American Literature: A Vernacular Theory*. U of Chicago P, 1984.
- . *Modernism and the Harlem Renaissance*. U of Chicago P, 1987.
- Balthaser, Benjamin. “Killing the Documentarian: Richard Wright and Documentary Modernity.” *Criticism*, vol. 55, no. 3, Summer 2013, pp. 357–90.

- Barkley Brown, Elsa. “‘What Has Happened Here’: The Politics of Difference in Women’s History and Feminist Politics.” *Still Brave: The Evolution of Black Women’s Studies*, edited by Stanlie M. James, et al., The Feminist P at the City U of New York, 2009, pp. 283–99.
- Bartz, Gary. *Harlem Bush Music*. Milestone, 1971.
- Battaglia, Andy. “Carl Craig.” *AV/Music*, 17 June 2008, <https://music.avclub.com/carl-craig-1798214217>
- The Beach Boys. *Pet Sounds*. Capitol, 1966.
- Bean, Daniel. “Juan Atkins Interview, Part One.” *Bleep43*, 4 Oct 2009, <http://www.bleep43.com/bleep43/2009/10/4/juan-atkins-interview-part-one.html>
- The Beatles. *Sgt, Pepper’s Lonely Hearts Club Band*. Capitol, 1967.
- Beauregard, Robert A. *Voices of Decline: The Postwar Fate of US Cities*. Blackwell, 1993.
- Berk, Mike. “Technology: Analog Fetishes and Digital Futures.” *Modulations: A History of Electronic Music*, edited by Peter Shapiro, Caipirinha, 2000, pp. 188–201.
- Berman, Marshall. *All That Is Solid Melts into Air: The Experience of Modernity*. Penguin, 1988.
- “The Birth and Growth of Detroit and Techno.” *The Detroit History Podcast*, 9 April 2018, <http://detroithistorypodcast.com/birth-growth-detroit-techno/>
- Bishop, Marlon, and Wills Glasspiegel. “Juan Atkins.” *Afropop Worldwide*, 11 June 2011, <https://web.archive.org/web/20110623194409/http://www.afropop.org/multi/interview/ID/203/a>
- Bone, Robert, and Richard A. Courage. *The Muse in Bronzeville: African American Creative Expression in Chicago, 1932–1950*. Rutgers UP, 2011.
- Born, Georgina. “On Musical Mediation: Ontology, Technology, and Creativity.” *twentieth-century music*, vol. 2, no. 1, March 2005, pp. 7–36.
- Brewster, Bill. “Interview: Neil Rushton.” *Red Bull Music Academy*, 6 July 2017, <http://daily.redbullmusicacademy.com/2017/07/neil-rushton-interview>
- Broonzy, Big Bill. “This Train.” *Trouble in Mind*, Smithsonian Folkways, 2000.
- Brown, Lee B. “Adorno’s Critique of Popular Culture: The Case of Jazz.” *Journal of Aesthetic Education*, vol. 26, no. 1, Spring 1992, pp. 17–31.
- Bush, John. “Juan Atkins.” *Global Darkness*, https://www.globaldarkness.com/articles/juan_atkins_model_500_cybotron_bio.htm

- Butler, Mark J. *Playing with Something That Runs: Technology, Improvisation, and Composition in DJ and Laptop Performance*. Oxford UP, 2014.
- Butler, Will. "History." *Different Fur Studios*. <http://differentfurstudios.com/history>
- Calinescu, Matei. *Five Faces of Modernity*. Duke UP, 1987.
- Campbell, Robert L., et al. "The Aristocrat Label." 15 Aug 2016, campber.people.clemson.edu
- Catlin, Roger. "To Really Appreciate Louis Armstrong's Trumpet, You Gotta Play It. Just Ask Wynton Marsalis." *Smithsonian.com*, 23 May 2016, <https://www.smithsonianmag.com/smithsonian-institution/to-really-appreciate-louis-armstrongs-trumpet-you-gotta-play-it-180959184/?no-ist>
- Chanan, Michael. *Repeated Takes: A Short History of Recording and Its Effects on Music*. Verso, 1995.
- Cianci, Giovanni, and Jason Harding. Introduction. *T. S. Eliot and the Concept of Tradition*, edited by Giovanni Cianci and Jason Harding, Cambridge UP, 2007, pp. 1–9.
- Collins, Phil. "One More Night." *No Jacket Required*, Virgin, 1984.
- Coltrane, Alice. *World Spirituality Classics 1: The Ecstatic Music of Alice Coltrane Turiyasangitananda*. Luaka Bop, 2017.
- Coltrane, John. *Live at Birdland*. Impulse, 1963.
- Connell, John & Chris Gibson. *Sound Tracks: Popular Music, Identity, and Place*. Routledge, 2002.
- "Copyright Law of the United States and Related Laws Contained in Title 17 of the United States Code." United States Copyright Office. Dec. 2016, <https://www.copyright.gov/title17/title17.pdf>
- Corbett, John. "Form Follows Faction? Ethnicity and Creative Music." *Microgroove: Forays into Other Music*, Duke UP, 2015, pp. 116–22.
- Cosgrove, Stuart. Liner notes. *Techno! The New Dance Sound of Detroit*, 10 Records, 1988. https://www.ele-mental.org/ele_ment/said&did/techno_liner_notes.html
- . "Seventh City Techno." *The Face* 97, May 1988.
- Crouch, Stanley. Liner Notes. *The Majesty of the Blues*, Columbia, 1989.
- . "Premature Autopsies (Sermon)," Part II of "The New Orleans Function ." *The Majesty of the Blues*, Columbia, 1989.
- Cybotron. *Clear*. Fantasy, 1990.

Cybotron. *Enter*. Fantasy, 1983.

———. *Techno City*. Fantasy, 1987.

Davis, Angela. *Blues Legacies and Black Feminism: Gertrude “Ma” Rainey, Bessie Smith, and Billie Holiday*. Pantheon, 1998.

Davis, Erik. “‘Roots and Wires’ Remix: Polyrhythmic Tricks and the Black Electronic.” *Sound Unbound: Sampling Digital Music and Culture*, edited by Paul D. Miller, MIT P, 2008, pp. 53–72.

Davis, Miles. *Agharta*. Columbia, 1975.

———. *Bitches Brew*. Columbia, 1970.

———. *In a Silent Way*. Columbia, 1969.

———. *Live-Evil*. Columbia, 1971.

———. *Miles Davis at the Fillmore*. Columbia, 1970.

———. *Milestones*. Columbia, 1958.

———. *On the Corner*. Columbia, 1972.

———. *Pangaea*. Columbia, 1976.

———. *A Tribute to Jack Johnson*. Columbia, 1971.

Death Grips. “Ring a Bell.” *Bottomless Pit*, Harvest, 2016.

Degiorgio, Kirk. “When Detroit Techno Came to the UK.” *Red Bull Music Daily*, 22 May 2018, <http://daily.redbullmusicacademy.com/2018/05/when-detroit-techno-came-to-the-uk>

Deniaud, John-Paul. “1981–1988: The True Story of Techno in Detroit, by the Pioneers.” *Trax*. 175, <http://en.traxmag.com/article/10149-1981-1988-the-true-story-of-techno-in-detroit-by-the-pioneers>

Denning, Michael. *Noise Uprising: The Audiopolitics of a World Musical Revolution*. Verso, 2015.

“Derrick May Remembers Frankie Knuckles.” *BBC Radio: 6 Mix*, <https://www.bbc.co.uk/programmes/p01wvgsc>

DeVeaux, Scott. “Constructing the Jazz Tradition.” *The Jazz Cadence of American Culture*, edited by Robert O’Meally, Columbia UP, 1998, pp. 483–512.

Dickey, Frances. "T. S. Eliot, Scott Joplin, and the Rosebud Club." The Louisville Conference on Literature and Culture, 22–24 Feb. 2018, University of Louisville, Louisville, KY. Conference Presentation.

Digable Planets. "It's Good to Be Here." *Reachin' (A New Refutation of Time and Space)*, Capitol, 1993.

Dinerstein, Joel. *Swinging the Machine: Modernity, Technology, and African American Culture between the World Wars*. U of Massachusetts P, 2003.

DJ Krush. "Roll & Tumble." *Krush*, Chance, 1994.

Double Dee & Steinski. *Lesson 1: The Payoff Mix*. Tommy Boy, 1985.

———. *Lesson Two: The James Brown Mix*. Tommy Boy, 1985.

———. *Lesson 3: The History of Hip-Hop Mix*. Tommy Boy, 1985.

Drake, St. Clair, and Horace R. Cayton. *Black Metropolis: A Study of Life in a Negro City*. U of Chicago P, 1993.

Drexciya. *Aquatic Invasion*. Underground Resistance, 1994.

———. *Deep Sea Dweller*. Shockwave, 1992.

———. *Drexciya 2: Bubble Metropolis*. Underground Resistance, 1993.

———. *Drexciya 3: Molecular Enhancement*. Submerge, 1994.

———. *Drexciya 4: The Unknown Aquazone*. Submerge, 1994.

———. *Grava 4*. Clone, 2002.

———. *Harnessed the Storm*. Tresor, 2002.

———. *The Journey Home*. Warp, 1995.

———. *Neptune's Lair*. Tresor, 1999.

———. *The Quest*. Submerge, 1997.

———. *The Return of Drexciya*. Underground Resistance, 1996.

"The Dummy Guide to Detroit Techno, Part I: Origins to Explosion." *Dummy*, 3 March 2012, <https://www.dummymag.com/features/the-dummy-guide-to-detroit-techno-the-first-wave>

"The Dummy Guide to Detroit Techno, Part II: The Second Wave to the Present Day." *Dummy*, 8 Aug 2012, <https://www.dummymag.com/features/dummy-guide-to-detroit-techno-part-ii-the-second-wave-present-day/>

Eliot, T. S.. "Tradition and the Individual Talent." 1919. *The Norton Anthology of Modern and Contemporary Poetry, Vol. 1*. 3rd ed., edited by Jahan Ramazani, Richard Ellman, and Robert O'Clair, W. W. Norton, 2003, pp. 941–47.

———. *The Waste Land*. 1922. *The Norton Anthology of Modern and Contemporary Poetry, Vol. 1*. 3rd ed., edited by Jahan Ramazani, Richard Ellman, and Robert O'Clair, W. W. Norton, 2003, pp. 474–87.

Ellison, Ralph. "Hidden Name and Complex Fate: A Writer's Experience in the United States." 1964. *The Collected Essays of Ralph Ellison*, edited by John Callahan, Random House Modern Library, 1995, pp. 189–209.

———. *Living with Music: Ralph Ellison's Jazz Writings*. Edited by Robert G. O'Meally, Random House, 2001.

Eshun, Kodwo. "Further Considerations of Afrofuturism." *CR: The New Centennial Review*, vol.3, no. 2, Summer 2003, pp. 287–302.

———. *More Brilliant than the Sun: Adventures in Sonic Fiction*. Quartet Books, 1998.

Ferris, William. "Richard Wright and the Blues." *Mississippi Quarterly*, vol. 61, no. 4, 2008, pp.539–52.

Fischlin, Daniel, et al. *The Fierce Urgency of Now: Improvisation, Rights, and the Ethics of Cocreation*. Duke UP, 2013.

Fluck, Winfried. "A New Beginning? Transnationalisms." *New Literary History* vol. 42, no. 3, 2011, pp. 365–84.

Franklin, Aretha. "Who's Zoomin' Who?" *Who's Zoomin' Who?* Arista, 1985.

Gabriele, Timothy. "The Audibly Deteriorating Landscape." *Pop Matters*, 5 March 2012, <https://www.popmatters.com/155083-the-audibly-deteriorating-landscape-2495880331.html?rebelltitem=1#rebelltitem1>

Gates, Henry Louis, Jr. *The Signifying Monkey: A Theory of Afro-American Literary Criticism*. Oxford UP, 1988.

Gaye, Marvin. "Sexual Healing." *Midnight Love*, Columbia 1982.

George, Leigh. "Imposed Integration: Folk Identity in *12 Million Black Voices*." *Rethinking Marxism*, vol. 11, no. 1, Spring 1999, pp. 49–71.

George, Nelson. *Buppies, B-Boys, Baps, and Bohos: Notes on Post-Soul Black Culture*. Harper Collins, 1992.

———. *Hip-Hop America*, Penguin, 1998.

Gilroy, Paul. *The Black Atlantic: Modernity and Double Consciousness*. Verso, 1993.

- . “Sounds Authentic: Black Music, Ethnicity, and the ‘Changing’ Same.” *Black Music Research Journal*, vol. 11, no. 2, Autumn 1991, pp. 111–36.
- Glasspiegel, Will. “Detroit Techno City: Exporting a Sound to the World.” *NPR Music*, 27 May 2011, <https://www.npr.org/sections/therecord/2011/05/27/136718287/detroit-techno-city-exporting-a-sound-to-the-world>
- Glasspiegel, Will, and Marlon Bishop. “Get Familiar with Detroit Techno: 10 Essential Songs.” *NPR Music*, 27 May 2011, <https://www.npr.org/2011/05/27/136655438/get-familiar-with-detroit-techno-10-essential-songs>
- Gluck, Bob. *You’ll Know When You Get There: Herbie Hancock and the Mwandishi Band*. U of Chicago P, 2012.
- Goehr, Lydia. *The Imaginary Museum of Musical Works*. 2nd ed. Oxford UP, 2007.
- Goldberg, David Albert Mhadi. “The Scratch Is Hop-hop: Appropriating the Phonographic Medium.” *Appropriating Technology: Vernacular Science and Social Power*, edited by Ron Eglash, et al., U of Minnesota P, 2004, pp. 107–44.
- “‘Good Life’ (Inner City Song).” *Wikipedia*, 8 Nov 2018, [https://en.wikipedia.org/wiki/Good_Life_\(Inner_City_song\)#cite_note-19](https://en.wikipedia.org/wiki/Good_Life_(Inner_City_song)#cite_note-19)
- Gordon, Robert. *Can’t Be Satisfied: The Life and Times of Muddy Waters*. Little, Brown, 2002.
- Gulbrandsen, Erling E. And Julian Johnson. “Introduction.” *Transformations of Musical Modernism*, edited by Erling E. Gulbrandsen and Julian Johnson, Cambridge UP, 2015, pp. 1–18.
- Guralnick, Peter. *Feel Like Going Home: Portraits in Blues and Rock ‘n’ Roll*. Back Bay, 1971.
- Habermas, Jürgen. “Modernity vs. Postmodernity.” *New German Critique* no. 22, Winter 1981, pp. 3–14.
- Haider, Shuja. “Letter of Recommendation: Detroit Techno.” *The New York Times Magazine*, 13 July 2017, <https://www.nytimes.com/2017/07/13/magazine/letter-of-recommendation-detroit-techno.html>
- Hamer, Mick. “Interview: Electronic Maestros.” *New Scientist*, vol. 24, no. 92, 16 March 2005.
- Hamilton, Marybeth. *In Search of the Blues: Black Voices, White Visions*. Jonathan Cape, 2004.
- Hancock, Herbie. *Crossings*. Warner Bros, 1972.
- . *Fat Albert Rotunda*. Warner Bros, 1969.
- . *Head Hunters*. Columbia, 1973.
- . *Mwandishi*. Warner Bros, 1971.

- . *Possibilities*. Penguin, 2014.
- . *Future Shock*. Columbia, 1983.
- . *Sextant*. Columbia, 1973.
- Haraway, Donna. *A Cyborg Manifesto*. 1985. Macat Library, 2018.
- Heble, Ajay, and Rob Wallace, eds. *People Get Ready: The Future of Jazz Is Now!* Duke UP, 2013.
- Helmling, Steven. "A Martyr to Happiness: Why Adorno Matters." *The Kenyon Review*, vol. 28, no. 4, Autumn 2006, pp. 156–72.
- Hendrix, Jimi. "Third Stone from the Sun." *Are You Experienced*, Track, 1967.
- . "Up from the Skies." *Axis; Bold as Love*, Track, 1967.
- Hill, Rebecca. "Is Resistance Futile? Cultural Studies at the Zenith of Neoliberalism." *American Quarterly*, vol. 64, no. 2, Jun 2012, pp. 345–56.
- Hoffmann, Heiko. "From the Autobahn to I-94: The Origins of Detroit Techno and Chicago House." *Pitchfork*, 28 Nov 2005, <https://pitchfork.com/features/article/6204-from-the-autobahn-to-i-94/>
- Holley, Eugene. "What Albert Murray Taught Us about Jazz." *A Blog Supreme*, 24 Aug. 2013, <http://www.npr.org/blogs/ablogsupreme/2013/08/24/214831904/what-albert-murray-taught-us-about-jazz>
- Holmes, Thom. "Sun Ra & the Minimoog." *Bob Moog Foundation*, 6 Nov. 2013, <https://moogfoundation.org/sun-ra-the-minimoog-by-historian-thom-holmes/>
- Horkheimer, Max, and Theodor Adorno. *Dialectic of Enlightenment*. Continuum, 1997.
- House, Roger Randolph III.. "Keys to the Highway": William "Big Bill" Broonzy and the Chicago Blues in the Era of the Great Migration. Dissertation. Boston University, 1981.
- Houston, Whitney. "I Wanna Dance with Somebody (Who Loves Me)." *Whitney*, Arista, 1987.
- Hughes, Langston. "The Negro Artist and the Racial Mountain." 1926. *The Norton Anthology of Modern and Contemporary Modern Poetry, Vol. 1: Modern Poetry*. 3rd ed., edited by Jahan Ramazani, et al., W. W. Norton, 1990, pp. 964–67.
- . "The Weary Blues." 1921. *Anthology of Modern American Poetry*, edited by Cary Nelson, Oxford UP, 2000, pp. 504–05.
- Hurston, Zora Neale. "Uncle Tom's Children." *Zora Neale Hurston: Critical Perspectives Past and Present*, edited by Henry Louis Gates, Jr. and K. A. Appiah, Amistad, 1993, pp. 3–4.

- Inner City. "Big Fun." *Paradise*, Virgin, 1989.
- . "Good Life." *Paradise*, Virgin, 1989.
- Innerzone Orchestra. "At Les." *Programmed*, Talkin' Loud, 1999.
- . "Bug in the Bass Bin." *Programmed*, Talkin' Loud, 1999.
- Iverson, Ethan. "Interview with Wynton Marsalis, Part 2." *Do the M@th*, <https://ethaniverson.com/interviews/interview-with-wynton-marsalis-part-2/>
- Jameson, Fredric. *Late Marxism: Adorno, or, The Persistence of the Dialectic*. Verso, 2007.
- . "Modernism and Imperialism." *Nationalism, Colonialism, and Literature*, Terry Eagleton, Fredric Jameson, and Edward W. Said, U of Minnesota P, 1990, pp. 43–66.
- Jenemann, David. *Adorno in America*. U of Minnesota P, 2007.
- Johnson, James Weldon. "Preface (from *The Book of American Negro Poetry*)". 1922. *The New Negro: Readings on Race, Representation, and African American Culture, 1892–1938*, edited by Henry Louis Gates, Jr. and Gene Andrew Jarrett, Princeton UP, 2007, pp. 426–48.
- Jordan, June. "Notes Toward a Black Balancing of Love and Hatred." 1974. *Some of Us Did Not Die: New and Selected Essays*, Basic, 2002, pp. 284–89.
- Jordan, Ken. "Freeze Frame: A Snapshot of Music Making on the Internet." *New Music Box*, 1 Oct 2002, <https://nmbx.newmusicusa.org/Freeze-Frame-A-Snapshot-of-Music-Making-on-the-Internet/>
- "Juan Atkins Interview with Wolfgang Gartner." *Dancemusic.about.com*
- Kahn, David. *Noise, Water, Meat: A History of Sound in the Arts*. MIT P, 1999.
- Keeling, Kara, and Josh Kun, "Introduction: Listening to American Studies," *American Quarterly* vol. 63, no. 3, Sep. 2011, pp. 445–59.
- Kelley, Robin D. G. "Notes on Deconstructing 'The Folk.'" *The American Historical Review*, vol. 97, no. 5, Dec. 1992, pp. 1400–1408.
- Kitwana, Bakari. *The Hip-Hop Generation: Young Blacks and Crisis In African-American Culture*. Basic Civitas, 2002.
- Koch, Lawrence O. *Yardbird Suite: A Compendium of the Music and Life of Charlie Parker*. Bowling Green State U Popular P, 1988.
- Kraftwerk. *Autobahn*. Philips, 1974.
- . *Computer World*. Kling Klang, 1981.

- . *The Man-Machine*. Kling Klang, 1978.
- . *Radio-Activity*. Kling Klang, 1975.
- . *Trans-Europe Express*. Kling Klang, 1977.
- Lennon, Peter. "One of Uncle Tom's Children." Interview with Richard Wright. *Conversations with Richard Wright*, edited by Keneth Kinnamon and Michel Fabre, UP of Mississippi, 1993, pp. 239–41.
- Les Sages Poetes de la Rue. *Teknik dans le peau*. Wotre Music, 1995.
- Levin, Michael, and John S. Wilson. "No Bop Roots in Jazz: Parker." *Downbeat*, 9 Sep. 1949, http://www.downbeat.com/default.asp?sect=stories&subsect=story_detail&sid=999
- Lewis, George. *A Power Stronger Than Itself: The AACM and American Experimental Music*. U of Chicago P, 2009.
- . "Gittin' to Know Y'all: Improvised Music, Interculturalism, and the Racial Imagination." *The Improvisation Studies Reader: Spontaneous Acts*, edited by Rebecca Caines and Ajay Heble, Routledge, 2015, pp. 296–320.
- . "Improvised Music after 1950: Afrological and Eurological Perspectives." *Black Music Research Journal*, no. 22, Supplement: Best of BMRJ, 2002, pp. 215–46.
- Lewis, Pericles. *The Cambridge Introduction to Modernism*. Cambridge UP, 2007.
- Lipsitz, George. "Listening to Learn and Learning to Listen: Popular Culture, Cultural Theory, and American Studies." *Locating American Studies: The Evolution of a Discipline*, edited by Lucy Maddox, The Johns Hopkins UP, 1999, pp. 310–31.
- . "Space." *Keywords for American Cultural Studies*, edited by Bruce Burgett and Glenn Hendler, New York UP, 2014, <https://login.ezproxy.lib.purdue.edu/login?qurl=http%3A%2F%2Fsearch.credoreference.com%2Fcontent%2Fentry%2Fnyupacs%2Fspace%2F0> Web.
- Locke, Alain. "The New Negro." 1926. *The Norton Anthology of African American Literature*, edited by Henry Louis Gates, Jr. and Nellie McKay, W. W. Norton, 1997, pp. 961–70.
- Lott, Eric. *Love and Theft: Blackface Minstrelsy and the American Working Class*, Oxford UP, 1993.
- Manuel, Peter. "Music as Symbol, Music as Simulacrum: Postmodern, Premodern, and Modern Aesthetics in Subcultural Popular Musics." *Popular Music*, vol. 14, no. 2, 1995, pp. 227–39.
- Marcus, Greil. *Lipstick Traces: A Secret History of the Twentieth Century*. Harvard UP, 1990.
- Marsalis, Wynton. *Black Codes (From the Underground)*. Columbia, 1985.

- . *Hot House Flowers*. Columbia, 1984.
- . *J Mood*, Columbia. Columbia, 1986.
- . *Live at Blues Alley*. Columbia, 1988.
- . *The Majesty of the Blues*. Columbia, 1989.
- . *Marsalis Standard Time, Vol. 1*. Columbia, 1987.
- . *Standard Time, Vol. 4: Marsalis Plays Monk*. Columbia, 1999.
- . *Think of One*. Columbia. 1983.
- . *Wynton Marsalis*. Columbia. 1982.
- Mason, Natasha. “Magnetic Music Roots: The Origin of Techno with Juan Atkins.” *Magnetic Magazine*, 17 Sep. 2015, <https://www.magneticmag.com/2015/09/magnetic-music-roots-the-origin-of-techno-with-juan-atkins/>
- Matisse, Henri. *Jazz*. 1941. George Braziller, 1992.
- Maxwell, William James. “Black Belt / Black Folk: The End(s) of the Richard Wright—Zora Neale Hurston Debate.” *New Negro, Old Left*. Columbia UP, 1999, pp. 153–78.
- McClary, Susan. “The Blasphemy of Talking Politics during Bach Year.” *Music and Society: The Politics of Composition, Performance, and Reception*, edited by Richard Leppert and Susan McClary, Cambridge UP, 1989, pp. 13–62.
- . *Feminine Endings: Music, Gender, and Sexuality*. U of Minnesota P, 2002.
- . “The Lure of the Sublime: Revisiting the Modernist Project.” *Transformations of Musical Modernism*, edited by Erling Guldbrandsen and Julian Johnson, Cambridge UP, 2015, pp. 21–35.
- . “Terminal Prestige: The Case of Avant-Garde Musical Composition.” *Keeping Score: Music, Disciplinarity, Culture*, edited by David Schwarz, et al., University Press of Virginia 1997, pp. 54–74.
- McGee, Alan. “Sound of the Outsiders.” *The Guardian*, 29 April 2008, <https://www.theguardian.com/music/musicblog/2008/apr/29/soundoftheoutsiders>
- McLeod, Ken. “Authenticity Within Hip-Hop and Other Cultures Threatened with Assimilation.” *Journal of Communication*, vol. 49, no.4, 1999, pp. 134–150.
- . “Space Oddities: Aliens, Futurism and Meaning in Popular Music.” *Popular Music* vol. 22, no. 3, Oct. 2003, pp. 337–355.

- Metzer, David. "Sharing a Stage: The Growing Proximity between Modernism and Popular Music." *Transformations of Musical Modernism*, edited by Erling Guldbrandsen and Julian Johnson, Cambridge UP, 2015, pp. 97–116.
- Milkowski, Bill. "Wynton Marsalis: One Future, Two Views." *Jazz Times*, 1 March 2000, <https://jazztimes.com/features/wynton-marsalis-one-future-two-views/>
- Miller, Karl Hagstrom. *Segregating Sound: Inventing Folk and Pop Music in the Age of Jim Crow*. Duke UP, 2010.
- Miller, Paul D. *Rhythm Science*. MIT Press, 2004.
- Mingus, Charles. *Mingus Ah Um*. Columbia, 1959.
- Mixon, Imani. "Detroit Is Techno City, and Techno Is Black." *Detroit Metro Times*, 23 May 2018, <https://www.metrotimes.com/detroit/detroit-is-techno-city-and-techno-is-black/Content?oid=12291432>
- Model 500. *No UFOs*. Metroplex, 1985.
- "Mojo WGPR circa 1983." *Miles*West*, 2010, <https://soundcloud.com/xmondj/mojo-wgpr-circa-1980>
- Monson, Ingrid. *Freedom Sounds: Civil Rights Call out to Jazz and Africa*. Oxford UP, 2010.
- . *Saying Something: Jazz Improvisation and Interaction*. U of Chicago P, 1997.
- Moore, Jack B. "The Voice in *12 Million Black Voices*." *Richard Wright: A Collection of Critical Essays*, edited by Arnold Rampersad, Prentice-Hall, 1995, pp. 140–47.
- Morden, Barbara. "The Waste Land: A Quest for Meaning." *The English Review*, vol. 21, no. 2, Nov. 2010, pp. 35–37.
- Morris, Martin. "Negative Dialectics in Music: Adorno and Heavy Metal." *European Journal of Cultural Studies* vol. 17, no. 5, 2014, pp. 549–66.
- Moss, Beverly J. "From the Pews to the Classroom." *Literacy in African American Communities*, edited by Joyce L. Harris, et al., Lawrence Erlbaum Associates, 2001, pp. 195–211.
- Moten, Fred. *In the Break: The Aesthetics of the Black Radical Tradition*. U of Minnesota P, 2003.
- Mr. Oizo. "Half an Edit." *Nazis*, F Communications, 2006.
- Muddy Waters. *The Complete Plantation Recordings*. Chess, 1993.
- "Muddy Waters—You'e Gonna Miss Me When I'm Gone (1981)" Youtube Video. <https://www.youtube.com/watch?v=uPQ5eOXcHbs>

- Murray, Albert. *The Hero and the Blues*. Vintage, 1996.
- . “Improvisation and the Creative Process.” 1983. *The Jazz Cadence of American Culture*, edited by Robert G. O’Meally, Columbia UP, 1998, pp. 111–13.
- . *Stomping the Blues*. New York: Da Capo, 1976.
- Narváez, Peter. “Unplugged: Blues Guitarists and the Myth of Acousticity.” *Guitar Cultures*, edited by Andy Bennett and Kevin Dawe, Berg, 2001, pp. 27–44.
- Neal, Mark Anthony. “No Time for Fake Niggas: Hip-Hop Culture and the Authenticity Debates.” *That’s the Joint!: The Hip-Hop Studies Reader*, edited by Murray Forman and Mark Anthony Neal, Routledge, 2004, pp. 57–60.
- . *Songs in the Key of Black Life: A Rhythm and Blues Nation*. Routledge, 2003.
- . *Soul Babies: Black Popular Culture and the Post-Soul Aesthetic*. Routledge, 2002.
- Nicholls, David. E. “The Folk, the Race, and Class Consciousness: Richard Wright’s *12 Million Black Voices*.” *Conjuring the Folk: Forms of Modernity in African America*, U of Michigan P, 2000, pp. 113–30.
- Nielsen, Aldon Lynn. *Black Chant: Languages of African-American Postmodernism*. Cambridge UP, 1997.
- Norris, Chris. “The 808 Heard Round the World.” *The New Yorker*, 13 Aug. 2015, <https://www.newyorker.com/culture/culture-desk/the-808-heard-round-the-world>
- North, Michael. *The Dialect of Modernism*. Oxford UP, 1994.
- Nowell, David. *The Story of Northern Soul*. Pavilion, 2012.
- O’Connell, Christian. “The Color of the Blues: Considering Revisionist Blues Scholarship.” *Southern Cultures*, Vol. 19, no. 1, Spring 2013, pp. 61–81.
- “Octave One: The Detroit Techno Pioneers Spill the Beans.” *Computer Music*, 5 Oct. 2016 <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&cad=rja&uact=8&ved=2ahUKEwi4gPmFxfAhWB0YMKHf7EAeYQFjAIegQIABAB&url=https%3A%2F%2Fwww.pressreader.com%2Faustralia%2Fcomputer-music%2F20161005%2F281578060151216&usg=AOvVaw2k94V1rhgC-MuK8fhS2HVp>
- Opperman, Derek. “How Patrick Gleeson Introduced the Synthesizer to Herbie Hancock and Changed Jazz in the Process.” *Red Bull Music Academy*, 27 May 2015, <http://daily.redbullmusicacademy.com/2015/05/patrick-gleeson-feature>
- Organized Konfusion. “The Extinction Agenda.” *Stress: The Extinction Agenda*. Hollywood BASIC, 1994.

Paddison, Max. *Adorno, Modernism, and Mass Culture*. Kahn & Averill, 2004.

———. “The Critique Criticized: Adorno and Popular Music.” *Popular Music* no. 2, 1982, pp.201–18.

Palmer, Robert. *Deep Blues*. New York: Viking, 1981.

Panken, Ted. “A 2006 DownBeat Feature on Wynton Marsalis, Who Turned 50 Yesterday.” *Today Is the Question: Ted Panken on Music, Politics, and the Arts*, 19 Oct. 2011, <https://tedpanken.wordpress.com/2011/10/19/a-2006-downbeat-feature-on-wynton-marsalis-who-turned-50-yesterday/>

Parker, Tristan. “Carl Craig and Innerzone Orchestra.” *Clash*, 11 Feb. 2009, <https://www.clashmusic.com/features/carl-craig-and-innerzone-orchestra>

Parliament. *The Clones of Dr. Funkenstein*. Casablanca, 1976.

———. *Funkentelechy vs. the Placebo Syndrome*. Casablanca, 1977.

———. *Mothership Connection*. Casablanca, 1975.

Pearl, Max. “Listen to a Playlist of Tracks from The Electrifying Mojo’s Radio Show.” *Resident Adviser*, 30 Jan. 2018, <https://www.residentadvisor.net/feed/104161>

Pease, Donald E. “Introduction: Re-mapping the Transnational Turn.” *Re-framing the Transnational Turn in American Studies*, edited by Winfried Fluck, et al., Dartmouth College P, 2011, pp. 1–46.

———. “National Narratives, Postnational Narration.” *Modern Fiction Studies*, vol. 43, no. 1, 1997, pp. 1–23.

Perez, Vincent. “Movies, Marxism, and Jim Crow: Richard Wright’s Cultural Criticism.” *Texas Studies in Literature and Language*, vol. 43, no. 2, Summer 2001, pp. 142–68.

Pinter, D. “Plagiarism or Inspiration?” *Soundscapes*, no. 18, Sep. 2015, http://www.icce.rug.nl/~soundscapes/VOLUME18/Plagiarism_or_inspiration.shtml#Note01

Pond, Steven J. *Head Hunters: The Making of Jazz’s First Platinum Album*. U of Michigan P, 2010.

Poniewozik, James. “Review: ‘She’s Gotta Have It’ on Netflix Is a Bold Reboot from Spike Lee.” *New York Times*, 22 Nov. 2017, <https://www.nytimes.com/2017/11/22/arts/television/shes-gotta-have-it-netflix-tv-review.html>

- Porter, Christopher. "Herbie Hancock: Ancient to the Future." *JazzTimes*, 1 Sep. 2002, <https://jazztimes.com/features/herbie-hancock-ancient-to-the-future/>
- Porter, Eric. *What Is This Thing Called Jazz? African American Musicians as Artists, Critics, and Activists*. U of California P, 2002.
- Potter, Russell. *Spectacular Vernaculars: Hip-Hop and the Politics of Postmodernism*, State U of New York P, 1995.
- Radano, Ronald. *Lying up a Nation: Race and Black Music*. U of Chicago P, 2003.
- . "Soul Texts and the Blackness of Folk" *Modernism/Modernity*, vol. 2, no. 1, 1995, pp.71–95.
- Radway, Janice. "'What's in a Name?' Presidential Address to the American Studies Association, 20 Nov. 1998." *American Quarterly*, vol. 51, no. 1, 1999, pp. 1–32.
- "Rain Dance." *Who Sampled*, <http://www.whosampled.com/Herbie-Hancock/Rain-Dance/>
- Rankovic, Catherine. "Teo Macero." *Perfect Sound Forever*, April 2008.
- Reilly, John M. "Richard Wright Preaches the Nation: *12 Million Black Voices*." *Black Literature Forum*, vol. 16, no. 3, Fall 1982, pp.116–19.
- Reynolds, Simon. *Generation Ecstasy: Into the World of Techno and Rave Culture*. Routledge, 1999.
- Rhythm Is Rhythm. *Strings of Life*. Transmat, 1987.
- Roach, Max. *We Insist! Max Roach's Freedom Now Suite*. Candid, 1960.
- Roggkamp, Karen. "Richard Wright's *12 Million Black Voices*: Refiguring the American Jeremiad." *The Langston Hughes Review*, no. 24, Winter/Fall 2010/2011, pp. 138–49.
- Rooney, James. *Bossmen: Bill Monroe and Muddy Waters*. Dial P, 1971.
- Rose, Tricia. "A Style Nobody Can Deal With: Politics, Style, and the Postindustrial City in Hip-Hop." *Microphone Fiends: Youth Music and Youth Culture*, edited by Andrew Ross and Tricia Rose, Routledge, 1994, pp. 71–88.
- Ross, Alex. "The Naysayers: Walter Benjamin, Theodor Adorno, and the Critique of Pop Culture." *The New Yorker*, 15 Sep. 2014, <http://www.newyorker.com/magazine/2014/09/15/naysayers>
- . "Young Adorno." *Transition*, no. 69, 1996, pp. 160–77.
- Rubin, Mike. "A Tale of Two Cities." *Spin*, vol. 14, no. 10, Oct. 1998, pp. 104–109.

- . “Techno: Days of Future Past.” *Modulations: A History of Electronic Music—Throbbing Words on Sound*, edited by Peter Shapiro, Caipirinha, 2000, pp. 108–129.
- Ed Rush & Optical. “Check-out Time.” *The Creeps*, Virus, 2001.
- Ryce, Andrew. “Why Drexciya Took Detroit Electro Underwater.” *Resident Advisor*, 16 Oct. 2018.
- Said, Edward. “Reflections on Exile.” *“Reflections on Exile” and Other Essays*, Harvard UP, 2000, pp. 173–86.
- Salaam, Kalamu ya. “Albert Murray on Ralph Ellison and the Aesthetics of Writing.” *Chicken Bones: A Journal for Literary & Artistic African-American Themes*, 21 May 2010, <http://www.nathanielturner.com/albertmurrayonralphellisonaesthetics.htm>
- Savage, Jon. “Machine Soul: A History of Techno.” *Village Voice Rock & Roll Quarterly Insert*, Summer 1993, http://music.hyperreal.org/library/machine_soul.html
- Schaub, Peter. “Beyond the Hood? Detroit Techno, Undergroun Resistance, and African American Identity Politics.” *fiar* vol. 2, no. 2, Oct. 2009, <http://interamericaonline.org/volume-2-2/schaub/>
- Scherman, Tony. “Driving Mr. Murray.” *The Big Roundtable*, 27 Feb. 2014, <http://www.thebigroundtable.com/stories/driving-mr-murray/>
- . “What Is Jazz?” *American Heritage Magazine*, vol. 46, no. 6, 1995, <https://www.americanheritage.com/content/what-jazz>
- Scherzinger, Martin Rudolph. “Music, Corporate Power, and Unending War.” *Cultural Critique*, no. 60, Spring 2005, pp. 23–67.
- Schroeder, Patricia R. *Robert Johnson, Mythmaking, and Contemporary American Culture*. U of Illinois P, 2004.
- Seigel, Micol. “Beyond Compare: Comparative Method after the Transnational Turn.” *Radical History Review*, no. 91, Winter 2005, pp. 62–90.
- Shallcross, Mike. “From Detroit to Deep Space.” *The Wire*, no. 161, 1997, pp. 18–22.
- She’s Gotta Have It*. Directed by Spike Lee, 40 Acres and a Mule Filmworks, 1986.
- She’s Gotta Have It*. Directed by Spike Lee, Netflix, 2017.
- Shusterman, Richard. “The Fine Art of Rap.” *New Literary History*, vol. 22, no. 3, 1991, pp. 613–32.
- Sicko, Dan. *Techno Rebels: The Renegades of Electronic Funk*. 2nd ed. Wayne State UP, 2010.

- Simon, Scptt J. "Antecedents of Digital Reproduction in Jazz Improvisation." *Leonardo Music Journal*, vol. 18, 2008, pp. 41–42.
- Smith, Suzanne E. *Dancing in the Street: Motown and the Cultural Politics of Detroit*. Harvard UP, 1999.
- "Steinski Gives a Sampling History Lesson." *NPR Music*, 22 Oct. 2008, <https://www.npr.org/templates/story/story.php?storyId=93844583>
- Stewart, Jesse. "DJ Spooky and the Politics of Postmodernism," *Black Music Research Journal* vol. 30, no. 2, Fall 2010, pp. 337–62.
- Sue, Craig, and Steve Jones. "The Mysterious Heart of the Roland TR-808 Drum Machine." *The Secret Life of Synthesizers*, 19 May 2018, <http://secretlifeofsynthesizers.com/the-strange-heart-of-the-roland-tr-808/>
- Sun Ra. *Atlantis*. Saturn Research, 1969.
- . *Cosmic Tones for Mental Therapy*. El Saturn, 1967.
- . *Interstellar Low Ways*. El Saturn, 1966.
- . *The Magic City*. El Saturn, 1966.
- . *My Brother the Wind, Vol. 2*. El Saturn, 1971.
- . *The Nubians of Plutonia*. El Saturn, 1966.
- . *Other Planes of There*. El Saturn, 1966.
- . *Space Probe*. El Saturn, 1974.
- . *Visits Planet Earth*. El Saturn, 1966.
- Tate, Greg. "Black Jazz in the Digital Age." *People Get Ready: The Future of Jazz Is Now!* edited by Ajay Heble and Rob Wallace, Duke UP, 2013, pp. 217–24.
- . "Why Jazz Will Always Be Relevant." *Fader*, 5 May 2016, <http://www.thefader.com/2016/05/05/jazz-will-always-be-relevant>
- Taylor, Timothy D. *Strange Sounds: Music, Technology, & Culture*. Routledge, 2001.
- Techno City*. Produced and directed by Ben Cohen, Third Ear. 2000, <https://www.youtube.com/watch?v=a2gr73FQ9-s>
- Thomas, Andy. "Electronic Enigma: The Myth and Messages of Detroit Techno." *Wax Poetics*, no. 45, Jan./Feb. 2011, <http://cdm.link/2011/06/future-shock-the-emergence-of-detroit-techno-told-by-wax-poetics/>

- Thompkins, Gwen. "Forebears: Bessie Smith, the Empress of the Blues." *NPR Music*, 5 Jan. 2018, <https://www.npr.org/2018/01/05/575422226/forebears-bessie-smith-the-empress-of-the-blues>
- Thompson, Michael J. "Th. W. Adorno Defended against His Critics, and Admirers: A Defense of the Critique of Jazz." *International Review of the Aesthetics and Sociology of Music* vol. 41, no. 1, June 2010, pp. 37–49.
- Titon, Jeff Todd. "Reconstructing the Blues: Reflections on the 1960s Blues Revival." *Transforming Tradition: Folk Music Revivals Examined*, edited by N. V. Rosenberg, U of Illinois P, 1993, pp. 220–240
- Tracy, Steven C. *Langston Hughes and the Blues*. U of Illinois P, 1988.
- "Transmat." *Discogs*. https://www.discogs.com/label/388-Transmat?sort=year&sort_order=
- Trask, Simon. "Future Shock." *Music Technology*, Dec. 1988, <https://web.archive.org/web/20080315234608/http://www.mobeus.org/archives/juanatkins/>
- . "Techno Rhythm." *Music Technology*, Nov. 1990, <http://www.muzines.co.uk/articles/techno-rhythm/452>
- . "The Techno Wave." *Music Technology*, Sep. 1988, <http://www.muzines.co.uk/mags/mt/88/09/81>
- Underground Resistance. *Death Star*. Underground Resistance, 1992.
- . *Elimination*. Underground Resistance, 1991.
- . *Predator*. Underground Resistance, 1990.
- . *Riot*. Underground Resistance, 1991.
- Universal Techno*. Directed by Dominique Deluze, La Sept-Arte, 1996.
- Vander Woude, Matthew. *The Recorded Music of Muddy Waters, 1941–1956: A Repertory Analysis and Anthology of Song Texts*. Thesis. York University, 1986.
- Wald, Elijah. *Escaping the Delta: Robert Johnson and the Invention of the Blues*. Amistad, 2004.
- Walmsley, Derek. "Monolake in Full." *The Wire*, Jan. 2010, <https://www.thewire.co.uk/in-writing/interviews/monolake-in-full>
- Walser, Robert. *Running with the Devil: Power, Gender, and Madness in Heavy Metal Music*. Wesleyan UP, 1993.
- Watson, Ben. "Frank Zappa as Dadaist: Recording Technology and the Power to Repeat." *Contemporary Music Review*, vol. 15, no. 1, Summer 1996, pp. 109–37.

Weheliye, Alexander. "Keepin' It (Un)Real: Perusing the Boundaries of Hip Hop Culture." *The New Centennial Review*, vol. 1, no. 2, 2001, pp. 291–310.

———. *Phonographies: Grooves in Sonic Afro-Modernity*. Duke UP, 2005.

Williams, Alastair. Review. *Adorno, Modernism, and Mass Culture*. Max Paddison. *Music & Letters*, vol. 78, no. 2, May 1997, pp. 306–09.

———. "Alastair Williams Reflects on Writing *Constructing Musicology*." *Ashgate Publishing Blog*, <https://ashgatepublishing.wordpress.com/2015/09/14/alastair-williams-reflects-on-writing-constructing-musicology/>

Williams, Raymond. *Marxism and Literature*. Oxford University Press, 1977.

Wilson, Olly. "Black Music as an Art Form." *Black Music Research Journal*, vol. 3, 1983, pp. 1–22.

Wiltshire, James. "Style Guide: Techno, Pt. 1: History and Sound Design." *Point Blank Music School*, 11 Oct. 2016, <https://www.youtube.com/watch?v=kXwA-BRoYQs>

Wirze, Stefan. "Illustrated Muddy Waters Discography." *Wirz' American Music*, 21 Nov. 2018, <https://www.wirz.de/music/waters.htm>

Witkin, Robert W. *Adorno on Music*. Routledge, 1998.

"'You're Gonna Miss Me' (2:50) 'Mean Red Spider' (2:41)." Review. *The Cashbox*, vol. 10, no. 21, 19 Feb. 1949, p. 9, <https://www.americanradiohistory.com/Archive-Cash-Box/40s/49/CB-1949-02-19.pdf>

Wright, Richard. *12 Million Black Voices: A Folk History of the Negro in the United States*. 1941. Basic Books, 2008.

———. *Black Boy*. Harper Perennial, 1998.

———. "Blueprint for Negro Writing." 1937. Reprinted in *Race & Class*, vol. 21, April 1980, pp. 403–419, doi: 10.1177/030639688002100405

———. "I Tried to Be a Communist, Pts. 1–8" *Atlantic Monthly*, Aug. 1944, pp. 61–70.

———. "I Tried to Be a Communist, Pts. 9–13" *Atlantic Monthly*, Sep. 1944), pp. 48–56.

———. Introduction. *Black Metropolis: A Study of Life in a Negro City*, St. Clair Drake and Horace R. Cayton, U of Chicago P, 1993, pp. xvii–xxxiv.

———. "Their Eyes Were Watching God." *Zora Neale Hurston: Critical Perspectives Past and Present*, edited by Henry Louis Gates, Jr. and K. A. Appiah. Amistad, 1993, pp. 16–17.

X-101. *Sonic Destroyer*. Underground Resistance, 1991.

———. *X-101*. Underground Resistance, 1991.