Whiteness as Improvisation, Nonwhiteness as Machine

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What's the meaning of the purported difference between "free jazz" and "free improvisation?" While some suggest that these terms demarcate two distinct, if closely related, musical practices, George E. Lewis demonstrates that the distinction does far less to clarify stylistic difference than it does to implicitly associate the term "free improvisation" with postracial whiteness and reinforce a racialized hierarchy within postwar experimental music.[1] Superficially, swapping "jazz" for "improvisation" between these two bigrams replaces a racialized marker with an ostensibly "raceless" noun describing a ubiquitous element of human action, thereby suggesting a postracial transcendence of social-categorical difference rather than racial specificity.[2] Nevertheless, as has been repeatedly shown, when race is nominally underspecified or "unmarked," whiteness is typically presumed, to the point that race is often only specified for nonwhite persons or contexts.[3] Moreover, the whitening effect of swapping "jazz" for "improvisation" is all the more apparent due to the racial identity of those who promote the substitution.[4] As always, however, that word—"white"—is conspicuously absent. Hence discourses on postwar avant-garde improvisatory practices are just another example of the typically indirect, covert, and oblique discursive marking of whiteness observed on numerous occasions by critical race scholars.

Lewis also illustrates how distinction between these two terms relies upon a set of racist essentialisms about the supposed intransigence of the nonwhite Other as opposed to the open-mindedness and progressivism of their white counterpart. As his critique shows, the supposed distinction between free jazz and free improvisation takes jazz, Blackness, and other cultural signifiers of nonwhite racial identification as forces detrimental to the achievement of "true" improvisation due to their purportedly

inherent fixity, rigidity, repetitiveness, and other attributes that prevent the display of novelty, originality, or creativity. "True," "total," or "nonidiomatic" improvisation, on the other hand, eschews indexes of racial location; by coincidence, the racial location from which it is most likely to be achieved just happens to be white.[5]

In Stuart Hall's lexicon, what Lewis describes is an "articulation" between whiteness and improvisation in the sense of a linkage between these two sociocultural categories that is consistently emphasized across a particular discursive zone while remaining in and of itself an inessential connection between these two categories.[6] For many, the articulation of improvisation with whiteness runs against a likely more widely known articulation of improvisation with nonwhiteness, especially jazz and other forms of African American music.[7] Paradoxically, then, improvisation is at one point articulated with whiteness, where elsewhere it is articulated with nonwhiteness. As contradictory as this may seem, this is also the essence of what Hall means by "articulation," which refers to associations that acquire significant representational power, while still remaining intrinsically nonessential and even contrived. Notwithstanding such articulations, the ubiquity of improvisation in all human practice remains.

But is it a mere coincidence, as Lewis implies, that the word "improvisation" is what sets free improvisation as a coded marker of whiteness against the term "free jazz?" Is this the same as all the other ways that other "racially neutral" terminology implicitly assumes and privileges whiteness as the unmarked category? In what ways might the concept or practice of improvisation be integral to the phenomenon of whiteness itself? Moreover, what is the relationship between the free improvisation discourses Lewis critiques and his pioneering work at the intersection of computation and improvisation? In the context of Lewis's work in this area, is it more than a coincidence that the discourses he critiques implicitly conceptualize nonwhite Others as if they were mere machines? In what ways do discourses on free improvisation exhibit the manner in which the metaphor of an unthinking, unchanging automaton is essential to how the nonwhite Other is often portrayed?

Drawing on a variety of forms of ethnographic participant observation conducted between 2008 and 2016 in scenes of free improvisation in Berlin, Chicago, and San Francisco, this article shows how a discourse articulating whiteness with improvisation and nonwhite Otherness with mindless, repetitive machines animates how performers participate in this practice. On one level, the articulation of whiteness and improvisation manifests itself through a variety of moments in which actors suggest that musical markers of Blackness or other nonwhite racial locations are inhibitory or detrimental to what they conceptualize as the ideal practice of free improvisation, or perhaps improvisation more generally. On another, it is made evident in the fact that the social milieux of this practice are not only dominated by white persons, but are inhospitable to or unwelcoming of nonwhites. This article focuses on the first of these two themes.[8] In effect, these two trends constitute a type of erasure of the

origins of the practice of free improvisation, which first came to prominence in the 1960s through the work of several African American jazz musicians interested in more open forms of improvised practice.

In addition to continuing to implicitly endorse the discursive opposition between "true" improvisation and nonwhiteness Lewis critiques, my ethnographic interlocutors readily display a worldview in which the nonwhite Other is metaphorically conceptualized as a kind of mindless machine. This is not unlike the conceptualization of nonwhite Otherness, particularly Blackness, as a form of being in which action is driven not by thought or rationality, but animality, sensuality, feeling, and embodiment. Indeed, both essentialisms rely upon the view that the nonwhite Other is a being (or really, a thing) that lacks the faculty of rational self-consciousness that would define a human in distinction from animal or machine.[9] While the conceptualization of the nonwhite Other as a being compelled by instinct rather than intellect is indeed relevant to several of the examples that follow, this article focuses its analysis on the relationship between improvisation, constructions of race, and the trope of the nonwhite Other as a machine.

The ethnographic episodes that follow highlight a relationship between race and technology distinct from the typical foci of recent criticisms of this intersection, which largely focus on algorithmic segregation of populations or related labor issues, among other pressing concerns.[10] More broadly, the ethnographic materials presented here raise the question of how improvisation may be essential to the concept, position, and practice of whiteness. The relationship between whiteness and improvisation takes two basic forms. On one level, these discourses reveal how the inherent vagueness and a priori indefinability of "free improvisation," as both term and practice, serve as a powerful metaphor for describing the correspondingly shapeless, featureless, and "colorless" nature of whiteness. On another, these discourses refocus attention on the manner in which improvisation is central to the construction of certain types of social privilege, whether in whiteness or another form. In other words, in what ways are the privileges of whiteness best understood as an ongoing practice of unfettered, or "free," improvisation?

Necessarily Vague

Vast and varied are the referents to which the terms "free improvisation," "free jazz," "improvisation," or "improvised music" can be attached. After all, if a practice, at least in theory, is "free improvisation," it follows that not much can be predicted about its precise form or outcome before it takes place. For many, free improvisation describes a practice first brought to prominence by Black jazz musicians in the early 1960s, in which performers are left at liberty to play as they choose over the course of the performance, which itself tends to be of indeterminate and highly variable duration, focusing on atonal, pulseless playing and the exploration of timbres beyond

pitch.[11] Yet the same term is easily applied to nineteenth-century European keyboard improvisation practices in which the performer extemporaneously composes as they perform.[12] The stark differences between these two practices reveal that mere mention of the term "free improvisation" cannot be expected to transparently indicate what sonic practices that bigram refers to or to prevent various interlocutors from reading those terms into their description of other improvisatory practices, or improvisation generally.[13] To make matters more complicated, scholarly usage of this term rarely pins it to specific social or sonic practices, thereby uncritically reaffirming the utopian notion that free improvisation is a practice of limitless musical liberty.[14]

To avoid this confusion, the ethnographic narrative presented here construes the term "free improvisation" not solely in terms of its sound and historical origins, but as a set of norms of discursive, communicative practice in everyday social interaction between performers of free improvisation, or "improvisers" as they more commonly refer to one another. While in a general context the term "improviser" used without specification refers to any of a number of different kinds of performers, in my fieldwork in these scenes, performers of free improvisation commonly used this term to refer to fellow members of the same artistic milieu and as a means of distinguishing from other kinds of improvisers in jazz or other improvisatory performance practices. Unless otherwise noted, subsequent usage of the term "improviser" is consistent with how performers of free improvisation use this term.

Generally speaking, what defines the practice of free improvisation as a sociocultural phenomenon is not only its sound or history, but the way that performers habitually refrain from specifying their expectations about how other players should conduct themselves in performance. Whether or not performers are "free" to play as they wish, my ethnographic participant observation as a woodwind player in these scenes has repeatedly revealed the many ways that these musicians expend considerable effort to avoid the slightest hint of what they think others should do or what they should have done. This is a consistent communicative, interactional habit across the three scenes in which I have been active as a performer. Thus, it is less useful to take free improvisation as a practice enabling the creative liberty of its performers (which romanticist takes on free improvisation tend to suggest) and more helpful to understand it as a set of subculturally specific routines of human communication enabling a collective illusion that improvisers are "free."

For example, when I asked "Carl," a white Chicago-based improvising cellist and concert organizer, in early 2008 to describe what he felt makes a player a good improviser, he roundly rejected the idea: "There's no such thing as a 'good' improviser."[15] Besides the explicit denial of aesthetic hierarchy in free improvisation, other communicative habits endorsing the notion of "freedom" include: refusing pedagogical authority over others, avoiding clarifying expectations to other players whether verbally or nonverbally (i.e., interperformer "glare"), feeling the need to give obligatory praise, declining to criticize others when requested to do so, viewing

competitive behavior as taboo, and numerous other social behaviors enacting a facade of "freedom" and "egalitarianism" among these performers.[16] Since these behaviors do indeed tend to negate the possibility of predicting the outcome of these performances, it is perhaps understandable that scholars rather rarely give a specific definition of free improvisation in terms of its sound and other generic traits.

A similar dialectic of vagueness and specificity surrounds the terms "whiteness" and "white privilege." On a superficial level, "whiteness" refers to phenotypic skin color as well as sociocultural attributes assumed to be essential features of those with this phenotype. Yet as examples detailed later in this article suggest, whiteness is not always the exclusive property of the phenotypically white and is often temporarily, if infelicitously,[17] appropriated by phenotypically nonwhite persons or "honorary whites."[18] Likewise, "whiteness" also refers to the numerous ways in which white persons and their purportedly essential cultural traits function discursively as the default category; that is, when race is unspecified or "unmarked," whiteness is presumed. Similarly, the term "white privilege" certainly does describe the way that white persons and any cultural phenomena associated with this racial location are ceded pride of place by others. At the same time, white privilege overlaps quite significantly with the postracial aspiration of "freedom from race" in the sense of a desire for a world in which race is no longer consequential, or in a less utopian sense, a world in which one can deny ever benefiting from white privilege at all.[19] White privilege is not only the ascription of greater hierarchical value to white persons or associated cultural phenomena, but the power to act without constraint (or at least without constraints faced by others), to remain undefined, default, or unmarked, and thereby retain an effectively invisible position from which one can define, delimit, and circumscribe the possibilities of others.

Disclosing Expectations in the Presence of a Machine

While improvisers largely decline to explicitly state their concept of ideal practice in free improvisation, they occasionally break this silence under exceptional circumstances. One such circumstance arises when they encounter a humanlike, artificially intelligent virtual improviser and are asked to compare their experience playing with this system to playing with a human musician. Alongside canonical methods of ethnographic work on music, such as participation as a performer (primarily as a woodwind player) or concertgoer, I have staged encounters between nearly one hundred improvisers, primarily in Berlin, Chicago, and San Francisco, and Maxine, a virtual improviser I designed myself.[20] Similar in concept to George E. Lewis's Voyager system (but distinct in design), Maxine takes the role of a fellow improviser by composing and producing sonic outputs in real time through a loudspeaker while adjusting to the performance context (i.e., the ensemble sound) through algorithmic analysis and interpretation of incoming audio signal from microphones.[21]

Maxine is an algorithmic ethnographic depiction of free improvisation as a subculturally specific form of human social interaction and is based on my participant observation in this practice, primarily as a performer, but also as a concertgoer and listener of the recorded archive of this practice. Just as an ethnographic monograph is a scholar's depiction of specific social realms, so it is that Maxine not only portrays, but performs, an interpretation of what human interaction is like in a given social world. I designed Maxine to resemble human improvisers as much as possible using an iterative process of playing with the system myself, comparing this to playing with other people, rebuilding the system accordingly, continuing to play with the system, and so on. That is to say, Maxine was not designed based on my knowledge of other systems, such as Lewis's Voyager, but my own interpretation of my experience making music with other improvisers, primarily in Chicago. While many improvisers who have encountered this system in my fieldwork find it readily resembles a human player, Maxine is still just one scholar's subjective interpretation of this form of social life; the same is true for any and all ethnographic representations through other more conventional media, such as text.

Since I first designed Maxine in 2009, I have been interested in understanding how other improvisers experience playing with this system, especially given the inherent subjectivity of how such systems are designed.[22] Initially, my purpose in arranging for improvisers to play with Maxine and compare it to a human performer was to solicit feedback from others in order to use this commentary to refine the design of the system. However, just as Paul Dourish has suggested, commentary from the human interactant about their encounter with such systems can serve a purpose that goes beyond their typically very utilitarian conception as a space to mine for "implications for design."[23] Compared to their routine social interactions with one another, in which they refrain from divulging their concepts of the ideal practice of free improvisation, encounters with Maxine enable performers to be far more direct and explicit about these ideas than they would otherwise. For example, as "Torsten," a white Swedish bass player in his forties based in Berlin, put it to me during his meeting with Maxine in April 2015, "I *wish* I could tell other people things like this!"

A Machine with No Race?

Perhaps the most strikingly explicit conflation of whiteness and "postracialism" with the ideal practice of free improvisation emerged during an encounter between Maxine and "Joel," a white Chicago-based trumpeter and concert organizer in his late thirties, that I arranged at my apartment in the city's Logan Square neighborhood in December 2009. Though the majority of his professional musical activities and artistic reputation focuses on his involvement in free improvisation, Joel and I had initially met one evening at the "Carolina," a bar in Chicago's Bucktown neighborhood, where he ran a jazz jam session. Since then, he and I had played private improvisation

sessions as well as frequently ran into each other and seen each other perform around town at various venues hosting free improvisation and related musical practices.

For the first piece of the session, Joel and Maxine played a duo of just under seven minutes. In this case, I set the system to play a combination of instruments that Joel frequently performs with, including acoustic bass, drum kit, and piano, with each of these virtual players moving across the typical range of common practice and unorthodox sonification methods (or "extended techniques") that many improvisers regularly include in their sonic repertoire. In addition to these, another virtual "player," distinct from Maxine and without a specific name, in this ensemble used live sampling techniques to splice and manipulate audio material from the resultant "ensemble" of human and machine performers. As it usually is, Joel's playing was a mix of pitched material deploying and discarding harmonic organization at will as well as pitchless, noisy materials reminiscent of players like his contemporary the German trumpeter Axel Dörner.[24] As it would between human improvisers, the piece ended with a mutual "silence" in the sense of the cessation of intentional sound production by all players.[25] For an audio recording of Joel's improvised duo with Maxine, visit *www.press.uillinois.edu/journals/jac/media/vol_4_2021/*.

After the piece concludes, Joel expresses his satisfaction with the system's overall behavior, including, among other things, its ability to work with him to create what he finds to be a coherent ending to the piece. He then has many questions for me about how the system works. Though he has no real ability to understand what I am telling him, he continues to express praise and appreciation. He finds it "quite effective," noting how he appreciated its range of choices as a "player" and that he found it superior to Voyager, which he finds "ridiculously corny," though for better or worse, I did not press him to explain what he meant by this. While I do not necessarily agree with Joel, his opinion may be due to Lewis's use of a relatively early generation of MIDI instruments as Voyager's primary sound palette.

Joel is hardly the only musician I have engaged in this element of my fieldwork who is aware of Voyager, much less is he the only one to directly compare the two systems or do so in favor of mine. Obliquely, his comment already begins to reveal his stance on race, technology, and improvisation. While his praise may be a genuine expression of his aesthetic appreciation for Maxine, it nevertheless expresses a well-known stereotype about race and technology in which South Asians, such as myself, are assumed to possess greater gifts and aptitude in technical fields compared to African Americans.[26] Does Joel find that the system sounds better or is he simply prone to assuming it does given the race of its creator?

Overall, Joel finds that the system not only strongly evinces a human interactive, social presence but also the presence of improvisers whose work he values. He compares Maxine to a handful of players in particular. With the exception of one, all of them are white players he works with regularly. So strong is the resemblance that he describes it as "freaky."[27] In response, I explain that it was indeed my goal to

build an improviser that resembled the interactive patterns of this scene, a cohort of musicians who I did in fact intensely admire.

On that topic, I reciprocate Joel's praise with praise for his concert series at "the Starving Sage," a bar on Chicago's Northwest side where he happened to have also booked my group for the last concert of the year in late December. As I bring this up, Joel confesses that the group I was bringing violates a tacit rule he and his co-organizer "Chris," a Black drummer and composer, follow when booking the series: no vocalists.[28] He assures me that the breach was not my fault and resulted from a common procedure in which he gave me the date before requesting personnel information. He politely complains about the ramifications of the decision. As he explains, in order to avoid an overload of booking requests, he and Chris had taken an "arbitrary" decision early in the series's history to not include groups with a vocalist. He mentions that a similar mishap had taken place previously, in which "James," a Black woodwind player, had brought a Black vocalist named "Rashid," though I correct Joel as he misremembers the vocalist's name as "Hamid" (to which he has no significant reaction). In any event, he goes on to explain that the series had previously turned down even well-known vocal improvisers in the international circuit like the white Dutch improviser Jaap Blonk. While Joel may have foregrounded male vocalists excluded by this rule, the decision not to book vocalists may indeed be a manifestation of the typically misogynist, gendered dismissal of vocalists.[29]

Joel seems exasperated by the decision he made with my group. To try to calm him down, I switch to a more positive topic: "Shakti," the vocalist of the group I had booked at the Sage, and what I admire about working with her. Born, raised, and educated in India before taking up a successful career in information technology in the United States, Shakti had throughout cultivated her passion and skill in Hindustani classical music, an interest that eventually led her to set aside her primary occupation for the arts. This was the feature that drew me to work with her on the project I had booked for the Sage, *The Whiskey Book*, a collection of compositions for improvisers. While not explicitly rooted in South Asian musical structures per se, the project was a loose interpretation of these structures as they inevitably became part of my sonic upbringing as the child of two medical doctors who migrated to the United States from India in the 1960s. For an audio recording of a selection from *The Whiskey Book* entitled "Whiskey Sour," visit *www.press.uillinois.edu/journals/jac/media/vol_4_2021/*.

I never intended to write music that sounded like South Asian classical musics, nor does *The Whiskey Book* readily betray this influence to listeners unaware of this context. Formally, the book's compositions mainly use a basic structure featuring (1) a repeating accompaniment figure consisting of a few notes that vaguely suggests a particular tonality and (2) a series of melodies that each performer slowly spells out as the piece proceeds.[30] For the most part, none of this takes place with an intentionally pulse-based organization. Parts may be performed by any instrument, though I have usually assigned accompaniment figures to a bass player, often with another melodic

instrument improvising with the same materials. In terms of their "cognates" in South Asian musics, the accompaniment figures are roughly equivalent in function to the role of the tanpura or other drone instrument. The principal melodic lines, often played heterophonically by several players at once, resemble the net effect of the roles taken by soloist and accompanists in that tradition.[31] Though *The Whiskey Book* and South Asian musics are certainly distinct in structure, their commonalities greatly facilitated Shakti's ability to intuitively understand what I was trying to achieve. Yet Joel is not especially interested in hearing more about this. He politely affirms that he is looking forward to hearing the group at the Sage, noting that I had mentioned to him the other day that I really enjoyed performing *The Whiskey Book* at the Chicago Asian American Jazz Festival, or as Joel puts it, "the Asian Improv thing."

Postracial Improvisation

Noting Joel's disinterest in this topic, I push the conversation back to Maxine. This brings Joel back to his admiration for the system as well as his bright hopes for my future as a researcher. Though not an academic himself, he is excited about how my work can address what he feels to be the major shortcomings of scholarly work on improvisation, especially jazz. He takes issue with Paul Berliner's book on cognition in jazz and casts it as merely "notes to an incredible book that has yet to be written."[32] In response, I explain that my goal is mainly to use encounters like the one between Maxine and Joel as a means of eliciting commentary on how performers experience free improvisation as a form of social life and do so as a complement to the scholarship on this practice, which often focuses on the relationship between this musical practice, the civil rights era, and other social justice movements.[33]

Joel interjects:

What's interesting to me is that in [four second pause] the high—this is what it seems like to me, the higher on the scale you get as an improviser, the better you are, the less actual [six second pause], the less actual race content there is: [two second pause] Jewish, Indian, whatever, you know?

He goes on to clarify that "to [him], when [improvisation] gets to a certain level," all markers of racial location, as far as he understands them, are absent, though he notes there still are "incredibly effective" "Jewish," "Indian," and "African" forms of improvisation.

Not that there isn't effective improvising like that, but it's like when we're talking about the kind of improvising that I think that happens at the highest levels like here whether it be [three second pause] Larry Bridges, Beau, Bazi, Carl, Amos, you know? Whatever—these like, super high-level functioning people:

it's like the content it's kind of this like more—I mean everyone comes from where they come from but the content is all of this like, *sound stuff*, do you know what I mean?[34]

At face value, Joel's point is only that the best in musical improvisation is "postracial" in its avoidance of sonic connotations of racial specificity.[35] Yet carefully woven into his discourse is the presumption that whiteness itself is somehow postracial or that every race other than white is a "race" while whiteness is something else. "White" is noticeably absent from his list of races and types of "race content," for example.

His foregrounding of "Jewish" and "Indian" as racial categories reflects the identities of the two speakers present: he, a white Jewish man, and myself, a brown-skinned South Asian man, both of us born and raised in Chicago. Beyond this, however, the choice obliquely refers the deliberate racialization of improvised musics through projects like John Zorn's "radical Jewish culture"[36] series or "Asian Improv Records,"[37] as well as the aforementioned "Asian Improv thing," the Chicago Asian American Jazz Festival. Aside from general references, however, Joel expresses a clear, but indirect, judgment about *The Whiskey Book* and its invocation of "Indian" improvisational structures. Given his voluble praise for Maxine, which is a machine, it is ironic that he suggests that I, a human being, am lower "on the scale" as an improviser because my work uses racialized structures for musical improvisation.

It is notable that Joel places his Jewishness alongside brownness and Blackness in the larger category of "races." While American Jewish populations are now largely included in the category of "white," Joel places them in the same unit as two nonwhite racial categories.[38] In so doing, he figures Jewishness as a nonwhite racial category as well, thereby invoking a dated, though not entirely vanished, racial distinction between Jewish people and whites.[39] He could still be putting Jewishness within whiteness, but given how he enumerates races and that he twice mentions Jewishness specifically, there are good reasons to doubt this. Were whiteness a category of racialized musical improvisation for Joel, there would be nothing stopping him from saying so.

His listing of exemplars of racial transcendence in improvisation is a subtle, but consequential, expression of his conflation of whiteness, the postracial, and ideal improvisatory practice. Except for Larry Bridges and Bazi, his exemplars are all white men, though Bazi, a Chicagoan born to Middle Eastern immigrants, may pass for white due to his relatively light skin tone.[40] Joel's list articulates race transcendence more frequently with white men than with any other kind. Moreover, the white men are all mentioned by first names only. In part this is because he can reasonably assume our mutual familiarity with this list of names. Yet Carl, presumably the white cellist and concert organizer mentioned previously, is the namesake of another Carl, an elderly Black saxophonist, concert organizer, and key figure of the Association for the Advancement of Creative Musicians.[41] Larry Bridges is the only Black man in the list.

He is mentioned by full name rather than just a given name or surname. Discursively, this sets him off in a different category from the rest. Nevertheless, he is given as the first example of an artist who transcends race in the manner Joel idealizes.

Besides these subtleties of his spontaneous speech, however, the most characteristic marking of whiteness in his discourse is the very idea of racial transcendence itself. Superficially, whiteness seems limited to the cultural attributes of persons phenotypically white. Yet it is also a metaracial position that seeks a "freedom from race" in the same way as ideologies of colorblindness or postracialism.[42] For Joel, it is not just any whiteness that constitutes the position from which ideal improvising can take place, but a whiteness understood as a nonracial space, a whiteness construed as postracial in and of itself. By listing Jewishness, brownness, and Blackness together, he classifies nonwhiteness as a generic form of racial location that inhibits the ideal practice of improvisation. He need not state that whiteness is the position from which the best of improvised music emerges; this is marked in his spontaneous, discursive framing of race in relation to improvisation.

Joel also articulates whiteness with improvisation through an emphasis on their shared vagueness. Before it takes place, calling a performance "an improvisation" emphasizes the lack of definition or specificity of its outcomes. A similar logic applies in Joel's thinking on race and improvisation. "Race content" (other than whiteness, of course) is a threat to the vital indefiniteness that characterizes improvisation; it threatens to force definition and prescription into what ought to remain vague, indeterminate, and open ended. To remain undefined, formless, and unforeseen, Joel suggests that improvisation must be postracial. In his framing of the matter, this putatively postracial location just so happens to be white.

As he concludes, he moves away from negative definitions of what to avoid to positive affirmations of what to seek. His prescription is extraordinarily vague, however: "sound stuff." In the context of his expressed appreciation of the first piece he played with Maxine, it is clear what this means. By "sound stuff" as an ideal, he means any efforts an improviser makes to explore the timbral possibilities of their sonic tools that exceed common practice,[43] as is evident in both his own playing as well as the way Maxine avoids clearly pitched material and tonal organization more generally. "Sound stuff" on its own seems to suggest no particular racialization, no particular origin. Indeed, this is what Joel himself suggests by placing "sound stuff" as a priority that allows improvisers to escape where players "come from." Right in line with the broader trend of much sound studies research that implicitly assumes whiteness through repeated unmarked reference to "sound" or "the listener," Joel articulates "sound" with an eschewal of identity and history, thereby implicitly articulating it with whiteness as well.[44] More importantly, the particular "sound stuff" that Joel marks as valuable is precisely the same sonic material most valued by the field of contemporary "new music" (i.e., atonality, extended techniques, pitchless

sounds, noise), a domain that serves as a kind of sonic icon of whiteness due to the scene's overwhelming dominance of one racial group.[45]

Similarly, the priority of avoiding "race content" corresponds to the "no vocalists" rule of the Starving Sage concert series. Whether or not race can accurately be adduced from a speaker's voice, the idea that this is possible enjoys wide currency.[46] Regardless of whether the decision was as "arbitrary" as he says, not booking vocalists concords with Joel's ideals for free improvisation.

Joel is clearly aware that what he is suggesting is potentially offensive. Hardly void of communicative effect, his multisecond pauses indicate plenty of this kind of self-consciousness.[47] There is a six-second pause, for example, before he utters the phrase "actual race content," which is followed by a two-second pause before clarifying what he means by "race."[48] Similarly, he concedes that "everyone comes from where they come from" while making it clear that he would prefer that this not be audible in their reference to various forms of musical "race content."

Despite the force of his declaration, he positions it as mere personal opinion as if he and his perspective are relatively inconsequential even as it is clear to us both that his series at the Starving Sage is influential in the local scene. Avoiding "race content" is no objective truth; this is just "what it seems like to [him]." In this manner, Joel uses a discourse strategy in which "personal opinion" just by coincidence corresponds with the valuation of whiteness above all else. This is much like John Cage's dismissal of jazz, which retains the force of objective pronouncement while its utterer invokes a logic of democratic liberalism: others are free to play or enjoy jazz, but it is not Cage's place to stop them.[49] As elsewhere, "personal preference" is a discursive method of expressing covert racism.[50]

Nonwhite Otherness and "Machines"

Like a previous generation of improvisers, Joel articulates postracial whiteness with the ideal practice of free improvisation while characterizing nonwhiteness as harmful to the flourishing of free improvisation.[51] In doing so, however, he also articulates the boundaries of whiteness versus nonwhiteness and improvisation versus its failure with human versus machine. Whiteness is articulated with not only improvisation, but with humanness itself; nonwhiteness not only with the failure of improvisation, but with machines. This is a discourse that understands nonwhiteness as automaticity and nonwhites as machines.

The first layer of this discourse appears in Joel's dismissal of Voyager as "ridiculously corny," especially in relation to his rather strong praise for Maxine, which he directly compares by name to a mostly white list of Chicago collaborators. Superficially, Joel's thinking accords with a stereotype placing South Asians higher than Blacks on a racialized hierarchy of purportedly inborn aptitude in technical matters

and affinity with machines. This superficial implication aside, however, his distaste for Voyager, especially its sound, does more than just reinscribe this stereotype. As noted before, the sound of Voyager is unmistakably based in an early generation of MIDI technology. Maxine also uses MIDI, but does so in a manner that exploits Ableton Live's expansive possibilities for timbral manipulation in real time, possibilities that were far less practicable at the time Lewis first created Voyager. This allows Maxine to resemble more closely what many real improvisers do in terms of their nearly obsessive exploration of timbre as they improvise. For Joel, the particular sound and usage of MIDI in Voyager is one that fails to cleanse itself of its origins in a machine. This is the nearly same idea as his politely expressed aesthetic judgment against improvisers whose sound betrays "where they come from." While both Maxine and Voyager make use of loudspeakers rather than a physical instrument to generate sound, Maxine's sound more effectively evokes the image of a pianist preparing and tinkering with the instrument's strings or any of a number of common contrivances of free improvisational performance practice. To put it bluntly, in Joel's ears, the Black man's virtual improviser sounds too much like a machine where the brown one's sounds much more like his favorite white collaborators.[52]

The rest of Joel's articulation of nonwhites and nonwhiteness with machines and automaticity is far more subtle. While his comments do not suggest this when taken very literally, they cannot be fully extricated from a very old, Orientalist discourse in which the nonwhite Other has been repeatedly characterized as caught in a loop of repetitive, unthinking action from which they cannot escape. As Edward Said has carefully illustrated, characterizations of the Other are both about the Other as well as obsessively concerned with defining the white, European Self as all of what the Other is not.[53] What is often lost in this point, however, is that the Other is very frequently described as not just subhuman, but machinelike. The nonwhite Other, *their* society, and *their* culture are inherently "fixed, laid out, boxed in, imprisoned," "always the same, unchanging, uniform," confined to "stability and unchanging eternality,"[54] and so on. Said's collection of Orientalist discursive tokens only features one explicit mention of the Other as an automata; notably, this is the intersectional, double-essentialism of the Oriental woman who is "no more than a machine: she makes no distinction between one man and another."[55] Even so, it is hardly a leap from the discourse Said examines to say that it essentializes the Other as a machine disguised as a nonwhite person out in "the Orient."

Though it is rarely thought of as such, machines are a central metaphor in how stereotypes and essentialisms work as discursive techniques. To stereotype or essentialize is also to characterize and reduce the object of these techniques to an unthinking machine. Working in the wake of Said, Homi Bhabha distills stereotyping discourses down to their hallmark features. This kind of characterization relies centrally on the idea that the Other is indefatigably prone to "repetition," "fixity," "rigidity," remaining in "unchanging order," and exists as an "automaton."[56] Said

and Bhabha give us just glimmers of a discourse that is nearly ubiquitous. Chattel slavery, of course, is the literalization of this discourse as the abducted Black African is reduced to a mechanical tool of racial capitalism.[57] While slavery is the most abundantly obvious example of this worldview, it is by no means isolated. For example, eighteenth-century tinkerer Wolfgang von Kempelen's chess-playing "Turk" was an elaborate machinelike puppet dressed according to Hapsburg stereotypes of their Ottoman neighbors.[58] Not only does von Kempelen's mechanical Turk literalize the notion of nonwhites as machines, it does so rather violently as the Turk is actually operated by a white European. Similar ideas sit at the root of modern social science in which the cross-cultural study is imagined as time travel and the nonwhite Other as a living fossil unchanged from the dawn of time, thereby rendering the "elementary forms" of social life ripe for European scholarly vivisection.[59]

This worldview permeates jazz and postjazz discourses, including those on free improvisation. Adorno's dismissals of jazz are the canonical reference. While his essay "On Jazz" is best known for this line of thinking, "On Popular Music" spells the argument out more specifically, especially in the idea that the thirty-two-bar form and other kinds of "standardization" train the listener into metronomically regular emotional responses like Pavlov's dog or the invective that all jazz improvisation is just "pseudo-individualization."[60] Similarly, "Perennial Fashion" explicitly suggests true spontaneity is an illusion in jazz improvisation as it is typically "planned out in advance with machinelike precision."[61]

Derek Bailey's questionable distinction between "idiomatic" and "non-idiomatic" improvisation is the same lick on a different tune.[62] By pure coincidence, the "idiomatic" forms are all primarily associated with nonwhiteness, except for improvisatory practices in the European art music tradition, which are nearly absent in the era when Bailey writes. Nonwhiteness is defined, definable, and always already *ausgearbeitet* ("worked out").[63] Whiteness is indefinite, undefinable, intrinsically unforeseen. More importantly, like the colonialist, Orientalist "machine" Said criticizes, European improvisers imagine Blackness as a colonizing force from which they must seek "*Emanzipation.*"[64] African Americans have not only been previously enslaved, but apparently seek to turn the rest into human machines, a process from which white European musicians must seek to liberate themselves, supposedly.

Whether he is aware of this legacy or not, Joel is one of its inheritors and exhibits this legacy in our conversation about Maxine, Voyager, race, and improvisation. Even if he is more explicit about the articulation of postracial whiteness with the "highest levels" of improvisation, this coincides rather strikingly with the concomitant articulation of nonwhiteness with machines, fixity, and other factors deemed harmful to the flourishing of improvisation. Like his predecessors, he takes the white European Self as the true human and true improviser. The nonwhite Other may evince the sensation of improvisation but is ultimately merely a machine simulating this behavior.

Despite his dismissal of improvised musics based in "race content," Joel was, at least during the time of my fieldwork, an active performer in one form arguably fitting that criterion: jazz. After all, we first met at his weekly jazz jam session at the Carolina, a session he ran for several years both before and after my time in Chicago. Likewise, one of his primary sources of income was work as a store clerk at a large jazz-oriented record store downtown. Nevertheless, Joel's primary professional identity as an artist eschews jazz and tallies with the postracial aesthetics of free improvisation he asserts when meeting with me to play with Maxine. For Joel, jazz is a both a leisurely pastime as much as it is a source of labor and income. For example, when I first learned about Joel's Carolina session in 2007 from a white jazz keyboardist named "Dan," it was described as if the session were a sort of "hobby" for the house band, a kind of break from the more serious work they do the rest of the week, which ironically tends to pay far less than the Carolina session itself. The same is true for his record store clerk work. Just as he articulates "race content" with machines in his encounter with Maxine, his engagement with jazz implicitly associates this practice with the original sense of "robot": work.[65] Whether jazz is leisure or work for Joel, it remains something less serious than his primary artistic efforts.

Postracial Improvisation and the Nonwhite Musical Subject

Many will find Joel's articulation of the ideal practice of free improvisation with whiteness offensive. They may also be inclined to assume his worldview is an exclusively white one. Indeed, when I mentioned Joel's claim to a fellow music researcher, a white female music scholar with a permanent position at a major North American research institution, she felt there was no need for me to clarify that Joel was white, as if to suggest it were impossible for nonwhite persons to take a similar position.

Nevertheless, it is certainly the case that the experience of being a nonwhite person can yield a similar stance on aesthetics, race, and improvisation. Joel's comment startled me. The day after the session, I mentioned the episode to "Antoine," an African American improviser, multi-instrumentalist, and interdisciplinary media artist in his late twenties, who at that time was my roommate. Antoine's reaction was a mixture of laughter and shock. It was evident that he immediately recognized the range of benign and violent connotations of the idea that one should avoid "race content" to be "higher on the scale." His amusement at Joel's comment vaguely masked his continual stewing anger and frustration about how he has suffered the consequences of others holding such attitudes. Antoine was a pervasive presence as a performer in various segments of the Chicago scene and was frequently sought after as a collaborator on a range of projects. All the same, he hardly felt accepted by the elite cadre of white improvisers at the helm of several of the scene's principal venues and concert series, even after performing at each of these several times with other groups. For example, I was invited in December 2008 to perform at "the Stardust," a

bar on the city's near South Side that hosted a concert series run by several members of the city's elite cohort of white improvisers. Having played with him several times before, I invited Antoine to join. From the initial invitation through several weeks afterward, he was amused by the whole idea. In out-of-character fashion, he asked me to take photos of him on stage, joking that he was collecting "evidence," but of what exactly he did not say.

More broadly, Antoine has rarely reacted with anger to the small and large racist insults he has had to deal with over his lifetime. Instead, he has tried his best to laugh them off, smirking at their pathetic nature rather than letting his mood sink in recognition of what they really mean. Like many to whom life gives less than what basic decency would easily command, he finds ways to learn from these encounters despite their offensiveness. Joel's comment was no exception. Though it was obvious that it was a jab at the presence of people like me and Antoine in the scene, after a moment's laughter, Antoine suddenly seemed struck by a sense of truth in what Joel was saying.

Active as an improviser, Antoine had little interest in learning the stylistic rules of jazz improvisation, though he was continually inspired by certain jazz players like Yusef Lateef or Rahsaan Roland Kirk. Nonetheless, because of his skin color, concert organizers and fellow musicians consistently presumed his music was jazz and that it should be evaluated according to its often exacting aesthetic criteria. In my conversations about these issues with Antoine over the years, he has repeatedly indicated that he does not have the privilege that Joel does to refuse "jazz" as the category that defines his professional identity as an artist. Antoine is defined as an artist by his race. Joel retains the right to improvisation in a broad sense by remaining undefined despite his audible and weekly stewardship of the Carolina jam session. Like many African American performers before him,[66] Antoine is tired of the prejudice that if he appears on stage with a saxophone, then it is jazz that the audience should expect to hear. He often felt uncomfortable performing in jazz-oriented venues, largely because many concert organizers would invite him to do so simply because of his Blackness rather than his work itself. Likewise, he knew that what he performed tended to disappoint audiences of such venues.

Formally speaking, Antoine found that the orthodoxies of pitch and rhythm were how the conventions of jazz crept into one's work as an improviser. His own work at the time was driven by a rejection of tonal or metrical organization. Similarly, he expressed strong judgment against improvisers using these structures in their work. For example, when I would spend time practicing scales and jazz vocabulary at home, just as many saxophonists active in free improvisation do, Antoine would frequently mock me for "still playing just notes." Implicit in this aesthetic priority is the same characterization of jazz and tonality one hears in Joel's thinking as cultural systems driven by "rules" and nearly identical to mechanical operation rather than human expression.[67] Like Joel, it is the "sound stuff" that Antoine really cherishes. He values those who can produce sonorities beyond pitch using sound production techniques afield of the common

practice historical legacy of their given instrument or sound production apparatus. His body of work in recording and performance makes this commitment audible as well. Despite the vague hint of racial cleansing in Joel's comment, Antoine finds all the same that it describes an aesthetic position he values.

No Blues

In my fieldwork, improvisers have rarely stated the notion that free improvisation is based intrinsically in the exclusion of African American musical legacies as explicitly as the cases of Joel and Antoine suggest. The exceptional nature of such prescriptions is well highlighted in a humorous incident during a private playing session in Berlin that I participated in during the summer of 2012. The session was organized by "Yun," a cellist from Hong Kong in her early thirties. She had recently resettled in Germany to pursue postgraduate training at a major conservatory, after which she moved to Berlin to become part of the city's vibrant scene of free improvisation.

She invited me and another friend of hers from Hong Kong, a saxophonist, to a casual session at a local elementary school in Neukölln, a center of the city's thriving arts scene, where she worked as a part-time music instructor. In general, the arrangement of such sessions is vague; little more than date, time, and location are specified beforehand. It is often possible that one is summoned, however, to play something in particular rather than to just improvise. Given these ambiguities, improvisers often ask out of politeness if anyone, particularly the convener, has specific intentions or goals for the outcome of the gathering.

As I occasionally do in the midst of this vagueness, I asked if Yun wanted to play "anything in particular."[68] Breaking from her typically smiling, friendly demeanor, she winced her eyes at me and lowered her head as she sat with her cello and bow in her left hand. Deepening her voice and adding an uncharacteristic gravelly husk to its texture, she responded: "B-flat blues." After a moment of laughter, she counted off in 4/4. Though we started on her downbeat, the next half hour of playing was the typical mix of atonal, pulseless playing and exploration of extended techniques and unusual sonification techniques that characterize free improvisation. Yun, for example, often manipulated the sound of her strings using a variety of household clips.

Her joke establishes several points. By mocking the idea of a specific prescription of what should be played, she affirms the notion that what defines free improvisation as a sociomusical practice is the elimination of such prescriptions. But by referring to the blues specifically, she further confirms that a tacit taboo on competitive displays of musical competence is also what defines free improvisation.[69] In the particular way that she "calls a blues," Yun implicitly references jazz jam sessions while mocking their deeply competitive atmosphere and the thinly veiled machismo that typically grounds them as social events.[70] Poking fun at all this, she marks the

practice of free improvisation as one that works in opposition to the ritual meanings of jazz and its iconic use of blues as a cyclical form.

Aside from setting free improvisation in opposition to jazz, of course, Yun also affirms the racialized aesthetic hierarchy Joel and his predecessors have announced on several occasions. If she merely wanted to state that free improvisation is based in the disuse of normative frameworks like a composition or other specification that the musicians should play something "in particular," there would be no need for her to single out a musical form iconic of Blackness. She refers not just to "race content," but a rather consistent, cyclical, repeating form based in orthodoxies of rhythmic organization used as the basis for improvisation. Thereby, she casts Blackness as repetitive, formulaic, and fixed, recapitulating old white supremacist discourses on jazz from the time of early twentieth-century modernist musical criticism, which are repetitions of far older discourses and practices such as slavery that reduce nonwhites to nothing more than mindless machines.[71] Moreover, she also invokes tropes of mechanical repetition and automaticity with the count off. By no means should a count off be universally construed as an index of machines or metronomes. Here, however, given the marked and consistent manner by which improvisers have avoided pulse for half a century, the likelihood that Yun's count off indexes machines and automaticity is heightened.

It might seem unfair to implicate Yun in the perpetuation of a systematic valuation of whiteness above other locations given that she herself is nonwhite. Like me and many others, she experienced this nonwhiteness on a daily basis in Germany, where her skin color and appearance mark her as a "foreigner," this being true even for nonwhite people who were born and raised in Germany, are citizens, fluent in German, and so on.[72] All the same, merely being nonwhite does not prevent one from serving as a support mechanism for the edifice of white supremacy and whiteness.[73] Our assent, whether voluntary or coerced, is quite integral to the success of such systems.

From Aesthetics to Space and Technology

Outside the context of the ethnographic examples presented here, improvisatory practice is for the most part articulated with nonwhiteness rather than whiteness. The power of this articulation is so significant that it has frequently rendered the work of Black artists pursuing creative practices not based in improvisation as invisible, inaudible, or illegible as is amply illustrated in Lewis's history of the Association for the Advancement of Creative Musicians.[74] Discourses on free improvisation, on the other hand, enact an inverse of this articulation, in which improvisationality is more greatly associated with whiteness than Blackness. Like any and all racializations, the articulation of whiteness with improvisation is inessential. It does not undo the competing articulation of improvisation with nonwhiteness; it simply illustrates that

in some cases improvisation is articulated *with* whiteness. These connections can and will be severed at any time. Similarly, demonstrating an articulation of whiteness and improvisation is not in any way meant to signal the untold virtues of whiteness. Improvisation is simply an element of all human action, hence the relatively recent humble request that it be considered so.[75]

The foregoing ethnography of free improvisation does more than exemplify the "unmarked" quality of whiteness, in which it is presumed when race is not specified (i.e., "man" means "white man"). Whether this is "unmarking" or "exnomination," whiteness is defined by not only phenotypic traits or attendant cultural essentialism, but, rather paradoxically, by indefiniteness and indeterminacy itself.[76] In order to retain the power of defining others, it refuses its own definition. As a signifier of vagueness and the "unforeseen," improvisation is a metaphor that buttresses the indefiniteness of whiteness. This concept of improvisation, for example, is what allows Joel to minimize the role of jazz in his professional identity despite its centrality in his weekly performance activities. In other words, improvisation is an integral element of what white privilege is as a phenomenon. It is precisely this kind of privilege that Antoine cannot invoke as he and his work are continually reduced to "jazz."

Central to the distinction between whiteness as a kind of indefiniteness and nonwhiteness as always definable, predictable, and fixed is the mapping of this distinction to the boundary of human and machine. As outlined in the examples above, the nonwhite Other is understood as a kind of machine, a subhuman, tool-like thing incapable of breaking its pattern of action. In turn, the notion of the Other as a machine is integral to how stereotype and essentialism work as discursive constructions. That is, these both rely quite frequently on presenting the Other as a machine. Indeed, this may be one of the central issues that motivates the wave of criticisms of Othering in anthropological representation in the 1980s, where a concern for the fact that the Other was depicted with fixed attributes and prone to cyclical repetition can easily be understood as a very justifiable fear that many modes of ethnographic representation—including this one—easily risk mechanical reduction of the ethnographic subject.[77]

This highlights a relationship between race and technology that typically has been given less attention within recent criticism of the relationship between these two forces. This is not at all to say that commentary on algorithmic segregation of populations or the numerous racialized labor issues of digital economies are not urgent.[78] The point is simply that the very idea of the nonwhite Other as a machine is as crucial as any of these other investigations of this relationship.

The ethnographic materials presented here are only one part of the broader critique of whiteness in free improvisation; the other crucial element of this is an accounting of both the demographics of these scenes as well as the many microaggressions and other acts that preserve the dominance of white persons therein. Nonwhite

people are nearly absent in these scenes. Since the beginning of my involvement in free improvisation in the late aughts, I have typically been the only nonwhite person present at a session or concert. Over the same period of time, improvisers in numerous scenes I have participated in have often spoken of Berlin as the world's center of this practice. Indeed, the scene certainly featured the greatest frequency of performances per evening for any single scene in which I have been a participant, as is readily apparent from even casual perusal of the echtzeitmusik.de calendar. Yet during this same span of time, not one African American player has taken up long-term residence in Berlin to participate in this scene, this despite the numerous Americans who are integral elements of this scene historically. By numerical accounting, this scene overwhelmingly white.[79] So then what does it mean when the scene that so many hail as the world's center of free improvisation just happens to be so monoracial? Despite frequent claims other improvisers have made to me about how "cool" this scene is, others have also reminded me that it is only recently that seeing a neo-Nazi in close proximity on public transport would *not* be a daily occurrence. Similar trends were notable in my participation in both the Chicago and Bay Area scenes, where white participants were most visible and dominant. Of course, each of these scenes and cities has distinct racial and cultural histories that play a pivotal role in this monoracialism. Yet that suggests that it is all the more striking that I was so rarely in the company of another nonwhite person despite participation over more than a decade in these three scenes principally and several others quite often as well. A fuller account of these matters cannot be given here, but for now, it should be noted that the articulation of whiteness with free improvisation is not merely aesthetic, but very visible in the social demographics of these scenes as aggregations of individuals.

Notes

1. For an example of an assertion that the distinction between free improvisation and free jazz is relatively clear, see Jack Wright, *The Free Musics* (n.p.: Spring Garden Music Editions, 2017). Similarly, while John Corbett concedes that it is "difficult to distinguish" between free improvisation and free jazz, he nevertheless purports a variety of features that differentiate these two practices; see John Corbett, *A Listener's Guide to Free Improvisation* (Chicago: University of Chicago Press, 2016), 31–33. For Lewis's response to this type of claim, see George E. Lewis, "Improvised Music After 1950: Afrological and Eurological Perspectives," *Black Music Research Journal* 16, no. 1 (1996); George E. Lewis, "Gittin' to Know Y'all: Improvised Music, Interculturalism, and the Racial Imagination," *Critical Studies in Improvisation/Études critiques en improvisation* 1, no. 1 (2004).

2. While the specificity of improvisatory practices varies greatly, the role of improvisation in human action is widespread; see George E. Lewis and Benjamin Piekut, eds., *The Oxford Handbook of Critical Improvisation Studies*, 2 vols. (Oxford, England: Oxford University Press, 2016). Notwithstanding the racially heterogenous demographic and cultural-historical composition of jazz, the term implicitly references Blackness, even if this is a Blackness hybridized with other racial identity markers. While this reference is in constant dispute, it remains that the term refers to Blackness, at the very least.

3. On whiteness as unmarked, see Ruth Frankenberg, "The Mirage of an Unmarked White-ness," in *The Making and Unmaking of Whiteness*, ed. Birgit Brander Rasmussen et al. (Durham, NC: Duke University Press, 2001). On whiteness as the presumptive or default category, see John Hartigan Jr., "Establishing the Fact of Whiteness," *American Anthro-pologist* 99, no. 3 (1997); Philip A. Ewell, "Music Theory and the White Racial Frame," *Music Theory Online* 26, no. 2 (2020). On the specification of race for nonwhite persons (as opposed to the nonspecification of race for white persons), see Richard Dyer, *White* (London: Routledge, 1997).

4. Lewis, "Gittin' to Know Y'all."

5. As Lewis notes, the prime example of this discourse is Derek Bailey's *Improvisation: Its Nature and Practice in Music* (New York: Da Capo Press, 1993).

6. See Stuart Hall and Lawrence Grossberg, "On Postmodernism and Articulation: An In-terview with Stuart Hall," *Journal of Communication Inquiry* 10, no. 2 (1986): 53–55.

7. Laudan Nooshin, "Improvisation as 'Other': Creativity, Knowledge and Power—The Case of Iranian Classical Music," *Journal of the Royal Musical Association* 128, no. 2 (2003). Examples of this discourse are abundant, but the most proximate case is the manner by which the compositional activities of members of the Association for the Advancement of Creative Musicians are overlooked and minimized given an assumption that because they are African American, their primary music-creative method is improvisation; Ronald M. Radano, *New Musical Figurations: Anthony Braxton's Cultural Critique* (Chicago: Univer-sity of Chicago Press, 1993); George E. Lewis, *A Power Stronger than Itself: The AACM and American Experimental Music* (Chicago: University of Chicago Press, 2008).

8. The second theme, in which the social spaces where free improvisation takes place prove to be either dominated by white persons or unwelcoming of nonwhites, shall be dealt with on another occasion. Preliminarily, however, this theme is already illustrated in a recent quantitative sociological study of Berlin's scene of free improvisation; Tom Arthurs, "Improvised Music in Berlin 2012–13: A Brief Ethnographic Portrait," *Critical Studies in Improvisation/Études critiques en improvisation* 10, no. 2 (2015). This is especially striking given that throughout my ethnographic work on this practice, performers in this city and elsewhere have consistently touted it as the world's epicenter and largest concentrated zone of activity for free improvisation.

9. For an examination of these two tropes in relation to one another in the context of music, see Alexander Weheliye, ""Feenin": Posthuman Voices in Contemporary Black Popular Music," *Social Text* 20, no. 2 (2002).

10. Ruha Benjamin, *Race after Technology: Abolitionist Tools for the New Jim Code* (Cam-bridge, England: Polity Press, 2019); Lilly Irani, "Difference and Dependence among Digital Workers: The Case of Amazon Mechanical Turk," *South Atlantic Quarterly* 114, no. 1 (2015).

11. Prior to the 1960s, there were many scattered instances of extemporaneous performance practices that share the basic features of free improvisation; George E. Lewis, *A Power Stronger than Itself*, 40. Nevertheless, the practice of continuous extemporization for the duration of a performance first came to prominence in the work of a variety of African American musicians around 1960, perhaps most notably in the work of saxophonist, composer, and improviser Ornette Coleman. For discussion of the typical sonic features of free improvisation, see Chris Atton, "Genre and the Cultural Politics of Territory: The Live Experience of Free Improvisation," *European Journal of Cultural Studies* 15, no. 4 (2012); Melvin James Backstrom, "The Field of Cultural Production and the Lim-its of Freedom in Improvisation," *Critical Studies in Improvisation/Études critiques en improvisation* 9, no. 1 (2013).

12. Dana Gooley, Fantasies of Improvisation: Free Playing in Nineteenth-Century Music (New York: Oxford University Press, 2018).

13. See Lewis, "Improvised Music After 1950," 115.

14. Atton and Backstrom, mentioned above, are two notable exceptions to this trend. For several examples of such claims of the expansiveness of free improvisation, see John Zorn, ed., *Arcana: Musicians on Music* (New York, NY: Granary Books, 2000).

15. Unless otherwise noted, ethnographic interlocutors and performance venues have been given pseudonyms.

16. On refusing pedagogy, see Arthurs, "Improvised Music in Berlin"; Maud Hickey, "Learning from the Experts: A Study of Free-Improvisation Pedagogues in University Settings," *Journal of Research in Music Education* 62, no. 4 (2015). On avoidance of various forms of competition, see Diego Chamy, "Das Interaktion Festival: Eine kritische Verteidigung / The Interaktion Festival: A Critical Defense," in *echtzeitmusik berlin: selbstbestimmung einer szene / self-defining a scene*, ed. Burkhard Beins et al., trans. William Wheeler (Hofheim, Germany: Wolke Verlag, 2011). A full ethnographic illustration of these various methods is not possible here. Nevertheless, other work on free improvisation suggests how these take effect; David Borgo, "Synergy and Surrealestate: The Orderly Disorder of Free Improvisation," *Pacific Review of Ethnomusicology* 10, no. 1 (2002); Barbara Rose Lange, "Teaching the Ethics of Free Improvisation," *Critical Studies in Improvisation/Études critiques en improvisation* 7, no. 2 (2011); Amandine Pras, Michael F. Schober, and Neta Spiro, "What About Their Performance Do Free Jazz Improvisers Agree Upon? A Case Study," *Frontiers in Psychology* 8, Article 966 (2017).

17. This is in Austin's sense of the term and describes performative utterances or actions that fail to achieve their intended effect of changing a state of affairs in the social world; see John Langshaw Austin, *How to Do Things with Words* (London: Oxford University Press, 1962).

18. Eduardo Bonilla-Silva, "From Bi-Racial to Tri-Racial: Towards a New System of Racial Stratification in the USA," *Ethnic and Racial Studies* 27, no. 6 (2004).

19. See Shannon Sullivan, *Revealing Whiteness: The Unconscious Habits of Racial Privilege* (Bloomington: Indiana University Press, 2006), 191.

20. For an overview of the design of such systems, see Ritwik Banerji, "De-Instrumentalizing HCI: Social Psychology, Rapport Formation, and Interactions with Artificial Social Agents," in *New Directions in Third Wave Human-Computer Interaction*, ed. Michael Filimowicz and Veronika Tzankova (Heidelberg, Germany: Springer Nature, 2018). For a fuller account of this methodology and how Maxine is designed, see Ritwik Banerji, "Balancing Defiance and Cooperation: The Design and Human Critique of a Virtual Free Improviser," *Proceedings of the International Computer Music Conference* (2016).

21. George E. Lewis, "Interacting with Latter-Day Musical Automata," *Contemporary Music Review* 18, no. 3 (1999). Since Lewis's system, numerous other systems have been designed. See Kıvanç Tatar and Philippe Pasquier, "Musical Agents: A Typology and State of the Art Towards Musical Metacreation," *Journal of New Music Research* 48, no. 1 (2019).

22. As I detail elsewhere, design of the system came before I gave it a name and hence a gender as well; see Ritwik Banerji, "Maxine Banerji: The Mutually Beneficial Practices of Youth Development and Interactive Systems Development," *eContact! Journal of the Canadian Electroacoustic Community* 12, no. 3 (2010). I never designed the system to exhibit feminine gendered behavior, nor does its behavior consistently conform to any particular gender stereotype, especially since its behavior is rather unpredictable overall. Indeed, across the nearly one hundred improvisers who have played with Maxine, the system's behavior has been experienced and described in such a variety of ways that it is difficult to discern a single, obvious stereotype of gendered behavior, feminine or otherwise, in its engagement with human players.

Surprisingly, it is rather rare for designers of such systems to ever admit to the fundamentally subjective interpretation of free improvisation that inevitably drives the design of such a system. Besides myself and Lewis, who nearly describes Voyager as if it were

yet another member of the Association for the Advancement of Creative Musicians, Ben Carey is the only other designer who admits to the unavoidable fact that such systems are a reflection of the personal cultural trajectory of their creators; see George E. Lewis, "Too Many Notes: Computers, Complexity and Culture in *Voyager*," *Leonardo Music Journal* 10 (2000); see also Benjamin Carey, "Designing for Cumulative Interactivity: The _derivations System," Proceedings of the International Conference on New Interfaces for Musical Expression, Ann Arbor, MI (2012).

23. Paul Dourish, "Implications for Design," Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (2006).

24. For representative examples of this kind of playing, hear Axel Dörner, *Trumpet*, A Bruit Secret (2001), CD.

25. Strictly speaking, "silence," as the absence of sound, is not possible; see John Cage, *Silence: Lectures and Writings* (Middletown, CT: Wesleyan University Press, 1961).

26. Ebony O. McGee, Bhoomi K. Thakore, and Sandra S. LaBlance, "The Burden of Being 'Model': Racialized Experiences of Asian STEM College Students," *Journal of Diversity in Higher Education* 10, no. 3 (2017); Ebony O. McGee, "Devalued Black and Latino Racial Identities: A By-Product of STEM College Culture?" *American Educational Research Journal* 53, no. 6 (2016).

27. It is beyond the scope of this article, but Joel's reaction is a classic instance of the "uncanny valley" phenomenon; see Masahiro Mori, "The Uncanny Valley," *Energy* 7, no. 4 (1970); for an English translation of Mori's original Japanese, see Masahiro Mori, Karl F. MacDorman, and Norri Kageki, "The Uncanny Valley [from the Field]," *IEEE Robotics Automation Magazine* 19, no. 2 (2012).

28. In addition to booking this series with Joel, Chris is an active jazz drummer, improviser, and the main figure behind a large indie rock festival that happens every year in Chicago.

29. See Lara Pellegrinelli, "Separated at 'Birth': Singing and the History of Jazz," in *Big Ears: Listening for Gender in Jazz Studies*, ed. Nichole T. Rustin and Sherrie Tucker (Durham, NC: Duke University Press, 2008).

30. For example, for a five-note melody, the performer is free to play only the first two notes for whatever duration they please before moving on to include the third.

31. For an outline of the typical interaction patterns of these roles, see John Napier, "The Distribution of Authority in the Performance of North Indian Vocal Music," *Ethnomusicology Forum* 16, no. 2 (2007).

32. Paul F. Berliner, *Thinking in Jazz: The Infinite Art of Improvisation* (Chicago: University of Chicago Press, 1994).

33. For example, see Daniel Fischlin, Ajay Heble, and George Lipsitz, The Fierce Urgency of Now: Improvisation, Rights, and the Ethics of Co-Creation (Durham, NC: Duke University Press, 2013).

34. While Joel collapses the distinction between "free improvisation" and "improvisation" generally, it is clear that his use of "improvisation" or "improviser" refers to free improvisation specifically. This is in the sense of a practice in which no performer explicitly clarifies or supervises others as well as one typically resulting in an atonal, pulseless, sonic texture focusing on timbral exploration and extended techniques.

35. A similar conflation can be noted in many "critical improvisation studies"; see Scott Currie, "The Other Side of Here and Now: Cross-Cultural Reflections on the Politics of Improvisation Studies," *Critical Studies in Improvisation/Études critiques en improvisation* 11, no. 1–2 (2016).

36. Tamar Barzel, "An Interrogation of Language: 'Radical Jewish Culture' on New York City's Downtown Music Scene," *Journal of the Society for American Music* 4, no. 2 (2010).

37. Barzel, "An Interrogation of Language"; Susan M. Asai, "Cultural Politics: The Afri-

can American Connection in Asian American Jazz-Based Music," *Asian Music* 36, no. 1 (2005); Deborah Wong, "Asian/American Improvisation in Chicago: Tatsu Aoki and the 'New' Japanese American Taiko," *Critical Studies in Improvisation/Études critiques en improvisation* 1, no. 3 (2006).

38. Karen Brodkin, *How Jews Became White Folks and What That Says about Race in America* (New Brunswick, NJ: Rutgers University Press, 1998).

39. Eric L. Goldstein, *The Price of Whiteness: Jews, Race, and American Identity* (Princeton, NJ: Princeton University Press, 2006).

40. I use the vague designation "Middle Eastern" primarily to preserve the subject's anonymity, but also given that the ethnic group he identifies with is a minority population of several nation-states across this region.

41. See Lewis, *Power Stronger than Itself*.

42. Sullivan, *Revealing Whiteness*, 191.

43. By this term, I mean the historical association between particular sounds and a given musical instrument.

44. Marie Thompson, "Whiteness and the Ontological Turn in Sound Studies," *Parallax* 23, no. 3 (2017).

45. See Lewis, *Power Stronger than Itself*.

46. John Baugh, "Racial Identification by Speech," *American Speech* 75, no. 4 (2000); Nina Sun Eidsheim, *The Race of Sound: Listening, Timbre, and Vocality in African American Music* (Durham, NC: Duke University Press, 2018).

47. For further examples of the communicative effect of the putatively "empty" conversational action of silence, see Adam Jaworski, ed., *Silence: Interdisciplinary Perspectives* (Berlin, Germany: Mouton de Gruyter, 1997).

48. The other prolonged pauses are less relevant to race. Instead, these are tokens of the taboo against aesthetic hierarchies in free improvisation more generally. The four-second pause, for example, likely arises from his self-consciousness about the very idea of asserting a "correct" approach to playing "freely." Likewise, the three second pause before he lists specific individuals is a discursive manifestation of the prohibition against naming who or what makes a "good" improviser.

49. Lewis, "Improvised Music After 1950," 99.

50. See also Brandon Andrew Robinson, "'Personal Preference' as the New Racism: Gay Desire and Racial Cleansing in Cyberspace," *Sociology of Race and Ethnicity* 1, no. 2 (2015).

51. Bailey, *Improvisation*.

52. Joel's alignment of South Asians with whites is congruent with a broader American racial logic in which several nonwhite groups are taken as "honorary whites"; see Bonilla-Silva, "From Bi-Racial to Tri-Racial."

53. Edward Said, *Orientalism* (New York: Random House, 1978).

54. Said, *Orientalism*, 70, 98, 240.

55. Said, *Orientalism*, 187.

56. Homi K. Bhabha, *The Location of Culture* (London: Routledge, 1994), 66, 166.

57. Nicholas Fiori, "Plantation Energy: From Slave Labor to Machine Discipline," *American Quarterly* 72, no. 3 (2020).

58. Tom Standage, The Turk: The Life and Times of the Famous Eighteenth-Century Chess-Playing Machine (New York: Walker Company, 2002).

59. Émile Durkheim, *The Elementary Structures of the Religious Life*, trans. Karen E. Fields

(New York: The Free Press, 1995); Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object* (New York: Columbia University Press, 1983).

60. Theodor W. Adorno, "On Jazz," in *Essays on Music*, ed. Richard Leppert (Berkeley: University of California Press, 2002); Theodor W. Adorno and George Simpson, "On Popular Music," *Zeitschrift für Sozialforschung* 9, no. 1 (1941).

61. Theodor Adorno, "Perennial Fashion—Jazz," in *Prisms*, ed. Samuel Weber and Shierry Weber (Cambridge, MA: MIT Press, 1981), 122.

62. Bailey, *Improvisation*.

63. Lewis, "Improvised Music After 1950," 108. See also Carl Dahlhaus, "Was heisst Improvisation?" in *Improvisation und neue Musik: acht Kongreßreferate*, ed. Reinhold Brinkmann (Mainz, Germany: Schott, 1979).

64. Said, *Orientalism*, 44; see Joachim Ernst Berendt, *Ein Fenster aus Jazz: Essays, Portraits, Reflexionen* (Frankfurt am Main, Germany: S. Fischer Verlag, 1977), 222; for commentary on this discourse, see Lewis, "Gittin' to Know Y'all," 3–4.

65. See entry for "robot, n.1" in the *Oxford English Dictionary*.

66. Lewis, *Power Stronger than Itself*.

67. See Brian A. Miller, "'All of the Rules of Jazz': Stylistic Models and Algorithmic Creativity in Human-Computer Improvisation," *Music Theory Online* 26, no. 3 (2020).

68. Over the course of my fieldwork, this exact phrase has been the key component of how most improvisers express this query.

69. See Chamy, "Das Interaktion Festival."

70. Katherine Walker, "Cut, Carved, and Served: Competitive Jamming in the 1930s and 1940s," *Jazz Perspectives* 4, no. 2 (2010).

71. See Adorno and Simpson, "On Popular Music" and Fiori, "Plantation Energy: From Slave Labor to Machine Discipline."

72. Ruth Mandel, *Cosmopolitan Anxieties: Turkish Challenges to Citizenship and Belonging in Germany* (Durham, NC: Duke University Press, 2008).

73. Claire Jean Kim, "The Racial Triangulation of Asian Americans," *Politics Society* 27, no. 1 (1999); Eduardo Bonilla-Silva, *Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States* (Lanham, MD: Rowman Littlefield Publishers, 2006).

74. Lewis, *Power Stronger than Itself*.

75. Lewis and Piekut, *The Oxford Handbook of Critical Improvisation Studies*.

76. Lewis, "Improvised Music After 1950"; see also John Fiske, *Media Matters: Race Gender in U.S. Politics*, 2nd ed. (Abingdon, England: Routledge, 2016), 44.

77. James Clifford and George E. Marcus, eds., *Writing Culture: The Poetics and Politics of Ethnography* (Berkeley: University of California Press, 1986).

78. Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: New York University Press, 2018); Benjamin, "Race after Technology: Abolitionist Tools for the New Jim Code"; Irani, "Difference and Dependence among Digital Workers"; Neda Atanasoski and Kalindi Vora, *Surrogate Humanity: Race, Robots, and the Politics of Technological Futures* (Durham, NC: Duke University Press, 2019).

79. Arthurs, "Improvised Music in Berlin."

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