9

JAZZ AND THE MATERIAL TURN

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"When you hear music, after it's over, it's gone, in the air; you can never capture it again" (Dolphy 1964). Eric Dolphy's statement signifies a common understanding of music as intangible and immaterial. Because of its emphasis on improvisation, this discourse of immateriality has been particularly influential in jazz. As the music where notes are "picked out of thin air" (Berliner 1994, 1), it has become "a kind of language for expressing the ineffable" (Bivins 2015, 199). Jazz performance is often described, both by musicians and more recently by music theorists, as a "conversation" (Monson 1996), suggesting ideas of orality and immediacy—despite prevailing notions that "real" jazz is instrumental. The very definition of jazz has been described as "if you have to ask, you'll never know," making its elusiveness and intangibility essential to the genre. However, we only know Dolphy's words because they were recorded in 1964, suggesting that even such transient and immaterial experiences are mediated through material practices and technologies.

A growing number of scholars in the humanities and social sciences are turning their attention to such forms of material mediation of cultural expression and experience, and are increasingly finding their materiality to be non-trivial. The study of "material culture," as two of its major proponents write, "may be most broadly defined as the investigation of the relationship between people and things irrespective of time and space" (Miller and Tilley 1996, 5). Thus, in practice, it is the study of the role played by material objects, artifacts, and technologies in the shaping of human societies, cultures, identities, and knowledge. The authors continue that "the potential range of contemporary disciplines involved in some way or other in studying material culture is effectively as wide as the human and cultural sciences themselves" (ibid.). Twenty years later, this appears as a prophetic statement, as the "material turn" has made a big impact beyond its origins in anthropology and archaeology, with important influences from media studies and science and technology studies, to fields such as history, sociology, literature, art history, gender studies, philosophy, and many others.

The study of material culture, understood broadly, is thus a diverse and vibrant academic field, and it has offered a number of important challenges to traditional approaches in the social sciences and humanities. The study of material culture has frequently led to reconsiderations of the nature of meaning and sociality. As archaeologist Dan Hicks writes, in the intertwining of human and material lives "things themselves can come to constitute contexts, which are *by no means purely human or social* contexts" (Hicks 2010, 83, my emphasis). Instead of a traditional humanist understanding of agency as independence from material and social constraints, scholars increasingly understand human agency according to what Jane Bennett calls a "congregational" rather than

an "atomistic" perspective on agency, wherein agency is not located in a particular subject but formed through a reciprocal relation with the substances, artifacts, and technologies that fill the material world (Bennett 2009, 20). Agency and cognition are often said to be "distributed" over what are variously called "networks" (Latour 2005), or "assemblages" (Bennett 2009). This reciprocal relation implies, first, that such networks are contingent and dynamic, and second, that the material world is active rather than passive—an idea that some scholars express with the concept of "material agency" (Latour 2005).

In music scholarship, such ideas have been explored in depth in the field of music technology (Straw 2012; Sterne 2003; Born 2005) and more recently have also been applied to musical instruments (Bates 2012; Dolan 2013; Moseley 2016; Souza 2017) and music notation (Schuiling 2019, forthcoming). Hence, it would seem that a "material turn" in music scholarship is gaining some momentum. Its late arrival may have to do with the elusive materiality of music itself. Indeed, much of the critical musicological literature since the late twentieth century has precisely argued *against* the "reifying" notion of music as an object, proposing instead to see it as a form of practice (Cook 2001; Goehr 2007). However, this practice is mediated through various material objects and formations: instruments, concert venues, recording and playback technologies, scores, the bodies of musicians and listeners, advertising, and promotional material, music videos, and so on. I would therefore argue, with Will Straw (2012), Georgina Born (2005), and Antoine Hennion (2015), that precisely because of this "paradigmatic multiply mediated" nature (Born 2005), music in fact presents a unique opportunity for conceptualizing the role of material objects in cultural expression and experience.

Jazz, with its emphasis on its own intangibility and elusiveness, is a case in point. Apart from this existence "between process and product" (Cook 2001), which it shares with all other forms of music, there are two more particular reasons why the question of its materiality is significant. The first is historical. As a product of African American culture and history, jazz is to an important extent the expression of a people who have themselves been treated as objects to be exploited and sold for profit, rather than fully acknowledged as human subjects. As the work of Fred Moten (2003) and Alexander Weheliye (2005) suggests, black popular music has frequently employed sound, as the technological mediation of subjective expression, to subvert traditional distinctions between subject and object, negotiate the historical intangibility and invisibility of black subjectivity, and project what Weheliye calls a "sonic Afro-modernity." The second reason, while less overtly political, is directly related to the first, and has to do with the important role of improvisation in jazz performance. The discourse on jazz improvisation, with its emphasis on personal expression and "finding your own voice," seems to suggest an ideal of conquering one's material limitations in order to express one's authentic self. Given the reconsideration of agency in new materialist scholarship, such understanding may be fruitfully reconsidered.

Genre as Material Culture

The "new" jazz studies came into focus in the 1990s partly through a critique of the jazz canon and the assumption that jazz is a uniform musical category (DeVeaux 1991; Gabbard 1995). Recent work on popular and experimental music has approached genre as "assemblage," describing it as a process of categorization rather than a uniform category in itself (see for instance Brackett 2016).[1] Genre is understood not in terms of a fixed set of musical characteristics, or even as a discourse of identity and distinction, but as a dynamic process of grouping, of establishing and blurring connections and distinctions; a process made up of human actors as well as objects and technologies of aggregation and dissemination. Benjamin Piekut, for instance, in his work on experimental music, argues that genre is not "something that magically coalesced around shared [musical] qualities," but "a network, arranged, and fabricated through the hard work of composers, critics, scholars,

performers, audiences, students, and a host of other elements including texts, scores, articles, curricula, patronage systems, and discourses of race, gender, class and nation" (Piekut 2011, 19).

In various ways, jazz scholars have implicitly addressed the material culture that constitutes jazz. Particularly the importance of recordings has been noted, not just because they are the object of study for most jazz scholars, but because listening to records, playing along with them, and copying solos has been an important part of how many jazz musicians have learned to play and develop their own idiom. As a technology of memory (Kenney 2003; Bijsterveld and Van Dijck 2009; Roy 2016), recordings have thus played an important part in jazz history, not just as documents of this history but as common points of reference for musicians to "signify" on and in doing so give new meaning to them (Monson 1996). Arguably just as important for the development of the jazz repertoire has been the role of the Fake (and Real) Books that have been the subject of codification, clandestine exchange, debates over accuracy, and various legal disputes (Kernfeld 2006).

From a new materialist perspective, these objects are not just representations or reflections of jazz, contributing to a discourse around jazz while never permeating it, but integral elements of the jazz assemblage. Jed Rasula, in a classic paper on the "seductive menace" of jazz recordings (1995), argues that recordings constitute myths of an authentic "living reality" of which they can only be inauthentic and partial representations. As a medium of inscription, recordings constitute their own history of jazz in comparison with which the historian's account can only be "a surrogate act masquerading as authority" (135). Jazz thus comes to be characterized by a nostalgia for presence: "Jazz has been a constant testimony to things that will never be known, people that will forever go unheard, words that will remain unsaid" (152). Rasula certainly identifies an important part of jazz aesthetics, and it is striking how many jazz lovers still primarily approach recordings as representations of performances rather than works in their own right—which is how people today usually listen to recordings. Indeed, John Gennari calls it "the most fundamental and enduring article of faith in jazz" that "its truth is located in its live performance aesthetic, its multitextual, non-recordable qualities of emotional expressiveness and response" (Gennari 1991, 459). However, from this perspective, the "real" jazz is always somewhere else, always just out of reach. Instead, to paraphrase Piekut, I would argue that jazz is *exactly* what scholars and recordings have construed it to be, just not for the reasons Rasula gives (Piekut 2011, 18).

In fact, following anthropologist Alfred Gell (Gell 1998), we might say that the way technology intervenes in the "indexical"[2] relations of cause and effect, thus trapping, suspending, redirecting, and translating actions and intentions, is essentially what makes art captivating. Part of what defines a musical culture is how this relation between technology and agency is configured, and part of the dynamics of categorization that constitutes genres is thus also a negotiation of how this relation may change; such changes reveal important things about the composition of social and musical relationships in a given musical culture. By way of illustration, consider the album *Blue* by New York-based quartet Mostly Other People Do the Killing (2014). *Blue* is an exact, note-for-note replication of Miles Davis's *Kind of Blue* (1959), to the extent that the difference is only really audible in small details of timing and timbre when one listens very closely. The album intentionally plays with the kinds of indexical relations described by Gell. *Kind of Blue* owes much of its attraction to the way it appears to "capture" a pure moment of musical interaction, seemingly belying Rasula's schizophonic angst. Of course, this informal and immediate effect is, paradoxically, achieved precisely because of technological developments and the possibilities of the LP record that allowed musicians to record more extensive and unpredictable improvisations. *Blue* indexes not only *Kind of Blue* and its iconic status, and the meticulous transcription and rehearsal of the musicians as well as the overdubbing techniques of the producers, but also broader cultural constructs such as the classicizing tendencies in contemporary jazz culture (including the demand to play transcriptions on one's conservatory recital, which is how the group came up with the

idea). Paradoxically, it simultaneously indexes the currency of poststructuralist ideas in jazz culture that emerged with the intellectualization of the jazz climate—the liner notes feature Jorge Luis Borges's short story about the fictional author Pierre Menard who replicated Cervantes's *Don Quixote* word-for-word, thus creating an entirely different novel.

Obviously, the album created some controversy; the Estate of Miles Davis issued a statement from Vince Wilburn, Jr., Davis's nephew, that it did not support the project (Miles Davis Estate 2014). Wilburn, Jr. himself expressed himself more vividly on his Facebook page: "#BULL-SHIT. . . . Yes I Said It!!!!!!!!!!!!!!!!! stay original Motherfuckers FUCK THIS . . . . . . Pro-tools . . . auto-tune now this BULLSHIT. . . . Jimmy Cobb should kick Your ass . . . ." (Wilburn, Jr. 2014). Wilburn, Jr.'s comments, in comparing *Blue* to the use of Pro-tools and auto-tune, two forms of technology that supposedly stand in the way of "true artistry" and authenticity, highlight how certain understandings of agency are central to the appreciation of jazz. In fact, bassist Matthew Elliott of Mostly Other People Do the Killing (MOPDTK) says of the album that "the sound is clearly jazz, but because of the process that went into it, it magically becomes 'not jazz'." (Elliott 2014) He goes on to compare the album to the work of Wynton Marsalis—consider for instance his *Mr. Jelly Lord* (1999), which features not only very accurate renditions of pieces previously recorded by Jelly Roll Morton, but even a recording of "Tom Cat Blues" made on a phonograph cylinder, making it sonically indistinguishable from early jazz. The differences in reception are striking: both Wynton Marsalis and MOPDTK are criticized for being unoriginal, but where Marsalis is praised for paying tribute to the jazz greats, MOPDTK is praised for its iconoclastic, postmodernist gesture. These differences may not only have to do with the different public images of Marsalis and MOPDTK (in which the politics of race undoubtedly plays a role), but also be because of the indexical quality of the reproduced recordings; we tend to perceive the recordings of Morton as incomplete renditions of a mythical past, while *Kind of Blue* is perceived as an accurate document of a spontaneous and authentic performance. More than a form of "signifying" on a shared history, *Blue* brings into play not just notions of iteration and authorship, but the way in which the genre of jazz implies particular configurations of agency, technology, and creativity that can be brought into focus using Gell's model of indexicality.

A consequence of this model is that listeners, not just musicians, have helped to mediate and assemble the genre of jazz. A significant part of these "acts of assemblage" (Drott 2013) has been performed, quite literally, by collectors of recordings since the 1920s. Jazz is, perhaps more than any other twentieth-century music, a real collector's music, as listeners collect not only recordings, but also photographs, films, paintings, sculptures, and other memorabilia.[3] Early collectors aimed to salvage recordings that were frequently of low quality and were becoming unplayable because of heavy use (Cummings 2010, 95). These communities of collectors constructed an ideal of connoisseurship around jazz recordings, where each collector had their own specialism (99). This culture of connoisseurship, together with the emerging jazz criticism in the newly founded periodicals (partly aimed at these collectors) did much for the gradual social acceptance for jazz as an art form. Because of their aim for completeness, these collectors also initiated the practice of jazz discography (Epperson 2013). These collections and discographies constitute the material history of many jazz archives, which suggests that to only see these discographers and their canons as the perpetrators of ideology is a rather limited perspective. Rather, their efforts and obsessions emerge as a significant part of jazz history in their own right. As Ken Prouty (2012, 6) writes: "moves toward canon, and reactions against them, are part of the history of jazz itself." This does not necessarily mitigate these practices; Alex Cummings describes how white collectors would go into poor black neighborhoods to buy records for prices far below their actual worth, making palpable the forms of appropriation that are inevitably part of the history of the jazz canon (Cummings 2010, 97–98). However, it does make these histories more concrete, and makes clear the contingencies and contradictions inherent in the formation of genre.

Another example of the material history of jazz listening practices suggests that these may not necessarily revolve around connoisseurship and canon formation (or may configure these concepts in a different way). The fact that the early jazz collectors were all men might obscure the fact that the phonograph, from the late nineteenth century to the middle of the twentieth, was mostly used by women, who thus may also have played a vital role in the domestication of jazz and in its dissemination as a public form of entertainment. As a product intended for domestic consumption, it entered into a social sphere in which women maintained the household, and music was an integral part of this domestic sphere (Kenney 2003, 88–108; Gitelman 2006, 59–86). During the First World War, women gained more employment, also in the music industry, and they played an important role not just in the consumption of recordings, but also in their manufacturing and distribution (Kenney 2003, 97). After the war, as the cities were increasingly inhabited by working women, and with the emergence of recorded jazz and other dance music, these women played an important role in the upcoming "social dance craze" that was not only taking place in dance parlors but was also brought into the home (101–102). These developments have usually been described in jazz scholarship in terms of commercialization and the appropriation of African American music. Although this is undoubtedly correct, these histories of listening suggest that, as Sterne writes, the history of phonography (and thus part of the history of jazz) is "at least as much about the changing home and working lives of the middle class as it is about corporate planning and experimentation" (Sterne 2003, 197). Further investigations of the histories and practices of listening that have shaped the jazz assemblage may reveal further actors that have heretofore been neglected, as well as the conceptions of agency that are itself part of this history, uncovering the discourses and practices because of which these agencies have not yet been articulated.

The Materiality of Making Music Together

In the previous section, I suggested that technological mediation is not external to jazz as a musical and cultural practice but rather an integral part of it. This implies the need for a reconsideration of the role that instruments and other objects and technologies play in jazz performance and particularly in improvisation. Given the central importance of performance, creativity, and musical interaction in jazz studies since the 1990s, it is surprising that the role of instruments has not been a sustained area of investigation. This is not to say that instruments have been neglected. Certainly not: Ingrid Monson's (1996) influential account of musical interaction was predicated on highlighting the role of the rhythm section instead of maintaining an exclusive focus on the improvising soloist, and there have been various studies of particular musicians that explicitly discuss their playing style in terms of instrumental technique (Givan 2003, 2009; Lash 2011). However, many descriptions of jazz improvisation and expression—such as metaphors of conversation, telling a story, or the concept of signifying—have been cast in terms of "orality," which has been very important for addressing the interactive and processual quality of jazz as opposed to the traditional text-based approaches of music scholarship, but which does seem to dismiss the role of instruments and other forms of media and technology as a peripheral consideration (see also Prouty 2006). Lydia Goehr's (2016) discussion of how to respond to a sudden broken string indicates how objects can subvert common assumptions about the nature of improvisation. Rather than an understanding of improvisation as intangible and immaterial, we might reconsider it in terms of what Claude Lévi-Strauss calls "bricolage," a way of making do with whatever is at hand to achieve present needs (as opposed to the careful planning involved in "engineering," Lévi-Strauss 1966).

The point made in the previous section, about the "multiple mediation" that forms the basis of music's existence, applies here with equal force. Recent calls for a "new organology" have emphasized that the study of musical instruments might reconfigure our understanding of musical knowledge, analysis, performance, history, ethnography, and ontology (Tresch and Dolan 2013).

If agency is defined as the ability to act, then instruments clearly have significant influence on the musician's agency. Instruments are not just "tools" for achieving given ends; as Aden Evens points out: "they do not serve an interest that could have pre-existed them" (Evens 2005, 129). Moreover, instruments condition the means of expression and the role in the ensemble of the musician, and as such constructs a *persona* (Auslander 2006) for her that could not have existed without the instrument. The musician, immersed or possessed by the music she plays, is a categorically different kind of actor than the person she is in everyday life. We might characterize this mutual co-dependence with philosopher Karen Barad's term "intra-agency" (2003), which connotes an interdependence not just of two formerly independent entities, but a process by which two actors emerge as separate entities.

The instrument's interface, in such an approach, is an important point of focus as it is the main aspect with regard to which musicians develop these skills. Instruments, like all media, involve "protocols" of use (Gitelman 2006, 7); norms and standards that, according to a medium's technological affordances (J. J. Gibson 2014), emerge around that medium to give it a particular function and meaning in society. The incorporation of an instrument's interface thus constructs the musical knowledge and imagination of the musician, and by virtue of its technological construction the interface constrains and suggests particular musical possibilities within particular musical situations. Musicians might be said to *think with* their instruments; they do not just develop their musical thought in relation to their instruments; in performance the interaction with the instrument forms an integral part of the development of musical thought and the expression of musical ideas (De Souza 2017). Alfred Gell, whose work I discussed in the previous section, similarly describes the oeuvre of an artist not only as a "distributed object," highlighting the interrelated qualities of the works of a particular artist, but also as an extension of the artist's mind, implying that creating these works is also a way of developing her stylistic ideas (Gell 1998).

An approach to the analysis of jazz improvisation grounded in such ideas might understand it less as the construction of musical structures in relation to a chord scheme and the playing of fellow musicians and more as the application of skills learned in interaction with the particular construction and interface of an instrument. In other words, it would no longer take particular recordings as the primary unit of analysis, but see these only as particular instances of a musician's idiom in development. Benjamin Givan's recent analysis of Sonny Rollins *Blue 7* shows that the "motivic relationships" praised so famously by Gunther Schuller are in fact more accurately described as licks that formed part of Rollins' stylistic idiom at the time, something he illustrates with a comparison of *Blue 7* to other recordings made around the same time (Givan 2014). Moreover, he does not just restrict his discussion to Rollins but also shows that these and similar motives were in fact used by various other musicians at this time, suggesting that this idiom was itself part of the style and musical conventions of a wider jazz community. Although Givan uses none of the theories of methodologies outlined here, it is a good example of how instruments play a central role in the development of musical knowledge and creativity, and he does come quite close to Gell's perspective when he quotes Paul Bley saying "you might think of one's oeuvre as a single piece, and the oeuvre is a lifetime" (228).

Such examples suggest that the social life of instruments is contingent on the skills that musicians develop in reciprocal relation with them (W. Gibson 2006), and given the detailed knowledge of jazz scholars about the development of musical skills, their work is highly pertinent to the ongoing debates about material agency, which is sometimes perceived to sideline the social and embodied processes by which this agency is realized. In addition, the development of skills may also lead us to rethink what an instrument is in the first place. So far, I have been concentrating on how the construction and interface of an instrument constructs particular ways of knowing and acting in the musician. However, the primary focus on the instrument's interface in new organological scholarship might thus represent what philosopher Alfred North Whitehead would call a

"fallacy of misplaced concreteness" (Whitehead 1926). To illustrate, I recently heard Wilbert de Joode, a Dutch double bass player and free improviser, explain at length why he preferred to use thick catgut strings instead of steel:

> Such strings have to be made especially, they're not of a standard thickness. One string may be made from around twenty intestines, which have to be wound together, which is a very slow process—it's not very vegan. I also want strings with little winding. In baroque music people play catgut strings, but those are extremely flexible strings. I like strings that offer resistance, that can create tension. This is a harp string, so it's colored because you have to know where the F is among all the hundred thousand strings on a harp, but I've tuned it higher, to a G. [. . .] I use catgut strings because they don't break; in improvised music you want to be an equal partner, and to be able to sound out your voice. A large bass is always a little slow, which is great when you play tempo, but if you suddenly want to make a shift, do something else, then you need the sound to be able to pierce through everything else. I tried to do that with steel but they just broke. It also wasn't the sound I was looking for.
>
> *(De Joode and Vingerhoeds 2016)*

His comments show the various considerations that come into play only because of a string, which is after all only one part of his relation to his instrument but brings into play concerns with style, interaction with fellow musicians, knowledge of other instruments, genre, even animal rights—the *sound* of the material is almost a mere afterthought. Professional musicians have an intimate knowledge of their instrument that goes far beyond the interface as a site of interaction and concerns the properties and behaviors of the *materials* of which they are made up. Anthropologist Tim Ingold argues that the focus of material culture studies on "materiality" has resulted in a neglect of materials, which include not only wood, textiles, or stone, but also air and water, and the forces of pressure and gravity that move them (Ingold 2007). Creative work, for him, is not an engagement with finished and stable objects, but with materials that are always in motion; developing creative skill is a matter of learning to work with these unfolding qualities (Ingold 2010).

Although I have concentrated here on musical instruments, there are of course various other ways in which technologies can be seen to mediate modes of musical creativity. Marian Jago discusses the overdubbing practices of Lennie Tristano in the early 1950s, which were obviously an important element of his musicianship but are not easily accounted for in terms of improvisation as a "live" and interactive event (Jago 2013). In my own research on Dutch improvising collective the Instant Composers Pool, I found that their approach to improvised music included the use of a large notated repertoire that offered different creative possibilities in performance and were thus integral to their way of working. This directly confronts more or less standard definitions of improvisation in terms of its opposition to the use of music notation (Schuiling 2016). As in the example of *Blue*, such reconfigurations of creative agency are entangled in the dynamics of genre; Jago recounts how the production and reception of Tristano's experiments involved a negotiation of perceived genre boundaries, and in the case of the Instant Composers Pool (ICP), their practice resulted from a cultural position in between free jazz, contemporary art music, and the experimental performance art of Fluxus (Schuiling 2019).

Further research into topics like these might lead to a reconsideration of improvisation, to use Roger Moseley's words, as "a response as well as a call," in ways that "challenge distinctions between action and reaction" (Moseley 2016, 177). The concept of "bricolage" is enjoying renewed attention in anthropology, as scholars are becoming increasingly aware of the importance and ubiquity of improvisation, not only in creative practices but also to account for the relational dynamics by which objects accrue their cultural significance more generally, as well as

to characterize the process by which people negotiate the variously fluid, resistant, and emergent properties of material objects. Jazz scholars, who have developed a detailed and sophisticated vocabulary for speaking about improvisation, have much to contribute to such discussions.

Notes

1. DeVeaux's emphasis that the history of jazz is better understood in terms of the constant debates about its limits rather than as a fixed category thus prefigures this recent approach.
2. The "index" is a semiotic concept drawn from the work of C.S. Peirce (Peirce 1991), signifying a relation of sign to signified dependent on causation or contiguity; smoke is an index of fire (causation), but a pointing finger is also an index of the thing at which it points (contiguity).
3. This may have to do with the nostalgia and fantasy identified by Rasula; nostalgia and colonial fantasies are important themes in studies of collection as they represent a "longing for an impossibly pure context of lived experience at a place of origin, [. . .] a past which has only ideological reality." (Stewart 1984, 23).

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