

Notes and Opinions

Improvising Digital Culture

Paul D. Miller (aka DJ Spooky) and Vijay Iyer

[Streaming audio of panel discussion "Improvising Digital Culture."](#)

Vijay Iyer: First of all, I'm honoured to be here and to be back here, and happy to be speaking to you all.¹

I was sitting in on the previous panel, and I'd like to pick up from what Natasha Pravaz was speaking about.² She referred to Richard Schechner, and he emphasizes the idea of performance and the performative moment capturing the subjunctive mood. Schechner is referring to the aspect of ritual or play that comes to be in performance. The subjunctive mood means that somehow there's a degree of fantasy involved [in the performance]. Schechner is specifically referring to Laurence Olivier's performance in the play *Hamlet*: Olivier both is and is not Hamlet at that moment.

I want to contrast that idea [about performance] with something that Muhal Richard Abrams said recently on a panel that was convened by George Lewis in New York City, which was specifically about theorizing improvisation. [Abrams] encapsulated improvisation as "a human response to necessity." It seems to me that there is such a gulf between Schechner's subjunctive, fantasy mode of performance and what Abrams is referring to in that specific context. He kept circling back to that definition, as if those four or five words somehow encapsulated everything we needed to know. And I want to try to unpack it a little bit. I think one of the key aspects of [Abrams' definition] is that improvisation is embedded in reality. It's embedded in real time, in an actual historical circumstance, and contextualized in a way that is, in some degree, inseparable from reality.

This resonates with an idea about improvisation that I've been working with recently, which is that improvisation should actually be regarded as identical with what we call experience. This means that there is, in fact, no difference between human experience and the act of improvisation, which means that we're actually always improvising. It means that improvisation is central to consciousness and to everything that we know. In a way, this insight about improvisation makes it so primal, as a concept, that it becomes almost impossible to place value on it. It is something that structures who we are and how we move about in the world. This means that there is improvisation that you could call "bad" or "evil." That is, for every Roscoe Mitchell or Charlie Parker or John Coltrane or Alice Coltrane or Mary Lou Williams, you also have a Dick Cheney or a contractor with Haliburton, with an itchy trigger finger. They're improvising, too.

So, when we talk about improvisation, we can't always view it, I'd say, as a model for social change, unless you look at a definition like Abrams' as a kind of interventionist definition. That is, Abrams is trying to put a certain tilt on what we're calling improvisation, in a way that is, in a certain sense, empowering or activist: a human response to necessity. The history of the AACM [Association for the Advancement of Creative Musicians] encapsulates this idea, which is elaborated in George Lewis' book [*A Power Stronger Than Itself: The AACM and American Experimental Music*] in astounding detail.

So, when we start kicking around this term, "improvisation," I want to see how neutral we can be with it. Or else, when we choose to use these kinds of activist or empowering definitions that we're very aware that that's what we're doing. Because that means that we're theorizing positively of what improvisation can do. In other words, you might say that there are degrees, layers or levels to what we call "improvisation." There's a primal level at which we learn how to just be in the world, and then there's another level at which we're responding to conditions that are thrust upon us.

Of course, for aggrieved communities, these levels become indistinguishable; survival under such conditions becomes inseparable from the basic fact of one's existence. Does this then collapse the distinction I'm making between apparently neutral and activist definitions? The question is how and where we situate power in acts of improvisation. We need to be able to analyze and critique the improvisations of absolute power – portrayed, for example, in the casual torture and murder enacted by decadent fascist elites in Pasolini's *Salò* – just as much as we examine the revolutionary improvisations that we associate with collective actions of the dispossessed.

Now, this conversation is about improvising digital culture, or actually the phrase that we used was "improvising digital community," which is perhaps something different. I think that means that we're talking about what we can do together as improvisers and as people whose realities are interpenetrated with technology. In other words, it's again a sort of slant on things: it's not just culture-at-large, it's community, which is a certain possibility that we have in culture. So, all I want to do up front here is to set forth some parameters so that we know what we're talking about as we continue the conversation.

Paul Miller: First and foremost, I want just to say, "thanks for having me," and it's a real pleasure to see Ajay [Heble] in good health and good spirits.

One of my favourite mottos is from the science fiction writer William Gibson, who says, "the future is already here, it's just unevenly distributed." I think this is a great way of thinking about the notion of non-linear pattern recognition. Right now, we're looking at a lot of issues around how cultural production is proceeding in the twenty-first century's era of dematerialization and repurposing, or the economic structures that we have come to think of as globalization. So, as above, so below; that is, we have the macro versus the micro.

To me, DJ culture and electronic music have been an urban youth culture response to what's been going on with the macro structure of global digital society. Music is kind of a mirror you hold up to society to see how things evolve.

For example, the saxophone's been around for a little bit over a century, and there's a very specific mechanics that had to go into the production of the saxophone. There had to be a social process to [imagine] how orchestras would use it as a played instrument. The same thing happened with almost every instrument in the evolution of what we think of as the composer's tools. So, if a saxophone hadn't been invented before then, would a composer have been able to write music for it? Or, would someone have been able to think about it as a part of the music that they were composing for? If the tool wasn't there, was the composer someone who was at the edge of that particular future? Or, were they someone who was dreaming about instruments that could play what was already in their mind?

The problem with the twenty-first century is related to how much information we have out there and how we navigate through it. The density of the mound of information that we're creating at this time is about 7-9 petabytes per year, which is the Berkeley Computing Center and Google's way of measuring the volume of information. If you think about the sheer volume of petabytes, it's almost every human word ever spoken since we as a species have ever existed. In terms of scale, you can think of it like this – imagine naming and giving a detailed, precise label for every star in the universe, or being able to literally label almost every molecule of oxygen on the planet, if you so desire. That's the kind of density I'm talking about. How do we navigate it? How does music help us understand how we are organizing human experience? Rhythm structure, cadence – polyrhythm, polytonality – these are some of the key issues I'm highlighting. So, there is an uneasy tension between context and content: how we look at navigating between those two frames is, I think, improvisation.

For me as an artist, digital media is not necessarily about the process per se, it's about never saying that there's something that's finished. Once something's digital, essentially you're looking at versions. Anything can be edited, transformed, and completely made into a new thing.

For example, if you want to make architecture look like [Edgard] Varèse, I'm sure you can download a Varèse font, and then go for it. Or, for that matter, if you want to make Varèse remixed with the Philips Pavilion, for example, which is a great piece of work between le Corbusier and the composer Varèse, then you could probably scan photographs. Photoshop it, and turn it into music too.

There are lots of ways that software is a kind of unstable interface between context and content. I think the dialogue between me and Vijay here is not only between different systems of production of music, but it's about how improvisation itself is the bridge between radically different compositional strategies. As an artist, much of my work is based on found materials: records. If we look at the root of the "record," the phonograph, we can play with the rupture or the break in the term: phono/graph, or, the phonetics of graphology; or, writing with sound.

My new book, *Sound Unbound*, just came out, and Vijay has an essay in it. Pierre Boulez also wrote an essay, Steve Reich wrote the introduction, and many other composers whose work I really value and respect [contributed to the book]. One of the most fun parts of putting the book together was the research; I ended up finding all sorts of new, fun, quirky pieces. [Distributes handout.]

The idea [that I want to talk about] is "material memory," or how the phonograph is literally about "documents put into play." A record is essentially a document and so is a file. If you're recording a voice, once that voice leaves the body, it essentially becomes a file someplace on somebody else's hard drive. [What I want to examine here is] improvisation, and its relationship to materiality. Think of it as digital mnemonics, or how we use different kinds of recall to make raw data into useful information.

So, again, like the metaphor of the saxophone: if it didn't exist, would someone be able to write music for it? At the point that an instrument comes into play, what makes it popular? What makes it become part of everyone's vocabulary? And at that point, how does the instrument transform the compositional act? So, for me, music is much more about questions than about answers. It's a continuous sense of [asking] questions.

[I want to] interrogate the communal response to collective consciousness. [That is, I want to examine what happens if, say,] I share this record with you, and we share this memory: does each of us have an interpretation of that memory? How does that memory influence [our interpretation of] the sample, or the data set?

A sample is essentially a chunk of data. It is something that has gone into a computer and has been made into a quantized fragment that can work in a system of sequences of rhythms. To me, improvisation is part of this notion of pattern recognition. This notion also has a psychological facet, which involves [thinking about] the self as a part of the whole structure. What this means is that you are not separate from the scene that you are viewing. There's the [similar] notion of Schrödinger's cat in physics, which is that by looking at something, you change it.

In 1939, John Cage came up with the idea that turntables are essentially a kind of frequency playback system. So, in 1939, the audience walked in and there were two variable speed turntables on stage playing crazy frequencies. People were really pissed off and they wanted their money back. You have to imagine a mellow Buddhist like John Cage making everybody angry; you can imagine that must have been a controversial moment. Let's call it "classical music as the punk rock of the time." [In response to the audience,] John Cage said, "you know, frequencies are the piece." [But the audience's view was that] there was nobody on stage, just a lot of records playing random fragments.

In the twenty-first century, the "imaginary landscape" becomes the wireless network. It becomes something as simple as being able to download or upload ringtones to a cell phone. The wireless imagination is a good metaphor for thinking about improvisation.

One of my favourite photographers is Étienne-Jules Marey because, put simply, he was a pioneer of early stop-motion photography. Stop-motion photography allows you to break any kind of motion into its component elements. So, if you see someone running, [for example,] you can actually see his or her legs in every separate frame. They were able to break motion into small fragments. So, that's visual sampling. What ends up happening at the beginning of the twentieth century is that the machinic process of looking at motion or images as components actually becomes part of composition in general. Eric Satie's *Vexations* [is a good example of this because] you're meant to play motifs over and over. [Something similar] ended up happening with [the music of] other composers like [Olivier] Messiaen. In this sense, there's a convergence happening within the classical scene [at this time].

I want to show you one of the first films to deal with sampling. Georges Méliès was a magician in 1900 who wanted to apply magic technique to cinema. In 1900, films were edited by hand: what he would do is project himself back into the scene, record that, and then play with the projection. What you're going to see [in the film clip] is someone making seven copies of themselves and improvising. This is a very famous film in film studies, but I want you guys to think of it as a jazz motif. In French, this film is called *L'Homme Orchestre* (or, in English, *One Man Band*).

[Plays film clip.]



[Streaming video of Georges Méliès' L'Homme Orchestre \(1900\)](#)

Paul Miller: [In the film,] you saw someone literally improvising with recordings of themselves. It was put into a sequence, and you have to remember that this was done by hand. Film was actually physical celluloid. So, they'd have to project it, record that version, and then play with it, that is, literally improvise as the film was playing. You can look at the film for the sense of its choreography.

Vijay Iyer: I just wanted to ask: what about what we just saw suggests to you that there was improvisation involved? I'm asking because I'm interested in how you read it.

Paul Miller: Well, you've got to remember that Méliès started out as a magician, and magic is about being able to play with perception. What he ended up doing was trying to figure out how the audience would respond to film: that's the improvisation. He was never quite sure exactly how people would respond to the symbolism.

For example, he would do film tricks where he would show up as a little black imp or demon being edited or erased out of the scene. Because of the newness of film, the audience wasn't quite sure how to respond to the projected image. So, [I'm interested in] the idea of magic being [incorporated] into a film sequence. There is a sense of play involved [that relates to improvisation]. Méliès knew exactly what he was doing. In fact, he's one of my all-time favourite filmmakers precisely because he's looking at applying magic technique to film.

[Similarly,] Orson Welles (who is also one of my favourite filmmakers) was also into theatre. Orson Welles was actually a magician, as well. One of my favourite films is *F is for Fake*. [Welles depicts] this guy who is Europe's most famous counterfeiter. So, the guy is improvising constantly, by making up identities. This guy was able to [make counterfeit copies of] Modigliani, Picasso, and all these major painters. And, all these museums bought copies of his work, but later couldn't reveal that they owned copies because it would destroy the value of the art objects they thought were "real" – so after a certain point, they became "real" after enough people said they were. So, again, copying is the core theme here. What ended up happening was that the guy was so good that the museums didn't want to admit that they had fakes in their collection, since, by saying that it was a fake, they would lose money because it's a value issue.

I'm going to draw a connection between Méliès and Orson Welles because they both play with recorded media. I'm sure most of you know Welles' *War of the Worlds*. *War of the Worlds*, for me, is one of the first mass media delusions. Since radio was very new, people actually thought the US was being invaded by Martians simply because they heard a really good storyteller on the radio. They had to call up the army. They had to call in the National Guard. There were riots. So, recorded media can really trigger quite a few responses.

Although the jazz context might be different, I'm interested in examining how improvisation works in a multimedia context.

Vijay Iyer: I guess I'm trying to see if we can, in the course of this conversation, arrive at a productive idea about, definition of, or agreement on what we mean when we talk about improvisation, so that we can just be more specific about what it means to improvise digital community.

Paul Miller: To me, digital community is about this sense of networks: it's people who you relate to, send files to, and exchange information with. If we were to draw a diagram of everyone in this room and the relationships they have—between you, the moderator, the audience, and me—there's lots of layers of connectivity going on. That's a social

process of how human beings create meaning. Improvisation, for me, is much more about looking at music not as music, but as information.

Vijay Iyer: Yeah, and I agree with that. And I think that's where musical improvisation becomes somewhat indistinguishable from improvisation-at-large because [improvisation is] about navigating an informational landscape, whether it's music or not. And perhaps improvised music is something that magnifies [that idea of navigation], in a sense that it seems to be about that process.

I would also again argue that everyday life is improvised to such an extent that it becomes invisible. We, in fact, forget that improvisation is the order of things.

So, what I want to get at is this: what is it about new digital notions of community that emerge from that same process? Or, how can we read or theorize about digital community, and our new kinds of networked selves? [How can we do this] in a way that makes use of that awareness of what improvisation is, and its fundamental role in everyday life?

Paul Miller: Well, you have to remember that jazz in the twentieth century was very region-specific up until the [advent of] recording media. People's relationships to recorded documents, records, changed how they viewed the live experience. For the twentieth-first century, it's the opposite; in fact, most of us probably respond to recordings of a band before we even go see them live.

Vijay Iyer: So, there's a sense of place that gets kind of diffused. . .

Paul Miller: Yes. Would most of the audience agree that most of us are listening to recordings? If you hear a recording of a band, and you like them, you might go see them, you might go to their website, or you might hear them on a playlist recommendation. [There are] all kinds of social networks for recommendations or what is called "collaborative filtering."

Vijay Iyer: But that refers to consumers, and that's not all that we are.

Paul Miller: I'm not. . .

Vijay Iyer: I'm not trying to shoot you down; I just want to see how else this comes into play. In other words, to me improvised music has never been about selling records. It's not about commerce. It's about, once again, a human response to necessity. It's music that emerges at the crossroads of different forces that make it the only recourse for those who find themselves in those conditions. It's a refusal to be silenced; it's a desire to be heard.

We have improvised as listeners; we have improvised as players, and perhaps that overlaps because a player is also a listener, at some level. We're also always improvising.

I want [to see if we can make any general statements] about improvising digital community today without falling into the trap of commerce, because digital communities now tend to be interpenetrated by the vectors of commerce.

Paul Miller: Yeah, I mean economics is probably the most, I'd say, deep structured human endeavour. When you think about economics, you can think of—my next album's called *The Invisible Hand*, for example. I'm a huge fan of this notion that we look at organizing principles and patterns and how people interact with one another.

Now, economics and commerce obviously are linked, but the idea of the gift economy, for example, or what I just give away, is not necessarily about commerce; but, there is a notion that there's an exchange going on. So, economics is not necessarily always about what they call "capital gains." [Cross-culturally, there are differing perspectives on what constitutes ownership and commerce. The gift economy is one example of a different kind of model.]

I mean, I'm not saying... there's also an ironic term that Marx and Engels came up with, this notion of "everything that's solid melts into air" once you have this notion of the hyper-accelerated economy. So, if you're an Indian and a Dutch guy shows up on your island—like Manhattan—and says "hey I have these red beads. All this land is my land now. I'll give you these red beads." I mean, that's a very unequal exchange, if you know what the value is. But if the Indian's like, "hey, nobody owns the land, everyone owns the land." Is that commercial for them? Or, are they just

inviting these new weird white guys who smell weird from Europe to make a fire and cook a meal, hang out on our island?

That's what's so funny whenever you have these strange European models of ownership applied to other cultures. Other cultures, like those of Japan, India, and China have highly refined tuning systems and artistic production practices. However, one of the common denominators between many of these cultures is that the artists would never sign their names.

I think that Europe was one of the first cultures to actually come up with this notion of copyrightable and patentable playback systems for ownership. So, if you look at the Renaissance, for example, and the book by Vasari, *Lives of the Artists* that's one of the first moments in history when the artist is now brought to the foreground. The artist becomes rock star for them. The same thing was going on in music. The composer was no longer some guy in the background playing some cool music for the king. So, that's one system. In West Africa, there's a lot of music that comes out of a [different] history, where people were [working with the] collective sense of the gift economy. So, exchange is not always about commerce.

Moderator [Carl Wilson]: So Paul, to sort of tie that back in to the idea of digital community, I think one of the possible shifts that happens with the digitization of information is that the notion of community in improvisation—an idea that sustained itself through most of the twentieth century—was that the group, the ensemble, was the sort of community among which the improvisation happened. And, I think part of what you're getting at a little bit, with talking about other cultural models and the role of the artist, is that maybe that idea is dispersing in some way through these sorts of networks of information.

Paul Miller: Yes, there's an infamous Brian Eno statement in *Wired* magazine a couple of years ago where he said, "the problem with computers is that there's not enough Africa in them." I think it's the opposite; there's actually a lot of Africa in them. Everyone's beginning to exchange and trade freeware. [You can] rip, mix and burn. That's a different kind of improvisation. What I think Vijay is intimating is that we're in an unbalanced moment in which so much of the stuff is made by commercial [companies]. My laptop is not my culture. The software that I use—whether it's Protools, Sonar, or Audiologic—[is not my culture per se]. But, it is part of the culture because it's a production tool.

Vijay Iyer: Well, the thing I was just sort of cautioning against was the idea that "we are our playlists." I just didn't want [our discussion] to become like, "because we listen to these things, this is who we are," especially at a moment when the privileged can listen to anything, which means that listening starts to . . . well, it starts to sound like noise or it starts to decrease in value. Or, [there's a sense that it's possible to be] listening without place. Listening in cyberspace or listening in a place that has no . . . I don't want to say that cyberspace has no community because, as we know, it does. But what I find to be somewhat of a mistake is the eliding of live performance. It's those moments of live performance that, in fact, feel more alive than they ever did. They feel more animated.

Paul Miller: But is it after you've played, in the memory stage of a live performance? Because what I'm saying is that a recording is essentially a distillation of a live moment.

Vijay Iyer: It is, and yet the liveness of it gets diffused, or it gets lost, when you can stockpile at a terrifying rate, which means you can have a year's worth of music [on a device that can fit] in my shirt pocket. So, then, what does music mean anymore? The live moment ends up bringing you back to that primal recognition that music is human action. It comes out of people using their bodies to take action, and using devices of whatever kinds to create events, audio events. But of course, then there's the fact that you can sit and make electronic music just by moving your knuckles around on a laptop for a while, and then that can be played on a dance floor or sold to thousands of people.

In a way, I find that live performance brings people back to the fact that music is an embodied thing. [It is something] that people do with other people and with their own bodies. And there's something that feels more urgent about that reality than anything else I can remember in 33 years of music making.

Paul Miller: Well, it's like we've come full circle. In the twentieth century, the idea of the recording actually displaced the live experience altogether. And that's the idea of mass culture, mass production, the mass scale of what we call "pop culture": this was literally about [creating] mass consumers of music. [The] Rolling Stones could not have existed if there was not a music industry behind them pushing a certain very limited, narrow product. Essentially, you have a sense of artificial scarcity.

In economics, what ends up happening is that you have physical objects being defined by scarcity, and that's what creates value. If you go to a rich person's house and they have a Picasso on the wall, they want to make sure that you know that they have that Picasso, and the scarcity [is what makes it valuable]. But value, in the twentieth century, went through a whole tumultuous cycle as the "culture of the copy" kicked in. If everyone has a [copy of a] Picasso painting, does that mean it still has value? (I'm sure most of us have heard of Walter Benjamin's "The Work of Art in the Age of Mechanical Reproduction.")

So, [there's a connection between the notion of] the live experience and the notion of having a unique object. What ends up happening with music in the age of cybernetic replication is that [these ideas of authenticity are challenged.] You need to think about how the root word of "replication" is based on the term "reply." It's a response. It's not about a passive situation. I think what ends up happening with a lot of hip hop, techno, drum and bass, all those styles of music that I call home, is that—essentially, they're about saying that the recorded medium is your archive. It's something that's a living, breathing archive. Your memory of a song might be subjective, but once it's made objectively available, anyone can remix, remake, and reedit [it]. It's that sense of reply to a thing that made kids in the '70s go wild.

So, if you're Afrika Bambaataa playing in a park in 1975, and you're having DJ battle with Grand Master Flash, they wanted to know who had the most amount of bass because that would make people move. And that's a whole Jamaican sound system thing.

You have to remember that in New York we had this huge urban renewal project by Robert Moses and it ended up destroying a lot of the city parks for the cross-Bronx expressway; so, the social patterns [changed]. Kids would gather in the park during the summer. They'd turn on the fire hydrant. If you were in the South Bronx you didn't have too much else going on. It was a very heavy economic situation.

So, after the riots of the 1960s, people were trying to figure out urban decay. Detroit was dying. LA had gone through a whole bunch of turmoil, [as did] Washington, D.C., Philadelphia, most of the main U.S. cities.

In Canada, you guys didn't riot so much. I think half the war veterans were up here maybe chilling out. You guys just sent back an American, and I was like, "what?"

So, the war and turbulence of the 1960s, the crazy riots and assassinations: that's the birth cry of certain kinds of social structures, and [gave rise to] hip hop. I really don't think people would just go and hear a record play someplace; they would want to have a social environment for their kind of community. It's shared experience.

Moderator [Carl Wilson]: But is there a shift now? [What Paul has outlined is] 25 years of hip hop history. But, I think part of what Vijay's talking about in relationship to the live experience is [that there's a difference between] the live experience and your experience with a file full of mp3s in isolation. Perhaps you're in a community, in the sense that you're exchanging files, but I think [Vijay's] trying to point out that there's an important contrast between that kind of exchange and the kind of exchange that happens at a live session.

Paul Miller: Let me play you a response.

The whole notion of hip hop as "not live" is very problematic. In fact, when I was coming up on the scene, there was a lot of beef between the older jazz musicians and younger hip hop kids. In fact, I was one of the first DJs to work with Amiri Baraka, and he [would say things like,] "You know, Paul, this hip hop's OK, but why's it always repeatin'?" It's a valid question.

The funny thing [about] repetition is that it's a very real thing. There must be some psychoanalytic thing about why people think repetition, on the one hand, is not musical, while on the other hand it's about deep immersion. So, [while there's] live poetry, live playing, live theatre and concerts, I'd say [that] right now your average kid's relationships to video games, to their cell phone ring tones, to their text message communities, and to their instant messaging [are stronger]. Trust me, they are a community.

[Miller says to Iyer:] How's your kid?

Vijay Iyer: 3 and a half. She's sending text messages.

Paul Miller: So, [these new technologies are] a translation of certain impulses.

I want to play a quick example of one of the earliest hip hop MC battles, and I think you will chuckle over the kind of historical issues going on. It is actually very old school. It's Run DMC vs. Kool Moe Dee.

[Plays clip.]

Vijay Iyer: I agree that this music is improvised, in the sense that the entire history of the music that we're talking about was improvised, not just on the note-to-note level, but on the level of its very existence. In the same way that, if you were in the woods and you had a stick and a blanket, you would improvise a tent out of those things. This [musical example] is something that arose out of what was at hand and what was necessary. And especially in the case of hip-hop's origins, which you've just described, [it drew upon] the energy of that moment: the human impulse to create, in response to conditions that are imposed on us. So, what you've just portrayed for us resonates with that notion of improvisation I described earlier.

What I also think is interesting about all of these musics is that they also radically revise the idea of composition. It dehierarchizes the idea of composition. If you think of the root words of composition, it's just about placing things with other things, which is what you do as a DJ. This is what hip hop culture was: it's about taking these found objects and found sounds, and placing them alongside each other in a way that's about building with these raw materials, with these constitutive elements. So, reframing these guys as composers, essentially, is crucial too. I also want to be able to name things as both [composition and improvisation], so that we don't fall prey to that binary. That is, the binary between composition and improvisation is false. In other words, these cultural phenomena should be able to be read, in terms of their improvised and composed elements, because everything has those elements.

Paul Miller: This [roundtable] is about a dialogue, where each artist here has radically different approaches to compositional strategy.

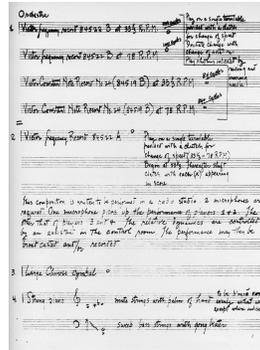
I'm going to keep riffing on that term "compositional strategy" because essentially collage [uses] everything on the table. You can take lots and lots of different [materials]: anything goes.

In my book *Sound Unbound*, we tracked down the estate of the composer Raymond Scott. He made a lot of early computer music. He was one of the first composers to make music for TV commercials, like jingles, but he called the jingles "audio logos." What I love about that is that the idea of a recognizable motif has a whole psychoanalytic relationship to memory. So, you can hear certain sequences of sounds, you can hear ring tones, you can hear a whole sense of how a sequence works in electronic music, but it's still playing with memory. As we move further into the twenty-first century, this idea of the "database aesthetics" [is] a kind of basic root of how people look at digital life or living in a digital information economy.

I was walking down the street in Luanda, Angola, and they had just ended a twenty-five year tribal war, care of U.S. tax dollars at work. They had a lot of gold, oil, and diamonds. Now, there are over thirty-thousand Chinese walking around downtown Luanda because of the relationship of the Chinese petroleum corporations to the Marxist regime of President Dos Santos. So, I'm walking down, [and I see that] all the buildings have crazy high-calibre bullet pockmarks; it has a serious ex-war zone look. But, in the midst it all, every single kid on the corner had bootlegged DVDs, and every possible ripped, mixed, burned copy of Tupac, or Puff Daddy, you name it. They also had a style of music called Kuduro, which is like techno mixed with certain Angolan and Brazilian motifs, because Angola was a Portuguese empire.

So, all the kids are raging about Kuduro, and if you go to Rio, which is across the Black Atlantic, as Paul Gilroy likes to call it, you can hear this style called Baile Funk. Baile sort of means the ghetto area; it's a kind of very underground style of music. So, the people of these two different cultures across the Atlantic share a common history of colonialism, a common history of responding against colonialism. [Both styles have] a very interesting common denominator.

I found the PDF of the score of *Imaginary Landscapes*, so I guess I can stop asking you to visualize it. The instructions for the complete composition say, "begin at 33 1/3 rpm. Thereafter, shift clutch with each 'x' appearing in score."



[John Cage's Imaginary Landscapes No. 1³](#)

The actual score for this piece becomes about shifting speeds, playback systems, and duration. In physics, the sustained release of a note or a tone actually has a sound envelope, and that can be added in and transformed simply with playback speeds. So, if you hear something very slow, it has a radically different sound than if you play it very fast. So, [Cage] was playing with variable speeds. And I like thinking about that as a new form of polyphony, where the composer is trying to figure out this quirky object called the phonograph in 1939. You have to remember that it was probably [considered] high tech for that time period.

If you think about the way that we listen to encoded music these days, the format you encode something in is MP3, AAC, FLAC, or Ogg. Each of these encrypted ways of playing something can be interrupted. And I think that there's some tricksterism, whether it's playing with words, with fragments of a recorded medium, or with how people will respond to something that's a perceived sequence. That's that magic sense of realism that I think Méliès was going for back in the beginning of the twentieth century. Magic is a kind of improvisation, and maybe we're looking at the twenty-first century as an inheritance of magic realism. [We are] playing with the materials around us, and seeing that playfulness as irreverent to this notion that every found record or every found picture . . . anything can be changed. That's kind of what I hope we have as a common ground.

Questions from the Audience:

Audience Member 1: Doesn't improvisation sort of imply a sense of community? If you just go online and look at digital files that everybody looks at from a different context, what does all that mean? That's ignorance to me. You have all this information and you don't know what it is? You mentioned Raymond Scott. If you go out in the real world, almost nobody knows about him.

Paul Miller: But a lot of people have heard the Loony Tunes theme.

Audience Member 1: Do they know it's by Raymond Scott?

Paul Miller: It doesn't matter. You can say that the memory of that sound has influenced millions of people. You're not going to know every song you hear all the time.

Audience Member 1: But, if you have all this data, in general . . . and you have no context for understanding . . .

Vijay Iyer: Well, you always have context. It's more about how active you are in seeking out that context. I guess the question is, how active does one become in fleshing out one's context, or in responding to it, or being really engaged with it, and does that then make you more fully realized.

Paul Miller: And, by the way, I don't think that everyone looking online is making community. It's a way of saying "we share something." And that sense of sharing goes beyond nation-states. It goes beyond geography. It goes beyond class and race. One of the fun things about this strange, entropic, early twenty-first century file exchange culture is that it's actually eerily post-geographic. Some kid in Brazil will download a mix from Finland. Sigur Rós gets bootlegged and remixed in Baile Funk. That kind of social sculpture is very beautiful, but also it's so huge and so bizarrely . . . I don't think about the kid down the block. I'm thinking much more about what kids are going to be doing in the next 10 years or so, as geography, as the twentieth century defined it, and you're saying the notion of

community in the physical space that's . . . I think a lot of kids who are playing massive multi-player, they don't know where their partners are, unless somebody tells you. Or, if you're in Second Life . . . The country Sweden was the first country to open an embassy in Second Life. If you want to bypass all the lines, there you go. But, I think there's a lot to be said: this is new, and we're still feeling our way out. I would say that this isn't the end all and be all. I definitely hope that not everybody leaves here saying, "Oh, DJ Spooky's saying that everything's great online." Yeah, there are lots of issues.

Audience Member 2: You talked about improvisation between the artists in a live venue, but in that event of improvisation the audience also plays a role in the improvisation. So, in that case, in a situation like that, and let's say it's recorded, is there really any ownership to that? I mean, is it part of a community at that point, and then it's just out there, is there really any ownership to that?

Vijay Iyer: Well, this has been one of the great issues in 20th century copyright laws, and it continues to be an issue. If you look at the history of what's called "jazz," you'll see a history of responses to that issue. For example, in "Bird of Paradise," Charlie Parker plays over "All the Things You Are." There's a pre-existing song, but it's named "Bird of Paradise." The melody is never played, and so it becomes this composition. But he improvised it. Why did it become a composition? Because the record companies said, "OK, what are we going to call this?" And then he could have, for that moment, ownership of that version or that rendition of that song. This is why they then said, "well, why don't we just write our own tunes over these harmonic progressions that we already have." That was a way of circumventing the ownership issue. So, they composed and they'd improvise and who owned that? The record company.

Audience Member 2: Improvisation is a moment in time; we've crystallized it. How can you own that moment in time?

Vijay Iyer: There are multiple issues interpenetrating here. One is the issue of who owns music. Period. Then, there's the issue of the relationship between artists and those who wish to own their content, which is another dynamic that creates imbalances. People have responded [to this dynamic] in different ways. [Some have said,] "well, we're composers, too," so let's write our own tunes and only play over our own tunes and create our own harmonic progressions. Then it got even wilder because it was like, "we're going to create this improvised situation that's ours. And no one owns it but us." But then, there are these people who sample things and are also improvising, using a technique that [DJ Spooky] pioneered. And that became another issue. The history of music as we know it, in the modern technological era, is constantly in dialogue with the issue of who owns it, and [will] continue to be.

[The session concludes with a sampling of various compositions/improvisations.]

Notes

¹ This conversation originally took place as part of a panel discussion during "Diaspora, Dispersal, Improvisation, and Imagination," The Guelph Jazz Festival Colloquium. September 3, 2008. Guelph, Ontario, Canada. It has been transcribed by Elizabeth Groeneveld.

² Natasha Pravaz, "Brazilian Music and Community Building in Toronto," presented at "Diaspora, Dispersal, Improvisation, and Imagination," The Guelph Jazz Festival Colloquium. September 3, 2008. Guelph, Ontario, Canada.

³ Permission to post a sample of John Cage's score *Imaginary Landscapes No. 1* kindly granted by Edition Peters New York.