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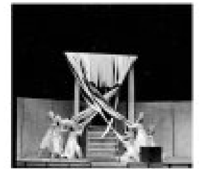

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Lucille Meets GuitarBot: Instrumentality, Agency, and Technology in Musical Performance

Philip Auslander

In an essay titled "Instrumentalities," David Burrows proposes ventriloquism as a metaphor for understanding the relationship between musician and instrument. Although this is not Burrows's point, this metaphor suggests that one can see the musician as making the instrument sing by "throwing" his or her musical voice into it. Burrows actually uses the figure of ventriloquism to suggest another aspect of the relationship between player and instrument, describing ventriloquism as "not simply [an act] of concealment and transformation but [one that] involves splitting the performer's personality and displacing part of it onto an alter ego that acts as a foil, not a clone."[1] With this metaphor, Burrows importantly posits the musical instrument not as a McLuhanesque, technological prosthetic that extends the capacities of the human body, but as an entity perceived as distinct from, and in tension with, the musician. Like the ventriloquist's dummy, this entity is made to appear to have its own agency with which the musician must negotiate in order to make it sing. In reality, of course, the instrument is subject to the musician's agency in the sense that, like the ventriloquist's dummy, it is mute without human intervention, but the illusion of the instrument's (semi-)autonomy is fundamental to instrumental performance in most Western musical genres.

A possible reason for the cultivation of this illusion is that conventional Western musical performance is a demonstration of skill undertaken, as Stan Godlovitch has pointed out, under "accepted artificial constraints." Godlovitch means that instrumental performance is not simply about producing particular sounds, but rather about producing them by means that reflect the traditional values of a community of musicians. These traditional values, which forbid such tactics as redesigning instruments to make them easier to play or playing a violin part on a synthesizer (Godlovitch's examples), demand not only that certain sounds be made, but that they be made under circumstances that make them difficult to produce so that musical performance "becomes a ritual requiring skill":

> In these respects, [musical] performance shares much with exploring and athletics. Specialized gear notwithstanding, ardent mountain climbers do not typically solve their challenge by blasting and bulldozing so as to furnish level terrain where once there were cliffs; nor do they hasten ascent to the peak in helicopters. Being an accomplished guitarist is in part being able to subdue confidently the treacheries of the guitar.[2]

[1] David Burrows, "Instrumentalities," *Journal of Musicology* 5, no. 1 (1987): 123.

[2] Stan Godlovitch, *Musical Performance: A Philosophical Study* (London: Routledge, 1998), 71. It is important to note that Godlovitch takes the classical solo recitalist as the model of musical performance on which to base his philosophical inquiry.

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In other words, musical performance is not just about achieving certain sonic ends—it is crucially also about perceptibly overcoming challenges presented by the means used to achieve those ends.

Without in any way discounting the real and hard-earned skill of musicians, I insist, Godlovitch notwithstanding, that what counts, ultimately, is audience perception, not actual degree of difficulty. Here, it is necessary to make a distinction between audiences. Godlovitch's argument pertains, in part, to the idea of skilled musicians as constituting something like a guild; in order to claim membership in this "exclusive community," one has to demonstrate the necessary level of technical accomplishment.[3] Presumably, one's fellow guild members are in a position to judge one's technical ability in and for itself by assessing one's instrumental technique, handling of the conventional repertoire, and so on. Most audience members, however, are not also guild members and therefore do not possess the requisite knowledge to make an informed judgment of instrumental skill. As Theodore Gracyk puts it, "If one does not know the demands of the particular instrument, one cannot judge the virtuosity displayed. And this may be the situation more often than not."[4] It becomes necessary, then, for the musician to perform instrumental skill in a way that will make it apparent to a more general audience.

This dimension of musical performance is related to the process Erving Goffman calls "dramatization." For Goffman, dramatization is the making-visible of aspects of one's work routine that are not readily visible to the audience so as to make a desired impression. He identifies violinists, along with prizefighters and surgeons, as not needing to indulge in dramatization, because "some of the acts which are instrumentally essential for the completion of the core task of the status are at the same time wonderfully adapted, from the point of view of communication, as means of vividly conveying the qualities and attributes claimed by the performer."[5] I differ with Goffman's inclusion of violinists among those who do not need to dramatize, for the acts that are "instrumentally essential" for the performance of music (e.g., fingering or striking keys, bowing or plucking strings, blowing into apertures or vibrating reeds, and so on) are not in themselves expressive of "the attributes claimed by the performer." Musicians therefore must engage in additional actions to communicate those attributes to the audience, especially the nonspecialist audience. To be an accomplished guitarist in the eyes of this audience therefore is *to appear to be able* to subdue the guitar, which means that the guitar has to be constructed in performance as something that presents obstacles for the player to surmount, something that resists the player in some way and is not simply a tool that yields readily to his or her use. Investing the instrument with agency, constructing it as an entity with a will of its own, as the ventriloquist constructs the dummy, is a way to achieve this effect in performance.

Here, I will discuss the questions of instrumentality and agency, and their relationship to technology, in musical performance in relation to two contemporary performers: blues guitarist and songwriter B. B. King and classical violinist and composer Mari Kimura. Both may seem somewhat idiosyncratic in their respective engagements with instruments: King is famous for having named his guitar Lucille and treating it

[3] Ibid.

[4] Theodore Gracyk, "Listening to Music: Performances and Recordings," *Journal of Aesthetics and Art Criticism* 55, no. 2 (1997): 145.

[5] Erving Goffman, *The Presentation of Self in Everyday Life* (New York: Anchor, 1959), 30–31.

as a person unto itself, and *GuitarBotana*, Kimura's performance that I will examine, involves a digitally programmed robotic musical instrument as well as a standard violin. I will use the trope of ventriloquism as a means of unpacking the layers of agency, both overt and covert, in their performances to suggest that both performers, while innovative, do not so much challenge the ways that agency and instrumentality play out in conventional musical performance as *dramatize* them.

Lucille

As Burrows suggests, musicians displace their own agency onto the instruments they play in ways that constitute those instruments as (semi-)autonomous entities to which they relate as performing partners rather than just tools. Not long ago, I saw Judd Hughes, a young though virtuosic country guitarist who played lead in Patty Loveless's band, hold and manipulate an acoustic guitar as if it were an unruly alter ego, like a barely trained Great Dane over which he had temporary control but that could get away from him at any moment. A more celebrated example is B. B. King, who in naming his guitar Lucille encourages his audience to perceive it as a separate being, and implies that his relationship with it is fraught with the complexities attending heterosexual relationships between men and women.[6]

King's relationship with Lucille is indeed complex, and I cannot hope to do it justice here. The guitar is said to be named for a woman over whom two men brawled at a joint in Arkansas where King played in the late 1940s, early in his career; the fight led to the immolation of the place, a story that itself could have been taken from a blues ballad. King consistently treats Lucille as an entity separate from himself, both discursively and in the way he performs with her. He frequently gives Lucille instructions, saying "One more, Lucille" when he wants to play another chorus, or "Take it easy" when he plays pianissimo. He confirms his ventriloquial relationship with Lucille in the way he seeks to make her sing in his displaced voice: "The one thing that I'm concerned about today, to make Lucille sound even more like singing, more in the style of my singing."[7] King defers to Lucille at moments when he claims to find himself unable to speak, suggesting that his voice and Lucille's are expressively interchangeable. In his recording of the song "Lucille," one of the places where he has recounted the story of how the guitar got its name, King says at one point: "Sometimes I get to a place where I can't even say nothing." This remark is followed immediately by guitar playing, to which King responds appreciatively, "Look out!" as if addressing the actions of another. At a different moment in the same song, he says, "Sorta hard to talk to you myself. I guess I'll let Lucille say a few words, and then. . . ." His voice trails off as the guitar takes over; when he resumes speaking at the end of the instrumental passage, he does not pick up where he left off—it is as if Lucille had completed the thought for him.[8]

[6] A number of celebrated guitarists in the blues/rock tradition have named their guitars: Eric Clapton had a guitar called Blackie; Roy Buchanan had one called Nancy; Keith Richards has called a guitar "Micawber"; George Harrison played Rocky and Lucy; Steve Vai has guitars named Evo and Flo; and the list goes on. The *Bad Dog Café* section of *The Telecaster Guitar Forum*, the online bulletin board that is my source for this information, also features entries by many lesser-known musicians listing the names they have given their instruments. This thread, which began on 27 March 2009, is available at http://www.tdpri.com/forum/bad-dog-cafe/155962-clapton-had-blackie-roy-buchanan-had-nancy-bb-king-has-lucille.html (accessed 27 April 2009).

[7] B. B. King, quoted by Jim Kerekes and Dennis O'Neill, "Lucille Speaks," in *The King of the Blues* (1996), http://www.worldblues.com/bbking/prairie/lucille.html (accessed 11 July 2008).

[8] B. B. King, "Lucille," in *Lucille,* MCA Records, 1968.

He also describes Lucille as a distinct individual, with her own sensibility, from whom he must coax musical sound:

> It seems that it loves to be petted and played with. There's also a certain way you hold it, the certain noises it makes, the way it excites me . . . and Lucille don't want to play anything but the blues. . . . Lucille is real, when I play her it's almost like hearing words, and of course, naturally I hear cries. I'd be playing sometimes and as I'd play, it seems like it almost has a conversation with me.[9]

King's rhetoric here is worth attending to. There is ambivalence in the way he refers to the guitar sometimes as "it" and sometimes as "her," alternately personifying the instrument and acknowledging its status as an object. When he discusses his actions on Lucille (petting, playing, holding), he refers to the instrument as "it." But when he discusses Lucille's own musical contribution, he refers to the guitar either by name or using feminine pronouns, thus clearly positioning Lucille as an active, gendered entity separate from himself.[10] This entity has human characteristics: she speaks, cries, engages in conversation. He implies that Lucille is autonomous: she is "real" and has specific ideas about what music she will perform. King does not characterize Lucille as "treacherous," the word Godlovitch uses to describe the resistance the guitar offers its player. Lucille is King's indispensable creative partner and alter ego, but it is clear that her cooperation is not guaranteed: she must be cajoled. King must do what she wants ("it loves to be petted and played with") if she is to work willingly with him in playing the blues.

King dramatizes this aspect of his relationship with Lucille in performance. Like many other guitarists who are also vocalists, King often does not play when he is singing. When he sings, his guitar simply hangs against his torso on its strap while he uses his arms and hands to gesticulate in ways that underline the emotional states expressed in his songs' lyrics (fig. 1). While singing, he stands erect, his face toward his audience or directed slightly heavenward, his eyes often closed. When he plays Lucille, however, his posture changes. He hunches over the fretboard in his left hand, his head tilted downward toward the instrument. Even if his eyes are closed, his head is positioned as if he were looking at Lucille, giving her his full attention (fig. 2). While he is playing, every movement of his body and every facial expression is a direct response to the sounds emanating from Lucille, often on a note-by-note basis. In conjunction with what he says about Lucille, this way of performing with her suggests that when King is singing, he is free to express his own feelings as conveyed through the lyrics. If he wants Lucille to participate, however, the focus must be entirely on her and what she has to say.[11] In Burrows's description, quoted earlier, ventriloquism "involves splitting the performer's personality and displacing part of it onto an alter

[9] King, quoted by Kerekes and O'Neill, "Lucille Speaks."

[10] It is important to stipulate, however, that Lucille is not a specific instrument; there have been many Lucilles over the course of King's career, though they have all been of the same model, the Gibson ES-355. But the fact that Lucille is not a particular guitar reinforces the distinction between object (it) and persona (she) that King implies in talking about her: Lucille's identity persists across multiple physical incarnations.

[11] These observations are based on King's performance of several songs on Ralph Gleason's *Jazz Casual* television show in May 1968 on the National Educational Television network. Clips of this program are available on YouTube.com, http://www.youtube.com/watch?v=tBWcSc3nPow and http://www.youtube.com/watch?v=O5URVbh3KX8&feature=related (both accessed 4 May 2009). It was also published as a DVD by Rhino/WEA in 2002.

Figure 1. B. B. King sings on Ralph Gleason's *Jazz Casual* (National Educational Television, 1968).

Figure 2. B. B. King communes with Lucille on Ralph Gleason's *Jazz Casual* (National Educational Television, 1968).

ego." In King's case, it is arguably not just his personality that is split and displaced, but also the two musical functions he performs: he sings as himself, but his guitar playing is displaced onto Lucille as his alter ego.

In a discussion of a series of experiments intended to show the connections between the auditory and the visual in musical perception, a group of research psychologists describes King's typical gestures and facial expressions, noting that

> King frequently adopts an introspective demeanor, with eyes closed and a pained expression, yet stubbornly shaking his head. This *affective display* conveys an impression of stoically reflecting upon but not surrendering to difficult emotions. Periodically he stares open-eyed at the audience with an open mouth. The expression appears to convey a sense of wonder . . . . Judge A [one of the experimental subjects] observed that King's facial expressions often functioned to signal that certain passages were difficult but satisfying to play.[12]

These authors also observe the direct relationship between King's behavior and the music he plays:

> It is notable that B. B. King's facial expressions closely track his guitar sounds. . . . In some cases his rapid head shaking movement mirrors vibrato on individual notes. This gesture has the effect of drawing the listeners' attention to local aspects of music, specifically to B. B. King's nuanced treatment of individual notes.[13]

I suggest that the ventriloquial paradigm for instrumental performance points toward a different reading of King's performance, though not one that excludes the psychologists' analysis. Whereas the psychologists take it as given that King's behaviors express his feelings about his own playing and the music he is producing, it seems to me that the same gestures and expressions can equally well be read as his reactions to *Lucille*'s behavior. Perhaps the sounds Lucille produces arouse difficult emotions within him, and perhaps it is her ability to move him that stirs his sense of wonder. Perhaps it is Lucille's prowess at rendering difficult passages rather than his own that he signals for the audience, and perhaps he is following "her" playing with his head movements. Constituting the guitar as a separate "person" and acting toward it as such allows King to dramatize the ventriloquial relationship between instrumentalist and instrument, a relationship that is always enacted, though not usually foregrounded, in conventional musical performance.

GuitarBot

Mari Kimura's *GuitarBotana* (2004) is a work for violinist and GuitarBot, a robotic musical instrument designed by Eric Singer and based on the slide guitar. The GuitarBot consists of four independently controlled strings, each of which is "fretted" by a mechanical slide and plucked by a plectrum. It cannot be played directly by human hands, but only by using a computer and MIDI (Musical Instrument Digital Interface); the computer can be programmed to play it automatically.[14]

[12] William Forde Thompson, Phil Graham, and Frank A. Russo, "Seeing Music Performance: Visual Influences on Perception and Experience," *Semiotica* 156, nos.1–4 (2005): 207–8, emphasis in original.

[13] Ibid., 208.

[14] Some of my description of *GuitarBotana* here repeats material that appeared originally in Philip Auslander, "Live and Technologically Mediated Performance," in *The Cambridge Companion to Performance Studies*, ed. Tracy C. Davis (Cambridge: Cambridge University Press, 2008), where I discuss Kimura and her performance in a different context.

GuitarBot is a rather large and imposing sculptural object, over five feet tall, including its base. Each string is stretched over its own vertical metal strip; metal braces behind them hold the four strips parallel to one another. Attached to the braces near the bottom of the assembly is a metal rod that curves down to a supporting base. Although the robot is not humanoid, it is generally anthropomorphic in its size and verticality. As GuitarBot plays, it bobs and shakes on its vertical axis. In a video of *GuitarBotana* shot in an art museum, GuitarBot is perched on a white gallery pedestal, making it noticeably taller than the diminutive Kimura, who stands a few feet away from it while playing. She faces GuitarBot throughout the performance (fig. 3; the video is available online at Project Muse).[15]

Kimura composed the music and wrote the software for *GuitarBotana*; when performing the piece, she both plays from a score and improvises. The GuitarBot's part is also both scored and improvised. Its software enables it to respond to the violinist's playing in various ways. In some cases, it follows the violinist closely and produces tones to fill out the harmony of the piece; in others, it is programmed to disregard random pitches played by the violinist, producing more open-ended situations in which its responses are relatively unpredictable. It is therefore possible for the violinist and the robot to enter into an improvisational dialogue in which the robot responds to the violinist's playing and the violinist responds improvisationally to the robot, and so on, all within the structural constraints of Kimura's composition.

In a careful parsing of different kinds and degrees of interactivity in performance, David Saltz makes the point that in a piece such as *GuitarBotana,* the computer functions as a musical instrument.[16] Given that GuitarBot itself is a physical and mechanical object and not a computer, it is more precise to say that it is the instrument and the computer "playing" it is a musician, but I will offer a slightly refined version of this analysis below. Although King's and Kimura's respective instrumental performances are different in important ways, not least of which are the differences between the genres of the music they perform, the audiences for those genres, and the association of the blues with folk culture and art music with high culture, they both foreground musicians' ventriloquial relationships to their instruments. In *GuitarBotana*, Kimura is, in effect, playing two instruments at once. As a violinist she behaves conventionally, without drawing attention to her ventriloquial relationship to the instrument. But through her interaction with GuitarBot, which she treats as an entity separate from herself in a fashion quite comparable with King's establishment of Lucille as an autonomous agent, she engages in a meta-discourse around questions of musical identity and agency similar to those implicitly raised in King's performance, but further complicated by her use of digital technology.

When Kimura plays *GuitarBotana*, she interacts physically with GuitarBot very much as she might with a fellow human performer: as Kimura plays her violin, she faces GuitarBot, leans and gestures toward it, watches its movements, and her facial expressions and body language look as if she were taking and giving the kinds of performance cues that musicians exchange (fig. 4). Her proximity to GuitarBot makes

[15] These and subsequent observations about Kimura's performance with GuitarBot are based on a video by Liubo Borrisov of Kimura and Guitarbot performing *GuitarBotana,* http://www.music.columbia.edu/~liubo/guitarbotana/ (accessed 4 May 2009).

[16] David Z. Saltz, "The Art of Interaction: Interactivity, Performativity, and Computers," *Journal of Aesthetics and Art Criticism* 55, no. 2 (1997): 123–24.

Figure 3. Mari Kimura and GuitarBot perform *GuitarBotana* at the Chelsea Art Museum, New York City, in 2004.
(Source: Performance video directed by Liubo Borrisov.)

Figure 4. Mari Kimura and GuitarBot perform *GuitarBotana* at the Chelsea Art Museum, New York City, in 2004.
(Source: Performance video directed by Liubo Borrisov.)

these gestures seem quite intimate. At other times, Kimura does not look directly at GuitarBot, but closes her eyes or looks down. She focuses her gaze on her violin and her own playing of it, looking over at GuitarBot only every so often, as if to check in with a fellow player. Kimura uses her gaze within the performance to construct her violin and GuitarBot differently: the way Kimura looks at her violin while playing it establishes it as her instrument, while the ways she looks at GuitarBot suggest that she perceives it as another musician. The fact that GuitarBot moves as if it were leaning toward and away from Kimura as its strings sound enhances this effect by making it seem to move in response to her playing, gestures, and looks. Like King, Kimura separates the two musical functions she performs: just as King sings in his own voice, Kimura retains the identity of violinist for herself. And just as King displaces his identity as guitarist onto Lucille, Kimura displaces her agency as GuitarBot's programmer onto the instrument itself. (In saying this, I mean only that King and Kimura both perform two musical functions simultaneously and use one to foreground the ventriloquial aspect of the musician's relationship to the instrument, though not the other. The fascinating question of whether a singer has a similar relationship to the voice as an instrumentalist does to the instrument lies outside the purview of this essay.)

Kimura's stated goal in this performance is for the audience to perceive GuitarBot as a musical partner akin to another human musician, not an instrument.[17] She furthers this goal by using her own performance as violinist to ensure that everything that happens in the performance adheres to her vision of the composition:

> My compensating for the robot's or computer's lack of musical "integrity" as the performance goes along should be hidden from, or unnoticeable to, the audience. In short, my aim is that the performance as a whole come across to the audience as if the robot or computer is thinking, feeling, and being sensitive; that it possesses the "rights and responsibilities" of a true musician.[18]

The purpose of this benign deception is rhetorical. If King's dramatic relationship with Lucille seems to echo the complex gender politics of the blues, Kimura's presentation of GuitarBot as a separate entity addresses cultural issues pertinent to her genre—that of art music. She wishes to persuade her audience that contemporary, experimental, and electronic music belong in the same canon as the classical repertoire: "I consciously try to convey to the audience the fact that Bach, Brahms, Cage, Berio, and Robots belong together in the same evening's program."[19]

[17] In his article "Live Media: Interactive Technology and Theatre," David Z. Saltz makes a useful taxonomic distinction between instrumental media, in which "interactive technology is used to create new kinds of instruments," and virtual puppetry: "The difference is that while an instrument is an extension of the performer, a kind of expressive prosthesis, a virtual puppet functions as the performer's double. In other words, instruments are something performers use to express themselves . . .; a puppet is a virtual performer in its own right." See *Theatre Topics* 11, no. 2 (2001): 126. Kimura uses GuitarBot as a virtual puppet that is ultimately under her control, but appears to the audience as a "performer in its own right."

[18] Quoted in Auslander, "Live and Technologically Mediated Performance," 114.

[19] Ibid., 116. An index to the differences between the cultural contexts in which Kimura and King operate is that whereas it is possible that the more experimentally inclined part of the audience for art music might be open to the idea of a robotic musician, it is unimaginable that the blues audience, which subscribes to an ideology of folk authenticity, would be equally accepting.

Lucille Meets GuitarBot

Although I have emphasized up to this point the similar ways King and Kimura construct Lucille and GuitarBot as autonomous musical agents through their respective performances, there is an obvious and important difference between these performances: Kimura's use of digital technology allows her to remain physically independent of her instrument, enhancing the illusion of GuitarBot's autonomy. I say "illusion" because, while it is true that GuitarBot is more autonomous than a conventional instrument, since it produces sound without being manipulated directly by a human being and the programming for *GuitarBotana* allows it to make some "decisions" on its own, it is permitted only relative autonomy. Although Kimura does not touch GuitarBot, she nevertheless determines what it plays during the scored sections of the piece through her programming of the computer that controls it. The score contains special notations that allow the performer to anticipate what GuitarBot will do during specific passages in the piece. For example, (*ii) means that "GuitarBot follows and plays the violin pitches in unison," while (*iii) means that "GuitarBot follows and plays the violin pitches, adding 4th chords in parallel motion."[20] The sections in which GuitarBot "improvises"—that is, produces relatively unpredictable output—are also determined by Kimura and marked in the score. In other words, even though Kimura does not know exactly what sounds GuitarBot will produce during those passages, she knows when those passages will occur and the basis on which GuitarBot will respond. Furthermore, as the quotation above suggests, she seems to be primarily concerned with the integrity of her composition, not with the creation of a genuinely autonomous technological musical agent. Since GuitarBot cannot think, and therefore cannot actually make musical decisions, Kimura must make it appear to think by compensating for what she calls its "lack of musical 'integrity'" through her own playing. Writing of the characters in MOOs,[21] Michele White observes that "characters can be programmed to . . . participate in events when the spectator is not engaged with the host computer. It is difficult to describe characters as subjects, even though the character 'acts' while outside the spectator's control because of the continued conflation of spectator and character."[22] Much the same is true of GuitarBot: even though it acts on its own to a certain extent and is never physically controlled by Kimura, it does not qualify as a subject apart from her. Kimura's programming of GuitarBot does not grant it true autonomy; its apparent autonomy is an effect created through the way Kimura performs with it, just as Lucille's autonomy is an effect of King's performance.

Another important difference between King's instrumental ventriloquism and Kimura's is also a direct consequence of her use of digital technology: we can always *see* King manipulate Lucille and there is ultimately no ambiguity as to who is truly vested with agency in the performance. In this regard, King's and Kimura's respective

[20] Mari Kimura, *GuitarBotana*, © 2005. The score was provided to me by the composer.

[21] John Daintith defines MOO, which is an "acronym for multiuser object oriented," as "a system that has been developed from the early text-based multiuser adventure games, and offers a purely text-based environment allowing multiple users to . . . interact with other users and with end-user systems"; see *A Dictionary of Computing* (2004), from Encyclopedia.com, http://www.encyclopedia.com/doc/1O11-MOO.html (accessed 28 October 2009). In MOOs, users create characters, spaces, and objects and perform actions by typing commands.

[22] Michele White, *The Body and the Screen: Theories of Internet Spectatorship* (Cambridge, MA: MIT Press, 2006), 43.

performances parallel two different moments in the history of ventriloquism. King's performance is akin to the more recent, and most familiar, paradigm of the vaudeville ventriloquist who has a dummy for an interlocutor, which originated in the mid-nineteenth century. As Steven Connor notes, our ability to make a visual connection between ventriloquist and dummy is crucial to this kind of theatrical ventriloquism: our delight at the act derives precisely from knowing, despite appearances, where the voice comes from.[23] Indeed, our delight in King's facial expressions and physical gestures derives from the way they can be read as his reactions to the sounds Lucille produces, as if autonomously, juxtaposed with the self-evident fact that it is King who is playing.

As I have noted, the technology Kimura uses enables her to sever the physical connection: GuitarBot is her instrument, her dummy, her alter ego, her foil; it is controlled by the software she wrote, her violin playing, and the parameters of her composition. But there is not the evidence of direct physical control conveyed by the proximity of dummy to ventriloquist, not to mention the presence of the ventriloquist's hand on the doll. I suggested earlier that the computer could be seen as a musician "playing" GuitarBot. I will now refine that characterization by suggesting that the computer is not like a musician in itself; it serves, rather, as Kimura's "hand" that controls both GuitarBot's movements and its musical actions, in the way the ventriloquist's hand manipulates the dummy or King's hands play Lucille. Kimura's physical agency as GuitarBot's controller has been displaced onto the computer. In her performance, we see Kimura's enactment of traditional physical agency on her violin contrasted with the electronically mediated agency through which she controls GuitarBot via the computer.

Whereas we see King control Lucille even as we enjoy the (fictional) idea that he has to negotiate with her, there is greater ambiguity as to who has agency in Kimura's performance. This ambiguity stems largely from the probability that her listeners do not know exactly what is going on much of the time, even if they are aware of the basic situation unfolding before them. Absent such knowledge, it is not clear just from watching and listening whether, for example, GuitarBot is a playback device or is interactive, or, when it is improvising, exactly what it means for such a device to "improvise." Even if one knows the technological set-up and how Kimura uses it, what is happening on a moment-by-moment basis is still not necessarily clear unless one happens to be reading the score. This ambiguity relates directly to an issue that is emerging around performances involving human-machine interaction: how to enable the audience to understand the operation of cause and effect in such performances. Whereas some argue that performers should do things that allow the audience to understand how they trigger their technological devices and how those devices respond to performers' actions, Kimura, at least in this piece, intentionally obfuscates the precise nature of the human-machine interaction in the interest of promoting the illusion that GuitarBot is her equal partner in the performance.[24]

[23] Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), 20–21.

[24] For an essay discussing the need for transparency in human–machine interactions in musical performance, see W. Andrew Schloss, "Using Contemporary Technology in Live Performance: The Dilemma of the Performer," *Journal of New Music Research* 32, no. 3 (2003): 239–42. For a discussion of the issue in more general terms, see Robert Wechsler, "Artistic Considerations in the Use of Motion

If King's play with Lucille parallels the interaction of the vaudeville ventriloquist and the dummy, Kimura's performance relates more closely to an earlier, less familiar practice of ventriloquism: early nineteenth-century acts in which ventriloquists threw their voices into the bodies of automata that stood apart from them and seemed to move on their own.[25] If King dramatizes the instrument's status as dummy to the musician's ventriloquist, Kimura takes that representation a step further (ironically by taking a step backward in the history of ventriloquism) by using, in addition to her violin, a robotic instrument that is physically distinct and seemingly autonomous even as it sings, like Lucille, in the ventriloquial voices that Kimura "throws" as composer, coder, and player.

Like a theatrical ventriloquist, King deflects his audience's attention from his control over Lucille through his reactions to her, and by interacting with her as if she were a separate entity. Kimura seeks to deflect her audience's attention from GuitarBot's lack of autonomy and musicianly intelligence, but also goes beyond that. The *masking* of agency is central to her ventriloquial musical performance in a way that it is not to King's. John Deighton, a professor of marketing, provides a taxonomy of strategies for masking agency in performance, including his concept of "objectification." In Deighton's terminology, objectification means the masking of human agency and its apparent transfer to an object:

> [T]he marketer stages a performance, but the consumer perceives it as merely an objectively good performance by the product. The dramatistics are overlooked. . . . Hoch and Deighton (1989) describe several examples of framing events to show the product in its most attractive light while the marketer stays offstage.[26]

While it may seem unconventional to describe artists' work as analogous to that of marketers, I find Deighton's account of objectification to be particularly pragmatic and direct. Both King and Kimura are akin to marketers in one respect: each seeks to sell to an audience the idea of a musical instrument as an autonomous entity in equally vivid, though different, ways. King presents his guitar as a separate, named being that enjoys a degree of independent expression and with which he is in dialogue. Kimura also interacts with GuitarBot as if it were her musical partner and engages in both scored and improvisational musical dialogue with it. But whereas King does not in any way hide his physical manipulation of Lucille even as he rhetorically constructs her as a separate entity, Kimura seeks to mask the "dramatistics" involved in her staging of GuitarBot by encouraging her audience to perceive her relationship to it as a relationship between equals, and hiding the work she does to maintain the integrity of her composition in the face of GuitarBot's unpredictable behavior.

Tracking with Live Performers: A Practical Guide," in *Performance and Technology: Practices of Virtual Embodiment and Interactivity*, ed. Susan Broadhurst and Josephine Machon (Houndmills, UK: Palgrave Macmillan, 2006), 72. See also Caleb Stuart, "The Object of Performance: Aural Performativity in Contemporary Laptop Music," *Contemporary Music Review* 22, no. 4 (2003): 59–65. Stuart argues that listeners to laptop music should surrender the desire for a visually verifiable relationship between the physical actions of performers and the sounds they produce in favor of understanding the sound as performative in itself and therefore as the proper object of their attention.

[25] Connor, *Dumbstruck*, 335–37.

[26] John Deighton, "The Consumption of Performance," *Journal of Consumer Research* 19, no. 3 (1992): 365.

Objectification in Deighton's sense is thus the opposite of Goffmanian dramatization: whereas dramatization makes visible the work involved in a routine, objectification masks and displaces that work. But both techniques serve the end of making a specific impression on an audience. Deighton's observation that "the marketer stays offstage" points to the fact that both King and Kimura wish their audiences to perceive them as performers engaging with other performers—Lucille and GuitarBot, respectively—rather than as manipulators of instruments. King and Kimura appear as performers in scenarios they create as "marketers." The versions of themselves responsible for setting up the mise-en-scènes that make these scenarios possible and plausible are not exposed to the audience.

Comparing and contrasting the means that King and Kimura use in pursuit of the common goal of constructing the instrument as an entity unto itself, it is clear that while Kimura gains much through her use of digital technology, as contrasted with King's use of more conventional instrumentation, she also loses something. To understand what is lost, we must return to Godlovitch's characterization of musical performance, quoted earlier, as a demonstration of skill in which the musician "subdue[s] confidently the treacheries" of the instrument. Kimura hints at the nature of GuitarBot's potential treachery when she describes working with the machine. Referring to the instrument's four strings, she states that "I started to imagine GuitarBot as actually four individuals. . . . I would come in for a rehearsal and ask, 'So, how is Mr. Two today?' because he is the most temperamental of the four strings."[27] (It is noteworthy that Kimura characterizes her technological partner as male, especially in relation to King's feminization of his guitar. This leads to speculation that, within the matrix of heterosexuality, the instrument that is at once the musician's creative partner and foil is likely to be assigned the opposite gender.)

Because Kimura plays two instruments in *GuitarBotana*, one directly and one through displaced agency, there is twice the possibility of her being betrayed by them, as Godlovitch would have it, and therefore twice the opportunity for her to show her prowess by overcoming the obstacles they present. Kimura also created another "artificial constraint" (Godlovitch's term) through her decision to program GuitarBot not just to follow her playing, but also to deviate unpredictably from it at some points, making the piece that much more difficult to perform, because it forces her to think and respond, simultaneously and very quickly, as both composer and player, in order to maintain the integrity of the work. But Kimura's desire for her audience to perceive GuitarBot as a legitimate musician actually causes her to forego full credit for her own skill as a performer. She presents herself only as a virtuoso violinist overcoming the normal technical challenges offered by that instrument; her role as GuitarBot's ventriloquist remains intentionally offstage. She masks the challenges presented by GuitarBot as an instrument in favor of constructing it as a fellow performer and collaborator.

On the other side of the ledger, GuitarBot's greater apparent autonomy in the eyes of the audience makes Kimura's performance that much more effective as a staging of the ventriloquial relationship between musician and instrument. Indeed, GuitarBot's seeming independence borders on the uncanny, which

[27] Quoted in Ben Popper, "Robot Rock," *Brooklyn Paper,* 10 November 2007, http://www.brooklynpaper.com/stories/30/44/30_44robotrock.html (accessed 4 May 2009).

> occurs when animate and inanimate objects become confused, when objects behave in a way which imitate life, and thus blur the cultural, psychological and material boundaries between life and death, leading to what [Ernst] Jentsch called "Intellectual Uncertainty"—that things appear not to be what they are, and as such our reasoning may need re-structuring to make sense of the phenomenon.[28]

Animate objects like ventriloquists' dummies and automata evoke the uncanny, as does GuitarBot. At its best, *GuitarBotana* induces Jentsch's intellectual uncertainty, since GuitarBot, a machine that is not supposed to be capable of creativity, appears to act as a sentient being making music. Arguably, the version of the uncanny in performance enacted by Kimura and GuitarBot differs significantly from the version described by Matthew Causey in "The Screen Test of the Double." Discussing "the simple moment when a live actor confronts her mediated other through the technologies of reproduction," Causey posits "that the experience of the self as other in the space of technology can be read as an uncanny experience, a making material of split subjectivity."[29] Even though GuitarBot is not literally Kimura's double (that is, her reproduced and mediated self), it is plausible to suggest that GuitarBot acts as Kimura's Other in this performance. Since this Other's performance is a manifestation of Kimura's musical sensibility, one might stretch the point slightly and claim that *GuitarBotana* makes split "subjectivity material," as Causey describes. But the technological uncanniness of GuitarBot lies in its alterity—its difference from, and apparent independence of, Kimura in the way it serves her "as a foil, not a clone" (to return to Burrows's characterization of musical ventriloquism). The fact that GuitarBot's performance is actually a displacement of Kimura's agency is suppressed in favor of foregrounding the machine's ostensible autonomy.

On one level, Kimura dramatizes the ventriloquial relationship between player and instrument in the same way King does, albeit in a very different musical context, by creating the impression that an instrument possesses an identity and agency; both King and Kimura enact the fantasy of instrumental autonomy that underlies the ventriloquial relationship between performer and instrument. But because the digital technology Kimura employs allows GuitarBot a greater degree of (apparent) autonomy than Lucille, who is always under King's visible, physical control, it enables her to push the enactment of this fantasy further toward the uncanny to show us what it might look like for a performer to interact with a genuinely autonomous musical instrument.

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[28] Simon Hollington and Kypros Kyprianou, "Technology and the Uncanny" (paper presented at the EVA London Conference, July 2007), http://www.eva-conferences.com/eva_london/2007/papers (accessed 4 May 2009).

[29] Matthew Causey, "The Screen Test of the Double: The Uncanny Performer in the Space of Technology," *Theatre Journal* 51, no. 4 (1999): 385.