Vital materiality in John Cage's *Music for Amplified Toy Pianos*

Lecture for the *Florida International Toy Piano Festival,* January 2017

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Link to video of performance discussed in lecture:

https://www.youtube.com/watch?v=lZPP3wqO5_E

Introduction

John Cage's second piece for toy piano, *Music for Amplified Toy Pianos,* from 1960, may be one of the earliest works in the toy piano literature, but is it really "for" the instrument? When Alex Boostrom, Paul Koonce, and I prepared our March 2014 performance of the work, we discovered that the toy pianos were actually red herrings.[1] In addition to the toy pianos, the composition features a number of sound-making objects which arguably become more important in defining the character of the piece. In other words, the piece becomes a sound collage with toy pianos as a continual thread – rather than, as may be expected, the noises merely accompanying the toy pianos.

In this talk, I will use my experience performing the work as a springboard for relating Cage's practice of indeterminacy to Jane Bennett's concept of vital materiality. Bennett is a political theorist who teaches at Johns Hopkins University. Her book *Vibrant Matter* introduces "vital materiality," which is the capacity of things "not only to impede or block the will and designs of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own."[2] By using Bennett's vital materiality to interpret Cage's use of chance, we see that chance is not random coincidence, but a 'distributed agency' among the objects involved in realizing the work.

To do so, let us briefly consider the primary objects, or as Bennett calls them, "actants" in play – the toy pianos, the physical score, and the noises – before considering the entire experience as an assemblage of human and non-human agency.

Toy Pianos

The toy piano is shaped like a miniature piano, but it has an unrefined and appropriately child-like character, at odds with the control and sophistication of its 'parent' instrument. Cage embraced the instrument's distinctive qualities in his 1948 *Suite for Toy Piano* – a charming, deceptively naïve piece that uses simple rhythms, repetition, and a modal pitch language (only white keys) to evoke innocence and play. *Music for Amplified Toy Pianos,* composed twelve years later, is less rooted in the instrument's semiotics. Instead, it shows Cage's interest in the toy piano's noisy and indeterminate aspects. While the work might be better titled *Music for Amplified Toy Pianos and Assorted Objects,* the toy pianos serve as inspirations for a study of noise.
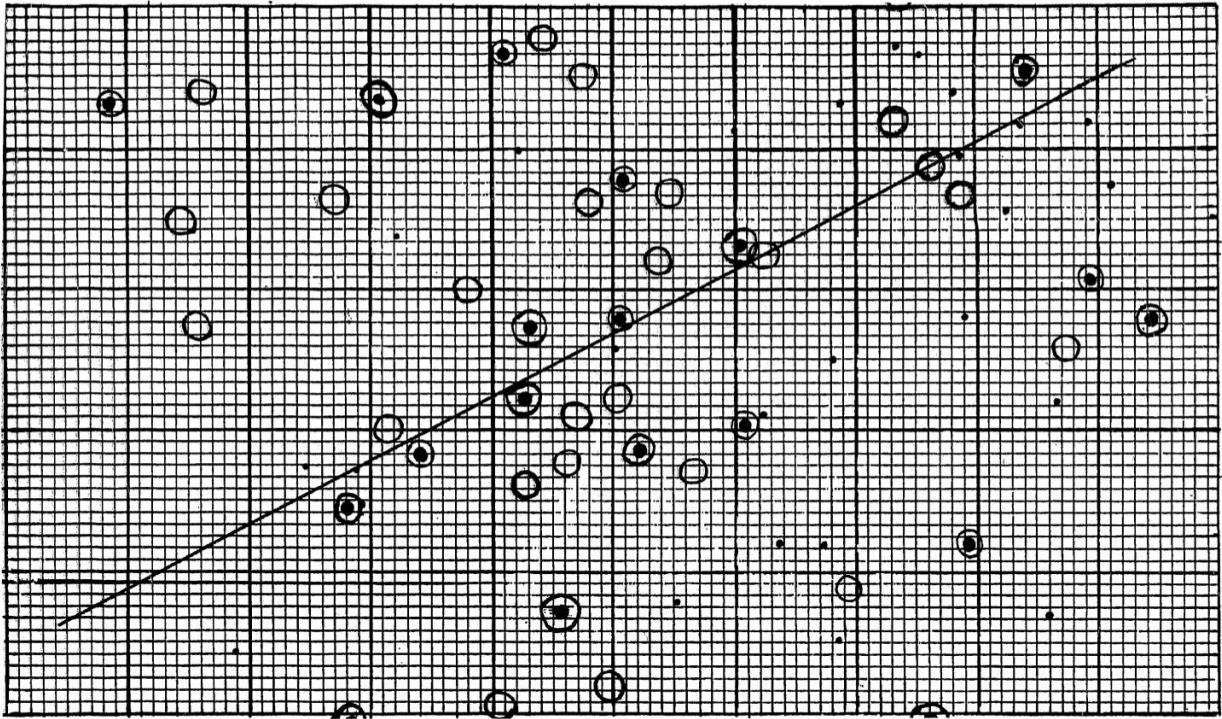
Transparencies

Cage's score for *Music for Amplified Toy Pianos* is made from several transparent sheets, which are overlaid by the players to make a performance score. One transparency has a grid, one has a single line, and the remaining transparencies contain scattered dots, circles, or circled dots. The dots represent notes played on the toy pianos, and the circled dots represent noises.[3] The circles represent possible levels of amplification – the audio engineer is to connect two circles with the line transparency, then follow this trajectory of increasing or decreasing the amplification.

While other graphic scores, such as Earle Brown's *December 1952,* can be read from any side, there are still only four variations on their structures. By using

transparencies, Cage multiplied the number of shapes his score could take, thereby granting the transparencies some power in directing the performance. However, scores like *December 1952* give more agency to the performers by allowing a flexible interpretation of time. Cage's grid transparency implies a regular procession through time. Cage intends for his score to be set prior to performance, then interpreted faithfully. He cedes his power to the performer, but more importantly, to the transparent page.

Cage's grid is 10 blocks across and 5 blocks high. Each block is 10 squares across and 12 squares high. It seems natural to consider the vertical axis to be chromatic pitches (5 octaves total) and the horizontal axis to be time (10 seconds per block). This makes a 100-second performance, which seems short; interpreting the "second" blocks any longer seems to make the piece extremely sparse. We elected to perform 9 versions of the score, which would be read through in 25, 50, and 100 seconds. Each of us read from unique "parts", playing only the toy piano on three pages, only noises on three pages, and both toy piano and noises on three pages. We also challenged ourselves to gather enough objects so that each noise was heard exactly *once.*

Cage's score when transparencies are overlaid (one of many options)

Noises

Cage allows the performers to select the 'noises' used in the work. He gives no recommendations, but calling them 'noises' implies a bit of indeterminacy in regard to the timbre, dynamic, inherent rhythm, etc. Here is a partial list of the noises I played: a ping pong ball in a glass bowl, a pile of wood, a whisk, a candy wrapper, empty and half-full beer bottles, tin cans, a wind-up toy car, eyeglass cases, and bamboo wind chimes. Once Alex, Paul, and I amassed an array of potential objects, we worked out their order based on the choreography required to play them. Most of my circled dots (noises) occurred in quick succession, so I needed to use small objects that I could easily hit, drag, flick, throw, scrape, or roll. In contrast, many of Paul's circled dots were spaced farther apart, allowing him to perform larger and more complex objects.

To be true to Cage's doctrine of indeterminacy, we tried not to be too loose with

interpretation by constructing 'musical' sequences of events. In Alvin Lucier and David Tudor's performance of the work, the transparencies directed them to remain silent for a full minute. Lucier felt embarrassed, but later realized that he had grasped the spirit of the piece. He writes, "Cage is interested in letting sounds be themselves and be expressive in their own right. If a performer wants so many loud sounds here and is determined to make them simply because she wants to do it, she's being self-indulgent and that's not what this piece is about."[4] Aside from choosing the objects to be used and how fast to progress through the score, the performers should have little more agency than the objects.

Assemblages

So where does vital materiality fit into this? Let's return to Bennett's book *Vibrant Matter.* Bennett opens with a vignette about encountering objects on a morning walk in Baltimore – a glove, a mat of pollen, a dead rat, a bottle cap, and a stick. "As I encountered these items," she writes, "they shimmied back and forth between debris and thing."[5] She began thinking about the objects' histories, what forces brought them to this point, and how they may have affected each other. She calls this interplay "distributed agency." For another example of distributed agency, Bennett describes the 2003 Northeast U.S. blackout. She writes, "the electrical grid is better understood as a volatile mix of coal, sweat, electromagnetic fields, computer programs, electron streams, profit motives, heat, lifestyles, nuclear fuel, plastic, fantasies of mastery, static, legislation, water, economic theory, wire, and wood – to name just some of the actants."[6]

The audience encountering *Music for Amplified Toy Pianos* may experience similar "shimmying" of the numerous objects on our messy stage. The toy pianos play a

sparse and slow-moving melody throughout the piece. The other objects, each used once, command attention for just an instant, while the toy pianos recede to the background. The toy pianos then return to the foreground, but some objects keep moving after their initial articulation. They became noticeable again when other sounds recede.

Of course, the difference between our assemblage on stage and Bennett's assemblage on the street is that we selected objects for our collection, while the 'distributed agency' of objects assembled hers. On could argue, however, that the availability of particular objects in our homes, yards, and local stores is a product of distributed agency as well, and that we did not have that much control after all! When you think about it, many actants[7] made up our presentation of *Music for Amplified Toy Pianos:* the performers, the objects on stage, the stage itself, the PA system, the recital hall, the score, the publishing industry, music performance practice, and so on. As Bennett states, "there is not so much a doer (an agent) behind the deed (the blackout) as a doing and an effecting by a human-nonhuman assemblage."[8]

In our performance, the human players were constrained by other actants – the transparencies and sound-making objects. Also, the objects had inherent indeterminacy that created much of the texture after we set them in motion. A spinning bottle interacts with the floor and nearby objects. It might continue spinning (and resonating), hit other objects (and cause them to make sounds), or stop spinning (and stop making sounds). Like the blackout, a realization of *Music for Amplified Toy Pianos* emphasizes "the ensemble nature of action and the interconnections between persons and things." It demonstrates that "individuals [are] simply incapable of bearing *full* responsibility for

their effects."[9]

By reducing the agency of composer and performer, Cage elevates the agency of objects. His piece invites the listener to focus on the sounding objects themselves, rather than attempting to force musical sense upon the objects' interactions. Bennett considers objects "vivid entities not entirely reducible to the contexts in which (human) subjects set them, never entirely exhausted by their semiotics."[10] We constructed an assemblage of sounds based on Cage's scheme for controlling density and time, but by using household objects we opened up a world of semiotic connections that we may not have intended and could hardly control. The objects on stage directly influenced the audience's construction of meaning. The audience might have found *Music for Amplified Toy Pianos,* for example, annoying and arduous, abstract and rigorous, or adorable and humorous.

Bennett writes, "the desire of the craftsperson to see what a metal can *do,* rather than the desire of the scientist to know what a metal *is,* enabled the former to discern *a* life in metal and thus, eventually to collaborate more productively with it."[11] Experimental musicians demonstrate a similar sensibility in their search for new sounds via extended techniques or new instruments. This compositional perspective implicitly acknowledges the influence that objects can have on the decisions of musicians. Cage wanted to "let sounds be themselves." Extending his attitude to the objects that make the sounds – whether they be buses, birds, or bassoons – shows a parallel between Cage's indeterminacy and Bennett's vital materiality. What Cage considered 'chance,' Bennett calls 'distributed agency.' But they both show a way for us to live and collaborate effectively and joyfully with the objects around us.[12]

1   A video of our performance can be viewed here: https://www.youtube.com/watch?v=lZPP3wqO5_E
2   Jane Bennett, *Vibrant Matter* (Durham, NC: Duke University Press, 2010), viii.
3   The final transparency contains only a straight line. The performer connects two circles with this line, showing a steady increase or decrease in amplification. Otherwise, the circles are ignored in performance.
4   Alvin Lucier. *Music 109: Notes on Experimental Music* (Middletown, CT: Wesleyan University Press, 2012), 132.
5   Bennett, *Vibrant Matter,* 4.
6   Ibid., 25.
7   Since "agency" implies consciousness, Bennett adopts Bruno Latour's term "actant" to label any object that affects another.
8   Bennett, *Vibrant Matter,* 28.
9   Ibid., 37 (emphasis original).
10 Ibid., 5 (emphasis original).
11 Ibid., 60 (emphasis original).
12 I am indebted to Alex Boostrom, who contributed excellent feedback on my initial drafts.

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