Revisiting Ryoji Ikeda: test pattern and superposition

Three years after his first major exhibition (the transfinite, at the Park Avenue Armory in 2011), Ryoji Ikeda, a Paris-based Japanese artist working across both sound and visual elements, returned to New York this fall to present a series of works at the invitation of the French Institute Alliance Française (FIAF) for its Crossing the Line festival. Considering Ikeda’s comparatively recent introduction to North America, it was a rare chance to experience a body of his work in different formats and in very different venues across New York City: an audiovisual performance, superposition (2012–ongoing), which premiered in the United States in the Grace Rainey Rogers Auditorium at the Metropolitan Museum of Art; a solo exhibition at Salon 94; late-night screenings of test pattern (2008–ongoing) on digital billboards in Times Square throughout the month of October; and a one-time special sound event complementing the screenings.

Conceiving data as material that composes our world, Ikeda explores the interfaces between our reality and its unexplored dimensions based on in-depth mathematical and scientific research. Data, as visible and invisible substance permeating our world, is a recurring theme in several series of Ikeda’s works including test pattern; superposition; db and spectra (both 2000–ongoing); datamatics (2006–ongoing); VfL (2008–ongoing); and systematics (2012–ongoing) that have evolved over a long span of time. Ikeda transforms such explorations of data into media productions—including installations, audiovisual performances, and sonic albums—that address the philosophical question of the ontology of our media environment and our world. In this respect, superposition is Ikeda’s most recent performance production in which audiovisual elements and constantly streaming information and data constitute a rematerialized space that engages viewers’ sensory perception.

Ikeda’s performance superposition was inspired by the artist’s exploration of quantum mechanics and quantum computation, and offers a new understanding of the information that comprises our world, shaping our environment and economic and political systems as well as social and interpersonal relationships. Based on his research into substances at an extremely small subatomic scale in mathematics and physics, Ikeda postulates the logic that could explain the fundamentals of both the physical world and the world of information. Thus, the dichotomy between the two "natures"—material/immaterial or physical/informational—is blurred. From mathematics and physics, Ikeda adopts the concept of QUBIT (quantum binary digit), which means a superposed state of 0 and 1. According to Ikeda’s pamphlet, QUBIT is differentiated from BIT (binary digit), “the most fundamental building block of our judgment and logical thoughts,” assuming its position and speed are fixed; however, substances in nature don’t exist at fixed coordinates of position and speed but always have a continuous and infinite mixture of position and speed. Thus, according to text in a pamphlet that Ikeda provided to the audience at the performance:

Bit is digital. QUBIT is analog—analogous to nature.
Bit is discrete. QUBIT is continuous—continuum.
Quantum computing is to read how subatomic particles behave by means of the language of QUBIT; i.e. Nature computes. We decipher it.

An approximately sixty-five-minute-long performance of pulsating rhythmic flow, superposition unfolded according to Ikeda’s composition of abundant materials including sound, visuals, language, and...
documents on physical phenomena and mathematical concepts. The opening sequence began by breaking the darkness and silence with low-frequency drone sounds that resonated throughout the theater and gradually became audible. The white noise that followed was soon synchronized with a visualization of explosions of mathematical structures scattered across three different sizes and shapes of screens: a large screen positioned as a backdrop, a long band of screen in the center composed of ten screens arranged in a line, and another ten monitors positioned next to each other at the front of the stage at approximately one-foot intervals. Here, Ikeda’s composition followed two axes of rules: velocity and intensity. Ikeda turned the theater into a constantly transforming soundscape by composing sounds ranging from droning, glitchy rhythms and white noise to high-frequency sine waves at a precisely calibrated pace and intensity. Such materialized and spatialized sound was perceived more by audiences’ bodies than by their ears.

Sound was visualized and accompanied by a great amount of information and data. Parts of the data were produced by two performers, Amélie Grould and Stéphane Garin, in the roles of data coder and decoder, thereby embodying a human relation to data. Keeping up with the flow of sound while adding sound of their own, the human performers, a rare element in Ikeda’s work, generated words and messages—seemingly Ikeda’s manifestation—by tapping out Morse code. However, the letters of the text projected on the screen in the rear were sequentially replaced and obscured, so it was difficult for the audience to capture their meaning. Nevertheless, the phrase “information is not knowledge” was clearly conveyed. Our realities consist of immense amounts of information and data, but not all of it is authorized or proven by the system of human knowledge and intelligence. Ikeda underscores that knowledge is only one way to understand our being and world, making information and data unbound by human perception and recognition “sensible.” Thus, knowledge is accumulated and authorized, but information is circulated and proliferated through the process of coding and decoding. Accordingly, the two performers attempted to code-break the computation of old IBM keypunch cards by imposing a crossword puzzle-like graph over them. They also deciphered the hidden meaning from old microfilm of the New York Times, choosing letters and digits at random. Eventually, machines took over the process of detecting, filing, and mapping the human activity with greater precision. In this way, Ikeda traced the logic of computational media, projecting his assertion on the screen that “Logic is not a body of doctrine but a mirror image of the world.” Data-driven images and sounds were registered by viewers’ bodies and materialized as an essential component of our reality. For instance, the multiple screens showed real-time video of numerous marbles that were thrown onto a grid. The marbles randomly rolled around and their positions were accurately captured by a computer program, referencing enlarged particles at the microscopic level beyond human perception. Likewise, topography of grandiose landscapes such as the Grand Canyon and melting ice caps from the North Pole—their full scale hardly apprehended by human eyes, and only partially captured by a camera—were presented on the grid surface.

Likewise, in the exhibition at Salon 94 on the Upper East Side, Ikeda revealed a domain that exists but is yet unproven by human apprehension. The extremely minimalist works on view presented data with digitally enabled precision. Transforming light, sound, and numbers from an intangible state to a state of materiality, the installation works explored the intersections between the material and immaterial and between the finite and infinite. For instance, in the transcendental (e) [nº2—a] series (2008–ongoing), developed through discussions about mathematical definitions of infinity between Ikeda and Harvard number theorist Benedict Gross since 2008, representations of the infinity of transcendental numbers, exemplified by π (pi) and e (Euler’s number), were printed on the surface of paper or etched into stainless steel. A transcendental...
number implies infinity since it exists, but it remains impossible to fully count or compute. The concept of infinity was further represented by a two-dimensional stainless steel etching on a wooden plinth that consisted of millions of infinitesimal snapshots taken of the transcendental number e. Likewise, Ikeda materialised silence by recording the exact duration of four minutes and thirty-three seconds on 16mm film as a dedication to John Cage’s seminal work 4’33” (1952), in which Cage’s acceptance of sounds beyond the structure and intentionality of Western music led him to explore silence in music composition and performance. In the systematics series, Ikeda juxtaposed musical composition and computer processing, displaying punched cards from vintage computers, piano rolls from player pianos, and data microfilm backlit in LED lightboxes.

In contrast to this presentation of his works at the Upper East Side gallery, with its somewhat limited audience, Ikeda screened test pattern in Times Square, the New York City landmark and public space perpetually crowded with people from around the world. As part of Midnight Moment, programmed by Times Square Arts in collaboration with the festival Crossing the Line, test pattern was projected on fifteen select digital screens in Times Square for three minutes every night during the month of October. The one-time special event promoted as a “public/private silent concert” was held on October 16, during which audiences were able to hear a six-minute segment of sounds corresponding to the patterns being projected on the screens. test pattern shows profoundly abstracted barcode and binary patterns of 0s and 1s converted from various types of data (text, sounds, photos, and movies) so that all elements of the image and sound are stripped of meaning, testing the range of the audience’s perception. However, given the precise articulation of audiovisual synchronization in Ikeda’s works, there were too many distractions from everywhere else—strong flickering lights from advertising and buildings, the noise of the city, and even the smells of the street—to allow full appreciation of Ikeda’s datascape that is itself supposedly saturated with sound and visuals. Nevertheless, people who came to experience Ikeda’s work in the public appeared to share a loose feeling of community, as they shared their experiences. Ikeda has shown and shared his work in a wide variety of venues—not only in museums or galleries but also in clubs, media art festivals, and public spaces—reaching diverse audiences that can perceive it according to their varying levels of knowledge about science, art, electronic music, and computational media. The artist seems to place more value on opening up his works to wider audiences than in providing explanations about them, stating, “If I say something that is a kind of answer, the audience will be stuck in what I am saying. And there are infinitely many answers.” Ikeda would prefer simply to let people experience the work, in the vein of William Blake’s well-known line that is also included in Ikeda’s performance superposition: “If the doors of perception were cleansed everything would appear to man as it is, infinite.”

JOO YUN LEE is a PhD candidate in art history at Stony Brook University.

NOTES