## **Confronting Silence: A Reflection in Three Parts**

Dr. Nikki Moore, 2022

## 1.

A raucous debate has raged over the centuries in the fields of mathematics, physics, biology and the arts. In time, each discipline has proposed its answers to this question: How can we say something true about the world around us?

For Leonardo DaVinci, accessing the truth of the world lay in mastering the art of biomimicry. Formulating careful studies of birds to propel human flight, he looked with equal intensity to the human body for signs of its inner workings. For DaVinci, nature was not only one step ahead of humanity, it was a gracious partner, eager to divulge its methods to those who cared to linger, to plot, and to listen.

Centuries prior, Euclid claimed that the truth of the world could be derived through mathematical postulates, or axioms. He joined Plato in claiming that truth could be not only accessed--but spoken--through logic, as if the latter was a mirror of an absolute. Until it wasn't. And contradiction cried out.

In the fallout and the breakdown: enter Hernán Cortés' venerational and anti-perspectival map of Tenochtitlan just before he destroyed it. Hop to Einstein and quantum mechanics wherein light can be described as both a wave and a particle. Then, on to Kurt Gödel's realization that axioms, Euclid's voices of truth, can only ever be incomplete or inconsistent. While particular phenomena can be modeled, on the topic of universals even mathematics remains silent.

## 2.

"If this word 'music' is sacred and reserved for eighteenth and nineteenth-century instruments, we can substitute a more meaningful term: organisation of sound." John Cage, 'The Future of Music: Credo' (1937)

In 1983, John Cage entered into yet another study of the aesthetic order of the complex. Organizing sound as the Zen Buddhist monks of Ryōan-ji had ordered a field of smooth, raked, river-rock pebbles in the temple's famous 15th-century dry garden, the composer abandoned the idea of music for something outside convention. The resulting sounds, like Cage's drawings of the stones themselves, reveal beauty and facticity--the being there-ness--in what appear to be random or stochastic processes. And yet, the drawing never touches the truth of the rocks. Instead, it models the wild contingencies of their existence.

Furthering investigations launched by both Cage and Tōru Takemitsu on silence, and Karlheinz Stockhausen and Iannis Xenakis on the problematics and possibilities for sound and score notation, Diaz' "Vuelos Brownian" propose a demonstration of Brownian motion by aural means. The discovery of Brownian motion revolutionized the understanding of solid matter by revealing the constant vibration of particles in what had long been thought of as still, or inert. Diaz' "Vuelos" are not just audible metaphors, the mechanisms of the KRK 8400 headphones actually celebrate the work of waves and particles in motion, transmitting both from the player to the ear.

## 3.

How does one model that moment when a flock of a thousand birds lilt and change course, as if one organism? Can one predict the emergence of robust three-dimensional form from a single point, which by definition has no mass and no volume? When does a trickle become a stream, and then a river and a landscape, or self-expression a worldwide protest?

Not a drawing of, but a drawing with, Diaz' intricate works on paper bring the body into the service of differential equations and fuzzy logic. Choosing the somatic, the artist's careful articulations of line, point, and gesture eschew the illusion of realism only to show us the world all the more profoundly. With Xenakis, Diaz maps fields of uncertainty and spontaneous synchronizations not only in music, but in the act of drawing itself. Lines that never connect form shapes that never truly appear.

These experiments are the notation and the model of micro-choreographies. They are footprints of the dance that is between body and pen. Between point and line. Between sound and silence.

Thirteen billion years on, we are still listening to the percussion of the Big Bang. In every moment. Perhaps inaudible in its ubiquity. Diaz' work is a response to the subsequent silence. It is a glimpse of the instruments that tune and turn the body to it.

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