

Seeing
the
Unseeable

Data,
Design,
Art



HIRMER

Rafael Lozano-Hemmer

b. 1967, Mexico City; lives and works in Montreal

Hormonium (Text Stream 8), 2022
Custom-generative code and computer 4k display
Dimensions variable
Courtesy of the Collection of Arkive

Rafael Lozano-Hemmer harnesses an array of sophisticated technologies to explore and coalesce socio-political histories and scientific phenomena. Informed by architecture and performance and employing digital tools such as computerized surveillance, robotics, and artificial intelligence, his installations most often take the form of sleekly electronic, dimly lit installations. In many ways the artist's works variously spotlight the viewer, becoming test sites for and about humankind while calling attention to matters simultaneously individual and communal. Hospitable in temperament, his works effectively eliminate any perceived barriers that may prevent observers from engaging and interacting, while also subtly introducing alternative approaches to issues that differentiate each of us from the other.

Lozano-Hemmer's education in chemistry and early experience in a molecular-recognition laboratory set the stage for his artwork, which employs sophisticated software and surveillance technologies. Data and its characteristics run rampant through the distinct algorithms driving each work, beginning with one of his earliest, *Surface Tension* (1992), an interactive installation where, in the artist's words, "a giant human eye follows the observer with Orwellian precision."¹ Accentuating the characteristics of datasets—namely, their ubiquity as well as our collective incomprehension of their presence and power—is *Zero Noon* (2013), a digital clock displaying real time by drawing on hundreds of different reference systems. Generating the time for this small yet prescient work is a menu of daily statistics culled from the government, *Harper's Magazine*, academic studies, and many other sources that viewers may select or, in some cases, even suggest.

Revisiting Lozano-Hemmer's ongoing reference to the human in its empirical, biological, and even philosophical forms is *Hormonium (Text Stream 8)* (2022). This work is part of his *Text Stream* series—single monitor works presenting new algorithmic text springs (animated texts) from select sources, ranging from literary tomes by figures such as the French poet Stéphane Mallarmé (*Recurrent Mallarmé (Text Stream 1)* [2018]) to scientific essays, including the writings of Charles Babbage and Ada Lovelace (*Babbage Lovelace (Text Stream 5)* [2019]).

Hormonium (Text Stream 8) utilizes abbreviations of the names of human hormones: E (for estrogen), GH (for growth hormone), TSH (thyroid-stimulating hormone), and so on. Manifested as an ocean, its waves breaking upon a shallow shore, the myriad acronyms roll in with the surf, spilling, crashing, and dissipating into particles, or airborne letters, upon impact. As such *Hormonium* reimagines human biological rhythms that surge, overlap, flow back, reemerge, and disintegrate. Simulating the span of a life in real time, the hormones change depending on the time of day, month, or year, evolving as time goes on. Markers of the specific age of the work, along with its circadian, ultradian, and infradian rhythms, are registered, also in real time, along the lower edge of the monitor. Currently three years old, the work reveals mostly growth hormones, as would a toddler of the same age. When the work reaches ninety years of age, the determined span of its lifetime, the work will reset. A demonstrable harmony of generative art and biology, *Hormonium* embodies the complex bonds between nature and science, the individual and the common. Modest in scale yet epic in resonance, this work is paradoxically lucid and profound. —JJ

¹ Project description of *Surface Tension* (1992) on the artist's website, https://www.lozano-hemmer.com/surface_tension.php.

