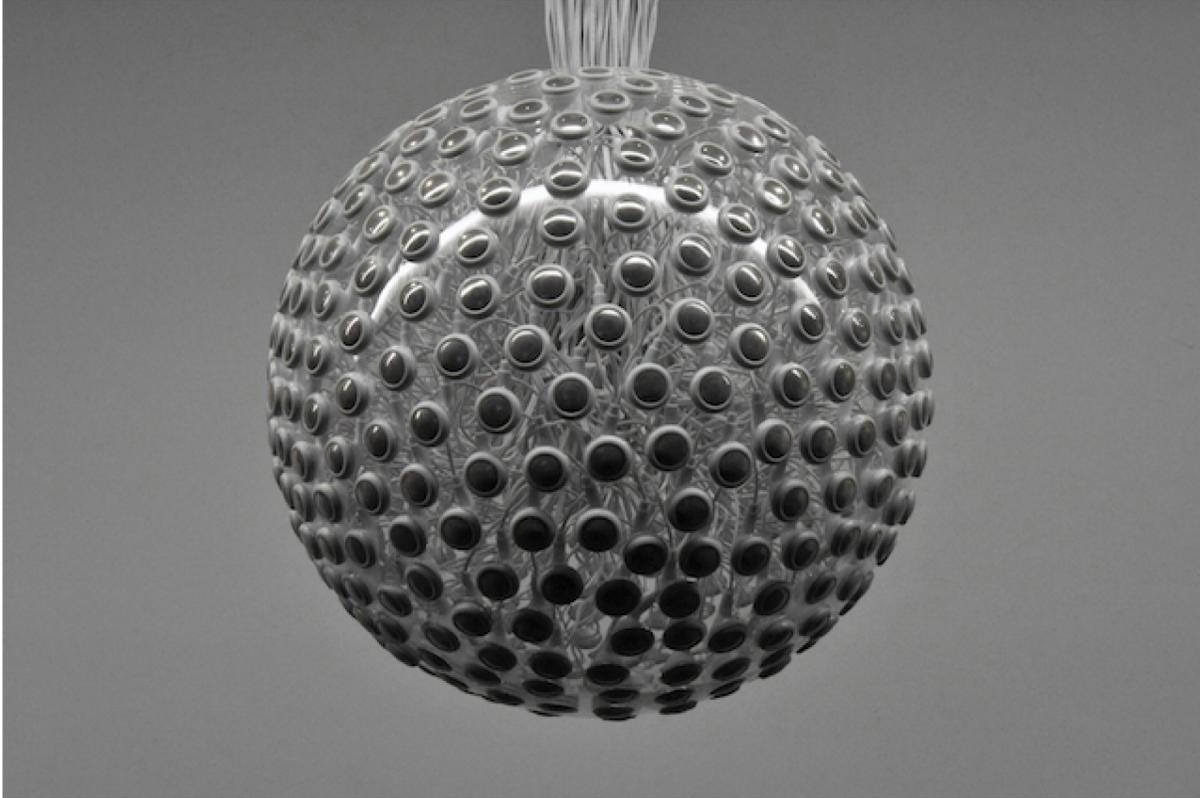


Pseudomatisms Exhibition Finds Patterns in the Randomness

By DJ Pangburn — Nov 12 2015



Rafael Lozano-Hemmer, Sphere Packing Beethoven, 2015. Pseudomatismos, MUAC, Mexico, 2015. Photo by: Antimodular Studio

Over the last 20 years, Mexican artist Rafael Lozano-Hemmer (<https://www.artsy.net/artist/rafael-lozano-hemmer>) has created interactive videos, sound sculptures, and other intermedia work to pervert technologies like computerized surveillance, robotics, and the information networks of modern wired world. With

Pseudomatismos, he gets his first comprehensive museum exhibition in his native country at the Museo Universitario de Arte Contemporáneo (MUAC).

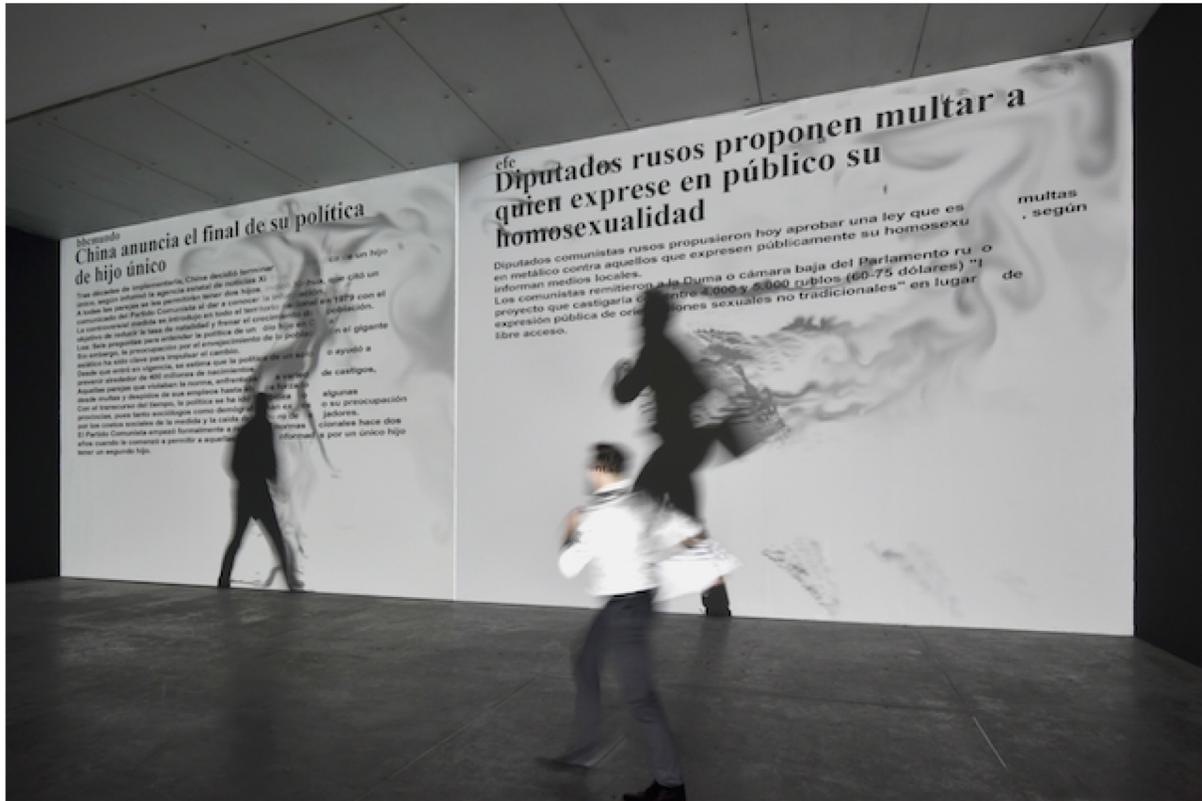
Pseudomatismos finds Lozano-Hemmer steering clear of the Surrealist notion of “automatism”—the idea of random, spontaneous artistic expression. He parallels this with the computer’s inability to generate a truly random output. Lozano-Hemmer outputs these concepts in five new works, which are as varied as they are mesmerizing. It’s a means for him to show the flaws in how our minds and computers can quickly analyze millions of data points and find repetitive patterns in the supposed randomness (http://lozano-hemmer.com/method_random.php).



Rafael Lozano-Hemmer and Krzysztof Wodiczko, Zoom Pavillion, 2015. Pseudomatismos, MUAC, Mexico, 2015. Photo by: Antimodular Studio

For the work *Babbage Nanopamphlets*, he used nano-technology to print two million pamphlets in elemental gold, higher in purity than 24-karat gold. He released approximately 250,000 copies—each 150 atoms thick and biologically inert—into the exhibition space so that they float through the air, pushed along by the museum’s ventilation system and potentially inhaled by the public. The rest of the pamphlets are shown suspended in water in a small crystal vial with a magnetic stirrer, while a display shows electron microscope images of the pamphlets.

The text, engraved by the Cornell NanoScale facility onto the gold leaflets, is excerpted from the Ninth Bridgewater Treatise, written in 1837 by Charles Babbage (https://en.wikipedia.org/wiki/Charles_Babbage), an English polymath. Babbage, “the father of the computer,” theorized that the atmosphere is a vast repository of everything that has ever been said, and that we might be able to “rewind” the movement of every molecule of air to recreate the voices of everyone who had spoken in the past.



Rafael Lozano-Hemmer, *Airborne*, 2015. *Pseudomatismos*, MUAC, Mexico, 2015. Photo by: Antimodular Studio

In *Airborne*, participants block the light of powerful floor-mounted projectors, casting their shadows on the wall in the process. These shadows are then tracked by computerized surveillance systems. Plumes of smoke are mapped onto the large wall, and within them are clouds of text generated from the live cables of news outlets such as Agencia EFE, Notimex, AlterNet, AP, and Reuters.

Zoom Pavilion, the first collaboration between Lozano-Hemmer and Krzysztof Wodiczko, is an interactive installation that features facial recognition algorithms and independent robotic cameras that zoom into amplify and abstract images of the public with up to 35x magnification. The fluid robotic camera movements highlight different participants to an animation that is constantly in flux.



Rafael Lozano-Hemmer, *Babbage Nanopamphlets*, 2014. *Pseudomatismos*, MUAC, Mexico, 2015. Photo by: Antimodular Studio

Lozano-Hemmer's *Sphere Packing: Beethoven* and *Sphere Packing: Schubert* are two new entries in a series of 3D-printed pieces printed on different materials suspended from a small playback box that is hung from the space's ceiling.

The *Beethoven* and *Schubert* pieces are each designed to concentrate the composer's entire musical oeuvre into a single dense multi-channel device. The size of each sphere is directly proportional to how prolific the composer was. Custom-made circuit boards allow for the simultaneous playback of thousands of separate sound channels.

With *Pseudomatismos*, Lozano-Hemmer hopes he can manage to disappoint technophiles and technophobes alike. Ironically, Lozano-Hemmer has made all 42 artworks open-source by publishing the source code, schematics, and associated files on a USB memory stick.

"We hope that our algorithms and methods will be reused by artists and programmers for their own projects," he says. "This is done to highlight the fluid nature of creation in our digital world, where there is no such thing as an artist alone, inspired in front of his canvas, but rather an ongoing dialog."



Rafael Lozano-Hemmer, *Sphere Packing Constellation*, 2015. *Pseudomatismos*, MUAC, Mexico, 2015. Photo by: Antimodular Studio



Rafael Lozano-Hemmer, *Eye Contact*, 2006. *Pseudomatismos*, MUAC, Mexico, 2015. Photo by: Antimodular Studio



Rafael Lozano-Hemmer, *Flatsun*, 2011. *Pseudomatismos*, MUAC, Mexico, 2015. Photo by: Antimodular Studio