

Reflection 1: Rafael Lozano-Hemmer

The artist

Rafael Lozano-Hemmer is a renowned Mexican-Canadian electronic artist who was born in Mexico City and currently resides in Montreal. He has received a bachelor's in physical chemistry and minor in art history at Concordia University. Upon graduation, he realized that he was more interested in the art world than a career in science. Despite this change of heart, his background in physical chemistry informs his sophisticated use of technology to explore themes of presence, absence, and memory in the digital age. His work exists at the intersection of digital systems, surveillance technology, and human connection, often manifesting as large-scale interactive installations.

Central to his practice is the concept of "relational architecture", which is an approach that transforms buildings and public spaces through technological means. This method reimagines architectural spaces by layering them with dynamic audiovisual elements, changing how people perceive and interact with them. Through this technique, buildings become interactive platforms where audiences can trigger connections to various contexts – may they be historical, political, or aesthetic. The architecture responds to and evolves with public participation, creating a dialogue between the building, the technology, and human interaction. By overlaying physical spaces with digital elements, Lozano-Hemmer challenges our traditional understanding of architecture, transforming static structures into dynamic, responsive environments that adapt and change based on viewer engagement. This transformation allows buildings to transcend their original purpose, becoming vessels for new narratives and experiences.

Throughout his practice, Lozano-Hemmer uses surveillance technology and biometric data to explore power dynamics, social control, and surveillance politics. Political themes like borders, migration, and displacement recur frequently in his work, reflecting the relationality of his cross-cultural background. His artistic methodology combines custom-developed technologies with critical social commentary, simultaneously celebrating and critiquing technology's role in contemporary society. Through this dual approach, his installations create spaces for both technological innovation and critical reflection, encouraging participants to consider their own relationship with digital systems while engaging in unexpected moments of collective experience and connection.

The artwork

"Border Tuner / Sintonizador Fronterizo" (2019), installed between Ciudad Juárez, Mexico, and El Paso, Texas, was a large-scale art installation that required participants to communicate with each other through light. Six total stations, each containing multiple light beams, illuminated the night skies of each city. Three stations were placed in El Paso and three in Ciudad Juárez. The light beams within the stations created live sound channels for communication across the US-Mexico border.

The participants could turn a large dial, which controlled the direction of the light beam. When two light beams from different stations crossed, a bidirectional channel of sound was opened between the participants in their remote stations. This allowed them to speak to each other through the light, with the brightness of the light oscillating to their tone of voice, which is similar to morse code. This is an interesting example of how Lozano-Hemmer uses his scientific knowledge within art. All stations could communicate between each other, so any station in Mexico could speak to any station in the US.

This is a very impactful installation, as to this day, people still struggle to contact each other in the name of international borders. This is especially true of the US-Mexico border, which is at the center of a plethora of political assumptions and prejudice. Through all this, the people around this border and their identities, expression, and culture are erased. Lozano-Hemmer describes this installation as "a platform for a wide-range of local voices and an opportunity to draw international attention to the co-existence and interdependence between the sister cities that create the largest bi-national metropolitan area in the western hemisphere.", which I feel is especially powerful, as this piece allows participants and observers to question and be curious about who's on the other side – may it be of the station, border, or conflict.