RAFAEL LOZANO-HEMMER:
TECHS-MECHS
A Survey of Mexican Technological Culture

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March 16 – May 31, 2023

2665 Mission Street
San Francisco, CA 94110
grayarea.org

TECHS-MECHS

An Introduction

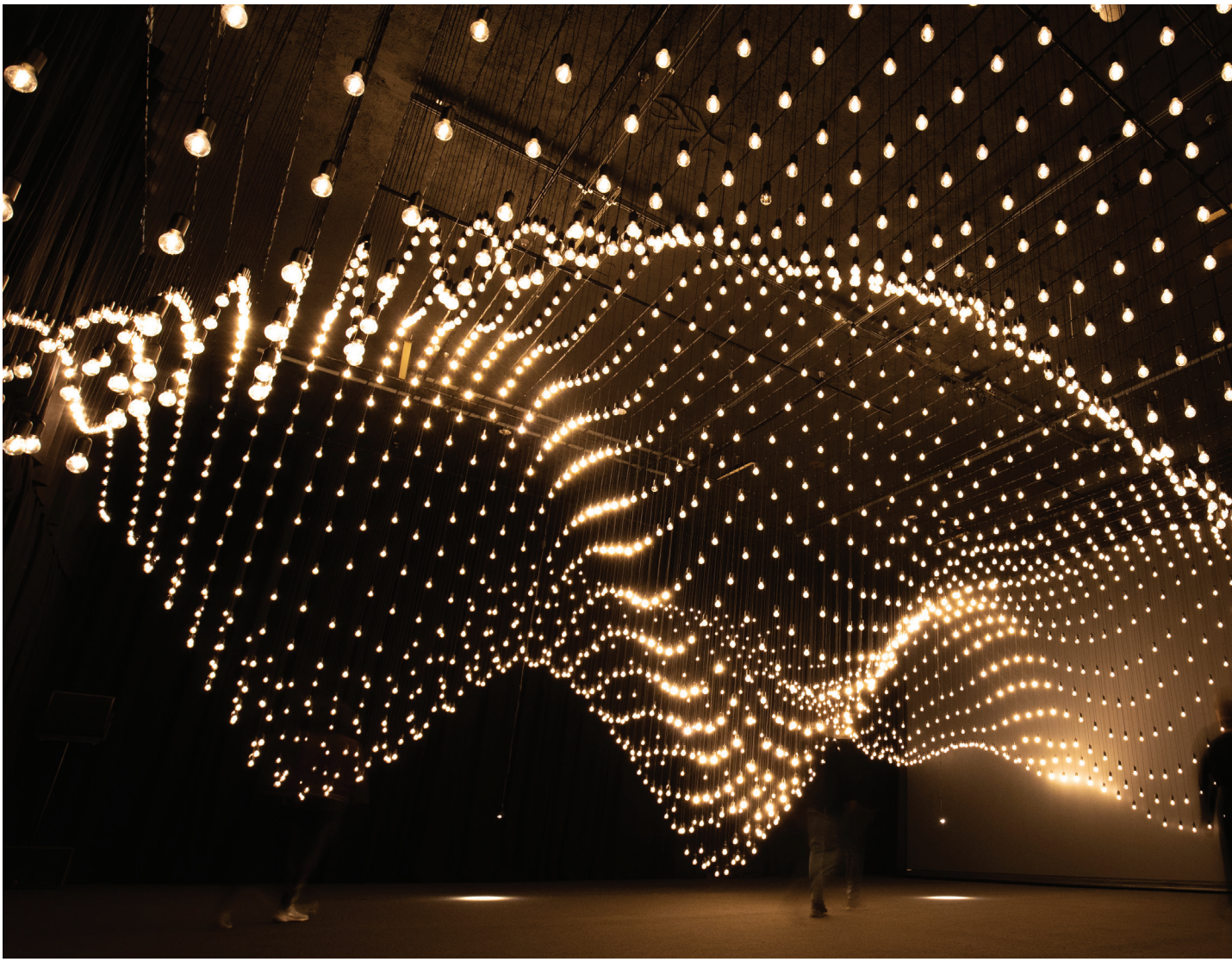
TECHS-MECHS is an exhibition of canonical works by **Rafael Lozano-Hemmer** presented alongside a rich chronology of technological cultural history from the artist's native Mexico.

Spanning immersive installations, kinetic sculptures, generative animations, and large-scale shadow theaters, this exhibition calls into question Silicon Valley-centric narratives about technology by highlighting often unrecognized contributions by Latin Americans.

Despite incorporating a wide range of technologies in his work, such as biometric sensors, computer vision, artificial intelligence, robotic arrays, and more, Lozano-Hemmer doesn't shy away from exploring a more critical stance. Recognizing the applications of the technologies he uses for military, corporate, and policing purposes, his installations invite viewers to explore the historical and social factors that often obscure how technology works or how it is created.

In the rich chronology presented in this volume, Lozano-Hemmer challenges the qualifier "new" that so often precedes the word "technology." Rather than positioning technology functionally in the present or fantastically in the future, he reveals that this mechanical and conceptual framework is formed of cultural and historical entanglements. The eleven works presented in *TECHS-MECHS* traverse historical and cultural eras that become funnelled into present circumstances—machine learning is always pulling from the past and carrying forward both joyous and fraught histories—but memory is partial, ever prejudiced, never neutral.

Lozano-Hemmer here provides an opportunity for visitors to interrogate competing histories and provoke their role in our culture, looking towards relationships beyond the site of exhibition. Surveillance has become an invasive practice that poses constant questions of identity, both personal and cultural. In *TECHS-MECHS*, Lozano-Hemmer responds to the role of technology in our society not in the declarative but in a dynamic interrogative, and in doing so challenges prescriptive definitions of Mexican identities through their myriad relationships with technology.



Pulse Topology

2021

LED filament light bulbs, contactless heartbeat sensors, computers, digital dimmers, 3-channel audio, programmed in OpenFrameworks

One of Lozano-Hemmer's most celebrated works, *Pulse Topology* (2021) is composed of thousands of light bulbs suspended at different heights that create a series of crests and valleys, evocative of an intimate landscape that visitors are invited to traverse. Each light bulb glimmers to the pulse of a different participant, which contributes to a connective arrangement. Forming a platform for self-representation, in *Pulse Topology* individual heartbeats come together to form an immersive chorus of light and sound. Translating an interior force to an exterior form, the piece makes tangible the otherwise invisible register of the heartbeat, which glows and then fades in the spirit of a memento mori.

The light arrangement of *Pulse Topology* finds its inspiration in the Mexican "supernatural drama" film *Macario* (1960) by Roberto Gavaldón. In a scene shot in the Grutas de Cacahuamilpa caves, the protagonist has a hunger-induced hallucination, wherein each living person on the planet is represented by a fragile flickering candle.

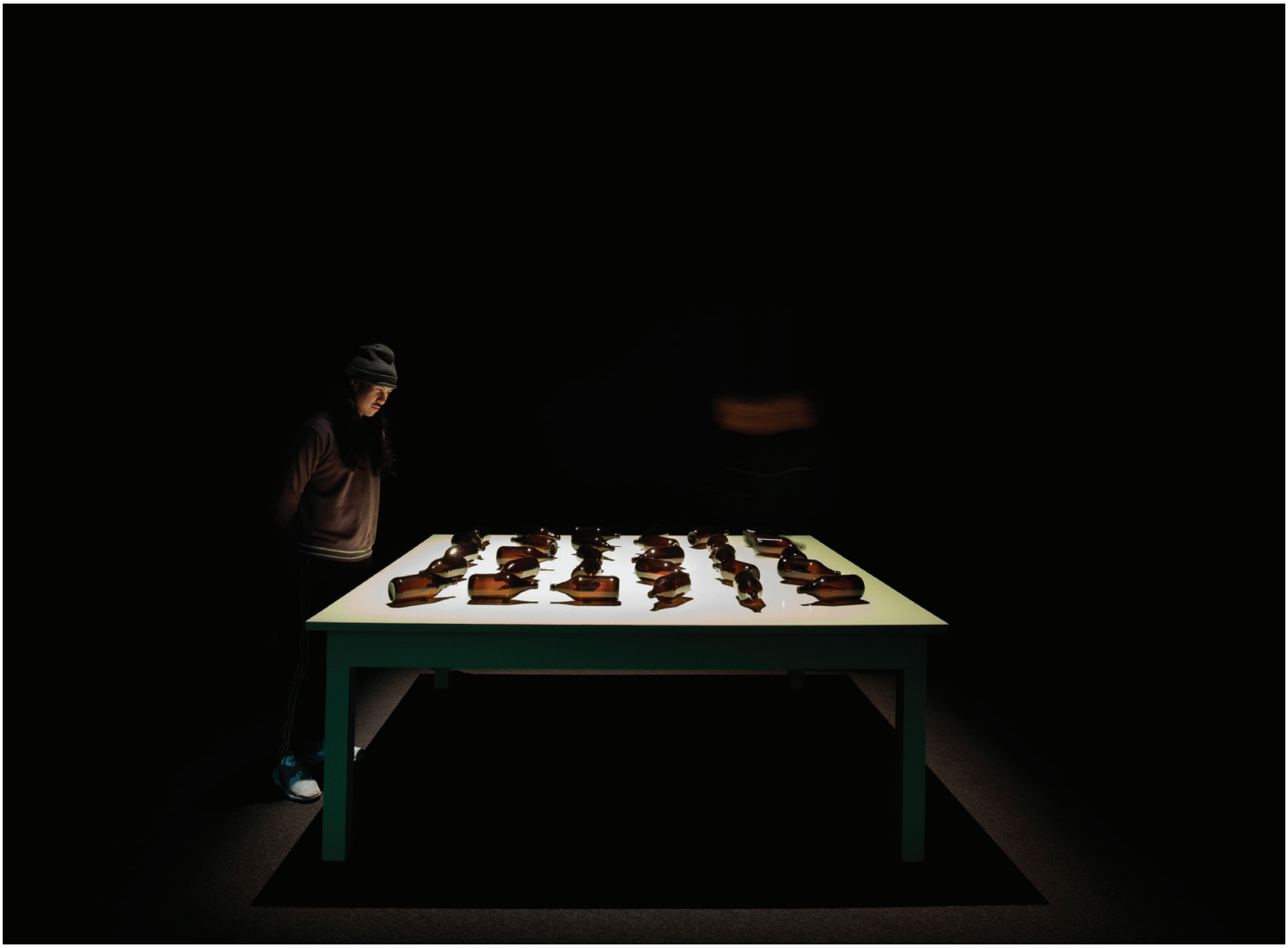

GRAND
COFFEE

Recurrent First Dream

2022

Flat displays, computer, generative fluid dynamic software programmed in TouchDesigner

Recurrent First Dream (2022) pays homage and animates the poem *First Dream*, the magnum opus of the seventeenth-century poet Sor Juana Inés de la Cruz. Associated with light through her pioneering contributions to the Spanish Golden Age, Sor Juana is sometimes referred as the "Phoenix of America," while *First Dream* is considered a proto-feminist ode to knowledge and deductive reasoning articulated through imagery of light and shadow.



Synaptic Caguamas

2004

Glass beer bottles on motorized wooden table, PC running algorithms that simulate neuronal activity programmed in Delphi

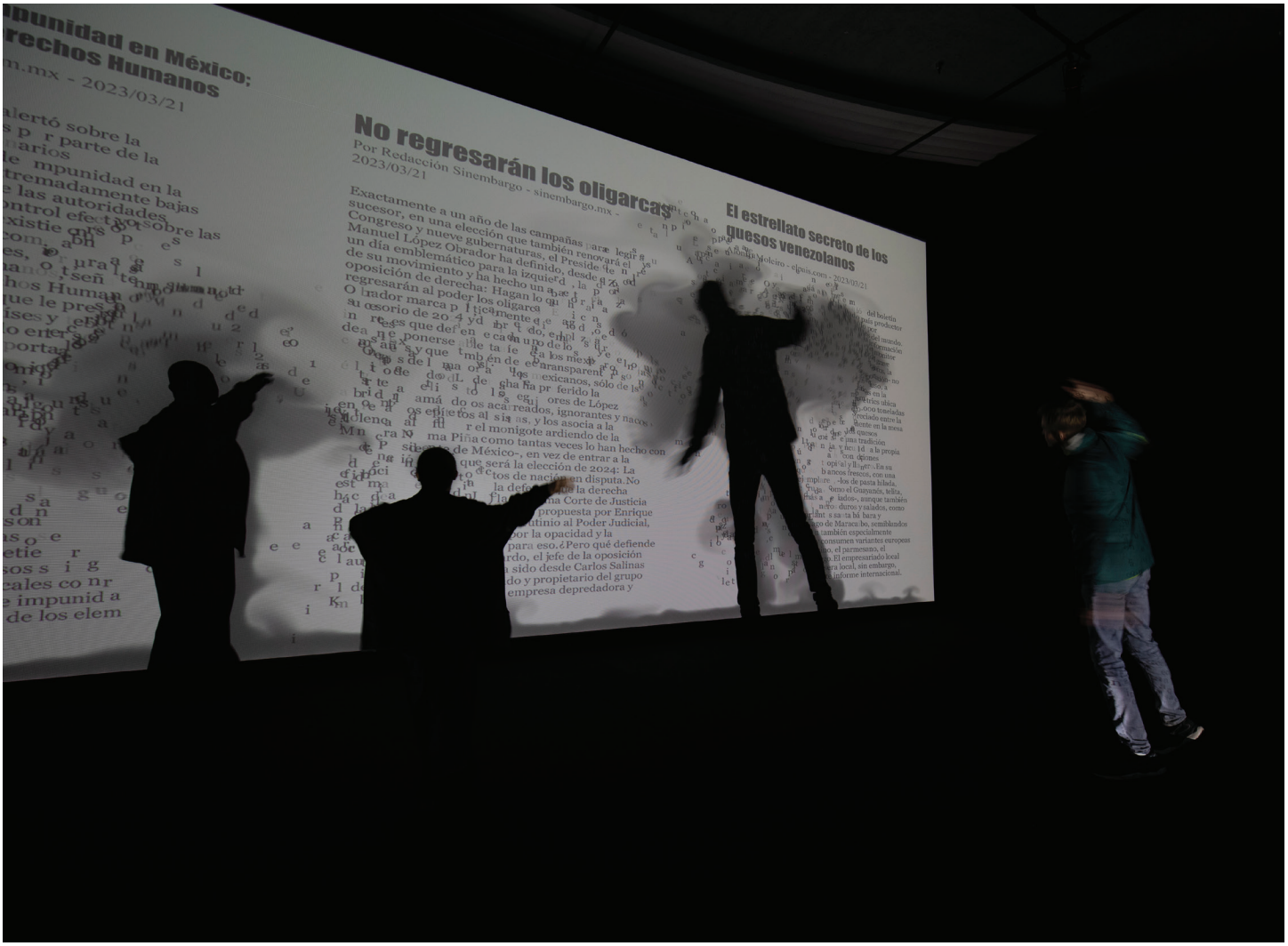
Synaptic Caguamas (2004) is a kinetic sculpture consisting of thirty "caguama"-sized beer bottles that spin on a Mexican "cantina" table. The mechanized beer bottles rotate in patterns generated by cellular automata that simulate the neuronal connections of the brain, playfully marrying neuroscience with social rituals like drinking and playing "botella de castigos" (spin the bottle).

Sway

2016

Noose, microcontroller, DC motor and driver, wood and steel, programmed in wiring

The kinetic sculpture *Sway* (2016) is a robotically actuated noose, tuned to sway very slightly every three or four minutes, representing the frequency at which ICE made arrests in 2021.



Airborne Newscasts

2013

Projectors, computers, surveillance cameras, custom-made software running Navier-Stokes equations, programmed in Delphi and TouchDesigner

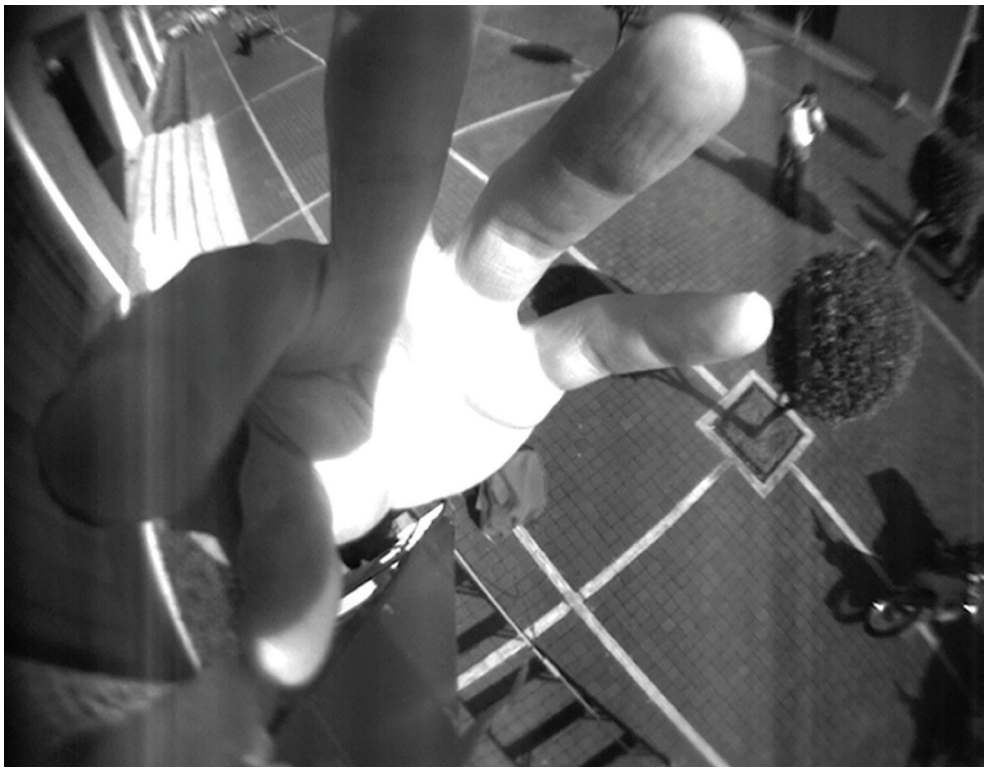
Offering a contemplation on ephemerality, *Airborne Newscasts* (2013), an interactive shadow play, uses surveillance systems to map billowing smoke-like shadows on the wall, as turbulent clouds of text—live newscasts from news feeds—evaporate from the "heat" of the tracked bodies.

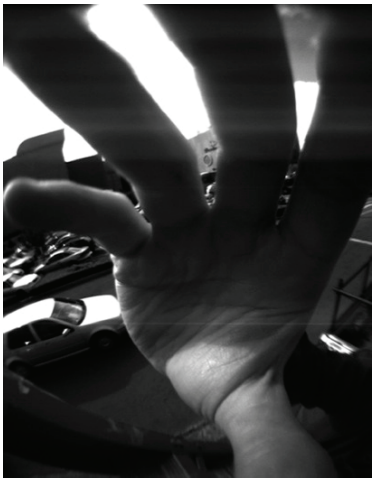
Thermal Drift Density Map

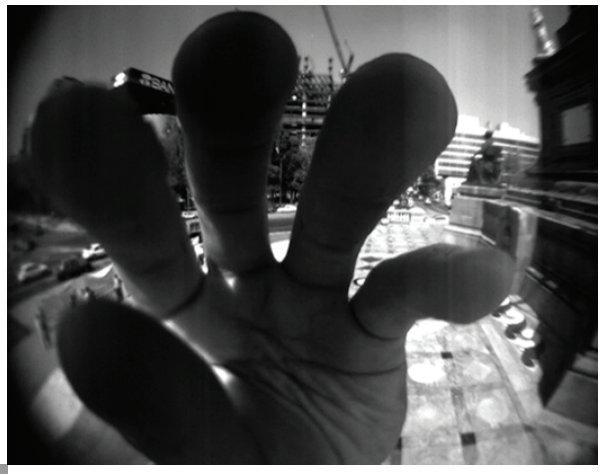
2022

Computer, thermal camera, display, generative software in TouchDesigner

Thermal Drift (2022) is an interactive artwork that visualizes the dispersion of body heat as emissions of thermal energy in the form of slow-moving packets or quanta that flow away from the participant. The project uses a thermal camera to detect heat, and a particle system to visualize its dispersion, while computational image-making reveals the porous boundary between body and environment.





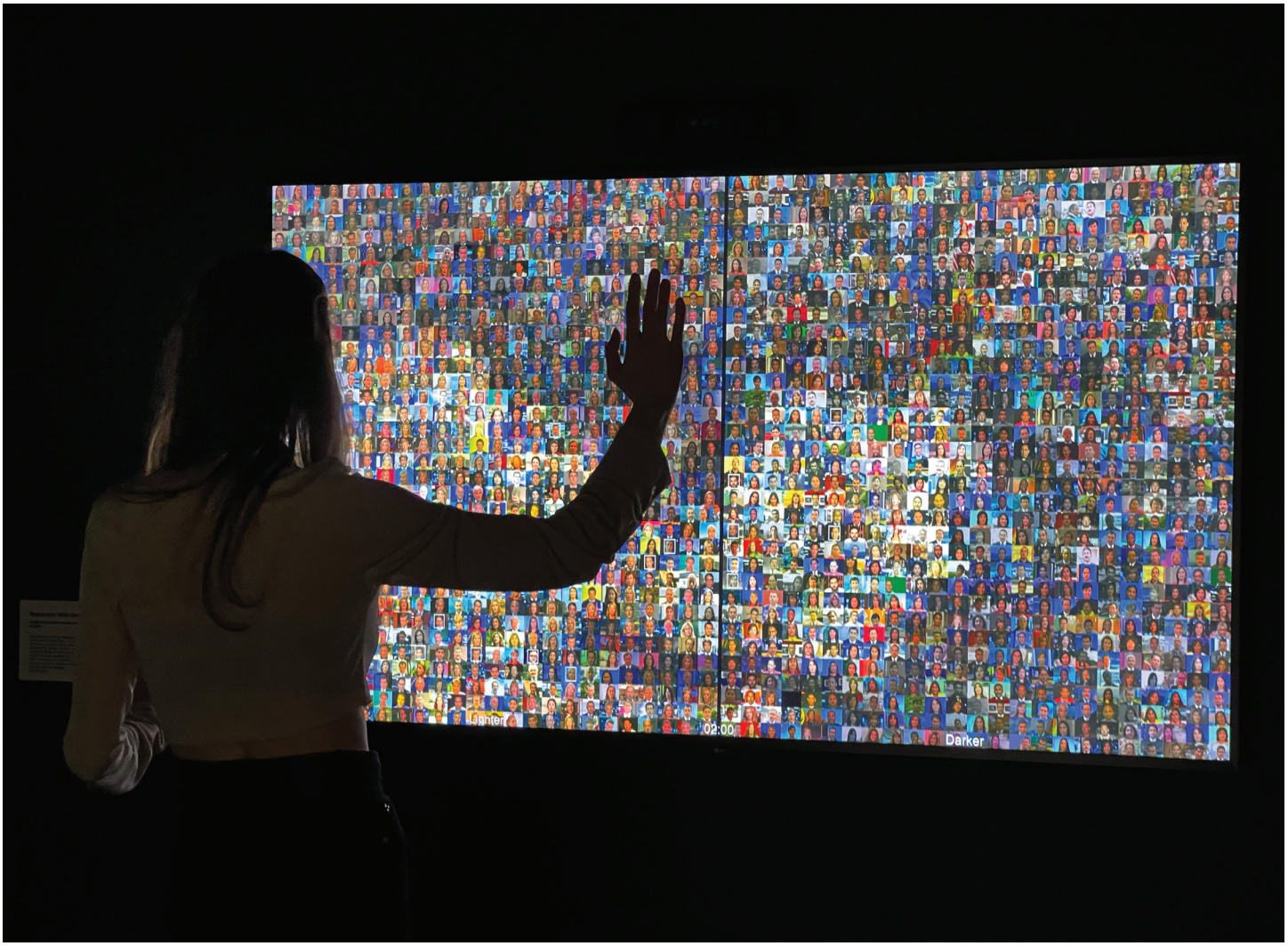


Inspired By Real Events

2004

CRT Video, Surveillance Camera Enclosure

Inspired by Real Events (2004) is a sculptural installation which displays the record of the artist-orchestrated intervention on surveillance cameras in different public places in Mexico City (Independence Monument, Reforma Avenue, Santa Fe shopping mall, Iberoamerican University, Meave Plaza and the Historic Center). At each location, a volunteer climbed a ladder to reach a camera and manually turned it off. A video on the mock surveillance camera monitor in the gallery shows the sequences that each camera captured as the volunteers dismantled them. The project is inspired by the optical distortion of reality presented in *Self-portrait in a Convex Mirror* painted in 1524 by Parmigianino.

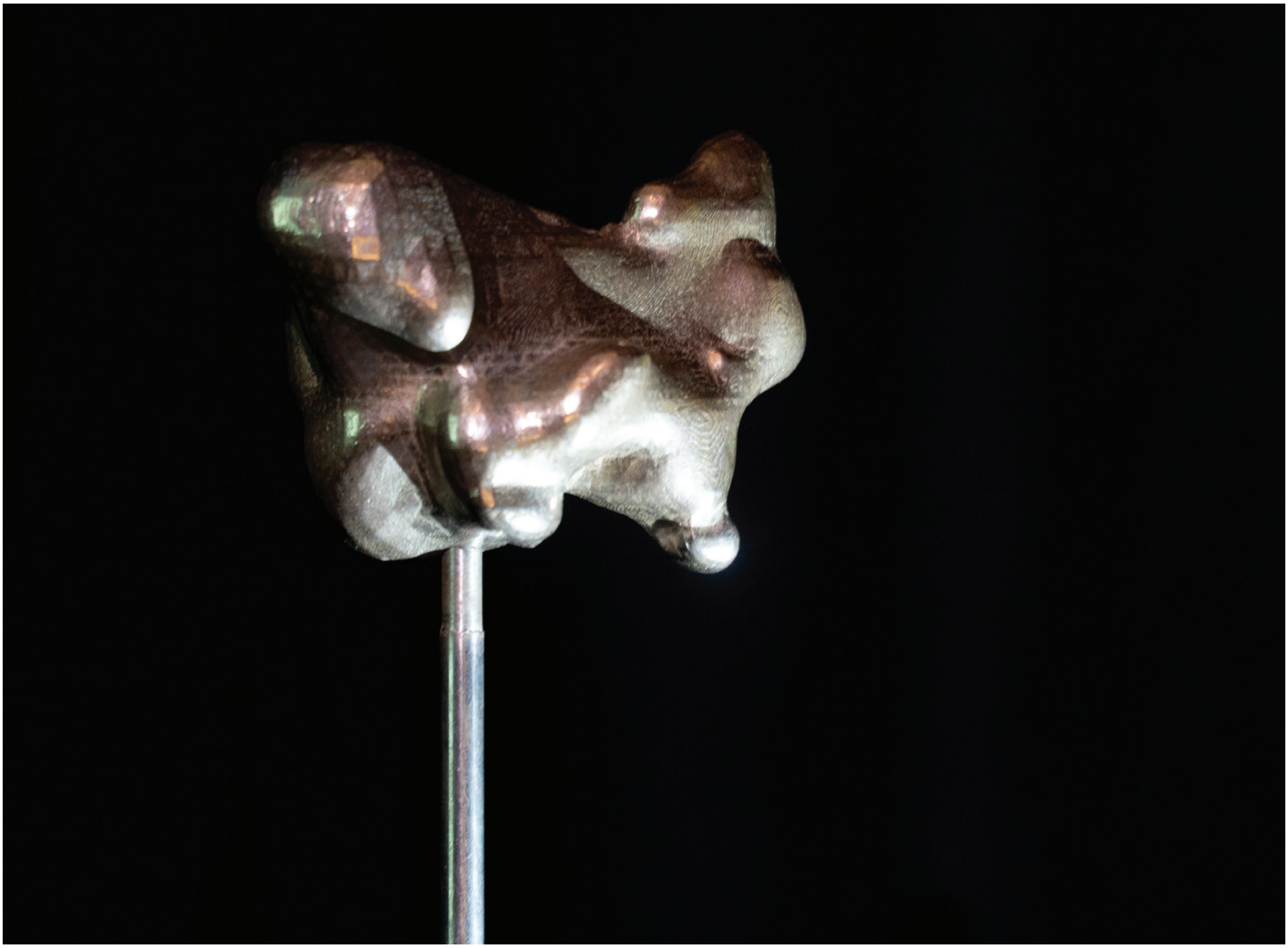


Reporters With Borders

2007

Display, computerized tracking system, programmed in Delphi

Reporters With Borders (2007) is a high-resolution interactive display that simultaneously shows 864 video clips of news anchors taken from TV broadcasts in the United States and Mexico. As the viewer stands in front of the piece, his or her silhouette is shown on the display and within it reporters begin to talk. Every 5 minutes the piece switches the video clips —from a database of 1600—and classifies them along gender, race and country, so that for instance on the left there are only American reporters and on the right only Mexicans.



Volute Zero

2016

Laser tomography, photogrammetry and 3D printed stainless steel

Volute Zero (2016) is the world's first 3D printed speech bubble. In 1860, Édouard-Léon Scott de Martinville recorded the phrase "Au clair de la lune'' on his phonoautograph, making the first known recording of human speech. In this piece, the same phrase is materialized with a new method developed by Lozano-Hemmer's studio in conjunction with fluid dynamic scientists from Georgia Institute of Technology, Auburn University, and NYU. Breath exhaled while speaking is scanned by a custom-made laser tomograph, then converted into a 3D shape using photogrammetry and, finally, printed in high-definition stainless steel. In Lozano-Hemmer's series of "Volutes," words, phrases, and songs are rendered into turbulent clouds, containing layers of complex folds and vortices. This piece is inspired by Charles Babbage's 1837 statement that the atmosphere is a vast library that contains all the words that have been spoken in the past.

Remote Pulse

2019

Corian slab, aluminum, heart rate sensor plates, circuits, Raspberry Pi, transducers, lightbulbs, internet connection

Remote Pulse (2019) is an interactive installation consisting of two identical pulse-sensing stations that are interconnected over the internet. When a person places their hands on one station, the person on the other station automatically feels their pulse as the plates vibrate in sync with the heartbeat of the other, and vice versa. The piece was originally presented as part of Lozano-Hemmer's *Border Tuner* installation across the US-Mexico border, with one station in Ciudad Juárez, Chihuahua and the other in El Paso, Texas. For *TECHS-MECHS*, the sensor at Gray Area connects to a sensor at bitforms gallery at Minnesota Street Project, linking spaces where Lozano-Hemmer's work can be encountered in San Francisco.

Border Tuner

2019

Single channel film by Ava Wiland and Rafael Salazar
Runtime 17:21
Courtesy Art21, "Borderlands" episode

Border Tuner (2019)—a large-scale, participatory art installation designed to interconnect the cities of El Paso, Texas, and Ciudad Juárez, Chihuahua—used powerful searchlights to make "bridges of light" that opened live sound channels for communication across the US-Mexico border. Each of the interactive *Border Tuner* stations featured a microphone, a speaker and a large wheel or dial. As a participant turned the dial, three nearby searchlights created an "arm" of light that followed the movement of the dial, automatically scanning the horizon. When two such "arms of light" met in the sky and intersected, a bidirectional channel of sound was automatically opened between the people at the two remote stations. The piece was intended as a visible "switchboard" of communication and self-representation. It serves as another subversive exercise of surveillance, as helicopter searchlights normally directed at predatory angles in borderlands are turned skyward to connect rather than to control. At Gray Area, a series of photographs and a short documentary by Rafael Salazar and Ava Wiland for Art21 capture powerful moments of unity between citizens on both sides of the border, while offering intimate portraits of select participants.

A Brief Chronology of Technological Culture in Mexico

Compiled by Rafael Lozano-Hemmer and Tracy Valcourt

This is an incomplete and idiosyncratic list of intersections of technology and culture in Mexico, written to accompany the exhibition ***Rafael Lozano-Hemmer: TECHS-MECHS*** at Gray Area in San Francisco. It includes contributions from before 1980.

From Teosinte to Corn

7,000 BC

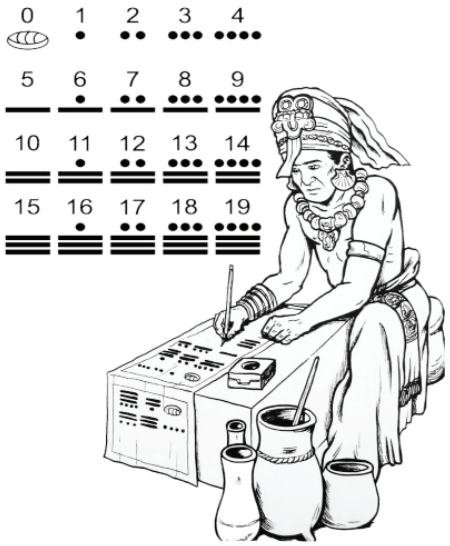
Corn is the result of artificial selection of grains of Teosinte grass by many generations of Indigenous people in Guerrero, around 9,000 years ago. Without the artificial selection of seeds, Teosinte would not have naturally developed into the large corn cobs that we know today.

Milpa
3,000 BC

Biodiverse Mesoamerican agriculture system that offers nutritionally and environmentally complementary crops, typically corn (carbohydrates), beans (lysine and typtophan to make proteins), cucurbita pepo squash (vitamins) and avocados (fats).

Mayan Zero
ca 350

The number zero was used as a placeholder by Mayans over 100 years before it first was used algorithmically in India in 458. Contrary to the Indian zero, which represented emptiness or vacuum, in Mexico zero represented totality, everything.



Banderoles and Volutes
ca 650 BC

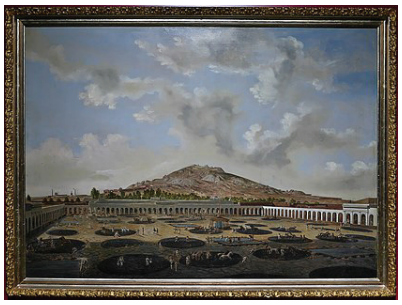
In art history, a speech scroll (also called a volute, banderole, or phylactery) is an illustrative device denoting speech, song, or other types of sound. The device was in use by artists within Mesoamerican cultures from as early as 650 BC until after the Spanish conquest in the 16th century. While similar European medieval speech scrolls were drawn as if they were an actual strip of parchment, Mesoamerican volutes follow the rules of fluid-dynamics such as Navier-Stokes equations, creating eddies and turbulence in the air.

Voluta de Chichen Itzá
ca 600

Voluta Maya ca 900

Uxmal
ca 500

The ancient Mayan city features the Governor's Palace which is a classic example of archaeoastronomy, as it is oriented so that every eight years, Venus intersects the building as seen from the Cehtzuc pyramid 5 kilometers away. This is no coincidence as the Palace has almost 400 glyphs signifying Venus on its facade.



Bartolomé de Medina
1554

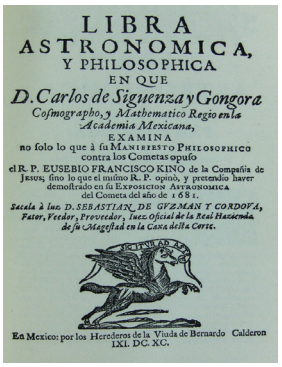
In Pachuca Hidalgo, Bartolomé de Medina invented and patented the "patio process" to extract silver from ore by using mercury amalgamation, brine, and copper sulfate as a catalyst. This invention greatly diminished the trade in African enslaved people.

Chinampas
ca 1150

Artificial islands or floating gardens created by interweaving reeds, stakes, fertile arable soil, drainage systems, and often secured and protected by Bonpland willow and cypress trees. Chinampas were developed by the Aztecs to extend land and grow crops that needed no irrigation and could yield up to 7 harvests a year.

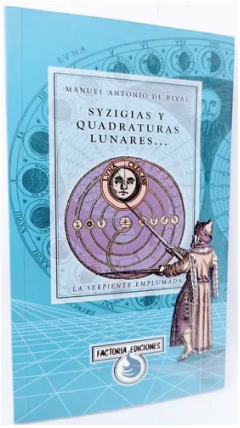
Carlos de Sigüenza y Góngora
1681

Polymath and writer Carlos de Sigüenza y Góngora wrote the book *Philosophical Manifest Against the Comets Stripped of their Dominion over the Timid* (1681) in which he categorically separates the fields of astrology and astronomy. His rationalist and anti-superstition treatise greatly influenced future generations of intellectuals.


LIBRA
ASTRONOMICA,
Y PHILOSOPHICA
EN QUE
D. Carlos de Siguenza y Gongora
Cosmographo, y Mathematico Regio en la Academia Mexicana,
EXAMINA
no solo lo que à su Manifiesto Philosophico contra los Cometas opuso el R. P. EUSEBIO FRANCISCO KINO de la Compañia de Jesus, sino lo que el mismo R. P. opinò, y pretendio haver demostrado en su Exposicion Astronomica del Cometa del año de 1681.
Sacala à luz D. SEBASTIAN DE GVZMAN Y CORDOVA, Fator, Vecedor, Provedor, Juez Oficial de la Real Hacienda de su Magestad en la Casa della Corte.
En Mexico: por los Herederos de la Viuda de Bernardo Calderon
IXI. DC. XC.

Manuel Antonio de Rivas
1775

Friar Manuel Antonio de Rivas from Mérida wrote *Syzygies and Lunar Quadratures* in 1775. This is considered the first science fiction text written in the Americas and included lunar travel, the location of hell in the Sun, and doubts about biblical chronology, for which he was the subject of an inquisition.



José Antonio de Alzate y Ramírez
1772

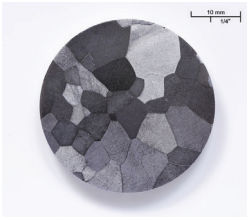
A nephew of Sor Juana, Alzate was a scientist, philosopher, cartographer, and historian who first ascribed the psychedelic effect of entheogenic plants, such as pipiltzintzintli, to natural causes and not the work of the devil. He defended the pre-Columbian use of ololiuqui plants for their anesthetic qualities, and he actively fought for the legislation of medical cannabis. The Antonio Alzate Scientific Society was created in 1884 and later became the National Academy of Sciences in Mexico.

Sor Juana Inés de la Cruz
1692

Writer, philosopher, composer, and poet of the Baroque period, Sor Juana joined a Hieronymite nunnery in 1667, and began writing poetry and prose dealing with such topics as love, environmentalism, feminism, and religion. Her poem *Primero Sueño (First Dream)*, written in 1692, is an ode to knowledge, clarity, and rationalism.

Andrés Manuel del Río
1801

Scientist Andrés Manuel del Río, author of the first mineralogy book in America, contemporary of Lavoisier and Von Humboldt, discovered the metallic element Vanadium from mineral samples from Hidalgo. Vanadium is a key component of many steel alloys, among other contemporary uses.

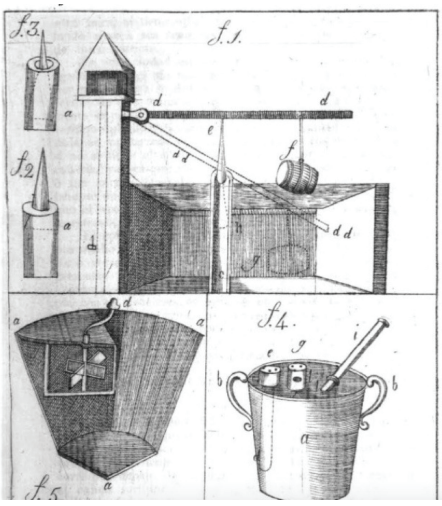


Leona Vicario and Josefa Ortiz de Domínguez
1810

Mexican feminists who informed, funded, planned, and aided the War of Independence from Spain. As the first journalist in Mexico, Vicario encrypted her printed messages in a code that could only be deciphered by the "Los Guadalupes" insurgent group. Separately, Ortiz de Domínguez triggered the insurrection itself, despite being held captive, by tapping a code with her heels so that warden Ignacio Pérez would warn independentists Hidalgo and Allende that they had been betrayed.

José Antonio de Alzate y Ramírez
1790

The great scientist invented the automatic float shutter, the air-filled float in the tank of the great majority of toilets, but also found in all sorts of industrial vats and irrigation systems. This invention has helped greatly reduce the waste of water.

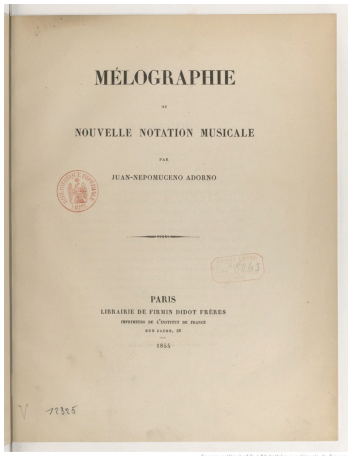


Ignacio Ramírez "El Nigromante"
1836

Ignacio Ramírez was a writer, journalist, and politician born in San Miguel de Allende. He wrote the first public school textbooks, advocated for women to vote, and was known as a progressive and principled politician. In his speech in 1836 to the Letrán Academy, he proclaimed "God does not exist, natural beings are self-supporting." This was two years before Darwin's theory of natural selection and 46 before Nietzsche's proclaimed "God is dead" in *The Gay Science*.

Juan Nepomuceno Adorno
1855

At the World's Fair in Paris, inventor and philosopher Juan Nepomuceno Adorno presented his Melograph, a device attached to a piano which could automatically transcribe musical notes in a notation on paper.


MÉLOGRAPHIE

NOUVELLE NOTATION MUSICALE

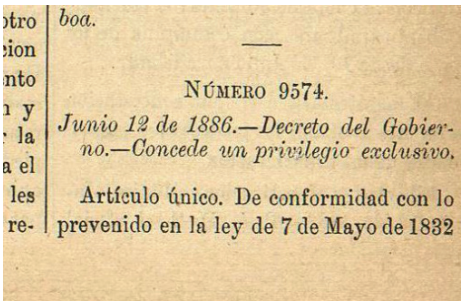
PAR

JUAN-NEPOMUCENO ADORNO

PARIS

LIBRAIRIE DE FIRMIN DIDOT FRÈRES

1855

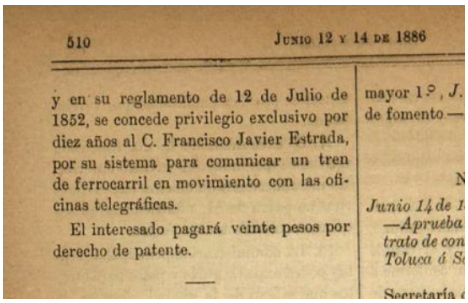


boa.

NÚMERO 9574.

Junio 12 de 1886.—Decreto del Gobierno.—Concede un privilegio exclusivo.

Artículo único. De conformidad con lo prevenido en la ley de 7 de Mayo de 1832



510 JUNIO 12 Y 14 DE 1886

y en su reglamento de 12 de Julio de 1852, se concede privilegio exclusivo por diez años al C. Francisco Javier Estrada, por su sistema para comunicar un tren de ferrocarril en movimiento con las oficinas telegráficas.

El interesado pagará veinte pesos por derecho de patente.

mayor 1º, J. de fomento—

Junio 14 de 1 —Aprueba trato de con Toluca á S

Secretaría

Francisco Estrada Murguía
1886

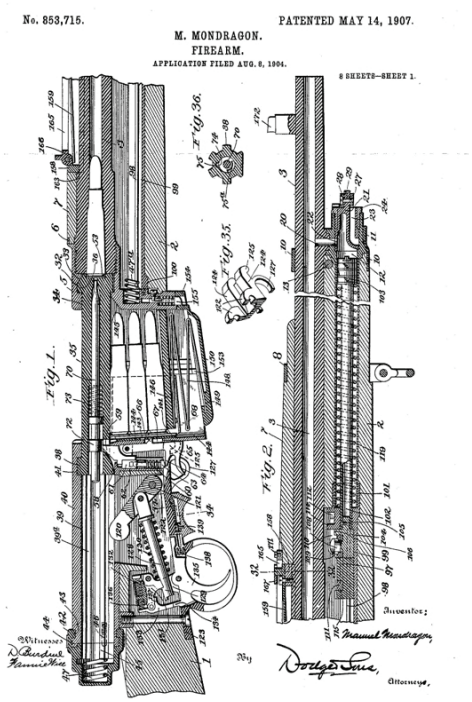
The inventor patented a wireless system to communicate with moving trains, using a Ruhmkorff induction coil that would emit morse code discharges. This was 10 years before Marconi's own wireless communication.

Francisco Estrada Murguía
1868

Inventor born in San Luis Potosí who, among other advancements, designed an electrical generator dynamo that greatly improved DC output compared to Pacinotti's invention. He sent his designs to be fabricated by French house Breguet, which did not reply and instead built them for Belgian Zénobe Gramme two years later, and this became a staple in industry.

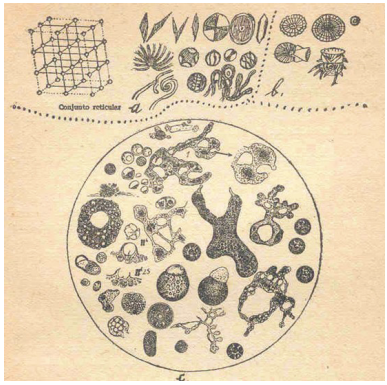
Julián Carrillo
1895

Julián Carrillo was a composer from San Luis Potosí who proposed microtonal music in 1895, using intervals smaller than half tones. He promoted and perfected his "thirteenth sound" theory and in 1940 patented fifteen metamorphoser pianos to play his music—these won the gold medal at the Brussels' World Expo in 1958.



Manuel Mondragón
1904

General Mondragón patented the world's first gas-operated semi-automatic rifle, the Mondragón rifle, designated the M1908. The rifle was used by Mexican forces in the Mexican Revolution, making Mexico the first nation to use a semi-automatic rifle in battle in 1911.



Alfonso Luis Herrera
1904

Herrera developed an experimental science called plasmogeny, concerned with the origin of protoplasm, the living material of which all animals and plants are made. He experimented with creating artificial cells that could have life-like behaviours, for example with sulphobe films, composed of formaldehyde and thiocyanates. He demonstrated the non-biological synthesis of organic compounds, but did not define the boundary between living and inanimate matter.

Juan Guillermo Villasana
1915

Pioneer aviation figure in Mexico, he designed the "Anahuac Propeller" which used a novel assembly approach using different types of wood. In 1919 this propeller broke the altitude world record which was 19,750 feet at the time.

Estridentismo
Maples Arce, List Arzubide, Lira, Gallardo, and others
1921

Estridentismo (Stridentism), was an avant-garde artistic and techno-optimist movement founded by poet Manuel Maples Arce. The arrival of radio transmission in Mexico was spearheaded by this movement, who did the first radio broadcasts in the country starting in 1921.

Eduardo Urzáiz
1919

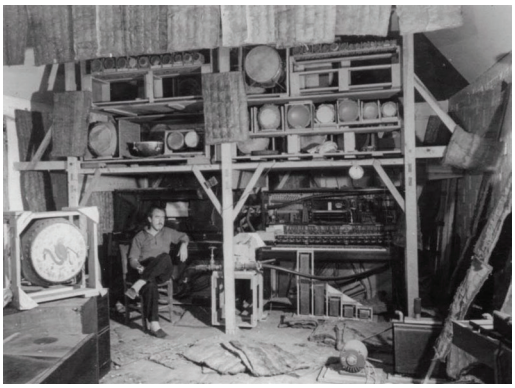
Writer from Yucatán, author of the dystopian science fiction novel *Eugenia*, a precedent to *Brave New World* (1932), *Nineteen Eighty Four* (1948) and *Farenheit 451* (1953). Set in 2218 in the supposedly perfect town of "Villautopia", capital of Central America, eugenics has reached a point where men become pregnant with selected fertilized eggs and family is no longer needed, replaced by groups built by affinity.

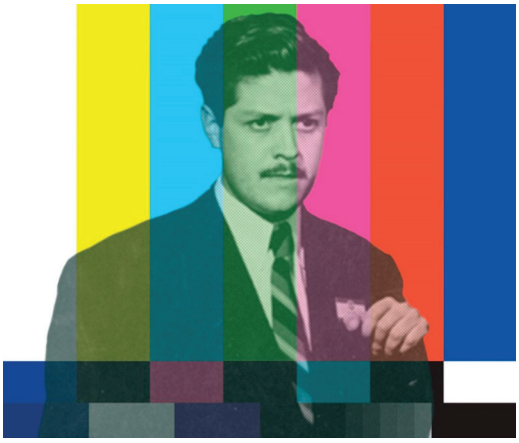
Xavier Icaza
1926

A Stridentist poet and writer from Durango, in 1926 Icaza wrote and produced *Magnavoz,* a performance text in which voices were projected through loudspeakers placed in the craters of replicated Mexican volcanoes. The performance created one of the first polyphonic, multi-channel theatrical presentations.

Conlon Nancarrow
1939

In 1939, composer Conlon Nancarrow began his works for mechanical player pianos, creating music which explored complex rhythmic variations beyond the ability of human performers. His polyphonic music derived from strata with different tempi, which required his pianos to be modified, and custom-built punching machines to make his piano-rolls. In 1947, he created a full robotic percussion orchestra, further bringing automation into his work.





González Camarena
1940

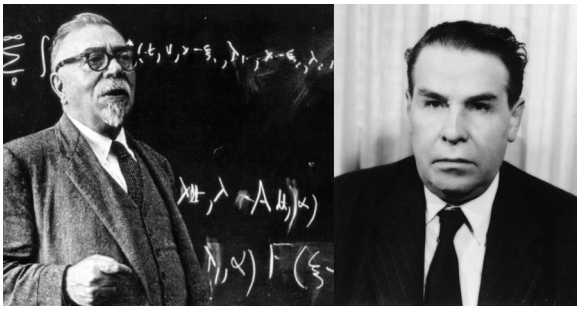
Electrical engineer born in Guadalajara who invented the color-wheel type of color television. At the age of 23, González Camarena patented a chromoscopic adapter with which black and white cameras of the day could capture color. This technology was later used in NASA's voyager mission to take pictures of Jupiter in 1979.

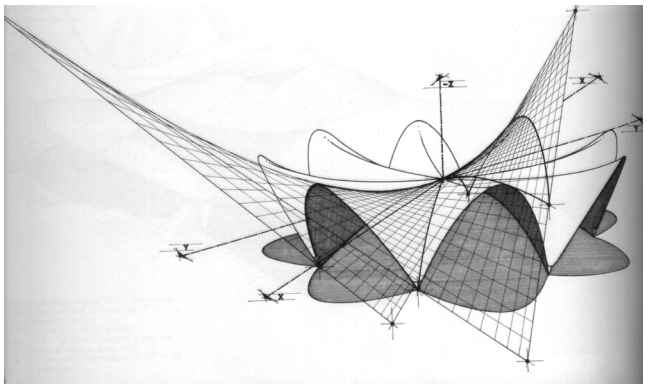
David Alfaro Siqueiros
1932

Siqueiros was known for his innovative approach to painting using industrial approaches such as synthetic paints, spray guns, photography, and cement "frescoes." In 1932 he was the first to use electric projections to trace his drawings to an architectural scale, and in 1933 he used cameras and projectors placed in the different locations of visitors to create the immersive and polyperspective work *Ejercicio Plástico* in Argentina.

Arturo Rosenblueth
1943

Rosenblueth was a researcher, physician, and physiologist from Chihuahua, and Director of the Mexican Institute of Cardiology. His publication *Behavior, Purpose, and Teleology*(1943), co-authored with American mathematician and philosopher Norbert Weiner, set the basis for the science of cybernetics.



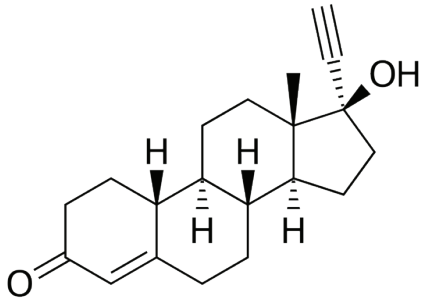


Félix Candela
1951

Candela developed and perfected the use of thin shells of reinforced concrete, popularly known as "cascarones" (egg shells), which transformed modern architecture and structural engineering. His Pabellón de Rayos Cósmicos (Pavilion of Cosmic Rays), at the National Autonomous University of Mexico, was built in 1951.

Morton Heilig
1955

Morton Heilig proposed total interactive immersion in his essay *Cinema of the Future*, written while living in Cuernavaca in 1955. While in Mexico, he started to develop what many consider to be the first virtual reality experience, with his Sensorama simulator which aimed to stimulate four of the five senses: sight, hearing, smell, and touch.



Luis Miramontes
1951

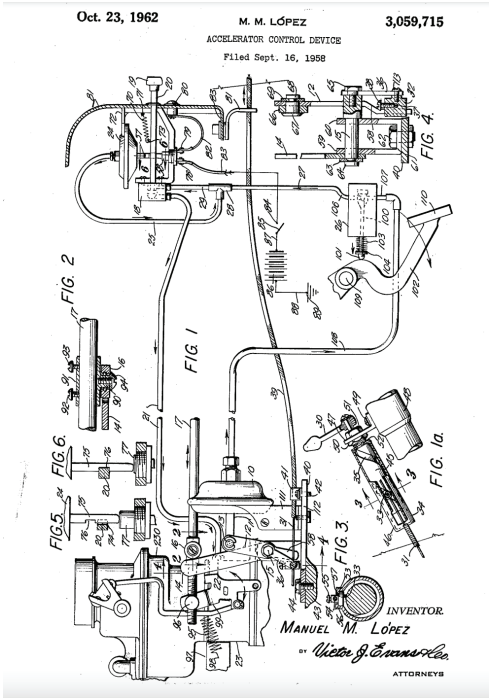
Eminent chemist from Nayarit, Miramontes worked at Mexico's Syntex Laboratory with Carl Djerassi and George Rosenkranz to synthesize norethisterone, the progestin used in one of the first oral contraceptives. "The Pill" has been lauded as one of the most important inventions of the 20th Century.

José Luis Gutiérrez
1955

Chemist who developed and perfected the first commercially available acrylic paints at the Instituto Politécnico Nacional in Mexico City. Gutiérrez was a part of Siqueiros' experimental studio in New York in 1935, and he developed a modern high-viscosity emulsion compared to the original BASF acrylic resin from the 1930s. In 1958 Rufino Tamayo painted his mural at UNESCO with Gutiérrez's acrylic paints.

Manuel M. López
1958

Chicano from Mount Carmel Illinois, patented an automated accelerator control device, precursor to the "cruise control" system existing in current cars, which used a fluid pressure actuated servomechanism. López invented this to facilitate his yearly drive back to Mexico, over 2,000km away.



Juan García Esquivel
1962

Born in Tampico, Esquivel was an electrical engineer, band leader, pianist, and composer for television and films. "The King of Space Age Pop" is recognized for his pioneering use of remote stereo recording, in which he employed two bands recording simultaneously in separate studios, making the first telematic music recording.

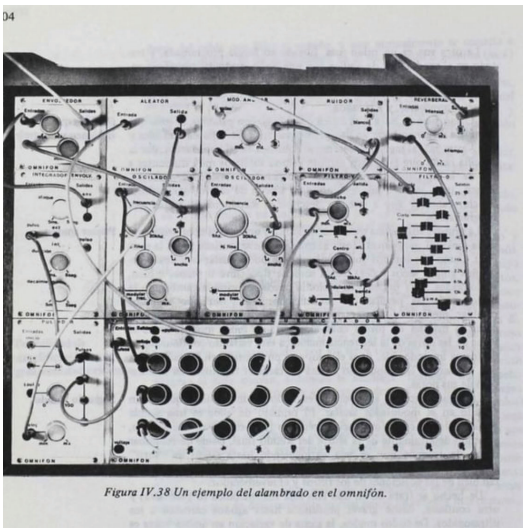
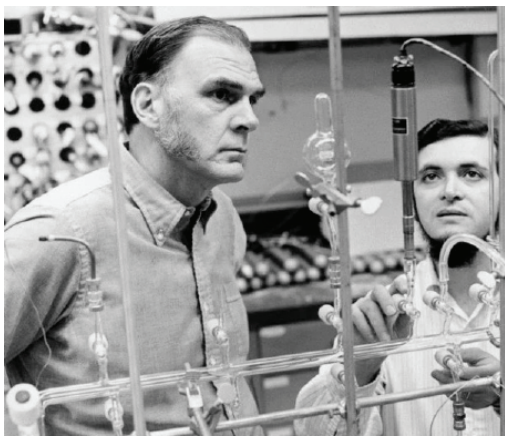
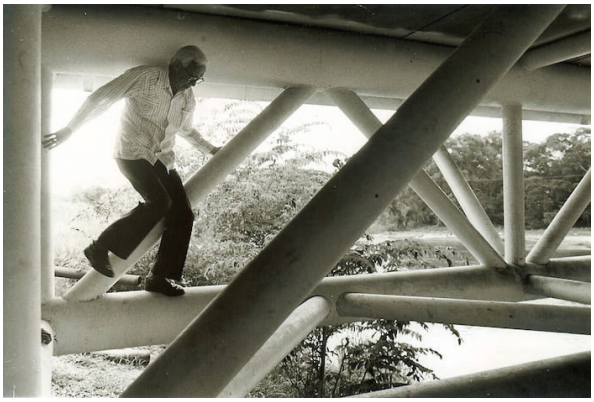


Figura IV.38 Un ejemplo del alambrado en el omnifón.

Raúl Pavón
1960

Mexico City engineer who invented the "Omnifón" a small electronic musical instrument that featured an oscillator with multiple waveform outputs, a variety of filters, an envelope generator, a white noise generator, and a keyboard, among other materials. This was among the first electronic sound synthesizers built, predating instruments by Donald Buchla and Robert Moog.



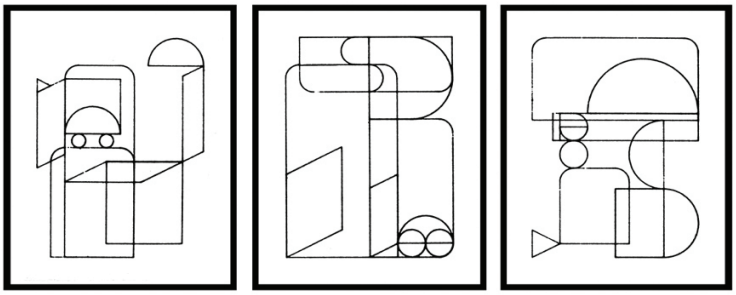


Heberto Castillo
1966

Civil engineer and political activist from Veracruz. Apart from founding three democratic socialist political parties, Castillo invented the "Tridilosa," a tetrahedral structure made of concrete and steel that is lightweight, resistant and materials-efficient. The structure has been used in hundreds of buildings and bridges, from the World Trade Center in Mexico City to Biosphere 2 in Arizona.

Manuel Felguérez
1975

Abstract artist from Zacatecas who worked with computer programming as early as 1975. In 1983, he co-authored with Mayer Sasoon *The Aesthetic Machine*, the seminal treatise on technological art.

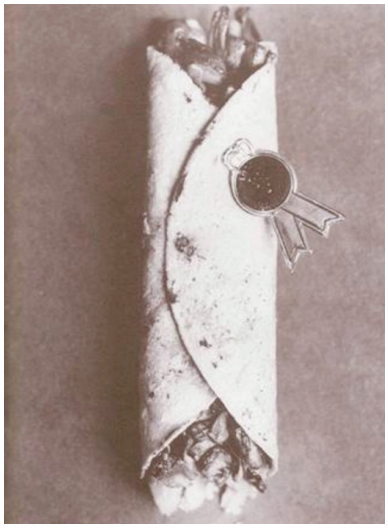


Mario Molina
1974

Chilango chemist and activist who discovered the causes of the hole in the ozone layer in the Antartic, for which he received the Nobel Prize in Chemistry in 1995. Before dying in 2020 he was instrumental in identifying Covid-19 as an airborne virus with an article in the National Academy of Sciences.

Maris Bustamante
1979

Pioneering interdisciplinary artist active in performance, installations, television broadcasts, and contraespectáculos (anti-shows), featuring critical, poetic, humorous, feminist work. As a commentary of the system of cultural property, identity, and control, in 1979 she patented the taco.



GRAY AREA

Gray Area is a San Francisco-based nonprofit cultural incubator. Our mission is to cultivate, sustain, and apply antidisciplinary collaboration—integrating art, technology, science, and the humanities—towards a more equitable and regenerative future.

Since our inception in 2008, Gray Area has established itself as a singular hub for critically engaging with technology in the Bay Area, while also reaching a global audience. Through our platform of public events, education, and research programs, we empower a diverse community of creative practitioners with the agency to produce meaningful, category-defying work.

Gray Area demonstrates the unique ability of artists to hold a mirror to society, and Rafael Lozano-Hemmer has been expanding consciousness with the rhetorical power of media art for over 30 years. We hope that *TECHS-MECHS* is the start of a conversation about who is included in the histories we tell about technology, and who has access to write its future.

Honoring our location in San Francisco's Mission District, a historic center of the city's Latinx and Mexican-American communities, we are proud to offer free admission to *TECHS-MECHS* for local residents.

We acknowledge that Gray Area sits on the unceded ancestral homeland of the Ramaytush Ohlone peoples who are the original inhabitants of the San Francisco Peninsula. We recognize that we benefit from living and working on their traditional homeland, and we affirm their sovereign rights as first peoples.

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