

Emilio Chapela: "No Pain, No Brain"

Are you ready to invent the future? Think big and tell us how you would create it! We are looking for game-changing and impactful ideas that have the potential to change the way we live, work, and communicate with each other.

-The Bell Labs Prize Application, April 2016

Emilio Chapela's third solo show with the gallery unfolds in two-parts featuring a series of sculptures, sound installations and appropriated artifacts from Bell Labs' Holmdel, New Jersey headquarters. Since its founding in 1925, Bell Labs has produced eight Nobel Prize-winning discoveries including the transistor, the laser, and the charge-coupled device (CCD) to name a few. From its prime in the 1930s until the end of the AT&T monopoly in the 1980s, Bell Labs spawned an invisible nervous system that launched the digital revolution and changed our social network forever. Additionally, Bell Labs played a pioneering role in artistic fields in the name of research—music, film, animation and computer graphics—through direct collaborations with a host of artists including Laurie Spiegel, John Cage, Robert Rauschenberg, and many more.

Over the past three years, Chapela has made a series of pilgrimages to eavesdrop on the ghosts of innovation at Bell Labs' defunct Holmdel grounds. The molted shell of this Eero Saarinen designed mega-complex persists like the shed suit of a superhero, still shining but lacking its sentient soul. Chapela's interest in the Bell Labs began with the Holmdel Horn Antenna, a 50-foot long, 18-ton aluminum ear that enabled the discovery of background radiation, a critical step in the development of the Big Bang hypothesis and the proof that the universe is indeed expanding. The Horn merged a number of common themes in Chapela's practice - sound and science, archiving and obsolescence, nationalism, nature and the potential for corporate influence to transcend national borders - which he addressed in the works *Cosmic Microwave Background* (2013), *Holmdel Antenna* (2014) and *Nasa / Pockocmoc* (2014).

These themes persists in Chapela's latest exhibition *No Pain, No Brain*, an archaeological and anthropological interrogation into Bell Labs' legacy. The exhibition's title is culled from a phrase present on *Do Not Erase: No Pain, No Brain*, a dry erase whiteboard appropriated from inside the Holmdel building. The *Do Not Erase* series draws the curtain on this behemoth of innovation exposing and preserving questions not yet answered. Ephemeral last words evoke a wavering fatalism in the face of technological optimism. Were they grappling with singularity, or seeking a pathway to perseverance?

- i. *What you can do*
- ii. *What you want to do*
- iii. *What we do*
- iv. *FIT?*

What activities defer/delay?

Chapela's practice is informed by his academic background in mathematics and communications, yet his work is interwoven with the Romantic—Wordsworth's spontaneous overflow of powerful feeling, emotion recollected in tranquility. Appropriation and direct representation creates the space for abstract reflection and poetic speculation.

Through his *Semi-transistors* (2016) sculptures, Chapela's attempts to build a working transistor by randomly combining a conductor (copper), an isolator (plastic) and a semi-conductor (silicon). The series references the first transistor developed by Bell Labs in 1947, which offered the cornerstone for the digital revolution. Similarly, the works *Silicon-based Proteins* play with the possibility of an organic life based on silicon instead of carbon, which has been explored by science fiction writers since the 1930's. They are sculptures that depict schematic representations of the chemical potentiality of silicon adhering to oxygen, hydrogen and nitrogen to build life.

In *Noises* (2016), Chapela distills enigmatic white noise to spectrograms graphing frequency, duration and intensity. The series underscores the computer's inability to produce true randomness. In contrast, he presents a spectrogram visualization of the organic white noise remnant from the Big Bang. Going deeper into the nature of light and sound waves, the artist appropriated an abandoned antenna from the Holmdel complex, which he uses to pick-up true unpredictable noise as a source of randomness.

Bell Nobel Prizes (2016) presents the brains of the eight lauded achievements in Silicon, an atomic relative of the carbon that comprises our own brains and the key ingredient in the computer chips that power society today.

Though still active, Bell Labs was recently acquired by Nokia and their Holmdel Headquarters was sold for redevelopment as a mixed-use lifestyle center. The monopoly has crumbled and machine learning looms. It is in this context that Chapela offers a philosophy of technology perhaps best evidenced through the video installation *The Space Around* (2016), with original music by Esteban Chapela and accompanied by sounds of music pioneer and Bell Labs collaborator Laurie Spiegel. The piece presents the vacated complex, its adjacent grounds and the hulking relic of the Holmdel Horn eliciting nostalgia for a bygone frontier where technology's daunting potential outweighed its inescapable presence. This portrait offers a fitting gaze in the context of namesake Alexander Bell's predilection toward the sublime. As Bell writes to his father in 1880 describing his photophone research, "I have heard articulate speech produced by sunlight. I have heard a ray of the sun laugh and cough and sing! ... I have been able to hear a shadow, and I have even perceived by ear the passage of a cloud across the sun's disk."

-Ken Farmer