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Ken Goldberg Follow 2 min read · Nov 8, 2016

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A Century of Art and Technology in the Bay Area

From pirates to prospectors to physicists and from poets to prankstors to programmers, the Bay Area is a magnet for mavericks impatient to reinvent the world.

Lot Gibbons Bay Lights at Sunset, 2016

From Eadweard Muybridge's experimental stop motion cameras in the 1880s to the 1915 Panama-Pacific Exposition, the Bay Area has a rich history of counterculture at the intersection of Art and Technology where artists and inventors use the latest tools and technologies to explore, expand, and critique the role of technology in culture.

Man Ray Cinéquanon

In 1927, in his lab at the bottom of Telegraph Hill, 20-year-old Philo T. Farnsworth transmitted the first television image, inspiring generations of video and pirate broadcast artists including San Francisco's Electronic Cinema, Ant Farm, Paper Tiger TV, and Bay Area Hippiethmen came to UC Berkeley to pursue research in physics by day and to produce light shows for the Grateful Dead by night. In 1966, Robert Oppenheimer was then recruited for the Manhattan Project and his research would lead to UC Berkeley on the bomb. Joseph McCarthy also unknowingly helped to discredit him.

J Robert Oppenheimer

Although McCarthy despaired the freedom of inquiry at Cal, the 1960 Berkeley Free Speech Movement was inspired by the Beat Poets. San Francisco sparked Berkeley's Free Speech Movement, which set the stage for the Anti-War Movement and the Summer of Love. McCarthyism also underscored Espinol's younger brother.

Frank Espinol and Jerry Garcia at Frank Espinol's Studio, 1966-1967

Unable to work as a physicist, Frank created the Exploratorium, which opened in 1969 at the Palace of Fine Arts with his legendary exhibition, "Cybernetic Serendipity" brought by Jasia Reichardt from the Institute of Contemporary Arts in London. The Exploratorium continues to provide fun for hands-on discovery that continues to inspire artists and scientists worldwide.

Lot Lyon Kinetic Sculpture

In 1965, the year Alan Ginsberg read "Howl" in San Francisco, a young Stanford graduate named Frank Zappa moved to Los Angeles and in the Cal. Alumni was later hired by Bell Labs in New York, where Ed Sze Area Bohemian experiences led him to start in 1968 the legendary Experiments in Art and Technology (E.A.T.) with Robert Rauschenberg and John Cage.

In 1966, Peter Selz curated "Directions in Kinetic Sculpture" at the Berkeley Art Museum, introducing the art world to sculpture driven by air, magnets, and electric motors. Two years later Doug Michels and Chip Lord formed Ant Farm in Sonoma County. In 1974, Michels and Lord, emerging technology of yerba pub video, created the video performance Media Burn, and Gail Fusfield, Ranch.

Lot Lyon Kinetic Sculpture

In 1970, Xerox Palo Alto Research Center started its artist-in-residency program, inviting Bay Area artists to explore new technologies. SFCA's first artists, both helped exhibit dozens of local artists, including SFCA's Paul Kos who created the Exploratorium's Sound Garden. Kos's work was also exhibited at nearby San Francisco and Carmel Ralph Rinzler to experiment on audio technology counterculture including Meyer Sound, Delta Labs, Nest Audio, Dolby Labs, Ampex, Altec Lansing, Stanford Research Institute, Center for Computer Research in Music and Acoustics (CCRMA), Mills Tape Center, and many others.

Lot Lyon Kinetic

In 1973, Lynn Hershman Lanson began her fictional persona performances and went on to pioneer a number of media art forms and by 1977 Sonya Rapoport and Joan Lyons created the Bay Area Video Coalition. Meanwhile media and Bruce Grace developed a satellite communications system that allowed live interactive dance between NY and SF.

Lot Lyon Hershman Lanson

In 1978, Mark Pauline founded the guerilla tech art collective Survival Research Labs to create and present machine art performances around the world. SRL introduced welding and machining skills to a network of artists. In the early 1980s, Pauline's friend Ken Goldberg was inspired by the Crucible in the East Bay. Scavenging for "obsolete" was an integral action for accessing impossibly priced tech materials. Punk and Industrial Culture Pauline's friend Ken Goldberg wrote "Scavenging The Industrial Culture Handbook" published by V. Vale's Re/Search.

Lot Lyon Research Lab

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Mark Pauline

In 1981 Trudy Myrh Reagan founded TLEM, Artists Using Science and Technology, and in the early 1980s Jaron Lanier, Chris Dodge, Jim Blinn to remember and popularize such as the 1983 exhibition that included Jaron Lanier's art game for the Commodore 64, Scott Kim's computer typographic puzzles, and Jim Blinn's computer graphics. Blinn's images manipulated on an Apple II. At the same time the San Francisco artist space New Langton Arts became the ongoing host of exhibitions by such artists as Bruce Nauman, Chris Burden, Barbara Kruger, and Laurie Anderson.Theater introduced Mabuhay Theater to Kabuki-style piece Highschool in which the audience became an actor.

Lot Lyon Dec 1 1983

In 1984, Roger Malina, an astronomer at UC Berkeley, brought the Leonardo Foundation to the Bay Area where it's monthly SIGGRAPH general meetings were held at the Exploratorium. The first Siggraph conference event was launched by Larry Hurney and Jerry James on Baker Beach and the first Siggraph Conference was held in Dallas. Leonardo was founded by Jim Pomeroy and Brian Eno. Pixar debuted "Luxo Junior" a short animation directed by John Lasseter, the first computer graphics film nominated for an Academy Award.

Also in 1984, Michael Naimark and other leading media artists started the Electronic Cinema program at SFMOMA. Bill Viola and Bruce Nauman Marks mixed live performance with real time computer generated 3D imagery, and Mark Pelraido started his long-running series of monthly Anon Salons in San Francisco.

Chris Marclay

In 1992, Jaron Marcelle and Lucia Rossello introduced WIRED magazine, which ran from 1993 to 2012 and was based in SF. Wired Ventures also ran Voice' BUZZ1 (1994 and Buffalo'n. WIRED hired Survival Research Labs to create a "Robot Wars" show for the Sci Fi Channel (now Syfy). In 2000, Dave a print zine about technology, art, and high weirdness, had a series of events at Bimbo's 365 Club in SF. Dave Eggers, Dave Hickey, Dave Morris presented Trigram, A Rebuttal, Opera at Theater Artaud and in 1998 Will Linn opened the Bluetitaus Gallery in SF.

Although the World Wide Web wasn't invented here, when Jim Clark and Mark Andreessen founded Netscape in Palo Alto in 1994, thousands of artists and technologists came to the Bay Area to participate in the revolutionary which soon included Google, Yahoo, Facebook, Twitter, and many others. In this midst of this paradigm shift, Stewart Brand and Kevin Kelly created the Long Now Foundation.

In 1997, as the Kremlin/ice ramped up their collection of slides art and Tiffany Shlain organized the first Webby Awards, colleagues and of UC Berkeley launched a monthly public lecture series, The Art, Technology, and Culture Series, which continued for twenty years. Its mission was to celebrate, contemplate and push the boundaries between these categories. The APC series, now in its 20th year, has presented over 170 artists, writers, and technologists including Stewart Brand, Kevin Kelly, Jaron Lanier, Bruce Mau, Liu Bolin, Mary Hodder, Pierre Omidyar, Mercedes Lulu, Danil Perez, Gary Kasparov, Ai Weiwei, Jim Fournier, Jaron Lanier, Lev Manovich, Christopher Alexander, and Billy Kluver.

Lot Lyon Foundation

In 2004 the First Maker Faire was held in San Mateo and Seattle Mother Jones and Dale Dougherty, Tim O'Reilly, Jim Dunnigan, Jim Dunn, Jim Dunn, Tim Scarcliff began organizing the monthly Lunacon at the Science Fiction Society of San Francisco. Lunacon was a mix of art, science, and science fiction. Literally hundreds of artists have come to the Bay Area to study and exhibit at SFAI, SFSU Berkeley, Stanford, MFA, CCA and other Bay Area schools.

In 2013, the Bay Area Art and Technology counterculture received international attention for the spectacular Burning Man Lights project initiated when Ben Davis, Timothy Childs, Amy Critchett, Charles Rawlin and others created the Burning Man Lights project. Burning Man Lights Technology to create the world's largest light sculpture on the Bay Bridge.

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Lot Lyon Foundation

Each wave of art and technology starts with a real or imagined discovery: land, gold, atomic elements, hallucinogens, circuits, algorithms. As Timothy Leary allegedly observed: "California is the end of the genetic runway." The Northern California / Bay Area Art and Technology counterculture paves that runway with a true love of science and engineering, a deep resistance to authority, and an undaunted belief in Power to the People. The Bay Area is quick to forgive and embrace projects that don't go the way they were intended. This ecosystem continues to explore and experiment with new ways to express ideas that could not be expressed before.

. . .

I wrote a preliminary version of this essay for the New Experiments in Art and Technology exhibit at the SF Contemporary Jewish Museum and expanded it for "100 Years of Robot Art and Science in the Bay Area", a 20 November, 2015 discussion at the de Young Museum in San Francisco including Pieter Abbeel, Catharine Clark, Karen Marcelo, John Markoff, Josette Melchor, David Pescovitz, Zander Rose, Tim Roseborough, Dorothy Santos, Kal Spelletich, and Terry Winograd.

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What are your thoughts?

Max Serradifalco
Oct 15, 2016

I see that your interesting story ends with satellite art, about this I suggest the work of Jenny Odell, David Thomas Smith, Federico Winer and Max Serradifalco

Reply

Liz Flyntz
Oct 10, 2016

I love a timeline as a way to comprehend and draw out connections and narratives in a cultural movement. Thanks for posting this — so much here that I didn't know, and things that I knew about put into context! You might be interested in this... more

Reply

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