CAL TECH, a review of "From the Archives: Art and Technology at LACMA, 1967–1971," Los Angles County Museum of Art, March 21–October 25, 2015 1492 words

The Treachery of Images, 1929, is among the most iconic pictures produced in the twentieth century, but most people don't know that this metatextual painting by René Magritte, depicting a pipe above the phrase *ceci n'est pas une pipe*, is in the permanent collection of the Los Angeles County Museum of Art. It's an ideal holding for the region's largest and most comprehensive institution: The wit presages John Baldessari, the typography Ed Ruscha; the Foucauldian slippage between the real and the imaginary—well, that's how SoCal rolls. The painting is also one of the last works you see before arriving at "From the Archives: Art and Technology at LACMA, 1967–1971," commemorating the pioneering exhibition launched by LACMA curator Maurice Tuchman to "bring together the incredible resources and advanced technology of industry with the equally incredible imagination and talent of the best artists at work today." Like Magritte's painting, "Art and Technology," aka A&T, has had a resurgent afterlife.

Tuchman joined LACMA in 1964 as a transplant from New York, and he initiated A&T two years after his arrival to harness the future-forward, techno-positive ethos in his new town. The exhibition revolved around an elaborate program to embed blue-chip artists— including Andy Warhol, Robert Rauschenberg, Robert Irwin, and James Turrell—within corporations such as Lockheed, IBM, Ampex, and Kaiser Steel, as well as entertainment companies and research centers including Universal Studios and the Jet Propulsion Laboratory. Tuchman's ambition extended to unprecedentedly broad showcases: eight of the projects—including Newton Harrison's kinetic gas-plasma light works and Tony Smith's corrugated-cardboard "cave"—were previewed by more than ten million visitors at Expo '70 in Osaka.

LACMA's mini-retrospective offers a fine-grained, behind-the-scenes look at the program as it unfolded. Materials on view include records of the sometimes antagonistic relationships between the artists and the corporations, such as the combative missives between the trickster John Chamberlain and an increasingly intolerant collection of rand Corporation technocrats: "I'm searching for answers. Not questions!" "There is only one answer. You have a . . . warped, trashy idea of what beauty and talent is." The show also provides a reminder of the bubbling creative energy that propelled the program, as well as of its sheer eccentric originality: Sketches and photos of Öyvind Fahlström's Zap Comix– inspired coatedmetal Meatball Curtain (for R. Crumb), 1969, are shown alongside newly remastered footage of Claes Oldenburg sketching blackboard drawings for his Giant Ice Bag, 1969–70, an oversize kinetic soft sculpture that continuously inflates and deflates.

What the retrospective does not have room to do, however, is explain how A&T—long considered by many as a failed experiment—achieved its now paradigmatic position. One is left to wonder about the historical reception of the program and the

broader context of the global boom in art-and-technology collaborations in the 1960s. Understanding A&T's long and seemingly unlikely rise to its current iconic status requires a closer examination of its relationship to Southern California's economy and culture.

The fundamental problem facing Tuchman was that the nation's attitudes toward technology transformed between 1966, when he first proposed A&T, and 1971, when it opened. Through the mid-'60s, technology carried the sheen of modernity, with such figures as R. Buckminster Fuller, Marshall McLuhan, and Nam June Paik expressing utopian aspirations for expanded modes of communicating and new ways of living. By the early '70s, however, artists, audiences, and even museum patrons had turned against the war in Vietnam, and technology had become synonymous with the military-industrial complex. In a1971 review, Max Kozloff expressed contempt for the artists who "did not hesitate to freeload at the trough of that techno-fascism that had inspired them." If geopolitics confounded A&T, so, too, did identity politics. As many noted, the cover of the 1971 catalogue is a grid of head shots of the participating artists and engineers: all white, all male. The artists are shaggy, the engineers buttoned down, but that's it for diversity. A&T was so egregiously patriarchal that it prompted the formation of the Los Angeles Council of Women Artists, and so uniformly Anglo that it was one of the tipping points leading to the Chicano/a collective Asco's famous intervention Spray Paint LACMA in 1972.

How is it possible, then, that a few decades later A&T has achieved cult status? The answer is simply that the original A&T went viral long ago and still hasn't left Southern California's system. Indeed, conditions have long been just right for a techno-pandemic in Southern California. Local art fabricators like Jack Brogan and Peter Carlson were patient zero: From Brogan's work with Light and Space and Finish Fetish artists in the '60s and '70s to Carlson's partnering on contemporary sculpture with Charles Ray, Liz Larner, and Doug Aitken, the region's fabricators have introduced everything from auto detailing to injection molding to surfboard glassing into fine arts practice, extending the A&T model into a new role of fabricator as co-creative spirit.

The A&T virus infects not just works but also spaces. While MIT's Center for Advanced Visual Study and the Exploratorium in San Francisco are also legacies of the '60s art/tech boom, it was in Southern California that the innate hybridity of the A&T process mutated the art world enough to alter the very mechanics of viewing and display. While the original A&T was a hierarchical affair, its descendants are more feral, egalitarian, and hackerish. True to A&T, these venues often embrace an engineering sensibility as much as an artistic one, favoring the "kludge"—an engineer's term for a quick and dirty workaround—over the fixed solution. They are also resolutely idiosyncratic outgrowths of their founders' obsessions, which are themselves usually rooted more in science (or at least sci-fi) than in art history. There is the justly famous Museum of Jurassic Technology, and right next door, CLUI, Matthew Coolidge's Center for Land Use Interpretation, which extends land art to include, say, exhibitions of experimental-aircraft crash sites of the Mojave. The

Crochet Coral Reef project may be the most seductive output of sisters Margaret and Christine Wertheim's Institute for Figuring, but the IFF also curates shows on fringe physics and alternative-logic alphabets.

Most directly channeling A&T is Echo Park's Machine Project—which falls on a continuum spanning twenty-first-century maker spaces, self-sustaining relational-aesthetic experiments, and sui generis SoCal eccentricities. Founded and directed by Mark Allen, Machine Project hosts everything from hackathons that explore the programming of Arduino robotic controllers to workshops on DIY cat architecture. Allen acknowledges his debt to A&T, especially those projects where the artist came to master the technology him- or herself, rather than relying on help from technologists. Yet there is an evolution of the A&T legacy, too: The critic and painter Peter Plagens maintained that A&T was about "hardware," where Machine Project tends toward software, if only because it is more easily distributable and encourages a DIY spirit.

While Robert Irwin claimed that A&T was a red herring because it gave technology equal billing with art, LACMA director's Michael Govan maintains the show opened the possibility of understanding technology poetically. But beyond the realm of art, A&T acted as both a reflection of and an agent of change on the culture of technology itself. A&T was part of a much broader transformation that is tied specifically to the intersection of West Coast counterculture with the new spirit of entrepreneurial capitalism that sprang up in Silicon Valley. Engineers in California don't present as straitlaced company stooges anymore. Today's "creative industries" employ coders who look, and claim to think, like artists. Art, or at least artifice, has hybridized with technology; that mutant has come to dominate our culture and has taken over our workplaces, our home lives, and even our bacchanalias.

Take the annual Coachella Valley Music and Arts Festival, which has tricked out A&T's legacy in a throbbing pop-glitz festival idiom, less Burning Man than TechCrunch Disrupt. In 2015, the standout was the mesmerizing Hypercube projection that formed the four-dimensional stage for LA-based producer Flying Lotus (Steven Ellison), enshrouding the artist in a pulsating series of animated characters, colors, and graphics that pushed the boundaries of expanded cinema, augmented reality, and sheer spectacle to jaw- and bass-dropping limits: pulsating proof of William Gibson's quip that "the future is already here, it's just not evenly distributed yet." If Coachella's reliance on corporate sponsors retreats from the contemporary DIY spirit back into the hierarchies of the original A&T, the festival also gives way to another kind of consumption. In addition to sound and light, Coachella features the gourmet-food trucks that have come to define Southern California's culinary landscape. Chef Roy Choi's Kogi truck has pride of place at the desert festival; it also regularly occasions a long line outside LACMA during lunch hours, where it offers urSoCal Korean-Mexican fusions like bulgogi tacos and kimchi quesadillas. In a sense, his kitchens on wheels are geolocative, streetscapeactivating, mobile sites of production and consumption, rolling from the mountains to the valleys, from the desert to the sea, How very A&T.



Image: Artist Newton Harrison (right) and Jet Propulsion Laboratory technician Ray Goldstein examining a preliminary design for Harrison's Art & Technology installation of glow discharge tubes, 1969. Photo © Malcolm Lubliner



Image: Claes Oldenburg's *Giant Icebag* (1969-1970), installed at LACMA in 1971. © *Claes Oldenburg, Photo* © *Museum Associates/LACMA* 

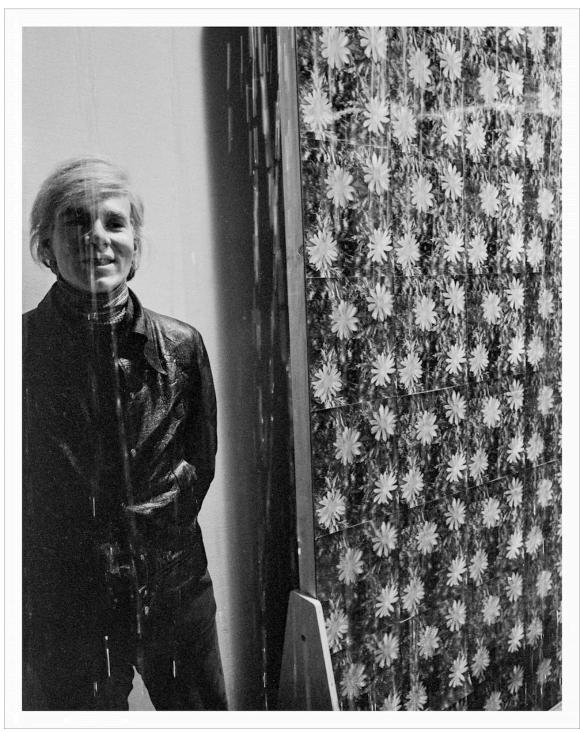


Image: Andy Warhol standing next to a prototype for his Art and Technology piece *Rain Machine*, 1969. Artwork executed in collaboration with Cowles Communication under the auspices of the Art and Technology program at LACMA, 1967-1971.