Culture > Art & Design

And Getty Created PST

The collision of art and science is too broad a topic for an arts festival. But the result is divine.

BY CAROLINA A. MIRANDA | PUBLISHED: DEC 16, 2024

NASA/JPL-CALTECH/DAN GOODS

It was July 1965, and the people of Earth were awaiting a transmission from Mars. NASA's *Mariner 4* explorer was approaching the red planet and preparing to take the first photos of Mars from deep space—and it was *an event*. One newspaper published a minute-by-minute timetable of the anticipated flyby; another presented a map of antennae positioned on Earth to receive the images. Would the pictures reveal rumored Martian canals? It was going to be a while before anyone

knew. In 1965, digital image-making was in its infancy, and the process was excruciatingly slow. Each photo of Mars would take over eight hours to transmit to Earth as a numerical code, after which it would need to be translated into a visual representation by computers at the California Institute of Technology's Jet Propulsion Laboratory in Pasadena. When the data began to land, JPL scientist Richard "Dick" Grumm didn't wait for the computers; he printed the numbers out on ticker tape, stapled the strips to a wall, and used pastels to shade each section as coded. The first-ever digital image of Mars was rendered by hand.

NASA/JPL-CALTECH/DAN GOODS

Above: The first-ever digital image of Mars was rendered by a Jet Propulsion Laboratory scientist who hand-colored strips of ticker tape with pastels. The five-foot-wide print was displayed at Caltech's exhibition for the PST Art festival.

The picture, which is over five feet wide, reemerged like a hopeful artifact from the era of the space race as part of the Getty's 2024 PST Art: Art & Science Collide, a series of exhibitions in Southern California focused on the intersection of art and science. The Mars image is a perfect example of that union: a first-of-its-kind scientific visualization that is also an otherworldly landscape of our planetary neighbor in warm shades of orange, yellow, and brown. In fall 2024, it was exhibited

at Caltech in the illuminating *Crossing Over: Art and Science at Caltech, 1920–2020*. The show was organized by independent curator Claudia Bohn-Spector and Peter Sachs Collopy, who oversees archives and special collections at Caltech. Dozens of objects illustrated the ways in which art has served scientific research and, conversely, science has inspired art, including Renaissance-era books laden with elaborate depictions of star systems and a magnificent 1930s photograph of a solar eclipse. Another example was the 2020 painting *Helium Blaze*, by contemporary artist Lita Albuquerque, showing a dazzling orb of white gold against a field of blue pigment, like a fiery sun hovering against an inky sky. Art and science, says Bohn-Spector, are bodies of knowledge that are "joined at the hip."

***This article appears in Issue 30 of* Alta Journal.**

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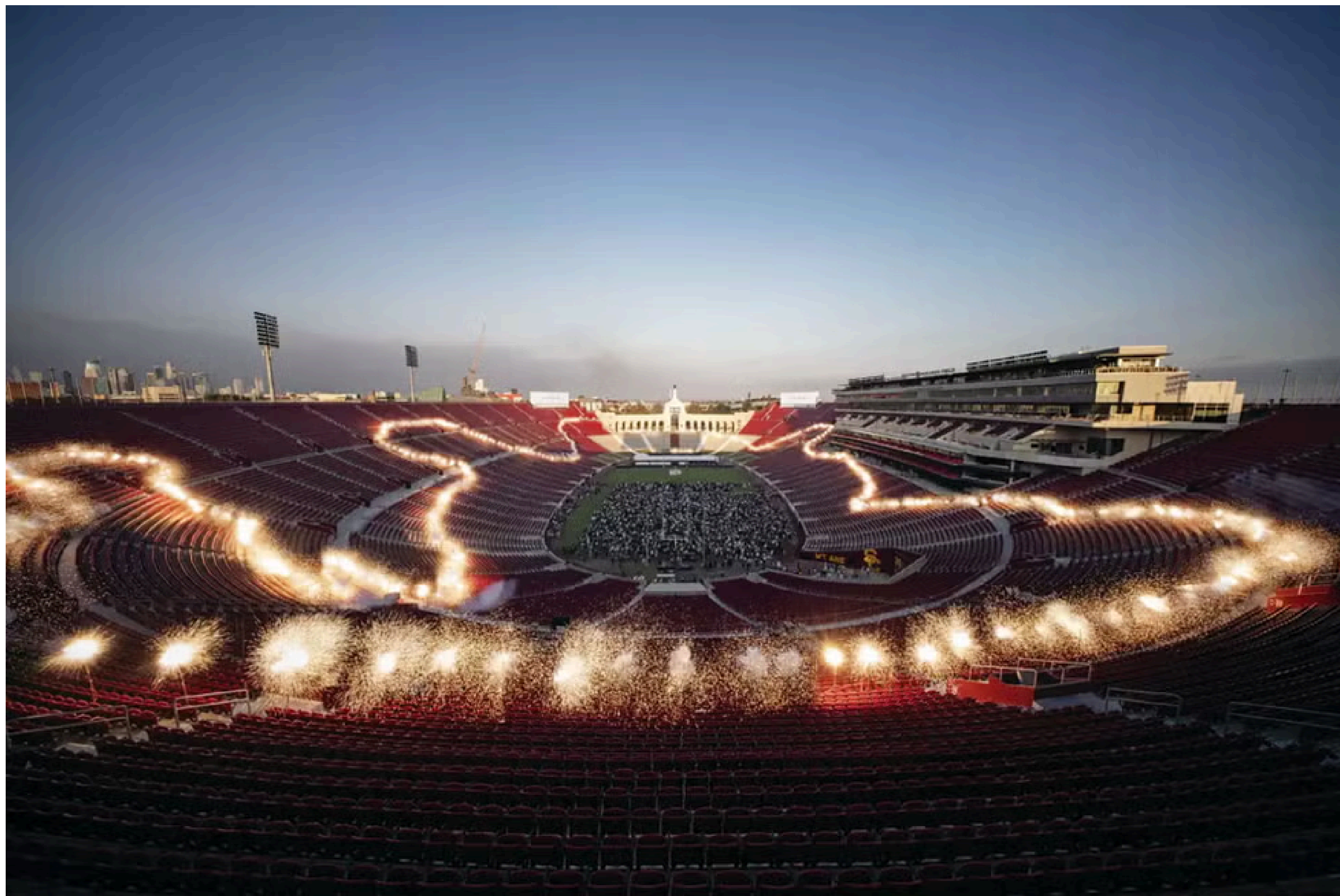
Crossing Over was one of more than 70 exhibitions examining the theme of art and science as part of this season's PST Art, the every-few-years regional art extravaganza (originally known as Pacific Standard Time) that is planned and heavily subsidized by the Getty Foundation. The bulk of the exhibitions began in the fall, but some will kick off in January 2025, stretching into the summer. In the past, PST's themes were framed around geography, like the first installment, which focused on post–World War II art in Southern California and opened to much acclaim in 2011. In brainstorming for the 2024 festival, however, the Getty went broad. "The image," says Joan Weinstein, director of the Getty Foundation, "is essential to the understanding of science."

As a theme, Weinstein notes, art and science is "a big, unwieldy topic." That is an understatement. Science is why we have everything from the atom bomb to Prussian blue. Science contains within it literal galaxies; art, our physical and psychological manifestations of them. Put the two together and the result is everything everywhere all at once. The theme, however, has ended up being timely—following the COVID-

19 pandemic and arriving at a moment in which human-induced climate change has resulted in more extreme weather events. In September, when I arrived at the J. Paul Getty Museum's hilltop home for the opening of one of its PST presentations, *Lumen: The Art and Science of Light*, a look at the ways scientists and philosophers approached the subject of light during the Middle Ages, I could see the billowing smoke of the San Bernardino Line Fire in the distance.



KENRYOU GU/CAI STUDIO

At a PST Art opening ceremony in September, artist Cai Guo-Qiang's daytime fireworks rained debris on the 5,000-person audience at the Los Angeles Memorial Coliseum—injuring several spectators.

The unwieldiness of the topic speaks to the unwieldiness of PST: wildly atomized and possibly too big for its own good, all the while staying charmingly messy. (So messy, in fact, that a daytime fireworks show by artist Cai Guo-Qiang at the Los Angeles Memorial Coliseum in September, which helped kick off the proceedings, ended up injuring spectators with falling debris.) The disorder stems from the process: The Getty sets the theme for PST Art and gives out grants to institutions for research and exhibitions—more than $20 million for the current series. But there is no central

curatorial arm deciding who shows what. This means you'll find lots of overlap as well as plenty of gaps. For example, amid 70-plus exhibitions dedicated to art and science, there are more than 20 about climate but none devoted to botanical illustration. The decentralization can also make PST a frustrating endeavor for a viewer. Not only does the festival comprise a huge number of shows, but some are broken up over multiple locations across cities and counties. (Godspeed if, like me, you use public transit.)

Ultimately, the sprawl—which feels true to Southern California—is also what makes PST intriguing. L.A. artist and curator Rubén Ortiz-Torres, who has helped organize the festival's exhibitions in the past, once told me, "If the Museum of Modern Art did this, it would be, 'These are the guys to follow. This is the canon.' The thing I like about the Getty is that you have these competing visions [that] will force us to make sense of what's going on." But with another PST on the horizon in 2030, now is the time to ask whether some of the unruliness might be tamed and the series, perhaps, made more user-friendly.

© WANGECHI MUTU

Histology of the Different Classes of Uterine Tumors **(2004–05), by Wangechi Mutu, at ICA LA.**

DREAMING BIG

PST's origins have nothing to do with exhibitions. In 2001, with a generation of postwar artists from Southern California beginning to age and die, the Getty Research Institute began to compile oral histories and preserve archives that were in danger of being lost. By 2011, that research led to Pacific Standard Time: Art in L.A. 1945–1980, 68 thematically linked shows that resulted in the publication of 40 books

and catalogs. "The first PST helped shape graduate seminars on Los Angeles art because there was a bibliography," says Weinstein. "And it revived the careers of innumerable artists." The success of that festival led to more, including a smaller one, Pacific Standard Time Presents: Modern Architecture in L.A., held in 2013, and Pacific Standard Time: LA/LA, four years later, which showcased Latino and Latin American art.

From the get-go, PST has helped support the types of deep research that would be difficult for a small art space to fund. On view at the Institute of Contemporary Art Los Angeles, for example, is *Scientia Sexualis*, organized by independent curators Jennifer Doyle and Jeanne Vaccaro. The exhibition examines the troubled relationship between medicine, sexuality, and gender in contemporary art. Years in the making, the show opened at a moment in which trans rights and women's bodily autonomy are in question. Among its many thought-provoking works—which include videos and installations—is a fantastic series by Nairobi-born mixed-media artist Wangechi Mutu that employs 19th-century illustrations of female anatomy as the basis for collages of human faces. (Imagine a uterus with eyes staring back at you from a gallery wall.)

The show, says ICA LA executive director Anne Ellegood, would have been impossible without Getty funding ($345,000). "This is a very expensive undertaking," she says. "It's 27 artists, a major publication, and two guest curators who put their heart and soul and a lot of labor into it. Plus, every artist gets an honorarium." But she wonders whether the Getty model could have involved the artists more directly, especially when survival of the creative class has become increasingly precarious. "Commissions have not been a big part of this," says Ellegood. "I know institutions do some of that. Could there be a program that offers a more direct line of support?"

The Broad's PST offering is an expansion of its independent exhibition *Joseph Beuys: In Defense of Nature*, which features environmental works by the late-20th-century German conceptualist—including a bottle filled with polluted Rhine River water. Broad curator Sarah Loyer and Beuys scholar Andrea Gyorody applied Beuys's concepts beyond the galleries with the planting of more than 100 native trees in Los

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The Broad's Joseph Beuys exhibition features a bottle of polluted water that the artist collected at the Rhine River in 1981.

Angeles's Elysian Park and Kuruvungna Village Springs. This gesture echoes an action staged by Beuys in 1982, when he planted 7,000 oaks across the German city of Kassel. The Broad's plantings are accompanied by an online curriculum for Los Angeles schoolchildren that was created in collaboration with Tongva cultural workers. The project is an attempt to extend the impact of PST beyond the five-month exhibition blast. "We have to ask ourselves, are we maximizing this opportunity to build literacy around the arts?" says Ed Patuto, director of audience engagement at the Broad. "Are we building knowledge beyond the length of any one exhibition? Are we building audiences? That's a big issue post-pandemic."

CLOCKSHOP

Audience members sit along the L.A. River to participate in *What Water Wants*, a 30-minute audio presentation that includes music, narration, and ambient sounds.

One of my lingering questions about PST is whether the endgame needs to be an exhibition. I've seen shows that might have been better as a graphic novel or documentary short—formats outside the traditional fine art presentation. Interestingly, the Getty Foundation has begun to move toward funding more performance, along with other innovative forms of programming. In early October, I found myself sitting on the banks of the L.A. River at sunset, participating in *What Water Wants*, a 30-minute binaural audio experience created by artist (and *Alta Journal* contributor) Rosten Woo for the arts nonprofit Clockshop. His piece offers an overview of the ways in which water arrives in the Los Angeles Basin and what could happen in the future as temperatures rise. Where so many PST projects go big, this one was small, but poignant—asking us to consider our relationship to water as we sat alongside it.

None of this is to say that there aren't payoffs to the festival's ambitious scale. Collectively, the shows tell a greater story than would be possible otherwise. An exhibition at the Los Angeles County Museum of Art, *We Live in Painting: The Nature of Color in Mesoamerican Art*, which examines the science and use of color among ancient Indigenous civilizations, is made richer by seeing it in tandem with *Blood of the Nopal: Tanya Aguiñiga & Porfirio Gutiérrez in Conversation* at UCLA's Fowler Museum, which explores how cochineal dye, first developed by the Zapotec people, is used today. Likewise, Caltech's show, which linked art and space, is a good

foundation for seeing *Particles and Waves: Southern California Abstraction and Science, 1945–1990* at the Palm Springs Art Museum, an elegant show that looks at how artists in the region engaged emergent scientific concepts in abstract art.

ELON SCHOENHOLZ

Blood of the Nopal: Tanya Aguiñiga & Porfirio Gutiérrez in Conversation **at UCLA's Fowler Museum.**

FINDING WONDER

Each edition of PST has had a ripple effect that extends beyond the life of its shows. The first one helped surface traditions of Black and Chicano art that had been understudied or overlooked, and those exhibitions have informed others since. The series devoted to Latin American art generated catalogs and other scholarship in English, which has been vital to expanding the reach of that work in the United States. And though clustering the shows into a few chaotic months may be inconvenient for visitors, it does draw the attention of the international art press, who otherwise might not be bothered to fly into Southern California to review shows at smaller institutions in places like Escondido and Palm Springs. Perhaps most significantly, especially to audiences, the series brings objects and ideas to Southern California that viewers might not otherwise see. At the San Diego Museum of Art, a ravishing historical show organized by curator Ladan Akbarnia is inspired by a

cosmography produced by Zakariyya ibn Muhammad al-Qazwini, a 13th-century Persian scholar who lived in Iran. His influential manuscript is a description of the universe, containing images and texts about botany, medicine, alchemy, and architecture. *Wonders of Creation: Art, Science, and Innovation in the Islamic World*, as the show is titled, features a pair of exquisite Persian editions of al-Qazwini's manuscript that were borrowed from historical university collections in England.

Al-Qazwini is a fitting figure to contemplate during our turbulent time. He produced his extraordinary document in the wake of a Mongol invasion of Persia. "He says at the beginning of his text that he writes it so that this information won't be lost," says Akbarnia. "He is also bringing order to the time that he lived in." To this order, he brought wonder, and that sensation informs the exhibition, which also features delicate drawings of trees and mythological creatures—like the illumination of a bearded merman moving through water—by an array of artists. "That's what al-Qazwini was asking us to do: to see the world with wonder," says Akbarnia. "It's part of what we will have to do for future generations." And, in that regard, PST's Art & Science Collide series as a whole provides a remarkable cosmography of our moment: our legacies of discovery and destruction; our challenged environment, but also the ways it might heal. An important reminder that, when it comes to our fragile planet, it is smart to approach it with reverence and awe.•

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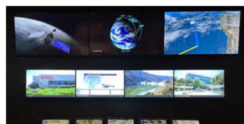

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