



T Special Edition
TRUE BELIEVERS

A Land Art Pioneer's Adventures in Time and Space

Nearly 50 years after Charles Ross began working on "Star Axis," the artist's gargantuan work in the New Mexico desert is nearing completion.



Charles Ross at the base of the Solar Pyramid, which forms the top of "Star Axis," his naked-eye observatory 85 miles from Santa Fe, N.M. Credit...Andres Gonzalez

By Nancy Hass

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THROUGH THE WINTER months, [Charles Ross](#)'s existence befits an established New York multimedia artist of a certain vintage: whitewashed SoHo loft with a comfortable studio in the back; a pair of sweet, shaggy dogs that he and his wife, the painter [Jill O'Bryan](#), walk up Wooster Street in the chill, past the wrought iron storefronts that were little more than scrap metal when he first came to the city in the mid-1960s after studying math and sculpture at the University of California, Berkeley, but now are outposts of Chanel and Dior. Evenings, they may drop into a Chelsea gallery opening or two, then linger over dinner at [Omen](#), the Japanese restaurant that's been on Thompson Street since the '80s, nodding to the fellow stalwarts of a downtown scene that long ago ate its young: the 92-year-old portraitist [Alex Katz](#) sharing a sake with the Abstract Expressionist [David Salle](#), 67; the musician [Laurie Anderson](#), 73, at the bar, her spiky hair stippled with gray.

But come dawn on an April day, when the weather has started to break, such trappings abruptly fall away. A long flight and a bumpy three-hour ride later in the bruised, red-clay encrusted 2004 Dodge Dakota that they usually keep in long-term parking at the Albuquerque airport, Ross and O'Bryan are halfway up a craggy mesa, at the base of "Star Axis," the 11-story naked-eye observatory made of sandstone, bronze, earth, granite and stainless steel that Ross, one of the last men standing of the generation of so-called earthworks artists, has [labored on continuously](#) since he conceived of it in 1971. It will be finished, at last, he hopes, in late 2022. He will be 84 years old. "When I'm in New York," he says. "I'm just waiting."



The entrance to "Star Axis," with 30-foot-high stone walls built using ancient techniques. Credit...Andres Gonzalez

The couple, who have been together for almost 25 years, will stay in New Mexico usually through November, returning to SoHo only when it gets too cold to pour the vast amount of concrete needed to complete a 130-foot-tall structure that is a fifth of a mile across, living in what might generously be called a house, barely visible on the adjoining mesa, a 15-minute, spine-jarring ride away. In fact, it is little more than two castoff campers that Ross spackled together at the beginning of this wild ride, as the Vietnam War waned and Watergate exploded, and he decided, after envisioning it on a summer night in 1971, that no matter how long it took him or the cost, he would build a gargantuan staircase aligned perfectly with the celestial pole, marked by Polaris, the North Star. The running water comes via cisterns from the roof of the 600-square-foot living space; the tiny bathroom with its ship's toilet came with one of the campers, and the two refrigerators are propane-powered, "made by the Amish who aren't supposed to use electricity," says O'Bryan, 64. They try to generate as little garbage as possible, bundling scraps left from their plates at the end of each simple meal into meager bits of paper towel, because they haul the trash down the mesa weekly to Las Vegas, the small New Mexico city nearly an hour away. Instead of a sofa — they have little use for one — there is a rough-hewn plank desk, covered in papers, drawings and, of course, bills, illuminated by the only lantern in the place.

O'Bryan, whose dense, Minimalist work, which has been shown at the [Phillips Collection](#) in Washington, D.C., and New York's [Margarete Roeder Gallery](#), is made by leaning over a leaf of rice paper to record with strokes of graphite pencil each breath she takes, will often spend 12 hours a day in the studio Ross built for her out back. It is an improvement over where his first wife, also an artist, painted early in their careers in New Mexico: She laid boards over their bed to make a level surface. When Ross is not at the site overseeing construction, he works with a handful of assistants in a studio adjoining O'Bryan's to craft the gallery work that has partly sustained "Star Axis" over the years (he estimates it has cost more than \$6 million so far), including his series of "[Solar Burns](#)," slabs of wood placed under round lenses of various sizes — up to six feet in diameter — set on giant hand-built stands outside the house, amid scraggly clumps of yellow gum weed. The resulting charred impressions are dated meticulously. They have delicate, multidimensional feathered edges that fade to ghostly brown and ocher. As tactile as a wound, like "Star Axis," they are meant, he says, "to make visceral the power of sunlight."



Ross on a boulder during the construction of "Star Axis" in 1982. Credit...Elizabeth Ginsberg

"Star Axis" itself is meant to embody an astronomical phenomenon called precession. First noted around 130 B.C. by Hipparchus, the Greek astronomer who is also credited as the inventor of trigonometry, precession refers to the top-like wobble of the earth's axis due to the sun's gravitational pull on the slightly bulging Equator. The result of precession is that while Polaris, in the constellation Ursa Minor, is currently the closest bright star to the northern celestial pole, that will change over time, as other bright stars

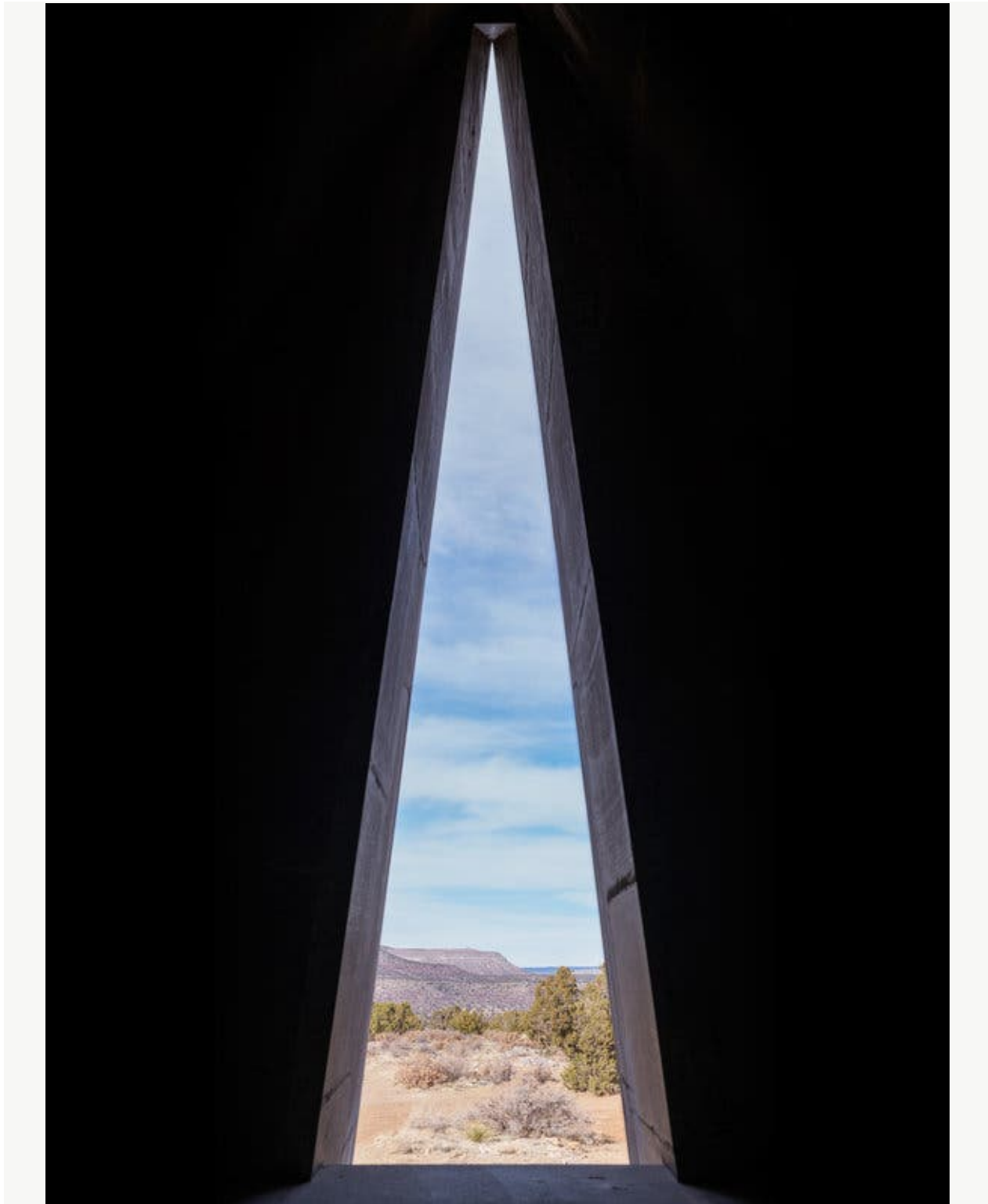
from surrounding constellations happen to slowly become the polestar. (The entire cycle takes about 26,000 years.) “How could I not want to illustrate that,” Ross says. “How could I not want to find a way to walk through time?”

THE SUN IS SETTING, a prelude to the wrapped velvet blackness that on the mesas renders you unable to see even your own footfalls, which, considering the terrain, can be terrifying. But for Ross, wiry and spry, with eyesight sharp enough to distinguish the headlights of a Ford from those of a Subaru as it chunks down a twisted road on a distant mountain, this is the best time to feel the work rather than merely see it. During the blindingly lit day, the site is alive with giant earth-moving machines, and with a small crew that includes two foremen who have been on the project since the beginning, growing old alongside Ross, lifting the remaining capstones into place in a well-practiced ballet. But when night falls — the kind no longer available in most of the artificially illuminated world — “Star Axis” becomes what he envisioned all those decades ago.

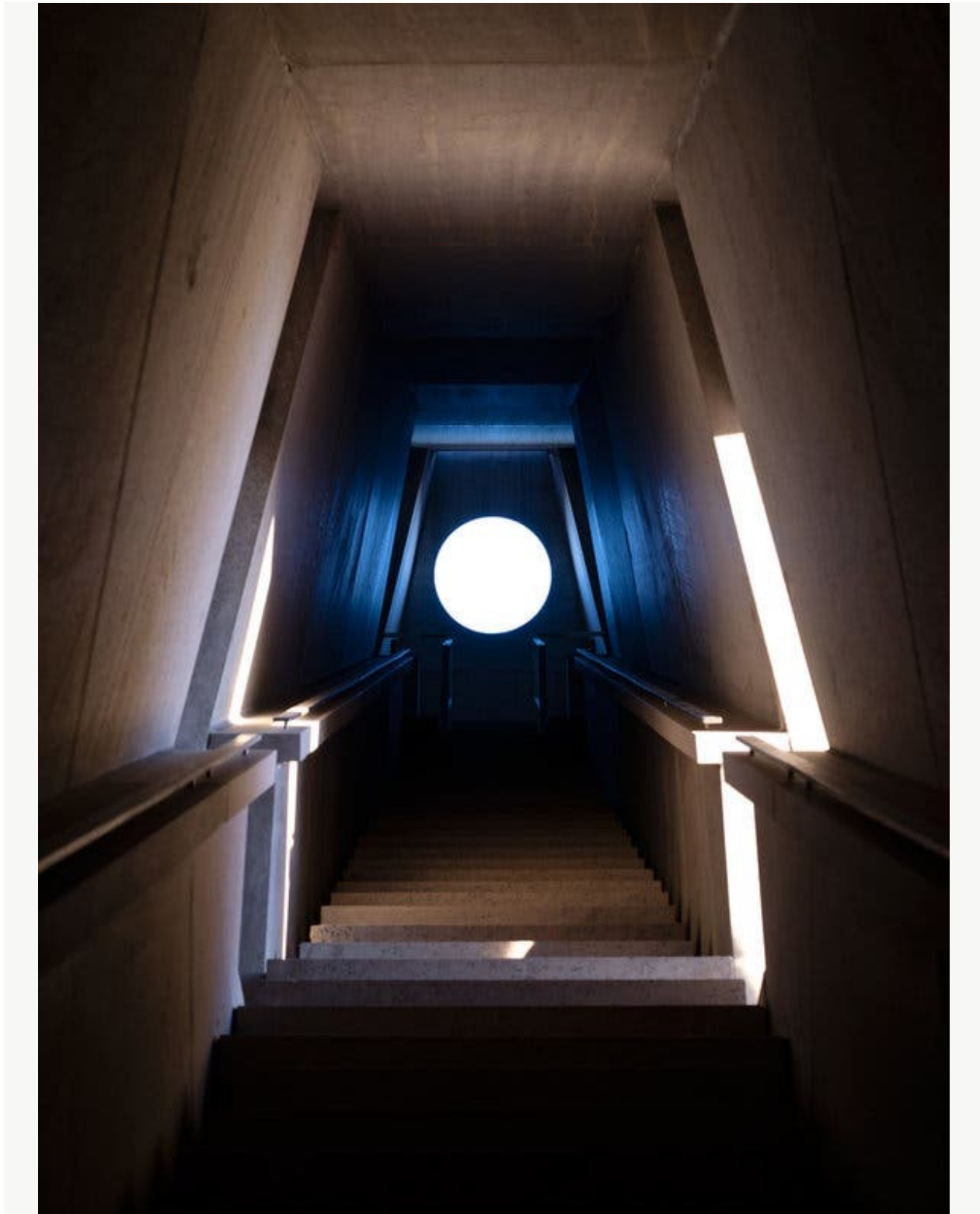
Soon, a visitor — there have been just a handful allowed in — can see nothing: no outline of the curved 30-foot-tall limestone entry walls made using Roman building techniques, or the outside of the Star Tunnel — a 147-step passageway that leads to the observatory — or the artist himself, in jeans, a denim work shirt and dusty sneakers. When Ross first dreamed of such a staircase, he thought he could build it on the outside of the mesa, a task he expected would take a year or two at most. But soon after he started construction, he had another dream: that to see the stars you would need to actually enter the earth. That meant the stairs would have to be excavated into the mountain itself.

“Relax and lift your head,” he says from somewhere in the void, as you grab the steel handrails — perfectly honed and, like everything else at “Star Axis,” strategically positioned for maximum comfort, at a pitch figured to a minute certitude, in keeping with both the celestial concordance and the human body. The height of the risers, too, has been carefully considered (8.25 inches; any more and they would be too strenuous to mount, any less and they would create the terrifying optical illusion of a nine-story sheer cliff when you turned around to descend). “Just keep your eye on Polaris,” he says. The elaborately engineered acoustics make it hard to tell how close he is. “I promise you’ll be all right.”

Image



The view from the Hour Chamber at “Star Axis,” where visitors will be able to observe one hour of the earth’s rotation. The North Star, Polaris, is framed in the apex of the 15-degree triangular opening; it takes exactly 60 minutes for a star anywhere along the left (west) edge to travel to the right (east) edge. Credit...Andres Gonzalez



The “Star Axis” oculus, at the top of a set of 147 stairs, is 40 inches wide, but from the bottom it seems only the size of a dime held at arm’s length. Credit...Andres Gonzalez

At the first tread, the stars come suddenly into view, framed by an oculus that seems the size of a dime held at arm's length. You can make out Polaris, at the rim, flashing brighter than the others as it traces its daily small circle with the earth's rotation. As you ascend, the aperture grows, the haze of cosmic matter coming into focus as though you are turning the knob of a microscope. Earlier, Ross explained how his illustration of precession works: At the bottom of the stairs, you see through the porthole the sky more or less as it is today (actually, as it will be in around 2100, when, as it happens, Polaris and the pole itself will be perfectly aligned). But with each step (he commissioned professors from the University of Washington's Department of Astronomy to date them in exact increments, one by one), the field of vision widens, tracking the change in Polaris's orbit. And so, as you climb, you move through the earth's 26,000 year precession. At the top, you glimpse the most distant past and future orbits of the polestar — the sky as it was at the beginning of the cycle, in 11000 B.C., and as it will be in A.D. 15000.

In the darkness, you hear your heartbeat and the in-and-out whoosh of breath; your steps become automatic, effortless, as though you are falling instead of climbing, an odd sensation that he later will explain is the result of thousands of minute calculations of how the stairs hew to the celestial axis. And then — Four minutes later? Ten? Half an hour? — you reach the top. You are alone on the small platform at the 147th step, nose to the glass, 40 inches across — exactly as wide as the human field of vision, as Ross told you earlier — and angled back to be at 90 degrees to the earth's axis. Although you have been climbing straight up, Polaris appears to have moved to the dead center of a web of stars so thick it seems almost like a solid mass: tiny glimmering fish in a net, gems poured out onto a bolt of velvet. To the side now is Gamma Cephei, in the constellation Cepheus, cued up to become the next North Star about 2,000 years from now. "You're here," says Ross, from somewhere in the blackness, his voice trailing off. "Stay as long as you need to."

AND THEN THERE were three: [Michael Heizer](#), [James Turrell](#) and Ross, the last of the American artists who in the 1970s came to define a muscular, almost entirely male, heterosexual and white American brand of Minimalism that dispensed with the traditional trappings — paint, clay, canvas — to sculpt into abstractions the Western elevations themselves. Each began a massive major work in the desert that he has yet to complete more than 40 years later. Now, it appears that Ross will be the first to finish. Heizer, 75, with whom Ross shared neighboring studio spaces in the same San Francisco building at the beginning of their careers (they remain friends), began what is now known as "City" in 1970: a low-slung, undulating collection of mammoth abstract geometric shapes molded from rock, sand and concrete that cover more than a square mile in a lunar landscape four desolate hours from the Alamo in the Nevada desert. Turrell, 77, a daredevil pilot who flew Buddhist monks out of Tibet during the Vietnam War and spent a year in prison for coaching young men on how to avoid the draft, bought Roden Crater, an extinct cinder cone volcano measuring two miles across in the Painted Desert of northern Arizona, in 1977 and has spent the past four decades turning it into an observatory, with 22 viewing areas and a multitude of apertures on the night sky. Throughout the 1990s, Turrell, whose project had by then turned him into an art-world deity, continuously pushed back his self-imposed deadlines for completion; last

year, [Kanye West](#) reportedly [donated \\$10 million](#) to the project and Arizona State University entered a [partnership](#) to help take care of the site once it's finished.

Such gargantuan works require a strange alchemy of obsession and irrational optimism; their sheer size and scope obliterate the notion of money — and time — as a precious commodity. Over the years, some critics have dismissed land art as being too much about too little, just an excuse for faux cowboys to create monuments to their own egos with heavy machinery, a critique that seems intuitive at a time when the critical eye of the art world has turned to long-ignored women artists and artists of color who are at last being given their due.

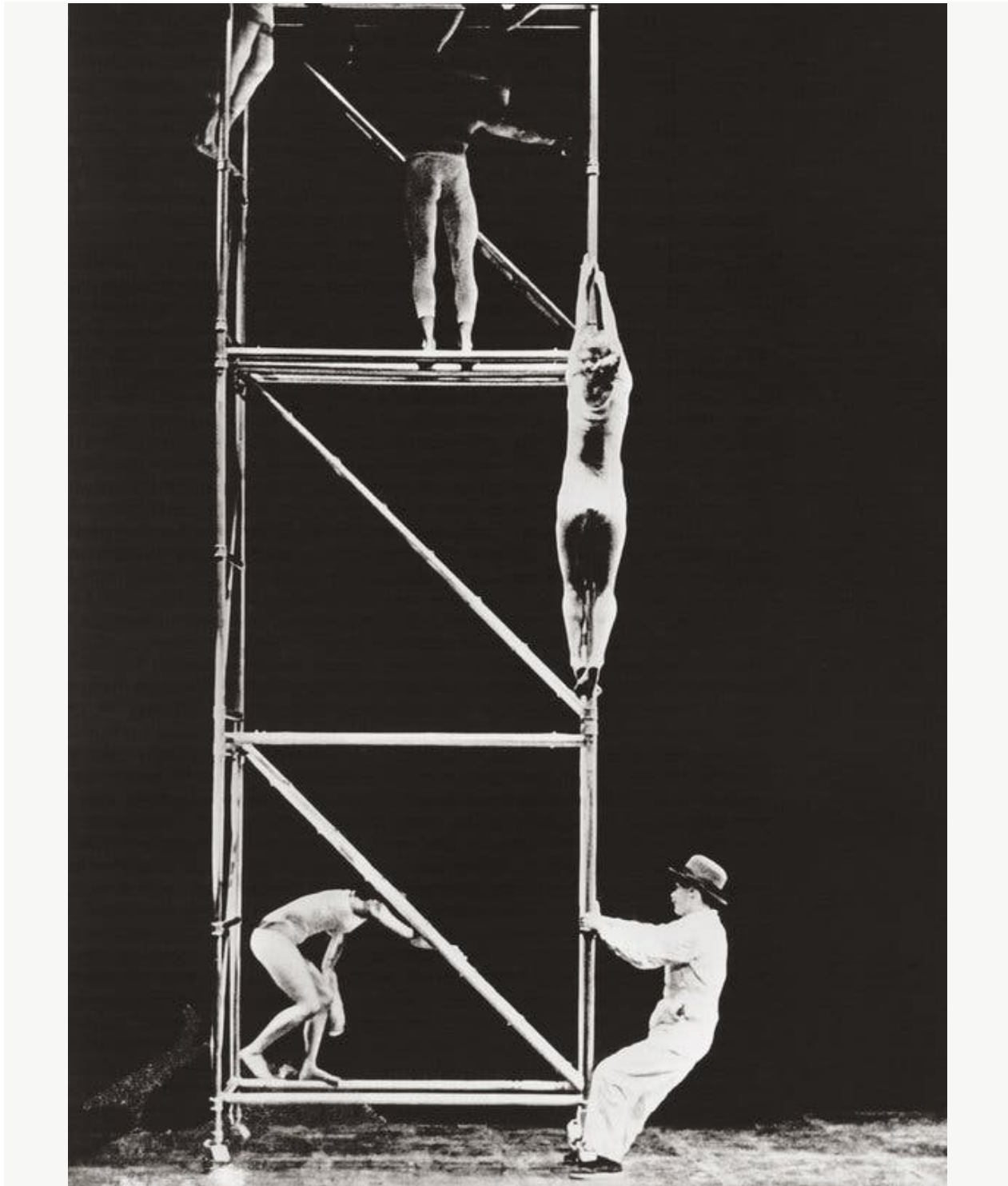


Ross, standing in the Equatorial Chamber, where one can observe the stars that travel directly above the Equator. Credit...Andres Gonzalez

But there is another way to view such works and their eccentric creators: as prescient. In a culture swimming in expensive objects, where art has become thoroughly corporate, never before has an immersive experience seemed more important; there is singular joy in works that draw attention to the barren beauty of the land and the endless skies above it, pieces too large for even a billionaire to build a private museum around. “People have dismissed the earthworks as monuments, but in fact, they’re critiques of the monumental,” says [Michael Govan](#), the 56-year-old director of the [Los Angeles County Museum of Art](#), who has championed the [land artists](#) for nearly 30 years, especially when he was the head of the New York-based [Dia Art Foundation](#) in the 1990s and early aughts. He points to “City” and its low, rolling geometries, as well as the hypnotic 1,500-foot swirl of black basalt and salt crystals that make up the most famous of all land artworks, [Robert Smithson](#)’s 1970 “[Spiral Jetty](#),” a natural sculpture in a shallow lake bed in northern Utah. Much of Turrell’s “Roden Crater,” Govan says, is underground, purposefully recasting a former site of violent eruptions into a subtle temple of light.

Not that such work tends to attract gentle personalities. The artists largely were products of a tumultuous era and landscape: first, the ragged and fierce avant-garde that developed in Northern California at the end of the 1960s, and then the dark, abrasive downtown New York art and music scene, which would soon give way to the canvas of the Western deserts. Safety and caution were never held in esteem. Smithson, a prolific essayist, died at 35 in 1973 when the small plane in which he was scouting locations for a new piece crashed near Amarillo, Texas. The reclusive [Walter De Maria](#), who in his early 20s was a drummer with the precursor band to the Velvet Underground, created “[The Lightning Field](#),” composed of 400 sharpened 20-foot stainless-steel posts in a roughly one-square-mile grid about three hours from “Star Axis” in western New Mexico; he lived alone in the same SoHo loft for more than 50 years and was felled by a stroke in 2013. Over the course of trying to complete “City,” Heizer developed severe respiratory problems and nerve damage that led to years of opiate addiction only recently shook. Mary Shanahan, his wife of 15 years, left him in 2014 — beaten down by his needs and those of “City” — and he stopped eating, plummeting to about 100 pounds. “Every bone in me is torqued and twisted,” he [told](#) The New Yorker’s Dana Goodyear in 2016.

Ross, a Pennsylvania contractor’s son, has always seemed the counter example, steady and calibrated with an almost merry, avuncular demeanor. Temperate and health-conscious, he has long availed himself of both Eastern and Western medicine, regarding both arcane herbal supplements and the high-tech surgical procedures perhaps in his future as ways to keep going. In contrast to Heizer, who in his early years debated art late into the night at the legendary bar [Max’s Kansas City](#), Ross spent the late 1960s immersed in a decidedly unmacho milieu: designing sets and performing with the experimental [Judson Dance Theater](#) in Lower Manhattan and later with [Anna Halprin](#), the San Francisco-based postmodern choreographer who mentored [Meredith Monk](#) and [Trisha Brown](#). It was a scene dominated by powerful women, recalls the dancer and choreographer [Yvonne Rainer](#), 85. When Ross wandered in, offering to adapt some of the vertiginous latticework sculptures he had been working on and then manipulate them onstage for the dancers, there was, she says, “nothing aggressive or macho about him. He listened.”



Members of the San Francisco Dancers' Workshop performing Anna Halprin's "Parades and Changes" in the mid-1960s, along with Ross (bottom right), who did the sets and sculptures. Credit...Janek Zdarski, courtesy of Anna Halprin.

Despite its audacious ambition to map time, "Star Axis" is far smaller in scale than either Turrell's or Heizer's projects. But that, paradoxically, is part of its emotional power. Every granite step to the oculus seems imbued with Ross's Zen-like

determination; you can't help but imagine the hundreds of sunsets he has experienced there in silence. "His project," says Govan, "is not only for us to meditate on time and light. It's also Charles's mediation, and you feel that when you're experiencing it. The calculations, the moving of stone, the mixing of concrete, the collaboration with those same workers all those years. There's a humanness to it."

HUMANNESS, HOWEVER, DOESN'T pay the bills, which is yet another reason to marvel at Ross's particular achievement. Through the decades, "City" and "Roden Crater" have been bolstered by massive financial and emotional support from institutions including the Dia and Guggenheim Foundations. Friends of "Roden Crater" and the nonprofit Skystone Foundation maintain a vibrant fund-raising effort — the pop star [Grimes](#) staged a surprise performance at the last benefit, where the billionaire founder of the online gaming company [Zynga](#) pledged \$3 million. Such support has allowed Turrell to focus over the years on his vast studio practice, which has included profitable private commissions as well as a 50-year retrospective at LACMA that opened in 2013. Heizer, who by 2012 hadn't had a gallery for decades, was broke and living alone on his ranch, also was resurrected: That year, Govan commissioned the permanent installation at LACMA of a Heizer piece called "[Levitated Mass](#)," a 340-ton white boulder that was moved laboriously over 11 nights from California's Jurupa Valley. The ensuing feature film made of the journey jolted interest in "City," and in 2015, the gallerist [Larry Gagosian](#) gave the artist his first show in years, with paintings from the 1960s and '70s and a giant hunk of iron ore that sold for more than \$1 million. Not long after that show, the gallerist moved the artist to New York so he could make a series of new paintings — his first in decades — that sold out instantly.

Ross, on the other hand, mostly has gone it alone, which is partly why "Star Axis" has taken this long. The SoHo loft was originally 10,000 square feet, but in 2008, to raise funds for the next stages of the project, he sold off 6,500 square feet of it to a private family. There is no staff of enthusiastic supporters to make cold calls to raise money and throw parties. Though museums and galleries still seek him out for commissions and exhibitions, he typically lies low, and is represented not by an enormous gallery with multiple global outposts but the small New York dealer [Franklin Parrasch](#).

His longtime patron — granted, an important one — has been [Virginia Dwan](#), an heiress to the 3M fortune, who was among the most influential gallerists of the midcentury, with spaces in Los Angeles and New York. She was the first to show [Andy Warhol's](#) Brillo boxes and [Robert Rauschenberg's](#) 1962 "Combines" (for the record, only one painting sold), and works by the light artist [Dan Flavin](#), the conceptualist [Joseph Kosuth](#) and [Niki de Saint Phalle](#), the French-American sculptor and filmmaker. After Dwan closed her doors in the early 1970s — the increasing commercialization of the art world turned her off — she began to put all her energy into land art, becoming one of the few noninstitutional backers. De Maria turned to her to finance a smaller precursor to "The Lightning Field," and she underwrote "Spiral Jetty." She purchased a square mile for the work that made Heizer's reputation: "[Double Negative](#)" (1969), a pair of trenches, 30 feet wide by 50 feet deep and 1,500 long, dug on either side of a canyon near Overton, Nev.



Virginia Dwan, the groundbreaking gallerist who championed earth art and has been Ross's longtime patron, photographed in New York in 2016, through one of his prism installations at her apartment in the Dakota. Credit...Alex Wroblewski/The New York Times

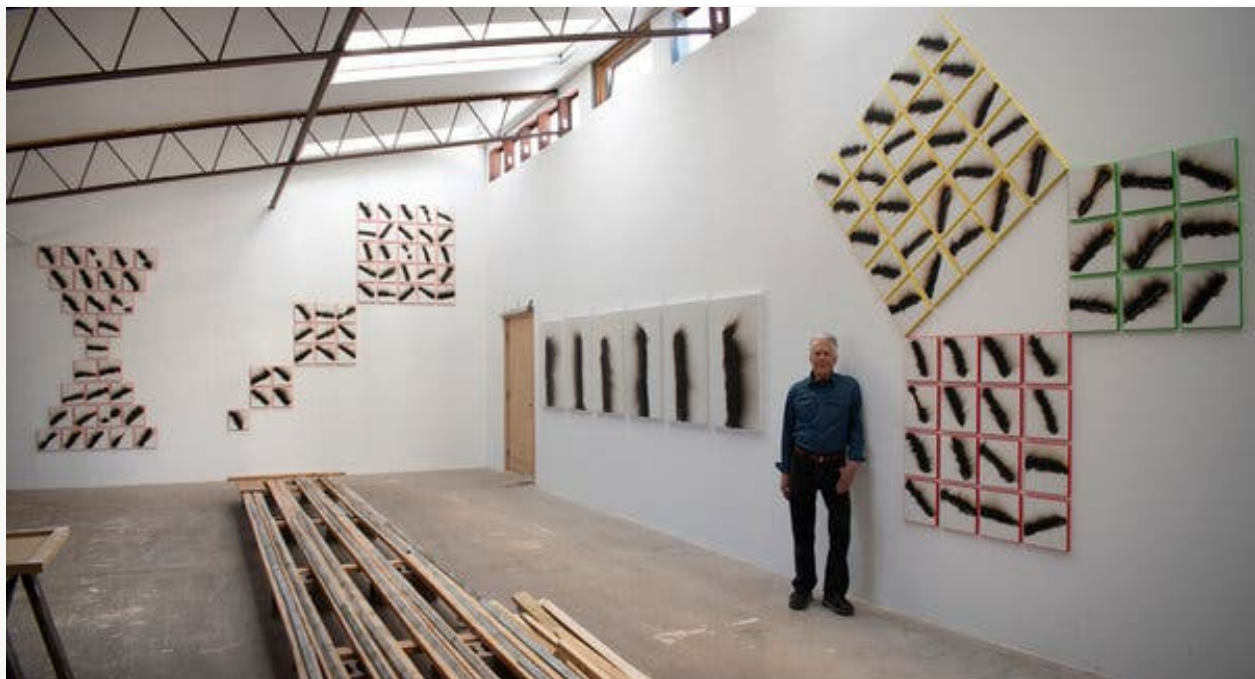


Conceived by Dwan as a place for quiet reflection, the Dwan Light Sanctuary (1996) at United World College in Montezuma, N.M., is a collaboration between Dwan, Ross and Laban Wingert. Each of Ross's 24 large-scale prisms is specifically aligned with the sun to project different spectrum events for every season. The spectrums also evolve throughout the day as they move through the space propelled by the turning of the earth. Credit...© 2020 Charles Ross/Artists Rights Society (ARS), N.Y.

But now, at 88, the only work Dwan is still funding is "Star Axis." She was there at the beginning: She and Ross were introduced in 1967, by the conceptualist [Sol LeWitt](#). And she will remain till the end, though even with her support, O'Bryan takes breaks from her practice to write grant applications. Dwan has been a part of most of the great art movements of the mid-20th century, but she and Ross share an elemental faith in the aesthetic and mathematical power of the cosmos as well as an aversion to the trite clichés of modern day "wellness" and spiritualism. In the mid-1990s, she commissioned him to design the Dwan Light Sanctuary, an unadorned round loft with 20-foot ceilings inside a stand-alone circular stone building on the campus of the United World College, a nonprofit institution in Montezuma, an hour from "Star Axis." Open to the public, it is illuminated through skylights by 24 enormous prisms of Ross's own design. Suspended at precise angles dictated by the artist's complex calculations, they throw massive rainbows against the white plaster walls in slashing patterns and shades that change radically throughout the day and the season.

"I had a unique connection to each of my artists, but there is something that is different with Charles," Dwan tells me as we sit in the living room of her sand-hued 1930s house in Santa Fe. She spends much of her time here these days, and in 2013 bequeathed her

collection, full of pieces by the artists whose careers she jump-started — the Abstract Expressionist painter [Ad Reinhardt](#), the Minimalist sculptor [Carl Andre](#) and [Yves Klein](#), who spurred the French Nouveau Réalisme movement — to the [National Gallery of Art](#). Still willowy and impeccably chic — photos of a young Dwan in aviator glasses at “Spiral Jetty,” or in a black leather jacket with windblown hair next to De Maria, are as iconic to fans of contemporary art as classic shots of [Gloria Steinem](#) at the barricades are to second-wave feminists — she now uses a wheelchair. She can no longer hop into her Jeep, alone, and drive hours into the desert, rarely seeing another car, just to catch a sunset. But her passion for “Star Axis” and Ross remains undimmed. One wall of her living room is dominated by a massive work O’Bryan made by rubbing graphite on a giant stretch of rock formation from the piece. “I can’t get up to see the site now, which is hard,” Dwan says, “but that they are so near to finishing gives me a great deal of happiness. The idea that it will be seen, that’s enough.”



Ross in his studio in New Mexico, with a selection of his “Solar Burns” on painted wood, from left: “Arc of the Sun” (2019), “Fibonacci 1, 2, 3, 5” (2019), “Personages” (2019) and “Pythagorean Triangle” (2019). Credit...© Jill O’Bryan 2020

THESE DAYS, ROSS and O’Bryan have begun to consider, for the first time, what it will mean to be finished. Forty-five years of construction may seem like biblical torment, but you get into a rhythm where the outside world becomes comfortingly moot. That’s the thing about art that takes twice as long to finish as the pyramids: The process becomes the piece itself, the work tracing the arc of your life. Still, Ross and O’Bryan now must engage with practicalities like finding an institution to help them run the site. This much they have figured out: no crowds, like De Maria’s “Lightning Field,” where only six people per night can stay in the rustic guest cottage. But that site, whose cabin is booked years in advance, has had the institutional infrastructure of the Dia Art Foundation to take care of all that. And “The Lightning Field” is, well, a *field*, by definition pretty safe for visitors (in fact, lightning rarely strikes), whereas the steep stone staircase of Ross’s

Star Tunnel is crowned with the Solar Pyramid, which has a set of 20 additional four-foot-wide granite stairs open to the elements — no railing — leading to the top, 11 stories up. In Ross’s perfect world, visitors to the site will move through time twice — once in the sunlight and again in total darkness. “We’re going to have to have good insurance waivers,” says O’Bryan. In 2011, the director of the [Museum of Outdoor Arts](#), Cynthia Madden-Leitner, collaborated with MOS Architects to create Element House, a striking and luxuriously minimal solar-powered modular guesthouse for the project within walking distance. Clad in aluminum panels, its billowing volumes are dictated by the Fibonacci sequence, the natural mathematical progression mapped by the 12th-century Italian thinker Leonardo of Pisa. But Ross and O’Bryan are undecided on what to charge per night and other small details. Do they need to keep both Trader Joe’s soy burgers and chicken breasts in the freezer? “This is so not our thing,” says O’Bryan.

This past spring, as the novel coronavirus shut down the country, the couple found themselves marooned in SoHo. Thrown off his routine, Ross didn’t quite know what to do with himself; the drawings he was making for lightning rods that need to be incorporated into the sculpture as invisibly as possible seemed to be taking forever. But in New Mexico, the prep team kept working; neither they nor Ross want to delay. “When there is finally some semblance of normalcy,” he says, “I think this is the kind of place people will want to come to re-enter life.” With shelter-in-place restrictions lifting, the couple and the dogs finally made their annual flight to Albuquerque in early June. The roads were even more barren of cars than usual, the air sharp, and by the time “Star Axis” came into view on the mesa, the sky was awash in light.