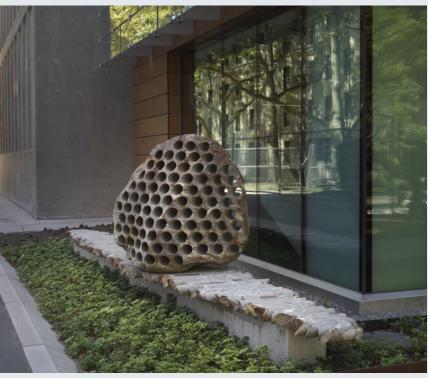
Julian Charrière Everything Was Forever Until It Was No More

A Percent-for-Art Commission Tina and Hamid Moghadam Building







Above:

Installation view: *Not All Who Wander Are Lost*, 2019/2023. Commissioned with MIT Percent-for-Art funds and a generous gift from Robert Sanders ('64) & Sara-Ann Sanders. Courtesy MIT List Visual Arts Center, Cambridge, Massachusetts. Photo: Dario Lasagni

Left:

Installation view: *Not All Who Wander Are Lost*, 2019/2023 (detail). Commissioned with MIT Percent-for-Art funds and a generous gift from Robert Sanders ('64) & Sara-Ann Sanders. Courtesy MIT List Visual Arts Center, Cambridge, Massachusetts. Photo: Dario Lasagni

Cover:

Installation view: *We Are All Astronauts*, 2013/2023. Commissioned with MIT Percent-for-Art funds and a generous gift from Robert Sanders ('64) & Sara-Ann Sanders. Courtesy MIT List Visual Arts Center, Cambridge, Massachusetts. Photo: Dario Lasagni

Julian Charrière's Everything Was Forever Until It Was No More Natalie Bell

Across all of Julian Charrière's work is a concern with the mutual influence and interplay of our planet, its human inhabitants, and time. Past, present, and future are layered together in his perceptive sculptures and installations, which merge a conceptual poetics with a sincere reverence for the planet's unknowability and a deep concern for its uncertain future.

The title of Charrière's Percent-for-Art commission for MIT, *Everything Was Forever Until It Was No More* (2023), is heavy with portents. Anchoring the new Tina and Hamid Moghadam Building (Building 55), which is host to several units dedicated to earth and planetary sciences,¹ the artist's installation consists of a triad of works that collectively index human interventions and the limits of the planet, while proposing allegories of inversion and recuperation. Within the context of an academic space devoted to fields that strive toward knowledge of our planet through scientific methodology and innovation, Charrière's works serve as sources of inspiration, sites of awe and wonder, and, in some regard, cautionary tales.

As forces of nature inspired generations of Romantic artists two centuries ago, forces of humankind-the fearsome powers of the Anthropocene-motivate the cross-disciplinary artistic endeavors of Charrière and many of his peers. Charrière's work stands out, however, for its embrace of paradox, extremes, and artistic gestures that might be read as absurd or hyperbolic. Fieldwork is essential to his research and thinking, and sites of geological activity (volcanoes), geological history (glacial moraines), and geological extraction (lithium salt mines) are frequent locations of engagement and ideation for him. As he has said, simply, "The idea of investigating a site, of encountering a place, has been central to a majority of my projects."2 At the same time, Charrière insists that his work also calls attention to the inescapable, myriad imprints of human activity. Sometimes the human can be found haunting the natural world, as it does in the ruined radioactive landscapes of Chernobyl, Kazakhstan, or the Marshall Islands. In other cases, it is present in the visible interventions of the artist himself.

Long fascinated with the cryosphere (the parts of the earth's surface where water is frozen), the artist has joined—and continues to take part in-expeditions to the extreme environments at the earth's poles. An early example of his work in Arctic regions, The Blue Fossil Entropic Stories (2013), documents in large-scale photographs the artist's durational performances in which he, quixotically, attempted to melt Icelandic icebergs with a blowtorch directed under his own feet. The resulting photographic images, where the artist is dwarfed by a spectacular, sublime landscape, foreground the awe-inspiring power of nature but also evoke the human role in accelerating the warming of the planet with an almost comical, Wile E. Coyote-esque slapstick. "But," Charrière has noted, "it is also an encounter with a temporally entangled entity." The glaciers, Charrière points out, are "time travelers" and "archives": within them, we find "primordial biomes and former atmospheres" preserved in bubbles embedded in their increasingly fragile bodies.³ These melting glaciers are capsules of planetary history as much as they are beacons of a warming future.

The peripatetic past of our planet's glaciers informs two bodies of work within Charrière's installation for MIT. The first of these, *Not All Who Wander Are Lost* (2019/2023), is composed of three boulders transformed by the artist, invoking both Ice Age geological forces and contemporary human agents. These boulders are a special sort of stone known as "glacial erratics"—frozen into the ice of glaciers, they were carried, sometimes for enormous distances, and deposited later in distant landscapes where they differ from the local bedrock. Glaciers move an incalculable tonnage of earth and rocks, but erratics are the odd ones—the wanderers—that tell an ancient story of the ebb and flow of glaciers⁴ and provide geologists with clues that help unlock questions of provenance,



Installation view: *Pure Waste*, 2021/2023. Commissioned with MIT Percent-for-Art funds and a generous gift from Robert Sanders ('64) & Sara-Ann Sanders. Courtesy MIT List Visual Arts Center, Cambridge, Massachusetts. Photo: Dario Lasagni

process, and time. Erratics are paradoxical entities. For earlier geologists, they defied explanation (particularly when found at elevations above their known sources). And with their massive scale—between 1.5 and ten tons in the case of the stones chosen by Charrière—they seem to defy movement.

From this raw material, Charrière presses geological time and scale into our present moment, inviting us to consider that where we stand now was once frozen under ice, and one day—perhaps in the not-so-distant future—may well be submerged under water. His erratics are not intact but transformed into seemingly impossible honeycombs, made to appear as porous as sponge. Using highly specialized drilling equipment, Charrière has extracted dozens of long cores from each boulder, producing cylindrical stone rods parked beneath the massive erratics—as log rollers were presumably used to transport monoliths in the eras of Stonehenge and the Egyptian pyramids. The cores themselves evoke methods of sampling that scientists use to study earth's soil, bedrock, or ice sheets—as well as the techniques used in oil drilling and mining.

The stone cores are not without their fragility, too—their broken parts have been patched with metals (aluminum, copper, stainless steel, nickel) that reference these earthbound resources. Of course, the more the boulders are cored, the lighter they become—and all the easier, one imagines, to slide along their roller conveyors. Their own bodies are used to produce the means by which they could be removed. With that, the work becomes a subtle parable for our contemporary addiction to fossil fuels and vastly longer obsession with gouging metals and other resources from the body of the planet. Test the limits of extraction, they suggest, and the whole rock will crumble in on itself. Core enough from a mountain or a planet, and what is left?

Located inside the lobby of the new Tina and Hamid Moghadam Building, We Are All Astronauts (2013–14/2023)⁵ consists of three now-blank antique globes, or "floating worlds," each suspended in a floor-to-ceiling glass vitrine. Designed by the artist, in dialogue with building architects Anmahian Winton, to echo the scale and placement of I. M. Pei's original concrete pillars, these airy, glass frames seem to assert a claim to load-bearing solidity while also projecting conspicuous fragility. The building's disciplinary focus is explicitly evoked by the globes and the work's title, inspired by the visionary architect and futurist R. Buckminster Fuller, who famously declared, "We are all astronauts on a little spaceship called Earth."⁶

Just as the physical reality of the planet Earth—its climate, topography, and, indeed, its ontological or existential status—has been increasingly, acceleratingly altered by human intervention, the work's most eloquent and complex story is encoded in what the artist has done with the globes, or to them. They look blank. The landmasses and oceans have been effaced; so, too, the nations and borders. It's not that they've been painted over they've been ground down, sanded away. If the resulting visual sameness or oneness seems to nod to the utopianism of Fuller, James Lovelock, Lynn Margulis, and other ecological thinkers who propounded "planetary consciousness" and the idea that our fates are all linked by our connection to a shared planet, a very different valence is latent in the process Charrière used to arrive at the globes' blankness.

The sandpaper used to scrape away their surfaces is a work, a complex performance and process, in itself: its grit is rock and sand sourced from each of the 195 UN–recognized countries.⁷ The method, or principle, of its collection and manufacture apparently reiterates an optimistic one-world idealism—but also undercuts it insofar as the notion of gathering minerals from every nation was, in reality, a matter of gathering from every *country* on earth (as defined by the criterion of the United Nations). With that, we are flung squarely back to the human-artificed realms of politics and borders, with all the historical processes of



Installation view: Julian Charrière, *We Are All Astronauts*, 2013/2023. Commissioned with MIT Percent-for-Art funds and a generous gift from Robert Sanders ('64) & Sara-Ann Sanders. Courtesy MIT List Visual Arts Center, Cambridge, Massachusetts. Photo: Dario Lasagni



Installation view: *Not All Who Wander Are Lost*, 2019/2023 (detail). Commissioned with MIT Percent-for-Art funds and a generous gift from Robert Sanders ('64) & Sara-Ann Sanders. Courtesy MIT List Visual Arts Center, Cambridge, Massachusetts. Photo: Dario Lasagni

nation-state formation, exclusion and annexation, colonialism and conquest, mapmaking, and disenfranchisement. This complicated sandpaper is, thus, materially both an index of the fraught and violent phenomenon of the nation-state and a weapon against its largely arbitrary demarcations.

The vintage globes and, deposited beneath them, the powdery detritus of the sanding remind us just how temporary our definitions of space and boundaries are. Robert Smithson, another artist who confronted matter, landscape, history, nature, and time, wrote of one of his own works: "The map is a series of 'upheavals' and 'collapses'—a strata of unstable fragments is arrested by the friction of stability."⁸ The same phrase might be said of Charrière's work in *We Are All Astronauts*—with the stratum of dust taking Smithson's "jeopardized map making"⁹ to a pulverized extreme. Our little spaceship, after all, is, in the scale of the cosmos, nothing but dust (and as much as we are astronauts, we, too, are stardust).¹⁰

If Not All Who Wander Are Lost can be understood as a cautionary or elegiac parable of coring the earth, *Pure Waste* (2021/2023) offers a kind of poetic reparation or "act of reconciliation."¹¹ The work's title itself poses questions: What is waste? And what is valuable? The object at the center of this artwork is a diamond pure carbon in the form of a highly valued gem, which (if it were mined) would have been formed by geological forces at least a billion years ago. The diamond in *Pure Waste*, however, is a synthetic lab gem produced using carbon molecules harvested, by means of carbon-capture technology, from the CO₂ of air pollution and the human breath of thousands of individual participants.¹²

Charrière created the diamond for a broader project of the same title and proposed—as part of his MIT commission—that one of these synthetic gems, these "breath stones," be dropped into the foundation of Building 55's lobby during its renovation. As a gesture, it participates in the long tradition of builders' rites, ceremonies that accompanied the construction of a dwelling or temple, and which, in ancient times, were often sacrificial (a smashed pot whose sherds were embedded under a doorpost;

- The building houses the Department of Earth, Atmospheric, and Planetary Sciences (EAPS), the Environmental Solutions Initiative (ESI), and the Woods Hole Oceanographic Institution (WHOI) Joint Program.
- 2 Julian Charrière, quoted in Julia Smith, "Julian Charrière: Even if We're Just Dancing in the Paleolithic Dark," *Flaunt*, no. 187 (2023), https://www.flaunt. com/post/julian-charriere-the-critical-mass-issue.
- 3 Julian Charrière, "Julian Charrière with Hearne Pardee," *Brooklyn Rail* (April 2023), https://brooklynrail.org/2023/04/art/Julian-Charriere-with-Hearne-Pardee.
- 4 The erratic stones for the works commissioned by MIT were sourced from Switzerland's Valle Maggia. Although significant efforts were made to source local boulders, local precision drilling that could meet the needs of the project was not found.
- 5 We Are All Astronauts, initially presented in 2013, was one of the first works Charrière realized after studying with Olafur Eliasson at Berlin's Institut für Raumexperimente.
- 6 Richard Buckminster Fuller, Operating Manual for Spaceship Earth (Mattituck, NY: Aeonian, 1969), 14.
- 7 The mineral samples used for this sandpaper were leftovers from Charrière's prior project Monument Sedimentation of Floating World (2013), in which these collected sediments were cast in concrete to form a thin, two-meter-tall monolith that solidified these "floating" geopolitical entities—195 with UN recognition as of 2013—that are constantly reshaped through various forms of upheavals and collapses.

an animal killed and buried under the fire pit). By drawing on these practices, the artist consecrates the structure and gestures to the sacrifice at its foundation. Perhaps the carbon emitted during the building's construction has been (partially) recaptured in the diamond. How much, or who, we might ask, gets sacrificed in establishing and financing a university or a country?

As a conceptual proposition, Pure Waste recuperates carbon emissions in a dizzying inversion that beckons us to question human valuations. A greenhouse gas or a gem? A monetary treasure or a waste of breath? As a public artwork, it calls our attention to invisibility (a condition that is relevant to much of our consumption of carbon). The work is a diamond, but one that cannot be accessed or even seen, and was made from an equally invisible substance-the carbon found in the air we breathe. The gesture of embedding it in the foundation is an inversion of mining and also a performance (a parody? a pantomime?) of carbon sequestration. Is it an iteration of the age-old human practice of hoarding wealth and burying treasure-or the even older practice of burying waste? Starting with its title, Pure Waste teasingly asks if we really understand what we're (not) seeing in the manufacturing of "progress" or of all human activity for that matter: the conversion of waste into purity or a total waste.

In Charrière's film of the same title, which relates to the production of what the artist has dubbed "sky diamonds" (in reference to the process of "mining" the atmosphere), a slow sequence of glacial landscape shots of Greenland is eventually interrupted by the hand of the artist, who, in a simple palm-opening release, drops five diamonds into a hole in the ice cap. Pouring pieces of solidified sky into the ground, the act reverses the trajectory of carbon emissions. It also gives visual form to a paradox known to glacier scientists and experienced by the artist: standing on mile-thick ice in the Arctic, the artist has observed, "There is sky under my feet"—or, more specifically, "The memory of the sky—in the form of those tiny bubbles, trapped in the ice, that preserve the planet's past atmospheres, the breath of a distant time."¹³

Natalie Bell is Curator at the List Visual Arts Center at MIT.

- 8 Robert Smithson, "Incidents of Mirror-Travel in the Yucatán," Artforum 8, no. 1 (September 1969): 28–33. Smithson was writing about Maps of Broken Glass (Atlantis) (1969), a work that, formally, does the opposite of Charrière's We Are All Astronauts, even if both hint at imperial critique. In Maps of Broken Glass (Atlantis), a map is made (from variously sized shards of green glass) rather than un-made.
- 9 Robert Smithson, Robert Smithson: The Collected Writings, ed. Jack Flam (Berkeley, CA: University of California Press, 1996), 212.
- 10 The idea that we are "stardust," popularized by Carl Sagan and Joni Mitchell in the 1970s, was baked into the thesis of the 1957 landmark scientific paper in *Reviews of Modern Physics*, titled "Synthesis of the Elements in Stars" (commonly called the B2FH paper) and coauthored by astronomers Margaret Burbidge, Geoff Burbidge, William Fowler, and Fred Hoyle.
- 11 Julian Charrière, "Pure Waste," artist's website, https://julian-charriere.net/ projects/pure-waste.
- 12 Undertaking this work during the Covid-19 pandemic, the artist collected CO₂ from friends and colleagues using balloons sent globally and collaborated with scientists at ETH Zurich Technology Institute. As the artist has noted, during that time, "the mingling of breath and atmosphere was made ever more poignant." And, as I realized after filling a number of balloons into a FedEx box sent from a largely empty office when travel was highly restricted somehow, we could still send breath halfway around the world.
- 13 Julian Charrière, "Art Needs Nature," interview by Kevin Hanscke, Collectors Agenda, https://www.collectorsagenda.com/en/in-the-studio/juliancharri%C3%A8re/.

The List Visual Arts Center, MIT's contemporary art museum, collects, commissions, and presents rigorous, provocative, and artist-centric projects that engage MIT and the global art community.

ABOUT THE ARTIST

Julian Charrière (b. 1987, Morges, Switzerland) lives in Berlin. His work examines the representation and perception of the natural world in an age of planetary ecological change. He studied with the artist Olafur Eliasson as a participant in his Institut für Raumexperimente (Institute for Spatial Experiments) at the Berlin University of the Arts. His work has been exhibited at institutions across the world, including solo presentations at the San Francisco Museum of Modern Art, Langen Foundation, Neuss, Germany, Dallas Museum of Art, Museo d'Arte Moderna di Bologna, Italy, Berlinische Galerie, and Musée Cantonal des Beaux-Arts de Lausanne, Switzerland, among others.

ABOUT PUBLIC ART AT MIT

MIT's world-renowned Public Art Collection reaches across the Institute and is enjoyed by students and visitors alike. New works are added through the Percent-for-Art program on the occasion of new campus construction. Formally instituted in 1968, the program continues to expand MIT's Public Art Collection through artworks by important and critically acclaimed contemporary artists, including Olafur Eliasson, Jeffrey Gibson, Sol LeWitt, Sarah Sze, and Ursula von Rydingsvard, among others. The List Visual Arts Center oversees MIT's art collection across campus and presents contemporary art exhibitions at the museum located in I. M. Pei's Wiesner Building (E15). The Public Art Collection and museum are free and open to all.

ABOUT THE COMMITTEE

Julian Charrière was selected for the commission by Percentfor-Art committee members, including: Brandon Allen, Postdoc, MIT Earth, Atmospheric, and Planetary Sciences; Alex Anmahian, Cofounder and Principal, Anmahian Winton Architects; Ekaterina Bolotskaya, Graduate Student, MIT Earth, Atmospheric, and Planetary Sciences; Aaron Bruckeroff, Principal, Anmahian Winton Architects; Maggie Cedarstrom, Administrative Assistant, MIT Earth, Atmospheric, and Planetary Sciences; Jennifer Fentress, Communications Officer, MIT Earth, Atmospheric, and Planetary Sciences; Paul C. Ha, Director, MIT List Visual Arts Center; Lachlan Patterson, Senior Project Manager, MIT Campus Construction; Todd Robinson, Senior Campus Planner, MIT Office of Campus Planning; Leigh Royden, Cecil and Ida Green Professor of Geology and Geophysics, MIT Earth, Atmospheric, and Planetary Sciences; Mazen Sakr, Principal, Anmahian Winton Architects; Roger Summons, Schlumberger Professor of Geobiology, MIT Earth, Atmospheric, and Planetary Sciences; Robert van der Hilst, Department Head and Schlumberger Professor, MIT Earth, Atmospheric, and Planetary Sciences; Sarah Williams, Project Manager, MIT Campus Construction. The Institute gratefully acknowledges the generous gift from Robert Sanders ('64) and Sara-Ann Sanders.



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