

ZOME RIGHTS

Oscar Tuazon has been building geodesic domes for almost two decades, and he and I have been talking about them, and the legacy of their most ardent proponent, Buckminster Fuller, on and off throughout those years. It's a complicated topic. Domes in the late twentieth century have a conflicted history, which is reflected in Tuazon's relationship to them in the twenty-first.

There are the domes of the so-called military-industrial-educational complex. To take one case, Fuller prototyped his 1952 Geoscope at Cornell University—a full-hemisphere geodesic dome intended to display data about food, housing, and shelter—while he was simultaneously developing so-called radomes for installation throughout the world by the U.S. military for anti-missile radar defense, which are used today as communication gathering sites by the National Security Agency (NSA). Then there are the domes of the 1960s and 70s counterculture, of Drop City, Colorado, for example: handmade from recycled junkyard car tops as part of an experiment in communal living (fig. p. 54). The legacy of Fuller's geodesic dome is interwoven with contradictory threads of anti-establishment rhetoric and corporate contracts, of DIY bootstrapping and master-planned megastructures, of cosmic patterns and totalizing human-authored design.

But if we can distill Fuller's wide influence to a single, essential word, it would not be "dome" but rather "resource." It was Fuller's drive to equitably and efficiently distribute global resources that

drew praise from "straight" culture and hippies alike. Likewise, Tuazon's recent forays into dome construction have brought to the fore important global struggles about water rights, access to shelter, and the redistribution of energy resources. For Tuazon, innovations around the design of geodesic domes are catalytic elements in re-considering relationships between architectural structures and human-altered ecologies.

In his first works employing domes from 2003, Tuazon explored what he termed "the city without a ghetto," constructing small camping tent-sized domes out of cardboard boxes. Commenting on the near-evangelical tendency of many builders to treat the geodesic dome as the architectural emblem of late twentieth-century modernity, Tuazon's modest domes revealed the sometimes hollow aspects of that vision, which after fifty years had done little to enact a universal standard of living or to improve housing conditions for vulnerable populations like the homeless.

In recent years, Tuazon has returned to the work of Steve Baer, a self-trained architect who began experimenting with geodesic domes in the late 1960s at Drop City, where he pioneered a kind of geodesic construction called Zomes—essentially geodesic domes using unusual polyhedral geometries. For Baer, the Zome improved Fuller's ideas in several ways, helping to correct a few of the limitations dome builders experienced. First, while Baer—like Fuller—emphasized design efficiency, Baer continued Fuller's experiments with light-weight and inexpensive construction materials beyond the model of the pre-fab kits Fuller proposed.

Secondly, Baer incorporated passive solar energy systems in his Zomes that used sun-heated water, making the structures energy-efficient in a timeline beyond that of their construction and into the years of their use. Thirdly, Baer developed systems of louvered window shades that served a dual purpose: they regulated the heat of the house, and allowed inhabitants to adjust the levels of interior lighting—an aspect that challenged many dome owners as the structure's skylights were often too high for occupants to shade properly.

In his 2019 project *Water School*—an eight-month installation at the Eli and Edythe Broad Art Museum at Michigan State University (MSU Broad) in East Lansing—Tuazon constructed a plywood version of a portion of the Zome House, which Baer and his wife Holly built for themselves outside Albuquerque, New Mexico, in 1971. This followed a public commission in 2016 at Art Basel, where Tuazon constructed an outdoor scale model of the entire Zome House. In the MSU Broad iteration, one end of Tuazon's structure contains a hinged wall made of two layers of glass, printed with the repeated image of a 55-gallon drum, which act as a solar collector to store heat from the sun during daylight hours. Tuazon's passive solar glass wall echoes the design in the Baers' Zome House, which employs a wall of water-filled metal drums that store solar heat throughout the day to warm the house at night. Yet in the original Zome House the wall of barrels blocking the southern exposure creates a rather claustrophobic feeling of bunker-like containment, whereas the rotating glass of Tuazon's hinged wall can pivot open, refracting sunlight prismatically into the surrounding space.

***City Without a Ghetto* (2003),
Socrates Sculpture Park, Long
Island City, New York**

In *Water School*, Tuazon's emphasis on the transparency of the mechanism is part of a larger investment in his work to consider the politics of water today. Human-triggered climate change and the privatization of natural resources make access to clean water and control of water supplies highly contested struggles, with countless battles currently engaged around the world to protect the rights of and to nature. Tuazon's recent work foregrounds the demands of Indigenous peoples to manage resources on their own terms, with the protests over the Dakota Access Pipeline in 2016 in Standing Rock, North Dakota, informing Tuazon's emphasis on community education and progressive social change. In Baer's practice, the Zome is a site of experimentation using the domestic setting of the architect's own home; in Tuazon's *Water School*, the structure becomes a hub for seminars and performances addressing the essential and elemental: the economic and educational aspects of water resources. In this sense, the Zome as Tuazon conceives it is less a shelter from nature than a shelter for ideas about how to act with nature, using water itself to shape the conversation.

—Eva Díaz



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