



Smithsonian  
National Air and Space Museum

# The Science of Frederick Eversley's Art

By Carolyn Russo | February 26, 2021



Installation view, David Kordansky Gallery, Los Angeles: Fred Eversley, *Chromospheres*, January 12 – March 2, 2019, Photo: Jeff McLane, Courtesy of David Kordansky Gallery, Los Angeles.

## Artist Frederick Eversley

From a distance, Frederick Eversley's perfectly round sculptures look like planets floating in space. Cast from polyester resin and color pigment, each one-of-a-kind form is a study unto itself. The highly-polished orbs reflect and refract the universe around them. Close-up, the sculptures pull observers in for an individual viewing experience. Fred Eversley's art is often grouped with the "Light and Space" artworks made in California during the 1960s–1970s. The movement is associated with the minimalist and abstract qualities of art informed by the aerospace technologies and industries on the west coast. Art historian Danielle O'Steen visited the National Air and Space Museum's art collection to examine Eversley's artworks for her Ph.D. dissertation "Plastic Fantastic: American Sculpture in the Age of Synthetics." In it she focuses on Eversley's creative process and analyzes his sculpture alongside other prominent artists including Donald Judd (1928-1994) and Eva Hesse (1936-1970).



Portrait of Fred Eversley by Elon Schoenholz. Courtesy of David Kordansky Gallery, Los Angeles.



Fred Eversley, *Untitled (parabolic lens)*, (1973) 2018, cast polyester 19 3/4 x 19 3/4 x 6 3/8 inches, (50.2 x 50.2 x 16.2 cm). Photography: Jeff McLane, Courtesy of David Kordansky Gallery, Los Angeles.

O'Steen says, "Eversley emerges as an artist in a particularly vibrant 'plastics moment' for artists in the U.S. during the 1960s and 1970s, but his methods of artmaking are entirely unique, and remarkable. He's casting his sculptures through motion, which allows him to create the parabola in solid plastic. For Eversley, the parabola is the only shape that focuses energy to a single point, so it's an endlessly dynamic shape to play with in a range of colors and hues." The National Air and Space Museum has two of Eversley's sculptures in our collection, both from his time as an artist-in-residence at the Museum.

### **An Artist in the Museum**

In 1970, Fred Eversley's distinction as a sculptor rose quickly after a solo exhibition at the Whitney Museum of Art in New York. However, his background was in aerospace. With a degree earned at the Carnegie Institute of Technology (Carnegie Mellon), he was an aerospace engineer for Wyle Laboratories and worked on projects for NASA during the Gemini and early Apollo programs. Aerospace also ran in the family. His father was an aeronautical engineer and executive for Republic Aviation. Eversley also used his engineer abilities to assist his artist neighbors in Venice Beach, with their kinetic sculptures. After a severe car accident, he changed careers and became an artist himself. The nominators for the Museum's Artist in Residence program knew of Eversley's background and thought he would be a great fit. In 1977, Fred Eversley was invited to work as the first artist in residence in the newly-opened National Air and Space Museum.



Installation view, David Kordansky Gallery, Los Angeles: Fred Eversley, *Chromospheres*, January 12–March 2, 2019, Photo: Jeff McLane.

Eversley's world was aerospace again. Artifacts such as the Apollo 11 command module Columbia and the planes his father helped to design for Republic Aviation were familiar friends. The logistics of making art in the new Museum, on the other hand, was a challenge, especially without his state-of-the-art studio, which was back in California. Yet he endured. The Museum's history of flight environment resulted in innovative new work, including a commission by the Miami International Airport. Standing 35-foot tall, the monumental sculpture *Parabolic Flight* comprises two twin sections of polished stainless-steel. The concept for the sculpture stemmed from Eversley's research of vertical axis windmills—particularly the Savonius Rotor windmill. It's actually a kinetic sculpture with interior lights generated by the wind, but for security concerns, the airport keeps it as a static display. Eversley has the distinction of being the first nominated artist to reap inspiration from the Museum's collection, but he's not the last. Since 2007, the Smithsonian Artist Research Fellowship (SARF) funds artists on an annual basis to collaborate with curators and explore collections throughout the Smithsonian for their research.

### **Experimenting with Energy**

The artworks *Untitled*, 1978 and *Untitled*, 1980 acquired from Eversley's residency are the iconic parabolic lenses he is known for. *Untitled*, 1978 is emerald green with a splash of transparent clear in the center. It resembles the depths of a pond with light bouncing off the surface or a precious gem. The color of *Untitled*, 1980 depends on the light and angle. From one side, the gray orb looks like the interior of a geode rock, and from another angle, it be-



Fred Eversley, *Untitled (parabolic lens)*, (1969) 2018, 3-color, 3-layer cast polyester, 19 1/4 x 19 1/4 x 6 inches, (48.9 x 48.9 x 15.2 cm). Photography: Jeff McLane, Courtesy of David Kordansky Gallery, Los Angeles.



Fred Eversley, *Untitled (parabolic lens)*, (1969) 2018, detail, 2-color, 2-layer cast polyester, 19 1/2 x 19 1/2 x 6 inches, (49.5 x 49.5 x 15.2 cm). Photography: Jeff McLane, Courtesy of David Kordansky Gallery, Los Angeles.

comes a solar eclipse. Eversley describes his work more accurately. He says, "They reflect all forms of energy, all light, and whatever is in front of that parabolic surface gets concentrated into it. In other words, it forms an image of everything that it is looking at from a single focal point. And sometimes you can have the focal point outside or above the sculpture, in which case the whole sculpture becomes a parabolic mirror...and when the focal point is in the sculpture you have sort of a band of concentrated energy, like a round globe of energy floating in space..."

Eversley's science interests and experimentations as a youth spawned his initial fascination with parabolic forms. In his childhood home, he created a laboratory filled with his grandfather's radio and photography equipment and learned the concept of the parabola from a science magazine article. The article described how the astronomer Galileo made a parabolic surface on water by spinning a bucket of water with a rope. To test the process himself, young Eversley filled a pie pan with water and spun it on his grandfather's phonograph turntable. The results were a perfect concave on the water's surface—a parabola.

In fact, all of Eversley's parabola lenses are cast in polyester resin and polished on motorized turntables using the same process he discovered in his youth. But he perfected it. The size of each sculpture also depends on the size of the turntables. Eversley found gigantic turntables at an industrial auction site in California in a "junk heap" and was told by the foreman they were once used to machine parts for the atomic bombs during World War II. Douglas Aviation was another resource for California artists, as Eversley recalls: "They had a big facility in Santa





Frederick Eversley, *Untitled 1980*, National Air and Space Museum. (Photo: Mark Avino/NASM)

Monica [and] they had a scraps facility with all the odd stuff... pieces of aluminum, plastic. [It was] open every Saturday... it was cheap and by the pound... some I used and some I never used." Aerospace is a constant thread in Eversley's work.

As for the magical colors in the sculptures, Eversley is humble and doesn't take all the credit for the stunning results. He says, "Color is a total arbitrary thing. I've tried almost every color combination. Some have been multicolored, some single colored, some three or four colors, and some transparent—completely clear, no color—and some totally opaque... Each piece is essentially a surprise until you get it finished, and you clean it up, and stand it up, and look at it. In other words, you can make a guess [at] what it might be, but it never turns out exactly the way you thought it was going to turn out... A lot is happenstance... Each piece is its own animal." Next up, Eversley will test a new blue color pigment that recently came on the market for artists. It's referred to as "YInMn Blue," based on the elements from the chemical periodic table. One can only imagine Eversley's next experiment or "surprise." Conceivably, the "YInMn Blue" could result in a sculpture that captures the energy, luminosity, and reflections of the heavens.

For 50 years, Eversley has been creating art in his Venice Beach, California, studio until a recent move to his studio in New York City. Now at 80 years old, he is busy preparing for new solo and group exhibitions and accepting accolades for his lifetime contributions to art. Among them is the Lifetime Achievement Award bestowed on him from Howard University. Eversley will also open *Recent Sculpture*, a new solo exhibition at the David Kordansky Gallery, in Los Angeles California, on March 20, 2021. It seems Fred Eversley's own energy is limitless, and perhaps acquired from his own energy-generating art.