SUN LIGHT / STAR LIGHT:
CONTEMPLATIONS ON THE SOLAR ORB

LOUISIANA ART & SCIENCE MUSEUM

Installation view at NASA's Goddard Space Flight Center in Greenbelt, Maryland.
Image courtesy of NASA.
Creating a magical aura, the Sun casts a soft, golden glow over Earth just prior to its rising and again before setting. Dubbed “The Golden Hour,” this daily light show rewards those of us who take the time to notice. Since the ascent of humankind, we have recognized that our survival in large part depends upon an understanding of the Sun and its effects upon Earth. Consumed by our busy, contemporary lives, we often take the magnificence of the Sun for granted.

Organized by Louisiana Art & Science Museum in honor of the International Year of Light, *Sun Light / Star Light: Contemplations on the Solar Orb* invites us to renew our human relationship with the star we live with. The exhibition, curated by Elizabeth Chubbuck Weinstein, features imaginative light sculptures, paintings, and digital works made by an international selection of contemporary artists, among them Caitlind R.C. Brown and Wayne Garrett, an artist duo based in Calgary, Canada; Jonathan Feldschuh, New York; IstadPacini Art Lab, a collaboration between Christine Istad and Lisa Pacini, Oslo, Norway; Eva Lee, Ridgefield, Connecticut; Taro Shinoda, Tokyo, Japan; and Penelope Umbrico, New York. Also included is an innovative art video produced by NASA’s Solar Dynamics Observatory, presented at the Art & Science Museum as an immersive experience.

Nearly every human civilization has expressed fascination with the Sun. Thought to be about 4.5 billion years old, our Sun is considered to be relatively young. It is but one of more than a billion stars that comprise the Milky Way. Although appearing to be roughly the same size as our planet when viewed from Earth, the Sun is the most massive object in our solar system. It holds 99.8 percent of our solar system’s mass and is roughly 109 times the diameter of Earth — which means that about one million Earths could fit inside our Sun! No wonder we have such boundless curiosity about the Sun and have instituted a whole field of study called heliophysics!

Since prehistoric times, we have expressed our understanding of this solar orb in a visual manner not only from a scientific perspective but also an emotional point of view. While the sunset is found repeatedly among traditional emblems in the history of art, it is in the contemporary snapshot that it has become omnipresent. Artist-photographer Penelope Umbrico makes artwork from images that already exist in order to comment upon the role of photographic imagery in today’s society. Some of her best known works center upon Sun imagery, such as her ongoing installation project titled *Sunset Portraits from Flickr*. According to Umbrico, currently there are more than 28,000,000 images tagged “sunset” on the photo-sharing website Flickr. The artist selected images found on Flickr that emphasize the Sun as opposed to the people posing in front of it. Presented as a composite view, *28,873,418 Sunset Portraits from Flickr on 09/14/15* speaks to our collective love of the Sun as well as the technology we use to record and share it.

Despite our love for the Sun, we often forget it’s there — until we are without it. In areas very far north and far south of the equator, the amount of daylight during the summer and winter months varies greatly. The artist duo Caitlind R.C. Brown and Wayne Garrett live in Canada, a country infamous for its icy Arctic winters. Commissioned for Downtown Calgary in December of 2013, their imaginative light sculpture titled *SOLAR FLARE* originally was conceived as an outdoor public art piece intended to extend the Sun’s Golden Hour into the longest and darkest nights of the Canadian winter. Measuring almost ten feet (3 meters) in diameter and weighing 400 pounds (180 kilograms), *SOLAR FLARE* was suspended over a busy pedestrian walkway with the use of nine cables attached to buildings on either side. It took 12 hours to install in freezing temperatures ranging from 23 to 5 degrees Fahrenheit. Remaining in place for two months, *SOLAR FLARE* was a bright beacon, imbuing a small corridor of the frigid city with its psychological warmth. Installed
inside the Art & Science Museum’s gallery, SOLAR FLARE is no less effective. Visitors are lured to bask in its golden glow and enjoy its motion-activated light show. When triggered, a sensor bulb causes the artificial Sun to twinkle and project a shimmering array of light patterns upon the gallery walls.

The concept that an artificial Sun can project the same aura of well-being as the real one is also at the heart of Traveling SUN, an ongoing project begun in 2012 by IstadPacini Art Lab, a collaboration between Christine Istad and Lisa Pacini. The two Norwegian artists have been bringing the Sun — literally and metaphorically — to areas where the Sun does not rise for months at a time during the long, harsh winter. Residents of Oslo, the artists were inspired to make a Sun that could travel by looking to ancient myths, such as the Egyptian solar barge believed to transport the Sun god Ra each night from west to east. The artists designed a flat, circular form with a diameter of almost 10 feet (3 meters) that glows in gradually alternating hues of red, orange, and pink. Hooked up to a generator and perched on the back of a flatbed
trailer, the brightly-lit sculpture has been trucked by the artists cross-country, sometimes through ice and snow, and even over to London, England. At each destination, the glowing disk has been installed on the periphery of a cultural building, transforming the frigid terrain with its welcoming light. Documented by way of digital images, a road movie, and a blog site (http://artubeart.blogspot.no), *Traveling SUN* has racked up 4,350 miles — and still climbing. The artificial Sun will be in Reykjavik, Iceland, projecting its warm light throughout the winter of 2015.

Spiritual references abound in Sun imagery, both ancient and contemporary. Often these references originate in religious texts. This fact is not lost upon experimental filmmaker Eva Lee, whose digital video *Into The Midst* focuses upon our human search for meaning. In her work, light may be read as a metaphor for enlightenment. Throughout the video, flickering patterns resemble *phosphenes*, the term used for the light that we see inside our eyelids when we close our eyes. Moving in and among these patterns, a shadowy, partly dissolved figure is walking. Eva Lee was inspired to produce *Into The Midst* in 2012 while researching Tibetan Buddhist art and meditative practices during her travels in India. As Lee describes it, her video is a “visual expression of egolessness, or no self.” Made up of matter, we are but a small part of the whole, simply a tiny spec in a vast, complex universe that we do not fully understand.
The National Aeronautics and Space Administration, better known as NASA, is a leading force world-wide in scientific research. NASA is very generous in making their scientific imagery available on the Internet. Such imagery forms the starting point for Jonathan Feldschuh, a New York artist with prior training in physics. His planetary landscapes are depicted in swirling, dense layers of paint that appear as gaseous fluids sealed in multiple layers of clear acrylic. For a series in 2002, he selected solar data produced by NASA’s Hubble Space Telescope and several other observatories, including the Solar and Heliospheric Observatory better known as SOHO. Included in Sun Light / Star Light are four of these paintings – SOHO, Yohkoh, Extreme Ultraviolet, and Nebula M1-67. His resulting canvasses capture an authentic portrait of solar phenomena while effectively imparting its mysterious grandeur.

Using imagery from its own vast holdings, NASA embarked on a four-year project to create a revolutionary art video titled Solarium. NASA’s Solar Dynamics Observatory (SDO) which launched in 2010 has an unprecedented capability to record and receive information about activity on the surface of the Sun. Under nearly continuous observation, material is tracked as it courses through the layers of the Sun’s atmosphere, called the corona, as solar flares burst suddenly and gigantic eruptions of solar particles, some measuring 50 times the size of Earth, swirl and surge into space. Spearheaded by multimedia producer Genna Duberstein, a team of media specialists including Scott Wiessinger and Tom Bridgman worked about ten hours to create each one-minute segment of the video. First, images were selected from the observatory’s vast holdings. SDO photographs the Sun every 12 seconds in ten different wavelengths of ultraviolet light and downloads these images at an impressive rate of 130 Megabits per second. After datasets reach the ground, the information is processed multiple times to produce images for projection at 4,096 pixels per square inch. Every single image has eight times more resolution than a high-definition TV. These images are recorded in a binary code, meaning ones and zeros. Using computers, the data is translated into black-and-white pictures. Scientists then colorize them for realism and zoom in on areas of interest. Each color selected relates to a specific wavelength of ultraviolet light, which is invisible to the naked eye, as well as to a specific temperature of material on the Sun. Once images for Solarium were selected, they were transformed into}

Jonathan Feldschuh, SOHO, 2002, acrylic on canvas over panel. Image courtesy of the artist.
into time-lapse videos and streamed one after another. The digital footage is accompanied by an audio track created at Stanford University from solar data measuring the way sound waves travel through the center of the Sun. Presented in *Sun Light / Star Light* as an immersive environment, the result is an unforgettably vivid experience.

While we tend to associate the Sun with daylight, this giant star also makes moonlight possible. The Moon’s light is caused by the reflection of sunlight upon the Moon’s surface. When sunlight hits the Moon, only between 3 and 12 percent is reflected. It appears at its brightest when it is a Full Moon, positioned 180 degrees away from the Sun. In Japan, there is an ancient custom to appreciate the Full Moon during the fall festival known as *Tsukimi*, which translates as “Moon viewing.” Tokyo-based artist Taro Shinoda grew up with this custom; yet, the Moon also holds a more personal meaning for him. As a child, he would attempt to communicate with his absent mother over great distances. He would imagine entrusting the Moon with messages that he hoped she would receive on the other side of the planet when the Moon would rise for her. Inspired by these memories in 2007 while performing a residency at the Isabella Stewart Gardner Museum, Shinoda built a telescope out of corrugated cardboard and attached a camera lens and a video recording device to it. He then embarked upon an ongoing project titled *LRTT* (*Lunar Reflection Transmission Technique*), seeking to capture lunar expressions from various vantage points around the globe. To date, Shinoda has captured telescopic perspectives of the Moon as seen in the nocturnal cityscapes of Boston, Istanbul, Limerick, and Tokyo.

Wherever we are, we derive the benefits of the Sun, whether or not we are mindful of its presence — or absence — in our everyday lives. The thoughtful works of art that collectively comprise *Sun Light / Star Light: Contemplations on the Solar Orb* serve to remind us how truly magnificent this giant star is and how dependent we are upon it. Our childhood lessons taught us about the important gifts of the Sun: light to see by; energy for plants to make food; power for homes and businesses; and warmth to make life on Earth possible. As if that were not enough, it also gives us a psychological boost. The Sun makes us feel happy!

—Elizabeth Chubbuck Weinstein
Director of Interpretation for Art and Museum Curator
LOUISIANA ART & SCIENCE MUSEUM
EXHIBITION CHECKLIST

Caitlind R.C. Brown and Wayne Garrett

**SOLAR FLARE**, 2013
Acrylic rods, aluminum, motion sensors, mechanical parts, sodium motion sensor bulb
10’8” x 10’8” (3 m x 3 m) x variable height
400 lbs. (180 kg)

Jonathan Feldschuh

**Extreme Ultraviolet**, 2002
Acrylic on canvas over panel
48 x 57 inches

**Nebula M1-67**, 2002
Acrylic on canvas over panel
48 x 48 inches

**SOHO**, 2002
Acrylic on canvas over panel
48 x 48 inches

**Yukkoh**, 2002
Acrylic on canvas over panel
48 x 48 inches

Eva Lee

**Into The Midst**, 2012
Digital video
Sound by Chris McKenna
Running time: 4:45

Istapacini Art Lab

**Traveling SUN**, 2012 - Ongoing
Road movie
Running time: 12:00

NASA Solar Dynamics Observatory

**Solarium**, 2014
Digital video loop
Produced by Genna Duberstein and Scott Wiessinger
Data visualizer Tom Bridgman
Audio by Stanford University
Running time: 7:45

Taro Shinoda

**LRTT (Lunar Reflection Transmission Technique)**, 2007 - Ongoing
Telescope video
Running time: 45:00

**Telescope**, 2007
Cardboard, camera lens, video recording device
26 x 43 x 16 inches

Penelope Umbrico

**Neverending Sunset (Second Life)**, 2011
Digital video loop on monitor
Running time: 12:00, excerpt from a 24-hour screen capture

Istapacini Art Lab

**Collection Photocopies: Eclipses (with Graphite)**, 2014-15
Thirty photocopies with hand-applied graphite
Each 10 x 8 inches framed / 8½ x 6½ inches unframed

**Sun Burn (Screen Saver)**, 2008
Digital video loop on monitor
Running time: 00:30

**Sun Screen**, 2015
Digital video loop on monitor
Running time: 00:30

**28,873,418 Sunset Portraits from Flickr on 09/14/15**, 2015
Digital chromogenic prints
Site-specific, 92 x 132 inches


COVER IMAGE  Penelope Umbrico, 28,873,418 Sunset Portraits from Flickr on 09/14/15 (detail), 2015, digital chromogenic prints, site-specific. Image courtesy of the artist.

This exhibition has been funded in part by a Local Project Assistance Grant from the Arts Council of Greater Baton Rouge, funded by the East Baton Rouge Parish Mayor-President and Metro Council, with promotional support provided by WRKF.