

ATOMIC SURPLUS

THE NUCLEAR LEGACY IN ART, FILM AND DIALOGUE

OCTOBER 11, 2013 - JANUARY 5, 2014

CCA | CENTER FOR
CONTEMPORARY ARTS
SANTA FE

FROM THE DIRECTOR

Atomic Surplus is a stellar example of what CCA is all about—stimulating and facilitating dialogue about a timely and relevant subject, utilizing a variety of perspectives and approaches, including visual art, film and digital media, literature, and educational programs. In New Mexico we claim a special piece of American history, living with the legacy of the atomic bomb, and this subject raises a multitude of feelings and responses.

Erin Elder, CCA Director of Visual Arts, has brilliantly curated a provocative exhibition of artists from near and far who address this important legacy. This exhibit is not a one-time experience. Rather, it beckons us to return a number of times to fully explore and understand the multiple perspectives and nuances. It provokes both retrospection and conversation, and entices us to pursue further exploration. This catalog offers a useful starting point for our deeper consideration and reflection.

To that end, we hope that you will view the special film series that Jason Silverman, CCA Cinematheque Director developed to accompany the *Atomic Surplus* exhibit. We invite you to participate in the numerous public programs that we are offering in conjunction with this exhibit, or just come with your family, friends, and colleagues to enjoy the new gathering spaces in the Muñoz Waxman Gallery and Cinema Lobby.

We are excited to partner with the Los Alamos Historical Society to offer a stimulating education program for high school students in Santa Fe and Los Alamos. We are thrilled to work with the estates of Tony Price and Ed Grothus to offer a selection of their work and shared personal history. Finally, we are grateful for the many supporters of the *Atomic Surplus* project, most notably the National Endowment for the Arts.

As CCA approaches its 35th year of service to Santa Fe and Northern New Mexico, we are proud to present the *Atomic Surplus* exhibition, catalog, film series, public programs, and education program.

Candace Tangorra Matelic, Ph.D., CCA Executive Director



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INTRODUCTION

I thought I knew something about the nuclear legacy. I had a series of images in my brain that, in this Google era of marketing logarithms, could be tagged with the keyword “atomic.” I knew some rudimentary facts and dates and could recognize a few names. Oppenheimer: check! Cold War: check! Three Mile Island: check! This appears to be an ailment of our time: that our basic understanding of history is comprised of a checklist of semi-related, oversimplified bits and iconic images that have been lodged into our brains via pop culture references, a couple of personal memories and maybe a few lessons in school.

When I scanned my brain for images or memories of “atomic” or “nuclear,” I came up a black-and-white mushroom cloud, historic footage of mannequins being flung across the desert in a slow motion nuclear test, a goofy *Dr. Strangelove*, a quaint fallout shelter in *LIFE Magazine* equipped with checkered tablecloths and canned goods. During a secondary search, I found marooned memories of wandering through some nuclear museum as a malaised pre-teen or the relief I felt when corrected that Rocky Flats was different from Rocky Ford and therefore the famous melons from the latter,



weren't radioactive. I remember crying my eyes out during a college class screening of the Japanese film *Black Rain* during which a woman loses handfuls of long, black hair to her radiation sickness. And later still, there is a memory of rising at dawn for a Shoshone ceremony at the edge of the nuclear test site in Nevada and the training in lock-downs, affinity groups, and non-violent protest that followed. These memories and images were isolated and disconnected, pinpoints of light in an otherwise dark sky.

I grew up in Colorado Springs in the shadow of Cheyenne Mountain and the North American Aerospace Defense Command (NORAD). The high security underground bunker was much discussed by the children of my hometown. We

Trinity test, photographer: Jack Aeby, courtesy Los Alamos Historical Society Photo Archives

imagined it as a kind of futuristic Noah's Ark with animals, people, stores, and whole neighborhoods on giant springs through which residents flew levitating cars while reading one another's minds with fancy computers. As my research revealed years later, our imagined NORAD was not far from reality.

The thing about living in proximity to secret government places like NORAD is that they are intentionally incomprehensible. Their activities don't allow for collective personal experience and disallow engaged curiosity. After childhood fantasies about the goings-on inside the vaulted mountain subsidence, the place – its lengthy acronyms and guard shacks and sophisticated science and secrecy – slides into the city's backdrop. Silently going about its secret business, NORAD thrives in its hiddenness; hiddenness is at the core of its purpose. Thus, our knowledge of NORAD becomes simple and flat: an image of a mountain with towers on top. Military bunker: check! Underground city: check! Secret unknown: check!

Despite the fact that our world is inundated by more information and images than ever before, iconic images often replace an in-depth understanding of issues and of history. We can almost imagine a game of matching images to events, places, and people, in a one-to-one relationship. Mushroom cloud = atomic bomb. Pyramids

= Egypt. Twin towers falling = 9/11. Peru = Machu Pichu. New Orleans = jazz. Play around on Google Images and it's clear why we think in iconic imagery.



Images are powerful. I do not advocate for a world without images or symbols, but rather for an engagement with images that goes beyond a one-to-one recognition. I am concerned about collective knowledge becoming marketed and branded, oversimplified, generalized. When iconic images or didactic story lines stand in for active, personal

knowing, complexity is lost. Critical thinking is lost. Curiosity is numbed. Secrecy becomes unquestioned. Truth is scripted and choice is only a menu of prescribed options.

Luckily there are experiences in life that wake us up to the fact of our ignorance. We are able to see the wonky constellation formed by the random images on our prescribed checklists, but also the spaces in-between. It is these in-between spaces

Edward Teller and Enrico Fermi with atomic bomb photo, courtesy Los Alamos Historical Society Photo Archives

that we must consider when developing a true understanding about things. *What do I not know? What have I not seen?*

I experienced this in-between unknown very literally, when looking at a topographical map of southern New Mexico. Scanning for a place to camp near White Sands, I was struck by the map's lack of features. No roads, no landmarks, no towns. Hatch-marks darkened a swath of the map marked as "restricted military zone." I'm grateful for the pause I had in that moment and the questioning that went beyond finding a campsite.

WE ARE ABLE TO SEE THE WONKY
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It's not our fault that we are ignorant about the nuclear legacy. The places and information surrounding it have been highly classified. National security measures have required intense secrecy around the technologies and practices of nuclear weapons. Aside from the military's necessary restrictions, the science of nuclear physics is esoteric, in fact, beyond most people's comprehension. The fission and fusion of subatomic particles occurs at the tiniest level of matter. Radiation, too, is invisible to the naked eye. That the movements of miniscule particles have the power to create an earth-shaking explosion is practically unfathomable. Unless your life is wrapped up in one of the nuclear-related industries or you've done serious research on your own accord, there's not a lot of imagery or information that takes you beyond mushroom clouds and flailing mannequins.

Atomic Surplus examines the space between the items on our collective "atomic" checklist, and aims to get behind the darkened spot on the map. Though experts, curators, scientists, and others have been involved with the shaping this project, it can't and won't explain everything. We do not aspire to give audiences a complete knowledge of the nuclear legacy; in truth, this project aims only to scratch the surface, to spark curiosity, to invite a deeper consideration.

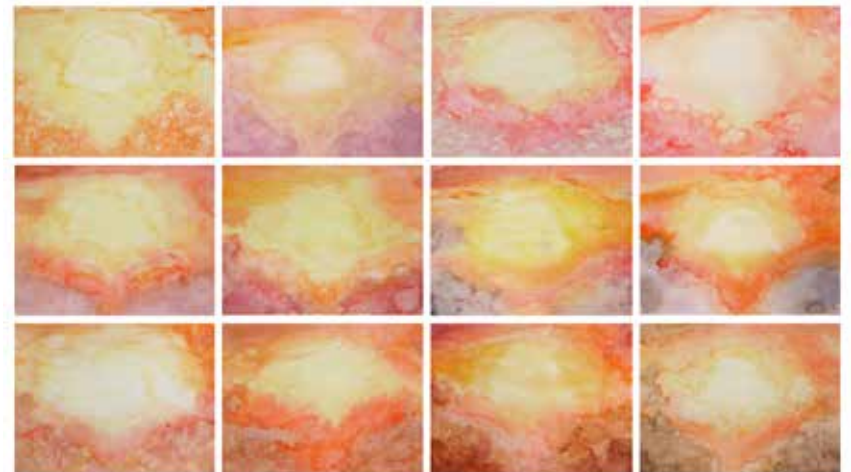
As this catalog goes to press, *Atomic Surplus* couldn't be more timely. Just this weekend, *The New York Times* ran an article on air pollution in China and their plans to decrease green house gases through increased nuclear and other "clean" power. As counterpoint, reports explain that thousands of tons of radioactive water have been continually leaking from Fukushima Daiichi, making its way into the Pacific Ocean and perhaps all the way to California. As tensions mount around the burgeoning Syrian conflict, the world wonders about the powers that may be triggered in the region and worldwide. Today former basketball player Dennis Rodman paid a visit to Kim Jong-un, the dictator of North Korea who recently threatened to annihilate the United States with nuclear weapons. The nuclear legacy is everywhere and it's not black or white. It's complicated and colorful. It can't be branded or generalized; it can't even

be captured in images. If we are to approach a more thorough knowledge of complex issues such as the nuclear legacy, we must make room for divergent points of view and lesser-known stories; we must confront complexity, even if the result is greater confusion.

This exhibition and its auxiliary programs and events come together as a cacophony of different perspectives. Numerous organizers and advisors have helped identify images and voices that tell the nuclear story in a new way. We reference historical moments and regional connections, but use New Mexico and the WWII-era as a touchstone for looking at much more global and contemporary consequences. Our definition of nuclear is not limited to the bomb, but branches into realms of nuclear waste and nuclear power, as well as the infrastructure, landscape, community, and science that has grown up around the collision of subatomic particles. Through a multi-disciplinary approach, we aim to create moments of tension, to provoke thought, to search out the in-between spaces of our knowing.

Art is a perfect realm in which to address complex issues. In their curiosity-fueled embrace of the unknown, artists are devoted researchers; they create and share new perspectives. Artists move easily outside the prescribed norm, working with iconic knowledge's checklist to reflect upon that very checklist. They respond to the world by making something that didn't previously exist. And their creations – film, books, poems, songs, and images – help to create a new constellation of cultural references that help us become curious about the stuff we do not know.

Erin Elder, Visual Arts Director



Claudia X. Valdes, *Tests*, 2006, watercolor and gouache on paper

ATOMIC SURPLUS IN FILM

"One of the most beautiful sights ever seen by man!" a U.S. Army officer raved after watching an early detonation of an atomic bomb in the Nevada desert. Looming above the many iconic images of the 20th century, the mushroom cloud, with its fearsome symmetry, has become the symbol of an age of paranoia, human potential and apocalyptic possibility. Unlike other indelible images of destruction—footage of Nazi concentration camps, a swath of tornado through a small town, the Zapruder tape—the nuclear tests were ready for their close-ups, designed to be captured by motion picture cameras. For more than a half-century, the footage of these bombs, and the life-altering potential it summoned, has remained a strong current in cinema, one explored in this series.

More than 200 tests between 1946 and 1960 were filmed by Lookout Mountain Laboratory, a secret military filmmaking unit based in Los Angeles. Hollywood technicians were hired to design lenses and shutter mechanisms that could capture the intensity of the blasts. And like a Hollywood set, designers built entire towns that would test the bombs' powers, filming them as they disintegrated and blew apart.

The power that accrued to those with fingers near the nuclear buttons became a national obsession. Could we launch an attack at the wrong moment and/or for the wrong reasons? The trigger-happy politician, technical glitch or a lone-wolf terrorist ending the world as we know it grew into a genre onto itself, a core plot element in films from *WarGames*, *The Day After* and *Fail-Safe* to most James Bond movies. Never has it been done with the relentless sharp focus as in Stanley Kubrick's *Dr. Strangelove*, with its manic, cartoonish tale of the absolute corruption of atomic power.

The U.S. government went beyond mere filming of the atomic age; it also embarked upon a sustained marketing campaign to urge Americans to embrace it. Having succeeded in enlisting the best and brightest from Madison Avenue and Hollywood to successfully promote World War II efforts, the government turned to making nukes and the prospect of a Soviet attack more palatable. The collage documentary *Atomic Café* draws deeply from the public record, assembling a broad array of commercials, educational films and advertisements to remind us that all will be OK, if we remember to duck and cover.

Nearly 70 years after the Manhattan Project launched, the debate about nuclear weaponry and power continues to burn hot. The Brazil-based *Uranium Film Festival* is among the many organizations harnessing our fears of the nuclear age into action, collecting the best films exploring the environmental, social and psychic damage done by nukes, including *Nuclear Savage*, by the Santa Fe-based documentarian Adam Jonas Horowitz. And a forceful rebuttal comes from *Pandora's Promise*, which uses a chorus of forceful thinkers and speakers to challenge the conventional wisdom around nuclear power, and engage in new thinking about it, a shared goal with each of these deeply committed works of activist art.

Jason Silverman, CCA Cinematheque Director

LOS ALAMOS HISTORICAL SOCIETY

The Los Alamos Historical Society preserves, promotes, and communicates the remarkable history and inspiring stories of Los Alamos and its people for our community, for the global audience, and for future generations. This is done through a variety of venues, including: the Los Alamos Historical Museum, which features 1.4 million years of history from the geology of Pajarito Plateau, the Ancestral Pueblo People, the homestead era, the Los Alamos Ranch School for boys to the Manhattan Project and the Cold War; an extensive archives with more than 20,000 objects and tens of thousands of documents and photographs; a monthly lecture series and other educational programs for children and adults; and ownership of historically significant buildings such as the homestead Romero Cabin and the wartime home of Dr. J. Robert Oppenheimer. The Los Alamos Historical Society is the education sponsor for *Atomic Surplus*.



You arrive at the Lamy train station in the summer of 1943. You are a university scientist, or married to a scientist, or maybe a scientist's child. You and your family have traveled here to join a top-secret project to support the war effort. From Lamy, you ride with a military escort to Santa Fe and report to the address you were given, 109 East Palace, just off of the plaza. The kind woman who meet you there, Dorothy McKibbin, tells you that Santa Fe is not where you and your family will live—there is a secret city, controlled as a military base, 35 miles to the northwest, in the rugged Jemez Mountains. She gives you passes for entry, and arranges the details of settling into your new home. Driving into the mountains, you take a winding, treacherous dirt road, hugging the side of a mesa, and

come to a guard gate. Showing your family's passes to the MP, you enter Site Y of the Manhattan Project: Los Alamos.

The people of the secret city were scientists and engineers, some of their families,

Dorothy Jensen arriving at Lamy on the Santa Fe Super Chief, courtesy Los Alamos Historical Society Photo Archives



soldiers, members of the Women's Army Corps, and local residents of the Jemez and the Española Valley. At the peak of the war work, more than 6,000 people lived at Site Y, not including locals who commuted to work there. Four Nobel laureates lived in Los Alamos over the war years, and twelve residents went on to win Nobel Prizes later in life.

Driver's licenses of the secret city's inhabitants— which often did not show a picture to protect the identity of world-famous scientists — gave their address as a post office box, and the children who were born there had birth certificates stating they were born in a post office box. Access to the town was strictly monitored with gates and guards, and mail was censored to make sure no secrets were divulged. (Physicist Richard Feynman delighted in demonstrating holes in this security net: he opened locked safes, snuck through holes in the fence to make it seem to the guard as if he exited several times without entering, and wrote letters to his wife in code to aggravate the MPs.) In the summer, monsoons turned the dirt roads into elongated mud pits, and in the winter, snow settled onto the mountains and the quickly-built, temporary housing where the majority of the town lived.

WHAT BROUGHT THESE PEOPLE TOGETHER WAS THE WARTIME EFFORT TO BUILD AN ATOMIC BOMB TO DEFEAT HITLER'S NAZI GERMANY.

What brought these people together was the wartime effort to build an atomic bomb to defeat Hitler's Nazi Germany. After VE Day, work continued, though the potential target was changed to Japan. Scientists and engineers worked long hours, six days a week, struggling with the theoretical and technical difficulties in applying cutting-edge scientific discoveries to create a practicable weapon. The average age of the

Los Alamos Main Gate, courtesy Los Alamos Historical Society Photo Archives

scientists at Los Alamos in 1945 was 29, and they played as hard as they worked, letting off steam at cocktail parties and throwing themselves into hiking, skiing, and putting on concerts and plays. Otto Robert Frisch, who assisted his aunt Lise Meitner in discovering the theory of atomic fission, the scientific basis of the atomic bomb, occasionally played the piano for the listeners of KRS, Site Y's radio station. For security, only last names were broadcast on KRS, and the signal was broadcast over power lines rather than over radio waves so that it could not be picked up by aircraft.

Early in the morning of July 16, 1945, the efforts of all of those living and working at Los Alamos resulted in the detonation of the world's first atomic bomb in the desert near White Sands. The military decision was made to use the newly created weapon on Japan, in the hopes of ending the war and of establishing the United States' power over the Soviet Union in the post-war world. On August 6, an atomic bomb was dropped on Hiroshima, and on August 9, a second atomic bomb was dropped on Nagasaki. Five days later, Emperor Hirohito agreed to an unconditional surrender to the Allies, and on September 2, treaties to end the most deadly conflict in the history of mankind were signed aboard the U.S.S. Missouri. World War II was officially over — but now the world knew the realities of atomic weapons, which influenced not only politics and diplomacy, but also art, culture, and everyday life, in the decades that followed.



Dorothy McKibbon and Robert Oppenheimer at a party, courtesy Los Alamos Historical Society Photo Archives

CHRISTOPHER J. JOHNSON

(SANTA FE, NEW MEXICO)



Christopher J. Johnson is originally from Madison Wisconsin. He came to Santa Fe in 2002 and graduated from the College of Santa Fe majoring in English with an emphasis in poetry. He is a freelance writer and reporter. For *Atomic Surplus*, he is organizing a small series of literary events.

Eric Lusito, *Library, 129th Independent Radar Center of Early Detection, Latvia, 2007*, digital print

We're keen on models of literature that suddenly stop the gears of, a whole city say, and then slowly, civilization begins to erase. But within the apocalyptic narrative there is sometimes the erasure that begins to revert the structures that surround us, like cliffs wearing away, back into the desert. Rather than ending with sand and dust, though, this model could be seen as a greening process. It is a reversion to nature: shoots spring up from cracks in the sidewalks, bats occupy underground parking ramps, birds nest in the tunnel slides, and turtles reside in the public fountains. There is an eerie elegance by exaggeration.

In Norse mythology, our world is the body of a god named Ymir. Each process, from those of the trees and ants to that of lava or human hands, is either a process of his decay or a fruition thereof. In some accounts of Ymir, he accretes new gods and these gods eventually kill him. So our world becomes his murder. And, how is this not our world? A pit springs into a ripening fruit again, this world contains microcosms of such systems of accretion, fruition and collapse.

Chernobyl is such a world. It is a corpse on the corpse, a bottle in a bottle. It is a place where death meets the afterlife, one that haunts our dreams and imagination. A city in northern Ukraine, Chernobyl was the site of a nuclear plant accident in 1986. A fire caused by a sudden power surge sent a cloud of radioactive fallout over the western Soviet Union and Europe.

This event is a dreadful chapter in our continued fascination with the savaged landscape, a haunting example because it confirms that our visions aren't always far off the mark. The portrayal of such landscapes is far from new. For the Victorians, the element displacing the human faction ranged from the plague to the rapture, with its tide of demons carrying off the unfortunates. Post WWI, with its plethora of mechanical weapons, war became the eraser. Post WWII, that eraser was the nuclear bomb. And what makes nuclear power so chilling is that, unlike plague, demons or even war, it represents a sudden, singular moment of change. The nuclear bomb is a wrench in the machine, that quick stop of the cogs that is perhaps ever the more terrifying because we created it ourselves; a product of hubris.

The nuclear end represents a bang and a hush that is followed by an emerging lushness. We are speaking here of the quiet, abandoned and desolate end. The blank, white end with an endless silt-fall of nuclear fallout. This is the end in which rolling nature buries cities, the end where the bones of animals make strange mandalas on the barren landscape, and vaporized birds in flight cast eternal shadows on ruin walls. And it is an end to be found in a cliché phrase: *the push of a button*.

MEGAN PRELINGER

(SAN FRANCISCO, CALIFORNIA)



Megan Prelinger is a library-builder, writer, and artist. She is co-founder of the Prelinger Library in San Francisco, an independent, experimental research library that is a creative workshop as well as a research space. The library is a collection of 20th and 19th century American cultural history, and is open to appropriative re-use by artists. She is also a historian of technology and graphic design. Her most recent book is *Another Science Fiction: Advertising the Space Race 1957-62* (Blast Books, 2010), a visual cultural history of aerospace industry trade advertising at the height of the space race. As part of the Prelinger Library and Archives working group she has been Artist in Residence at the Exploratorium since 2007, where she has co-authored a series of five atlases of Bay Area regional history, and has installed a site-specific research library for the museum's Bay Observatory gallery (2013). She writes and speaks widely on the relationship between 20th century commercial artwork and its role in the emergence of new technologies, and on the theory and practice of alternative libraries. She is also a naturalist with San Francisco Nature Education.

The exhibit I've prepared presents thirteen images from industrial advertising that relate to nuclear technology. The images date from between 1953 and 1963, a time of extremely rapid identity development for nuclear industries. Twelve out of these images are magazine advertisements that appeared in industrial trade journals; the last is the cover of an exhibit catalog. The advertisements were not aimed at the general public; they are industrial advertisements, aimed at scientists, engineers, technicians, business owners, and potential investors. They were published in specialty periodicals such as *Business Week*, *Nucleonics*, and *Scientific American*, and they represent an array of objectives. They are unified by their common deployment of atomic-themed imagery to promote the goals of their sponsor companies.

The images have been selected in part for the range of image types that they represent. Between them, representations of nuclear power plants, abstract and illustrative art based on the physics of the electron, and even an adapted photograph of a mushroom cloud are each used to promote or contextualize a different industrial objective. They have also been selected for the range of purposes to which the imagery has been deployed: The Los Alamos Scientific Laboratory partnered with Southwest fine artists to create a long-running campaign that harnessed sophisticated abstract art to the purpose of recruiting top-notch scientists. At the other end of the spectrum, the JFD Electronics advertisement from 1953 advertises wholesale access to rooftop television antennas for retailers and repairmen. The retouched mushroom cloud photo in the background of this ad coarsely invokes the atomic era as definitive of the emerging future, a future that demands top-quality TV reception (the better with which to watch the world burn?).

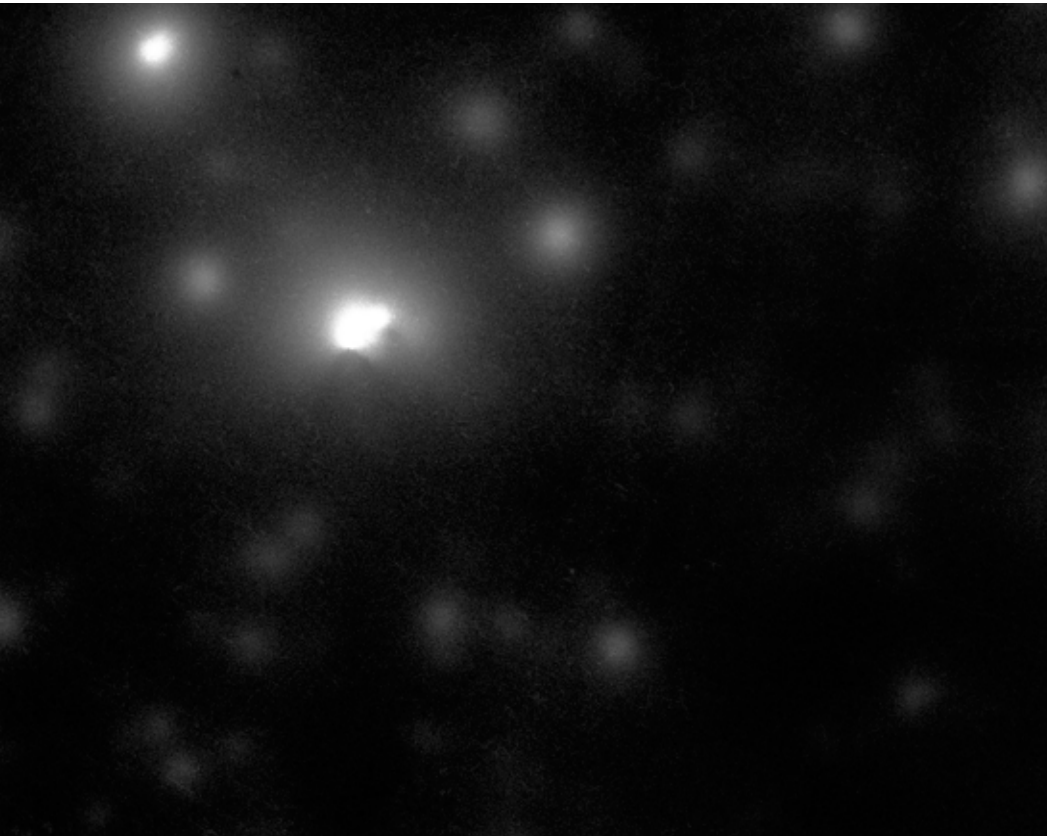
In between are images that either represent nuclear power plants themselves, or stylized atoms and electrons. This group of images tend to be aimed at rehabilitating the public image of nuclear technology away from the mushroom cloud. They offer a clean, modern, and even glamorous take on the electron and its potential as an energy source. The advertisements promote a range of peaceful applications of atomic energy: from nuclear-powered rocketry to civil electricity. An ad from the banking industry cashes in early on the emerging clean image of nuclear power, mapping it onto high finance. Ads from Union Carbide use imagery associated with atomic science to redraw the face of a decidedly dirty corporate identity.

Within this total group of images is a matrix of representations of atomic science and atomic technology during the first decade that those technologies found widespread industrial application. This exhibit explores the historical application of commercial and fine art to the construction of new identities for nuclear technologies and corporations in the early atomic era.

Art and the Atom, exhibit booklet cover, Stables Art Gallery, Taos, 1963. Image courtesy Prelinger Library

BETTINA SAMSON

(PARIS, FRANCE)



Bettina Samson was born in Paris in 1978. She graduated from School of Fine Arts, Lyon (2003) and Paris University, Panthéon-Sorbonne (2001). She lived and worked in Marseilles and was artist-in-residence at the Villa Arson, Nice; IAAB, Basel; Cité Internationale des Arts, Paris; before moving back to the Parisian region in 2010. Her work was recently presented at the Frac Provence-Alpes-Côte d'Azur, Marseilles and at Le Plateau, Centre d'Art d'Île-de-France, Paris. She has had solo exhibitions with Galerie Sultana, Paris; Nettie Horn, London; Galerie de Noisy-le-Sec; Palais de Tokyo; and at Zoo Galerie in Nantes.

The discovery of radioactivity paved the way towards a greater understanding of nuclear physics, the intimate structure of matter and elementary particle physics, nuclear energy and nuclear weapons and was, therefore, crucial to both the history of physics and the history of the world.

Yet this discovery, made by Henri Becquerel on March 1st, 1896, was a produce of chance.

In late February 1906, the physicist noted the capacity of phosphorescent uranium salts (in the sun) to pass through material and impress photographic plates which were protected from light. He wanted to repeat this experiment on the edge of his window, but that evening, Paris was covered in dark clouds. Discouraged, Becquerel abandoned his samples in a drawer, putting off his experiment later. Some weeks later, he developed the photographic plates without expectation, as the uranium had never been exposed to sun. To his amazement, an image appeared.

I am intrigued by that tenuous moment in science when anything is possible, where the principle of causality does not exist, where the consequences of discovery are still unknown.

Nuclear Dust I, II and III (2009) are photograms made in the absence of light and under similar conditions as was Becquerel's experiment. I placed 4 x 5 inch film in a light-tight black box that had once held radioactive uranium ore. For three months, I left the film in the all-but-empty box, curious as to whether the memory of radioactive ingredients would leave their mark once the film was developed. The idea was to crystallize an accidental moment in which the possible, even the unspeakable, will suddenly appear.

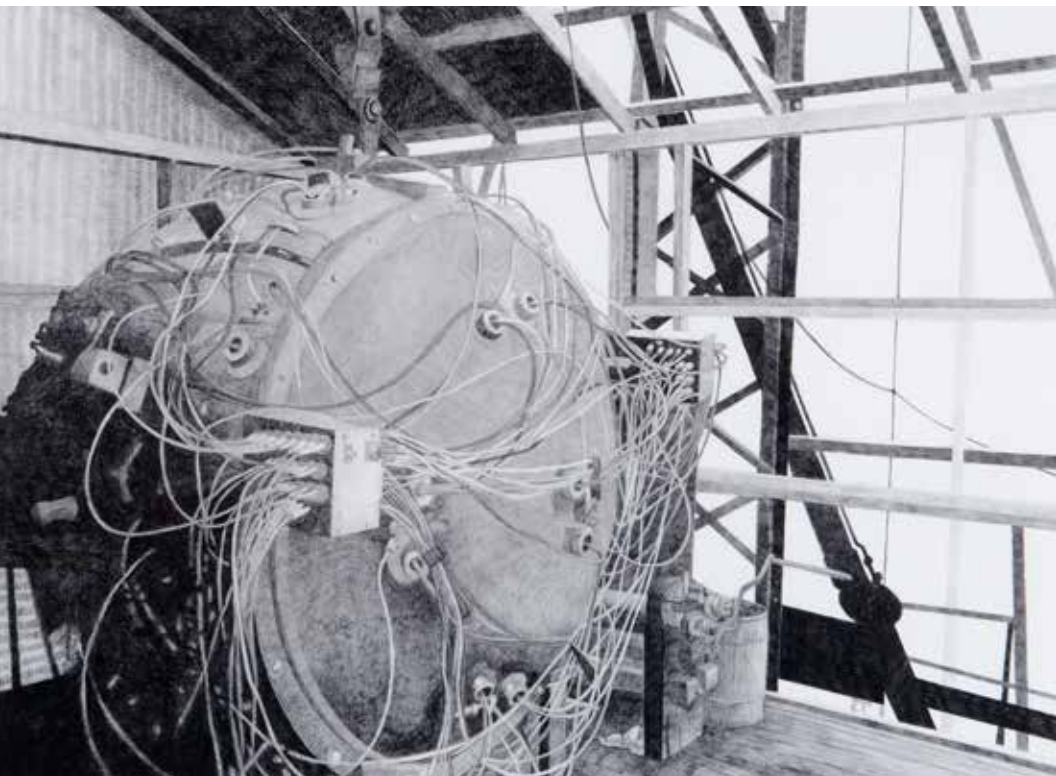
In developing the films, I discovered fuzzy, out of focus, points of dust, evocative of stellar landscapes. I realized very large prints, 190 x 150 cm, to support this perception and also the paradox of these "astronomical landscapes" the image of which comes from tiny radioactive grains. These almost immaterial images evoke the astronomical, contributing to an effect of reversibility between near and far, tiny and huge, darkness and light

I imagine that in the context of Santa Fe and New Mexico, these images might look like the desert sky at night, but also speak to the nuclear events that have been held in secret, causing invisible and lasting effects on the surroundings.

Nuclear Dust #1, 2009, photographic prints, courtesy of Galeria Sultana, Paris

NINA ELDER

(SANTA FE, NEW MEXICO)



Nina Elder is an artist, facilitator, and educator. She grew up in the Rocky Mountains where she cultivated a curiosity about gravel pits, mines, and lumber mills. Her work examines the visual evidence of land use in the American West and its cycles of production, consumption, and waste. She has participated in solo and group shows throughout the country. Her paintings and drawings have been featured in publications such as *New American Paintings* and *Art in America*. Elder holds a BFA in painting from The University of New Mexico and an MFA in painting from the San Francisco Art Institute. In 2009 Elder co-founded PLAND: Practice Liberating Art through Necessary Dislocation, an off-the-grid creative outpost and artist residency in northern New Mexico. She was recently hired as Residency Director at the Santa Fe Art Institute.

The Gadget (Trinity Test Site, July 15, 1945), 2011, graphite and radioactive charcoal on paper

Recently, while teaching a class, I asked the group of 20-somethings which generation they thought was most effected by the atomic bomb. I asked if they thought it was our generation, our parents, our grandparents, great-grandparents, or our great-great-grandparents. Almost all of them chose their great-great-grandparents. For these young (and historically maladroit) minds, the atomic bomb would have pre-dated the civil war. This says something of our nation's lacking knowledge of history. More importantly, this speaks to where we want to keep our national secrets and scares and shame: the far distant and naïve past.

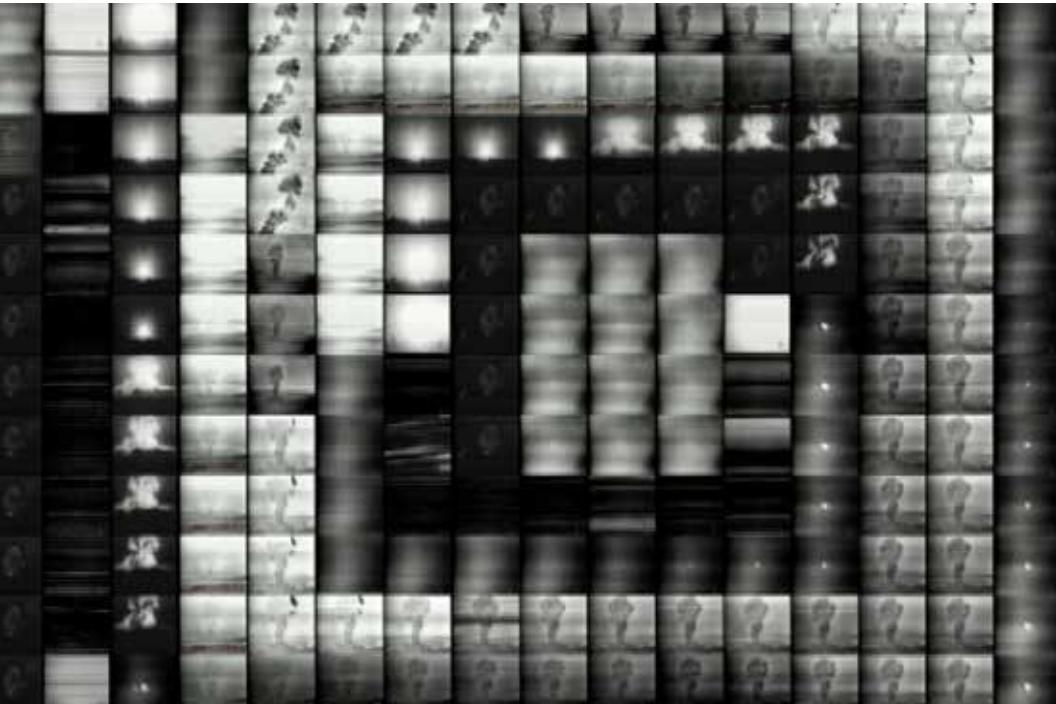
The year before my father was born, a group of elite scientists cracked open the terrifying unknown. They proceeded with the world's first nuclear explosion even after having placed bets on whether the earth's atmosphere would be incinerated. This kind of catastrophic nonchalance is something that society wants to put far behind us. Even more ghastly is that we have dropped atomic bombs on cities full of people, indelibly marring their DNA with our fear and our demand for dominance. Time does little to heal the burden of the victims, nor lift the guilt of perpetrators; suffering of that magnitude has a slow half-life.

Continuing nuclear testing and research is a constant refilling of Pandora's box, the lid of which got blown off years ago. It perpetuates a governmentality that has even the most concerned citizen questioning their apprehension. If something has gone on for 70 years, and has consumed millions of acres of land, and billions of taxpayer dollars, it must be kind of okay. Right? Wrong. The on going explosive rise of leukemia among the Santa Claran people, whose fields are irrigated with straight nuclear run off from Los Alamos, is wrong. The perpetual depopulation of farmers and ranchers in the Pahrump Valley in Nevada, because of early onset reproductive cancer, is wrong. Livestock continually being born without eyes or intestines in southern New Mexico is wrong. The huge stipends and education grants given to engineering students by weapons manufacturing corporations is wrong. The granting of millions of acres of public lands to weapons testing is wrong. All of these wrong things are happening right now. The problem is that it is so hard to remember. In our minds, the atomic legacy is protected by the sanctity of science, and contained to a historic generation, remote places, and conflicts that have long been resolved.

I believe art helps us chip away at the artificial insulation that we have from the atomic legacy. Artists, like myself, prove that you do not have to be a scientist to do research. Focused curiosity can crack open the unknown. I make art about the atomic legacy because I want to bring the flawed past into the present. By shining a light on the suffering and insolence that is the atomic legacy, I believe that art can accelerate their half-life.

CLAUDIA X. VALDES

(ALBUQUERQUE, NEW MEXICO)



Claudia X. Valdes was born in Santiago, Chile. Her family moved to the United States when she was three years old. Her undergraduate studies at UC Berkeley included architecture, modern dance and fine art. In 2001, she received an M.F.A. from UC Berkeley.

Her artwork has been presented internationally including at: SITE Santa Fe, NM; the ICA, London; MCA, Chicago; WRO Center for Media Art, Poland; Mills College Art Museum; UCR/California Museum of Photography; Werkstätten und Kulturhaus, Austria; National Centre for Contemporary Art in Moscow; San Jose ICA, CA; Bauhaus-Universität, Germany; and the Instituto Chileno Norteamericano, Chile. In 2009 a 5,000-ft2 solo retrospective, entitled TEN MILLION DEGREES, exhibited at Lawrimore Project, Seattle, WA.

192:291 (still), 2002/2009, digital video

With the attack of the NYC Twin Towers in 2001, my thoughts instantly turned to childhood nuclear fears, my mind repeatedly strategizing for survival in the event of foreign attack. Later in 2004, when co-teaching a course called Time, Trauma, Memory and Embodiment, I came to understand my experience in 2001 as a “zip-line to the past.” One moment experienced in the present is sutured with another from the past. The terrifying events of 9/11 fused to equally traumatizing terrors about nuclear war. This “zip-line to the past” moment catalyzed a decade of work focused on US nuclear arms.

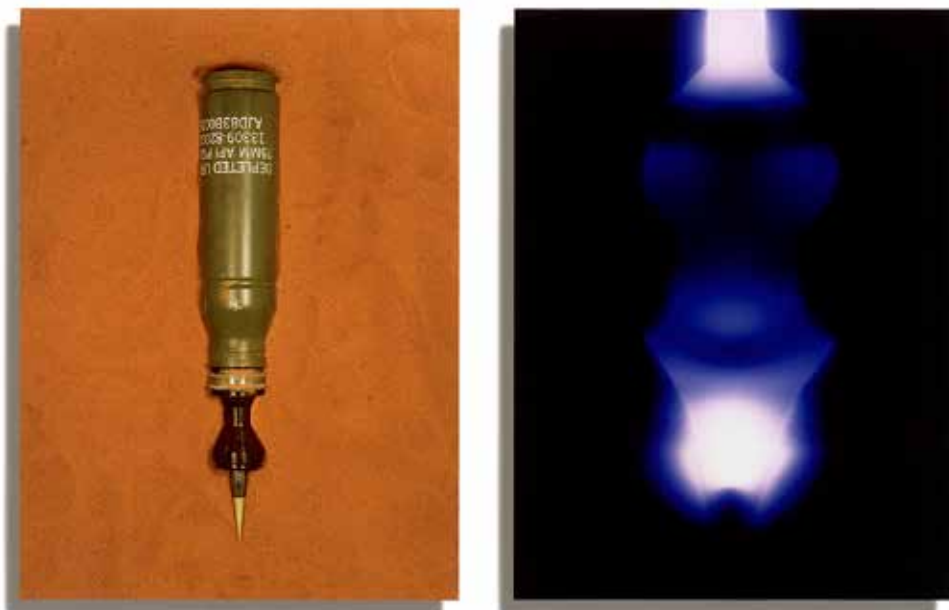
The body of work I produced throughout 2001-2009, entitled TEN MILLION DEGREES, repeatedly remembers specific moments in time. Again and again the blast explodes, like the Twin Towers on TV news falling over and over. Again and again the flash of light blinds us, like a soldier or a survivor reliving, and then again reliving, the critical moment.

Repeated remembering, re-imagining, and re-imagining the impact of nuclear legacy might ultimately create a little re-traumatization. It is this very experience, consciously created, that might help “zip-line” the viewer to the past and, as a result, might afford reflection on the past in order to better understand our collective present.

More importantly, zip-lining to the past is a way to consider our future moments yet-to-be-lived. Thus, many works from the TEN MILLION DEGREES project model a disruptive future imaginary moment, a future condition, through history. In doing so, my hope is that viewers might pause, reflect and move to shape the present towards a more productive future.

JIM SANBORN

(WASHINGTON, DC)



Jim Sanborn was born in Washington, DC on November 14, 1945. He graduated from Randolph-Macon College in 1969 with a double major in art history and sociology. He received his Masters degree in sculpture from Pratt Institute in 1971. Sanborn has received numerous awards and grants and has exhibited in major museums in the United States, Asia, and Europe. Jim Sanborn's public artworks are located in Japan, Taiwan and many locations in the United States.

Green Shell "Penetrating Radiation," 2002, pigment print face-mounted to plexiglass, courtesy of Robischon Gallery, Denver

Since the 1950s, various militaries have been using depleted uranium (U238) in certain types of artillery shells. Uranium 238 has two properties that make it an attractive weapon: the material is heavier and harder than lead and it is pyrophoric (from the Greek "fire-burning"). When a DU projectile hits a target, it ignites spontaneously and burns violently. To the military, this technically "sweet" solution to armor piercing is very attractive indeed. For the rest of us, there is one very large drawback. Uranium is radioactive and toxic. While the U.S. military considers this form of uranium to be relatively harmless, the problem is that when a shell explodes it releases radioactive dust that lingers on the site for millennia. Tens of thousands of uranium projectiles have been fired in U.S. military "theaters" of war. The health effects of this nuclear pollution are currently creating significant conflict within the international community.

The right hand image of each set was created by placing the uranium projectile on a piece of 4x5 transparency film in a plastic redi-load pack. After several days of exposure to the radiation the film was developed and printed without color manipulation.

The projectiles were obtained in the following manner:

In the summer of 2000 I was directed to a small two-story farmhouse in rural Wisconsin owned by a collector of "surplus" military projectiles. The downstairs rooms were benignly filled with hundreds of Winnie-The-Pooh collectibles and red plastic kitchenware. As the owner and I climbed the stairs to the second floor my Geiger counter began showing a dramatic increase in radiation. When I reached the upstairs rooms all of the wall surfaces in the couple and their daughter's bedrooms were covered with hundreds of mounted uranium projectiles dating from the 1950s through 2000. My Geiger counter was nearing the top of its scale.

We came back downstairs and negotiated a deal whereby I would photograph selected items from his projectile collection in exchange for providing him with digital prints of my photos. I built a shielded box that we shipped back and forth. He would send me one projectile at a time I photographed it and sent it back with the photos, and he would send me another one. This process continued for several months until September 12, 2001. On that day the collector awoke to his house being surrounded by dozens of FBI agents. The agents left after determining that there was no explosive powder in the hundreds of radioactive cartridges on display.

ERIC LUSITO

(CHAMONIX MONT-BLANC, FRANCE)



Eric Lusito is a French self taught photographer. He was born in 1976 in Aosta, Italy, and now lives in Chamonix Mont-Blanc. His work is largely shaped by six years of travel from East Germany to Mongolia, from Poland to Kazakhstan, working as an archaeologist in search of the military remains of the USSR. *Traces of the Soviet Empire* is a photographic record of land and architecture as well as a reflection on power and the passage of time. His first monograph is published by the English publisher Dewi Lewis. His work can be found in the permanent collections of the new Musée des Civilisations de l'Europe et de la Méditerranée in Marseille, the Fonds Régional d'Art Contemporain de Bretagne and that of the Kiyosato Museum of Photographic Arts in Japan.

304th Guards Red Banner Missile Regiment, Estonia, 2007, digital print

On November 9, 1989 when the worldwide televisions were broadcasting live the demolition of the Berlin Wall, I was a twelve-year old teenager from the generation for whom the Iron Curtain meant very little. At the time I was intrigued and appalled by the joy and emotion of the German people finally meeting after twenty-eight years of separation. I was aware that something important had taken place right in front of my eyes. I couldn't describe exactly what my feelings were, all I knew was that, one day, I would make the journey that would help me understand what had been going on beyond that wall.

After high school, I pursued my studies and got a degree in science. I worked for a few years in the industrial field but decided to pack up and visit the Eastern European countries at the wheel of an old British van, with my camera as my only companion. I had decided not to research for the trip as I wanted to allow free rein to discovery. I arrived on July 2002 to Novy Jicin, a city in the Czech Republic. An encounter with Radek, a young geography professor, proved to be decisive. We became friends and had long conversations in English about the way of life during the communist era.

One day he proposed that I should accompany him to explore an abandoned soviet military base. It was a fascinating sight that grabbed my imagination. I started to understand the power that the Red Army represented and the fear that it provoked. Radek told me about the existence of other abandoned military bases, some had been looted, some were under surveillance while others were poorly guarded. I decided to seek out these military remains throughout the former Soviet territories, relics of the ambition and power of the USSR.

This project led me to explore different nuclear sites and facilities. At one point, I attended the Jachymov's annual meeting of former Czech political prisoners who were forced to work in the uranium mines to feed the Soviet nuclear program during the Cold War. At another, I crossed the Semipalatinsk Polygon, the former Soviet nuclear test site in Kazakhstan where 700 bombs were tested during the 40-year period leading up to 1989.

One of the photographs exhibited in *Atomic Surplus* is a shelter at a military base that housed nuclear missiles. When I look at this image, I see a modern version of a prehistoric cave painting. Former hunting scenes are yesterday's frescoes, depicting the achievements of the Soviet civilization and the power of Lennin's army. Unlike cave paintings, I have serious doubts that this Soviet heritage will exist in 40,000 years. Though the radioactive waste produced nowadays just might.

VANESSA RENWICK

(PORTLAND, OREGON)



Born 1961 in Chicago, Illinois Vanessa Renwick is the founder of the Oregon Department of Kick Ass, and a film / video / installation artist. She lives in Portland, Oregon. Her work reflects an interest in place, landscape use and transformation, and relationships between bodies and landscapes. Her work has been shown internationally at The Centre Pompidou, Museum of Modern Art, The Kitchen, Kill Your Timid Notion, International Film Festival Rotterdam, Images Festival, The Viennale, and The Andy Warhol Museum. She has received awards from the Ford Family Foundation, the McKenzie River Gathering Foundation/Lilla Jewel, the Sarah Jacobson/Free History Project, Wolf Recovery Foundation, Seattle Art Museum, the Oregon Arts Commission, and the Weisman Foundation and more. Her film *Britton, South Dakota* received the Gus Van Sant Award for Best Experimental Film at the Ann Arbor Festival, and the Gecko Prize at Cinematexas. She is represented by PDX Contemporary Art in Portland.

Portrait #2: Trojan (still), 2006, digital video

The first time I had anything to do with the nuclear world, I was naked and surrounded by bison.

I was modeling nude for housewives in a barn on the Fermilab in Illinois. Underneath us atoms shot around the proton-antiproton accelerator while bison roamed around outside. The Art Institute of Chicago held drawing classes in their extension program out at Fermilab. There was a big silo next to the barn where I was nude modeling. At lunch break I walked past the bison to the lab compound itself and ate with the scientists in their white lab coats. On the way back to Chicago I got stuck in a traffic jam behind a stinking garbage truck in 100 degree weather.

The second time I had a brush with the nuclear world, I was in Knoxville, Tennessee. I had just moved there from Chicago and I was depressed out of my mind. Culture shock was when the bag boy in the checkout line at Kroger's commented on my purchase of a Corona 6-pack with a drawl, " Boy, yew shore aur sew-fist-tickaytid." I was bitching on the phone to a friend in Chicago when she told me that an hour away from Knoxville lived the highest concentration of people with the highest IQs in the U.S.A.

I drove over to the Oak Ridge National Laboratory, in a small town with absolutely nothing for those high IQs to do but work on their equations. There were trees roped off with yellow caution tape – the trees were radioactive from seepage – and every fall they shot geese that had spent the summer there because they didn't want them migrating away to some hunter's radioactive feast.

Later, I was in Oregon in a car with two friends. One of them was burping up the foulest smell I've ever smelled coming out of a human, and it was cold out, so none of us wanted to roll down our windows. We made her sit in the back. It was strange, as she was a knock-out babe, but she couldn't stop the rotten smelling burps. We were at the coast, coming back to Portland past Trojan Nuclear Power Plant. The two closest things to Trojan were picnic grounds at its base and a strip joint. We had to get out of the rancid burp infested car. We stopped at the strip joint. The dancers were on strike. They were not picketing; they were nowhere to be seen. The management asked us if we wanted to dance. Dance for whom? No one was there. Perhaps the scientists and the strippers were having a picnic at that picnic grounds at the base of the cooling tower? We got back into the car and drove to the picnic grounds. No one was there.

What were these patterns emerging? Naked women in close proximity to science, even the foul smelling car was somehow reminiscent of being stuck driving behind that garbage truck. Spaciousness and absence; and where were the scientists? If only they were naked, working on making love, not war.

CENTER FOR LAND USE INTERPRETATION

(LOS ANGELES, CALIFORNIA)



The Center for Land Use Interpretation is dedicated to the increase and diffusion of information about how the nation's lands are apportioned, utilized, and perceived.

The CLUI is a research and education organization interested in understanding the nature and extent of human interaction with the earth's surface, and in finding new meanings in the intentional and incidental forms that we individually and collectively create. We believe that the manmade landscape is a cultural inscription, that can be read to better understand who we are, and what we are doing.

The organization was founded in 1994, and since that time it has produced dozens of exhibits on land use themes and regions, for public institutions all over the United States, as well as overseas. The Center publishes books, conducts public tours, and offers information and research resources through its library, archive, and website.

Crescent Junction, Utah, 2012, digital photograph

Though the underground nuclear catacombs for America's spent nuclear fuel is yet to be created, radioactive tombs of America's various nuclear programs already exist today, with more to come. Most are repositories for the remains of uranium mills, processing facilities, weapons plants, and contaminated tailings, bulldozed into engineered isolation mounds designed to limit contact with their surroundings for hundreds of years. There are dozens of these mounds, across the country from Pennsylvania to Arizona, built mostly by the Department of Energy, and maintained by their Legacy Management office.

These disposal mounds are generally low, rectilinear piles with flat, sloping tops – terrestrial umbrellas, keeping moisture out of the pile as much as possible. In arid environments, the outer layer is a coating of coarse riprap rock, a dead space where nothing grows, where no soil forms, and no roots take hold that could pierce the radioactive core. This tough skin allows occasional rains to pass through it to the next layer, a low-permeability clayey mixture a few feet thick. Water drains off to the side of the pile through channels at the base held in place with more layers of crushed stone.

These disposal cells are located primarily in the Southwest, where natural uranium deposits were found and exploited. Some of these former uranium mills were set up secretly for the Manhattan Project. Most started in the 1950s, and many operated until the 1990s. Presently, only one conventional uranium mill is operating in the USA, the White Mesa Mill in Blanding, Utah, in the heart of the uranium district and Indian country. However, that may change as the nation shifts towards more self-reliant energy sources.

Each disposal cell covers many acres and as much as half a square mile. They resemble ancient pyramids or relics from a geometrical mound-building culture, like archeological forms made for the future. They represent the legacy of the most advanced technology of a global culture: the creation of the atomic bomb, the ability to destroy the world at the push of a button. They are part of the nationwide network of industrial sites created to extract, process, manufacture, and engineer nuclear fuel for reactors and weapons - a continent-wide landscape machine to concentrate a naturally occurring trace material into such compressed atomic density that it explodes with galactic energy.

These mound sites, byproducts of this effort, are the end of the line, meant to be unconnected to the rest of the world, like deadly anachronistic time capsules. These are the most negative of spaces, nonplaces, meant to stay inert and isolated for as much of forever as possible, kept from the present, but destined for the future.

CHIM↑POM

(TOKYO, JAPAN)



Chim↑Pom is a young artist collective formed in 2005 in Tokyo. Responding instinctively to the “real” of their times, Chim↑Pom has continuously released works that fully intervene in contemporary society with strong social messages.

Using video as a primary discipline, their expressions freely cross over a range of media from installation to performance. While based in Tokyo, they develop their activities globally in exhibitions and projects in various countries.

Their work has been exhibited and performed throughout Japan and Asia and at MoMA/PS1 in New York. Public collections that house their work include: The Japan Foundation, Mori Art Museum, 21st Century Museum of Contemporary Art, Kanazawa, Museum of Contemporary Art Tokyo.

KI-AI 100 (100 Cheers), 2011, digital video

© Chim↑Pom. Courtesy of MUJIN-TO Production, Tokyo

Ohhhhh!

We're going to do our best to rebuild!

We're not going to lose against the tsunami!

Don't ever lose!

Come on, Tohoku!

I wanna see cute girls in swimsuits soon!

Fukushima!

We're going to do it!

We are awesome!

Soma City!

I want to go swimming in the ocean!

Let's put the fighting spirit into it!

Japan is awesome!

Let's go, Tohoku!

We're not gonna lose against radioactivity!

Please buy spinach!

Don't lose against earthquakes!

I'm going to knock out any false rumors!

I want a car!

Let's all keep going!

Soma city's has great strawberries!

Fishermen are wicked!

I wanna be a fisherman!

Thank you, volunteers!

I'm gonna get a girlfriend this year!

Do your best from today!

I'm so amazing!

Let's keep on going!

I'm not gonna give up either!

I wanna wear a swimsuit!

I wanna see a swimsuit!

Thank you, mom!

Thank you, dad!

Thank you, grandma!

Grandpa!

Boyfriend candidate!

So we're all friends!

Thank you!

Alright, here we go again!

Soma City is wonderful!

Thanks to you from the Self Defense Force!

Good luck to Iwate too!

Miyagi!

Hamadori!

Fukushima is great!

I wanna eat squid!

Kenta! [Friend's name]

Nakadori!

Let's go for it, Tohoku!

Let's all go for it!

We're still not done yet!

Iwate!

Screw you, nukes!

Hey guys, are you losing your voice?

30 microsievert!

Cheer up!

Hang in there, Namie!

Can't hear your voices!

I'll do my best!

Radiation exposure is great!
I'm going to do my best too!
Soma City sucks!
We're still gonna keep on going!
Radiation is leaking!
Radiation is great!
Is radiation great?
Is radiation really great?
I wanna take it a bit more!
Radiation is not great!
Stop screwing around!

Here is the 100th. So once we say this... Ohhhhh!
Can you get your hands ready?

Here we go!

Oooohhhhhh!

Thanks, all you guys!
Let's do our best to move to a brilliant future!

RANKIN AND DUB AINU BAND

(YOKOHAMA, JAPAN)



Rankin' Taxi is a Japanese reggae artist, from Yokohama. His 2011 anti-nuclear song 誰にも見えない匂いもない (You can't see it, you can't smell it) with Dub AINU Band, despite receiving little airplay in the mainstream Japanese media, attracted the attention of the *New York Times* in June 2011 in an article by Dan Grunebaum titled "Japan's New Wave of Protest" songs, after it became popular online following the Fukushima nuclear disaster.

GRETA YOUNG

(SANTA FE, NEW MEXICO)



Born in 1949 in Boston, Greta Young is a Santa Fe artist who studied at the California College of the Arts in Oakland California. There she started experimenting with mixed media on cardboard. She now focuses on combining drawing with painting, using black and white gesso, oil paint and oil stick on canvas.

Her work was selected by the Menil Collection curator Toby Kamps for an 8 person exhibit at the New Mexico Museum of Art in 2013. Her paintings have been seen in numerous exhibitions across the country including New York City, Chicago and Boston.

Shadows, 2012, gesso, oil and oil stick on canvas

Here,
the visuals are pretty
intense and with such black
deep shadows looming over
All in its glory.

Beauty in Los Alamos, a brain
rife with nuclear blasts
awe inspiring
awe in terror, waste and radiation.
Its drip.
Can it seep into us?

A seething fire
so perilously close.
The burning ash
leads to evacuation.
Homes gone.

The summer hot flames
whisk too close to the
Lab.

Could it blow?

There's a fear near the surface.
It deepens and deadens
as winter comes.
But this fear does lurk
underneath.

Does every city have a fear?
The scratch
and there it is.
Ripe for every artist to
reap its beauty its brain its terror.
Material to build
a vehicle to ride
and there it is.
Finally
The Masterpiece.

PETER CUSACK

(LONDON, ENGLAND)



Peter Cusack is a field recordist, sound artist and musician with a special interest in the sound environment and acoustic ecology. Projects include community arts, researches into sound and our sense of place and documentary recordings in areas of special sonic interest (Lake Baikal, Siberia). His project *Sounds From Dangerous Places* explores soundscapes at sites of major environmental damage - Chernobyl exclusion zone; Caspian oil fields; UK nuclear sites. He describes the use of sound to investigate documentary issues as sonic journalism. He has initiated many sound-based projects throughout Europe, recorded numerous CDs, lectures on his work at London College of Communication, and has been a research fellow and DAAD artist in residence.

Lost Shoes, Pripjat kindergarden, Chernobyl exclusion zone, 2006, digital photo

My visits to the Chernobyl exclusion zone to collect material for *Sounds from Dangerous Places* took place in 2006 and 2007, twenty years after the disastrous nuclear power plant accident that put Chernobyl on the map and displaced thousands of people.

I have two particularly strong memories from the trips. One was the prolific springtime bird song and the beauty of the landscape. In the absence of humans (people had been evacuated), nature has spectacularly restored itself, creating a successful ecological balance within a changed environment.

The other is the people I met during those visits and the realization that, whatever the scale of disaster, life for the vast majority goes on – for years, decades, whole lifetimes afterwards. Whatever help is, or is not, offered by governments and other agencies it is individual people, families and local communities who bear the brunt of adapting their lives to vastly changed circumstances.

For me, this reality is personified by Svetlana Tsalko, now approaching her 80s. Originally evacuated from her home village of Duminskoye after the disaster, she decided to return there (at first illegally) unhappy with life elsewhere. In response to the catastrophe, she began to compose poetry based on her acute observations of the relationships between people and nature and how these had been abruptly severed. Here is one of her poems.

“People, where should I look for you?”

*I would walk out of my house,
And stand on the threshold.
Looking around me. And the tears would start.*

*Nightingales are singing in the green field.
The cuckoos are calling,
Calling and asking,
“Why are you leaving us?
The crane is circling above the ruined house
Circling and asking,
“People, where should I look for you?”
Don't look. You won't ever find us.
All driven away like water
That disappears from the field.
O God why do you punish us so,
Sending us away from our homeland
To a foreign country?*

LUCA ZANIER

(ZURICH, SWITZERLAND)

*Here at home I know every place I see.
Wherever I look I find nourishment.
In my native woods there are red berries.
Bread and mushrooms are food for us.
But in the foreign land the sun come up
In a different sky.
And brings to us settlers such sadness.*

*What are we to say, what are we to do?
Who should we ask, what should we expect?*

- Svetlana Tsalko

Svetlana speaks of the long understanding that exists between humans and nature. Birds are as saddened and disturbed by the sudden absence of villagers as the people are by forced evacuation. At a time when we are beginning to understand the consequences of exploiting natural resources and also the interconnectedness of all things, we can learn from people whose culture and practices have sustained them for so long.



Svetlana Tsalko, 2007, digital photograph



Luca Zanier was born in Zurich in 1966. After being trained in photography he worked as an assistant to numerous national and international photographers. Zanier then founded his own studio in Zurich and since 1993 he has been working as an independent photographer, focusing predominately on landscapes, stills, people and documentation as well as on free artistic work.

Zanier's work has been displayed in various group and solo- exhibitions across Europe and has received numerous awards from Review Santa Fe and Prix de la Photographie Paris. Most recently, newspapers and magazines such as Le Monde, Newsweek as well as Wired have featured his work. Zanier's first book, entitled *Power Book* was published by Benteli in June 2012.

Trianel I (interior view of cooling tower), 2011, digital photograph

Enormous spaces, endless walkways, wide sluices, cryptic signs; all combined with miles of cables and pipes. They form a technical universe that radiates a cool logic. This is a hidden world, known only to a few people and yet it has a huge – in fact, essential – influence on our day-to-day lives. Nuclear power plants, coal-fired power stations, storage facilities for nuclear waste and other energy systems can at the same time intimidate and fascinate a visitor. They seem to have originated from other planets or science-fiction films. They are strange worlds, cathedrals of industry, temples of an energy-guzzling society. Energy systems are almost secret spaces, highly protected against accidents and terrorist attacks.

My intention with these photographs is to capture these plants on film in an artistic manner. Pure information is in the background. The focus is on perspectives, colours, and shapes. What I am proposing is to dissipate technology into aesthetics, at least to a certain extent. Only the caption will remind the beholder of what he or she is contemplating: a highly complex system upon which our modern life depends. Energy systems serve us and, at the same time, can threaten us. Yet few of us really know what they look like.



Nina Elder, *Trianel I (interior view of cooling tower)*, 2011, graphite and radioactive charcoal on paper

TONY PRICE

(1937 - 2000)



Obsessive artist, counter-culture icon, compassionate father, musician and sage - Tony Price (1937-2000) was a complex man who touched the lives of countless individuals and deeply affected everyone who knew him. His life and career was a journey of self discovery and a quest for objectivity. Soon after moving to El Rancho, NM, in 1967, and upon discovering the LANL salvage yards, Tony dedicated his life to the creation and exhibition of 'Atomic Art'. Tony relocated from Santa Fe to Reserve, NM in 1993 where he constructed a studio to work and to display the collection of one hundred fifty metal sculptures. In 2014 The Friends of Tony Price, a non profit organization, and his three children, Rosanna, Zara, and Jed, plan to move the collection to Santa Fe, making a permanent home for his legacy.

Image courtesy Elliot McDowell

Tony Price, the man, was so horrified by the bomb's potential to thoroughly alter lives by its mere existence – and to end all life by its actual use – that he had to awaken all those who would be oblivious to obliteration to what he called “our atomic nightmare.”

Tony Price, the artist, used the very tools of possible atomic devastation to open their eyes.

This artist, musician, iconoclast and dreamer applied his art to further his doctrine against destruction by dedicating more than thirty years of his life to creating the prophetic and visionary body of work he called Atomic Art. His decision to do so was both urgent and personal:

“If the effort could be made to neutralize the bomb with the same intense effort it took to create the bomb, I know the task could be done, because nothing is impossible.”

He also considered this as his responsibility as an artist. To see Price's Atomic Art is to be struck by the many layers of meaning behind it. His method of turning something widely viewed as extremely negative into something positive, and the sardonic humor infused into the work invite looking beneath the surface and within the layers to find the artist's philosophy and understand the context in which the work was created.

Price utilized humor artistically as a relief valve to mitigate the terrifying nature of the subjects he was addressing and made his powerful message more palatable to the viewer. His humorous titles and expressions recall the clown or trickster who, through the release of laughter, gives the viewer a kind of space, or breathing room, to look at the reality he was communicating. As Hugh Romney (aka Wavy Gravy), once put it, “Tony had a sense of the divine goof and he would occasionally project that into the metal expressions that were formed on his artwork. You'd just look at it and howl because it resonated with the divine goof in you.”

Price himself explained the intended purpose of his alchemic transformations of atomic salvage into iconography of the world's spiritual and religious traditions:

Objectively, I know there are vast energy banks of super-good energy available. For each religion is like a giant capacitor in the fourth dimension, holding and dispersing the energy of its followers. Now all I had to do was create symbols corresponding to the energy banks of these religions, using the material of the nuclear weapons energy system. When the vibrations of the nuclear scrap have been shaped into spiritual energy images, a vibrational tunnel or bridge is formed from the religious energy banks to the nuclear weapons banks, and an automatic balance of energies would be established. These sculptures act as valves, bringing the dark and light energies together to balance and thus hold the peace.

by James Rutherford, Friends of Tony Price

ED GROTHUS

(1923 - 2009)



Edward B. Grothus (1923-2009) loved people and loved his work. An iconoclastic entrepreneur and visionary, he moved to Los Alamos in 1949 to work first as a machinist and later as a technician at the Los Alamos Scientific Laboratory. He resigned from “the Lab” in 1969. Ed and his wife, Margaret, then purchased and operated a southwestern gift store, The Shalako Shop, from 1969-1994. In 1953, while still employed at the laboratory, Ed founded the Los Alamos Sales Company. He operated this recycling/re-sale venture, later known as The Black Hole, until his death. Although a renowned destination for artists, tinkerers, and tourists, The Black Hole also provided a platform for Ed’s various anti-nuclear activities, which he pursued seriously and with humor for more than 30 years. Before his death, he designed and commissioned two forty foot tall granite obelisks (“Rosetta Stones for the Nuclear Age”) made in China and shipped to Los Alamos. The installation of these monuments has yet to be realized.

Image courtesy of Grothus Family

I first met Tony Price around 1967. He’d recently moved to New Mexico and was living in Pojoaque with his young family. My father met him at the salvage yard in Los Alamos, and one weekend we piled into the station wagon and drove down “the hill” for the afternoon. Tony was making chimes from various salvaged metals, and they dangled from big cottonwoods. Below perched a piano soundboard. Tony made music bouncing a variety of metal objects off the strings. He’d made a gourd into a cat with turquoise eyes; all prototypes of objects he refined over the years.

Inspired by Tony’s inventive use for salvage, my father got the idea that “atomic surplus” would sell in Santa Fe. In 1969 he rented a small storefront on Cerrillos Road and hired Tony to run it. Tony was friendly with the ashram outside town. One of the women had “smote her eye,” thus creating a gruesome visage. Tony engaged her to meditate in the display window of the store. Years later he described this as a fitting image for a business selling nuclear detritus. Apparently the concept of the place (both Tony’s and Ed’s) was too visionary for the times, and the business closed.

They remained friends and began a long and multi-faceted relationship laced with common interests and a certain humor. *The Last Salt Talks* and other works inspired my father, by then a long-time anti war activist. Tony’s masks were well-crafted and as conceptually strong as beautiful. As a machinist, my father had immense appreciation for the materials that attracted Tony’s eye. We attended numerous events for Tony and his work over many years. Ed was not an artist, but in his last decades began to apply his intellect, skills and humor to objects and performance, intending to articulate his ideas in opposition to “the nuclear business.” Tony was clearly influential in this development.

Ed had a successful retail operation in Los Alamos that became known as The Black Hole. He died in 2009, and the enterprise (or collection?) lost a master entertainer along with the vast knowledge for how and what use the massive accumulation of inventory was suited. The business declined. After my mother died in 2012, we began the closure of The Black Hole. Our country no longer makes the beautifully-crafted machinery and equipment that was found there. It is sad to see so much of it become scrap.

In 2007, Ed had two granite obelisks made in China and shipped to Los Alamos. These monuments for the nuclear age remain in shipping crates at The Black Hole. They will be erected eventually. The archives of his political work against war and his efforts to encourage the use of the sun in lieu of nuclear energy will eventually find a proper home. His well-deserved legacy will be preserved.

He would be pleased to see this exhibition, and he would be gratified to see the work that others continue to do to reprise and reappraise *Atomic Surplus*.

by Barbara Grothus

The Mission of the CCA is to create, maintain, and promote a vibrant regional gathering place for the exploration and presentation of diverse and challenging contemporary art forms and ideas through interdisciplinary programs: film, visual arts, performance, and educational outreach.

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ATOMIC SURPLUS

