

Focus Gallery

Exposed: Today's Photography/ Yesterday's Technology

Cardinale Project Room

Captured: Photography's Early Adopters

The Lounge

Liz Steketee: Reconstructed Memories

July 17 – September 19

Related Program:

August 12, 7-9pm

Tintype demo with Michael Shindler

Admission \$10 | Space is limited

Call Susan to sign up 408 283 8155

Coming soon:

01SJ Biennial September 16-19

Throughout San Jose

<http://01sj.org>

FOCUS GALLERY

Exposed: Today's Photography / Yesterday's Technology

Since the introduction of the digital camera more than 20 years ago, the computer has replaced the darkroom in the 21st century. However, even with the sophisticated advances of the digital age, a growing number of artists are embracing 19th-century photographic technologies to make their work. Inspired by the rich history and alchemic experimentation of these obsolete practices, the artists in *Exposed: Today's Photography / Yesterday's Technology* create images using archaic photographic methods. Making work on paper, using aluminum, copper and silver, with wet plates and dry plates, and utilizing chemistry like collodion, carbon, platinum, palladium, and potassium bichromate, the works in this exhibition range from daguerreotypes to tintypes and gum prints to cyanotypes.

Paradoxically, technology has greatly contributed to the enthusiasm, interest and renewal of antiquated photographic processes. Many artists utilize digital tools along with historic practices to make hybrid works. Active online communities provide a forum to share recipes and practices. While photographic technology continues to advance and evolve, making digital photography faster and cheaper, the artists in *Exposed* return to the origins of the medium in order to re-engage with the physical aspects of the practice and look to the history of photography for technical insight and visual inspiration.

Stephen Berkman and Joy Goldkind create portraits that take advantage of the drama and historic patina of antiquated photographic processes while Kerik Kouklis and Michael Shindler utilize the slow pace of tintype production to make intimate portraits of people in their lives. Artists Binh Danh and Andreas Hablutzel employ the daguerreotype and the pinhole camera respectively to confront the aftermath of war. Danh's mirror-like daguerreotypes provoke self-reflection and invoke the memory of the atrocities in Cambodia under the Khmer Rouge while Hablutzel's photographs document the site of a former concentration camp in Germany with the long exposure of a pinhole camera. Ben Nixon, Rachel Heath, Nathaniel Gibbons, Brian Taylor and Chris McCaw create landscapes that rely on chance and serendipity. Nixon, Heath and Gibbons hand-make wet collodion plates, a process that often results in unexpected and painterly patterns in the image. Taylor's four-color gum bichromate prints are exposed in sunlight for up to eight minutes and McCaw's unique process relies on the power of the sun and camera lens to literally burn the printing out paper during a long exposure. Inspired by the fruitful play between past associations and current intuitions, the artists in *Exposed* examine the various materials and formats of antiquated processes while returning to the hand-made quality of image-making. Part chemist, part artist, part historian and part experimentalist, all of these photographers share an interest in utilizing old technology to create new imagery.

ARTISTS IN ALPHABETICAL ORDER:

Stephen Berkman

Looking to the past for inspiration, Stephen Berkman stages elaborate tableaux of 19th-century characters in his work. By using antiquated photographic technology and the visual cues of that time, Berkman takes advantage of the historical patina of the process to create implausible scenarios that are suspended in time.

Berkman uses the wet plate collodion process to make his theatrical images. Invented in 1851 and popular through the 1880's, the wet plate collodion is a temperamental process, requiring swift and economical motions. To make one, Berkman holds the plate in one hand and pours the syrupy collodion evenly on the surface of the plate with the other. Before the collodion dries, he bathes the plate in a solution of silver nitrate, which creates a light sensitive plate. While the plate is still wet, he exposes it to light and immediately develops it.

Born in Syracuse, NY, Berkman is based in Pasadena, CA. Currently a member of the film faculty at the Art Center College of Design, his film work has been screened in both national and international film festivals. His photographs have been featured in the book *Photography's Antiquarian Avant-Garde, The New Wave in Old Processes* (Abrams Publisher, 2002) and in 2002 he was commissioned to create photographic tintypes for the feature film *Cold Mountain*.

Linda Connor

Linda Connor has led a creative life devoted to photography. With her large format camera, she has traveled to Africa, Southeast Asia, Nepal, India, Turkey, Mexico, Tibet, the American Southwest, and Europe exploring sites that evoke mystery and spirituality. Her luminous and iconic photographs reflect her own fascination with culturally sacred sites and landscapes. According to Connor, the essence of her work is to suggest the indescribable.

She uses a distinctive technique: a large-format view camera which gives her photographs a very fine sense of detail. Her prints are created by direct contact of the 8x10-inch negative on printing-out paper. She exposes the negatives in her garden using nothing more technologically advanced than sunlight. Finally, Connor tones the prints with gold chloride. Due to the remarkable tonal range of the printing out paper, her prints have a very distinctive look: dark, yet with a distinct luminosity.

Connor studied with renowned American photographers Harry Callahan and Aaron Siskind at the Rhode Island School of Design and the Institute of Design at the Illinois Institute of Technology respectively. She went on to a distinguished teaching career at the San Francisco Art Institute, where she has taught undergraduate and graduate students since 1969. Her work has been exhibited widely in the United States and abroad and has been published in numerous books, journals, and catalogues. Her photographs are held in major museum collections including the Art Institute of Chicago, the J. Paul Getty Museum, the Museum of Modern Art, and the Victoria and Albert Museum in London. She has been supported by Guggenheim and National Endowment for the Arts Fellowships, among other recognitions for fine-art photography and education.

Binh Danh

Oliver Wendell Holmes, Supreme Court Justice from 1902-1932 and one of photography's first great critics, called the daguerreotype "a mirror with a memory." As the first photographic process to have widespread commercial success, the daguerreotype rendered detailed images on a polished and reflective surface. In his artwork, Binh Danh utilizes the mirror-like qualities of a daguerreotype to reflect upon histories of the past. Born in Vietnam, much of Danh's work investigates the human and spiritual aftermath of the Vietnam War (or American War, as they call it in Southeast Asia). In these daguerreotypes, some of the source images come from the archive of the Khmer Rouge, the totalitarian ruling party in Cambodia from 1975-1979, known for ruthlessly executing innocent civilians after carefully documenting them. Additionally, Danh creates daguerreotypes based on his own photographs taken in Cambodia of contemporary Buddhist monks and ancient temples. The mirrored surface and relentless detail of the daguerreotype provoke self-reflection while invoking memories of the past.

Danh makes his daguerreotypes in his garage, coating a sheet of copper with several layers of silver. After he carefully cleans and polishes the plate, he fumes it with iodine and bromine in a closed container to produce a light sensitive surface. He then exposes the sensitized plate and develops it by the chemical action of mercury vapors on the exposed silver iodide surface to produce an image.

Based in San Jose, Binh Danh received his BFA from San Jose State University and his MFA from Stanford University. His works are held in the collections of the Corcoran Art Gallery, The Philadelphia Museum of Art, the deYoung Museum, and the George Eastman House, among many others. He recently received the 2010 Eureka Fellowship from the Fleishhacker Foundation.



Nathaniel Gibbons, *Bridgeport Brass Panorama*, 2009, Tintype,
Courtesy of the Artist and William L. Schaeffer Gallery, Connecticut

Nathaniel Gibbons

In *Bridgeport Brass Panorama*, Nathaniel Gibbons documents the details of urban decay. Just as the early photographers traveled with their darkroom and cumbersome equipment when shooting photographs outdoors, Gibbons has outfitted the back of his Chevy as a portable darkroom to prepare and develop his one-of-a-kind images. For tintypes, his work is considered large in scale since the image is the same size as the view camera's lens. *Bridgeport Brass Panorama* is a triptych, with three unique images taken all on the same day and time. A master at his craft, Gibbons' process is slow and methodical while also open to the chance and serendipity of the process.

Gibbons is based in Connecticut and has been making tintypes for more than thirty years. His work is held in the public collections of Yale Art Gallery, the Museum of Fine Arts, Houston, the Library of Congress and the Museum of Modern Art.



Joy Goldkind, *Rose*, 200-2009, Bromoil hand-inked print, Courtesy of the Artist

Joy Goldkind

In a haunting series of black and white portraits titled *Girlfriends*, Joy Goldkind set out to make images that would explore the unexpected aspects of a subject's persona lying beneath the surface. The sitter is Goldkind's husband, who donned costumes and make-up in order to assume numerous female characters -- from a bride to a nun to a fortune teller to a cross dresser, to name but a few. However, despite the variety of characters being depicted, the facial attributes are identical in each image.

Goldkind has worked with numerous photographic processes from wet-plate collodion to platinum prints, only eschewing digital photography.

She now works exclusively with

the time-consuming and labor-intensive Bromoil process, in which a silver gelatin print is bleached to remove the silver and then inked with lithograph ink. The images are hand crafted using brushes, which adds a layer of mystery to the photos. Goldkind finds that she is able to manipulate the process to get more abstract than traditional photographic portraiture. She uses a double exposure and slow shutter speed to change what is true and expected in an image. According to Goldkind, "This method allows me to alter a traditional photograph and create a unique painterly print." She has the freedom to soften, blur or completely erase an aspect of the original negative. While these bizarre images were made using this historical technique, they are quite certainly from the 21st century.

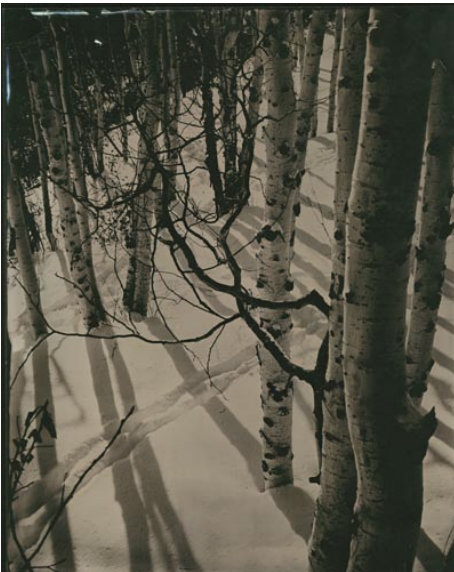
Goldkind was born in New York City in 1943 and graduated from the Fashion Institute of Technology and has studied at the International Center for Photography as well as Palm Beach Photo Center in Delray Beach, Florida. She began as a fashion designer for children's clothing but resigned after ten years to raise her family. At the age of 50 she took up photography. In the fifteen years since, her work has been shown in group and solo exhibitions across the country and is included in a number of private collections.

Andreas Hablutzel

Andreas Hablutzel's photographs document the site of the former concentration camp Buchenwald in Weimar, Germany sixty-five years after its liberation. The pastoral landscapes depicted here defy the horrors that were committed at this infamous site. However, the images transmit an ominous sense of evil. One knows that something has happened here, but it is not immediately apparent. Instead it is the memory of the place that survives in these images, the haunting inexplicability of Nazi atrocities.

In order to capture that foreboding quality in his photographs, Hablutzel has chosen to use a pinhole camera, the most elemental form of camera capable of producing an image. It consists of a closed light-proof box with a pinhole opening on one surface. Through the pinhole, light projects an inverted image of the subject onto a flat, light-sensitive material that has been placed on an internal surface opposite the opening. Because so little light enters through the miniscule opening, the negative material must be exposed for a long time. Therefore, the resulting images have a soft overall definition rather than crisp detail.

Andreas Hablutzel is a photographer and architect living in Brooklyn, New York. He received a BA from Rice University in Houston, a Masters of Architecture from the Southern California Institute of Architecture in Los Angeles, and an MA in Photographic Studies from the University of Westminster in London. His work has been exhibited in the United States, Switzerland, the United Kingdom, and Estonia.



Rachel Heath, *Untitled*, 2007, Ambrotype,
Courtesy of the Artist and
Stephen Wirtz Gallery, San Francisco

Rachel Heath

19th-century landscape photography required transporting the entire darkroom to rugged and often uncharted territory. Similarly, contemporary artist Rachel Heath travels with her large-format camera and portable darkroom to capture intimate landscapes using the wet plate collodion process. Heath is acutely aware that the work is in conversation with the long-standing tradition of landscape photography. She writes, "the traditional western landscape photograph regards horizon, ridge-line and distance as a grand vista on which one can impose one's own presence and fantasies." Heath considers this complex relationship between idealized images of nature and man's relationship with the landscape in her work.

However, for Heath, making the work is not just about the nostalgia of the landscape. She is also interested in how the antiquated process she employs calls attention to her hand in the work, often resulting in uncertain and surprising details that are not possible to achieve with digital tools. The collodion process she uses creates a surface for the exposed silver that produces a nearly grainless image. Also, because the plate is hand-made, its surface is never uniform, which often results in unexpected and painterly patterns in the background of an image.

Based in Oakland, Heath received her MFA from the California College of the Arts (CCA) and her BFA from UC Santa Cruz. Her work has been exhibited in San Francisco at Stephen Wirtz Gallery and at CCA. Nationally, her work has been exhibited at New Orleans Center for the Photographic Arts, and the School of the Museum of Fine Arts in Boston.

Robin Hill

Robin Hill's *Snowflake #1* is derived from a mathematical algorithm produced by Professor Janko Gravner of UC Davis, as part of his research on probability in crystal snowflake growth. This unique collaboration between a mathematician and an artist bridges natural and human sciences and has resulted in this huge and beautiful translation of mathematical data into a visual image.

Hill uses the 19th-century photographic technique of cyanotype (historically used for botanical studies), to create her ghostly blue and white images. The cyanotype records the quality of translucence and opacity in the material and also the distance the material is from the paper and any shadow it casts. The process is simple and involves two solutions, which are blended together in equal parts. The paper is coated with the solution and dried in the dark. The negative is then placed directly on the paper and exposed to the sun. After exposure, the print is processed by simply rinsing it in water. A white image emerges on a blue background.

Hill received her BA from Kansas City Art Institute and has had solo exhibitions at Don Soker Contemporary Art and the Davis Art Center. She has been included in group exhibitions throughout the United States and France, and received a Faculty Research Grant from UC Davis where she teaches. Hill divides her time between Woodland, CA and Cape Breton, Nova Scotia.

Kerik Kouklis

For the last few years, Kerik Kouklis has made tintypes of his daughter and her friends when they visit from college. Kouklis revels in the slowed-down pace of making tintypes in his studio. Unlike shooting with a digital camera, exposure time ranges from five seconds to thirty seconds, which dramatically heightens the relationship between the camera, the portrait sitter and the photographer. Also, like a Polaroid, the tintype is a one-of-a-kind photo, and the image is developed immediately after being taken. In this series, Kouklis asked each person to choose how they wanted to be photographed. After a day of shooting and developing the portraits together, they decided their images resembled a group of misfit superheroes and declared the series the *Santa Cruz Saints*.

A California-native, Kouklis has been teaching workshops in 19th-century processes for over ten years. His work has been exhibited in galleries in San Francisco, Los Angeles, Gualala and Yosemite and is in the collections of the Museum of Fine Art, Houston, and the Hoyt Institute of Fine Arts, Newcastle, PA.



Chris McCaw, *Sundburned GSP #277 (Tahoe)*, 2008, Unique gelatin silver paper negative, Courtesy of the Artist and Stephen Wirtz Gallery, San Francisco

Chris McCaw

The title of Chris McCaw's *Sunburn Series* is entirely literal. Setting up for long exposures in the Mojave Desert or by the San Francisco Bay, McCaw employs the most basic elements of the photographic medium: camera, lens and paper. He then lets his open lens work as a magnifying glass to focus the sun's light onto paper negatives. The resulting images document a landscape transformed by long exposures of the sun traversing the sky, scorching and often burning its path completely through the photographic paper. Paradoxically, the intense daytime images read as nightscapes.

Chris McCaw received his BFA in photography from the Academy of Art, San Francisco in 1995 and

studied photographic arts and film production at DeAnza College in the early '90s. His work has been exhibited throughout the United States and Europe and is in numerous public collections including SFMOMA, the Metropolitan Museum of Art, New York, the Victoria and Albert Museum, London, the Philadelphia Museum of Art and the Princeton University Art Museum. He has received numerous awards, including an Alternative Exposure Grant from the Andy Warhol Foundation for the Visual Arts. McCaw currently lives and works in San Francisco.

Beth Moon

The wondrous plants depicted in Beth Moon's series *The Savage Garden* represent a botanical variety that blurs the line between the vegetable and animal kingdom. In addition to sunlight and water, these plants require a diet high in protein. Their seductive beauty attracts their food – insects, worms, tadpoles, lizards and small rats. For instance, the transparent hood of the Cobra Lily is designed to retain and reflect light specifically to draw the attention of an insect. Tiny hairs in the Venus Fly Trap signal when a visitor enters the claw-like appendage, which will then snap shut, paralyzing and crushing the victim. Luring prey with an intoxicating scent, the external hairs of a Pitcher plant grow at an upward angle leading insects toward the top of a slippery lip where they fall like drunks and drown inside the trap.

Moon employs an equally seductive photographic process to depict these deceptively beautiful plants – a platinum printing technique that produces tones ranging from cool blacks to richer browns than can be obtained with traditional platinum printing methods. It requires no development. The process for making platinum prints was invented in 1873 and was popular until the 1920s when the price of platinum became prohibitively expensive. It was replaced by the somewhat cheaper palladium print, which employs a compound of the metal palladium rather than platinum. Both processes were valued for their great range of subtle tonal variations, which Moon has used so effectively in this series.

Beth Moon was born in Neenah, Wisconsin. Although she was a fine art major at the University of Wisconsin, she is a self-taught photographer. Her interest in photography was discovered somewhat indirectly while designing women's clothes. Moon hired photographers to document her new designs, but quickly decided to do it herself. She later sold the design company and continued to pursue her interest in photography, experimenting with various printing methods. She currently lives and works in the San Francisco Bay Area.

Ron Moultrie Saunders

To make his photograms, Saunders arranges plants on the surface of silver-based photographic paper and exposes them to light. Each resulting image is unique, capturing the subtle and fleeting changes of the plant as it begins to dry. For Saunders, the excitement of making a photogram is how it captures a moment of beauty.

Saunders uses the oldest form of photography to make these works. Made without a camera, the photogram fixes the shadows of objects that are placed directly on the surface of a photo-sensitive material and exposed to light. In the early days of photography, the photogram came to be regarded as nothing more than the infant stages of negative-to-positive photographic representation and the process became unimportant in relationship to photography's documentarian role. However, in the 1920's through today artists have revisited the conceptual, abstract and metaphoric qualities of the process.

Born in New York, Ron Moultrie Saunders is based in San Francisco. His work has been exhibited at the San Francisco Arts Commission, the Oakland Museum of California, Oakland Airport and the Center for Fine Art Photography in Fort Collins, CO.

Ben Nixon

The wet collodion process is integral to Ben Nixon's moody images of the American West. The syrupy collodion, which serves as the emulsion in the process, is poured on the surface of the plate. While 19th-century photographers desired a smooth and even pour, Nixon intentionally pours the collodion unevenly. In so doing, the process is open to surprising and sometimes dramatic effects, making the works dream-like or even ominous. Working outdoors, Nixon transports his entire darkroom with him to create, expose and develop the wet plate collodion glass negatives on site. He then makes a silver gelatin print from his negative.

Born in South Carolina, Nixon is currently based in Lake Tahoe. His work has been shown throughout the Bay Area including at Gallery 291, San Francisco; Morris Graves Museum, Eureka; and Rayko Photo Center, San Francisco.



Michael Shindler, *Untitled*, 2010, Tintype,
Courtesy of the Artist

Michael Shindler

For several months, Michael Shindler has been making tintype portraits of people he meets in his Mission district neighborhood in San Francisco. For Shindler, engaging with people and sharing his knowledge of tintypes is as important as making the work. Though a 19th-century technique, the chemical process of making a tintype is magical. Similar to a Polaroid, the tintype carries a direct and physical imprint of the subject and as the grainless portrait develops on aluminum in the darkroom, it reveals an image unlike any other photograph. Shindler delights in revealing the process with others and takes two photos during his portrait sessions, keeping one and giving one to the portrait sitter. He writes, “making photographs this way, one plate at

a time and with exposure times of several seconds, requires communication and cooperation between the photographer and the subject. The work is slow, but it is that slowness that helps to strip away some of the posed, constructed self that people naturally present to the camera.” When tintypes were invented in 1856, they were popular because they were cheap and could be produced on the spot. Shindler’s generous gesture plays with the history of the tintype as a memento while also documenting the diverse faces of his neighborhood.

A San Francisco based artist, Shindler has been making and teaching others how to make tintypes for over fifteen years. His work has been exhibited at Rayko Photo Center in San Francisco.

Brain Taylor

In an effort to escape the cacophony and speed of life in Silicon Valley, Brain Taylor often escapes to the woods to take long walks in search of a little peace and quiet. Of course, as is the case with most photographers, his camera is always with him. Rather than documenting the most sweeping or spectacular views that he may encounter along the way, Taylor chooses to capture more intimate arenas with a focus on the intricate and wondrous details of the forest. In the spirit of slowing down, he also uses an archival 19th-century process of printing that requires a great deal of time and patience.

Taylor's landscapes are produced using the gum bichromate and cyanotype printing processes. He starts with a sheet of rough watercolor paper, coated by hand with a layer of cyanotype photo emulsion. The light sensitized paper is then contact printed with a full-size negative and exposed in direct sunlight for ten minutes. After immersing the paper in water, a rich blue image emerges. The print is then hand coated again with a layer of gum bichromate solution containing green gouache pigment and contact printed in full sunlight for eight minutes. The second exposure gives the image more natural tones of greens and blues. After this layer has dried, a third exposure is made in brown pigment and developed to reveal a landscape now containing warm, natural tones of wood. A final exposure is made in black, to deepen just the shadows. In all, four exposures are made over several days in careful registration on top of one another to produce these handmade prints.

Taylor received a BA in Visual Arts from UC San Diego, an MA from Stanford University and an MFA from the University of New Mexico. He currently teaches photography at San Jose State University. His work is in numerous public collections including the San Jose Museum of Art, the San Francisco Museum of Modern Art, Smithsonian Institution's National Museum of Art, the Victoria and Albert Museum in London, and the Bibliotheque Nationale in Paris.



Brian Taylor, *Eroded Roots Stevens Creek*, 2010, Gum bichromate print, Courtesy of the Artist and Gallery 291, San Francisco

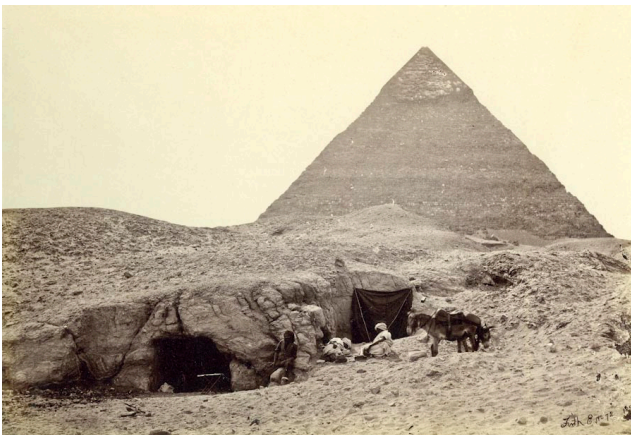
CARDINALE PROJECT ROOM

Captured: Photography's Early Adopters

It may seem odd to find a historical photography exhibition in a contemporary art space. However, in 1839 when Louis Daguerre announced his great invention, the daguerreotype, it was considered to be the most cutting-edge technology of the time. Since its origins at the end of the 1820s, photography has never ceased to evolve, both aesthetically and technologically. Photographers have consistently experimented with the chemical formulae as well as the physical conditions required to produce negatives and prints. And, they have continually redesigned and altered cameras and lenses over the years.

The photographs in *Captured* represent original examples of now-antiquated photographic innovations including daguerreotype, calotype, albumen prints, ambrotype, salt print, tintype, platinum prints, cyanotype, photogram, and photogravure, to name but a few. Each of these processes was considered to be a scientific miracle at the time. The exhibition provides a context for viewing the work of the contemporary photographs included in the adjacent exhibition, *Exposed*, which includes 21st-century examples of these antiquated processes. Both exhibitions provide an opportunity to marvel at the magical and mysterious darkroom technology that came into being nearly 200 years ago and continues to excite and motivate photographers today.

The works in *Captured* are all drawn from the collection of Stephen and Connie Wirtz.



Francis Frith, *Pyramid*, 1857, Albumen print with wet colodion

GLOSSARY OF PHOTOGRAPHIC TERMS

Albumen Print

Invented in 1850 by Louis-Désiré Blanquart-Evrard, the albumen print was the most popular print until the 1890's and the advent of the silver gelatin print. In the 19th century, the albumen print process offered the opportunity for photographers to make multiple prints from a single negative, making one-of-a-kind processes like the daguerreotype and ambrotype obsolete. To make, a sheet of paper is floated on a solution of egg white and sodium chloride. After the paper dries, it is sensitized by floating on silver nitrate and dried in the dark. The paper is exposed in contact with a negative and then placed into the sun to print (see printing out paper).

Ambrotype

The ambrotype process was patented, although not invented, in 1854 by James Ambrose Cutting, who popularized ambrotypes in the United States. Similar to the daguerreotype in size, appearance and mechanics, ambrotypes were also used primarily for portraits and were presented in hinged cases. Since they were faster, cheaper and simpler to produce, and the image was non-reflective and easier to view, the process quickly replaced the daguerreotype. The ambrotype is a collodian-on-glass image that has been underexposed and then developed in iron sulfate and fixed in cyanide (see collodian on glass negative). When placed against a dark background, the result is a positive image with incredible detail.

Bromoil Print

Developed in England in 1907, the bromoil process is known for its soft, painterly qualities. The bromoil process depends on the underlying principles of lithography, namely, that oil and water repel each other. The process uses a silver gelatin print that has been bleached in a chemical solution. As a result, the image disappears and the gelatin hardens in direct proportion to the amount of silver that comprised the image. The paper is then soaked in water in order for the gelatin to absorb water. Lithographic ink is then dabbed on the surface with a special brush or rolled on with a print tool called a brayer. Where the gelatin has absorbed water (in the highlights and to a lesser degree, the mid-tones), it repels the oil-based ink. In the other areas without water, the ink applies to the paper, thus creating the image.

Calotype

In 1840 William Henry Fox discovered the calotype process for making paper negatives, which he used to make positive prints. Unlike the daguerreotype, the calotype involved a two-step process of negative to positive image making. Early negatives were made with uncoated paper, creating a somewhat diffused image. By the mid 1850's, calotype negatives were replaced by collodion-on-glass negatives. The term calotype has sometimes been used to refer to the salted paper prints made from calotype negatives, as well as the negatives themselves.

Collodion on Glass Negative

The process of making collodion on glass negatives, also known as wet-plate negatives, was announced by Frederick Scott Archer in 1851. It quickly eclipsed other negative processes until the 1880's, when readymade dry plate gelatin on glass negatives became available. Generally used to make salt and albumen prints, the process provided enhanced detail and shorter exposure time.

To make a collodion negative, the syrupy collodion solution is evenly poured on a glass plate. Before the plate vaporizes, it is immersed in a solution of silver-nitrate, which makes it light sensitive. The plate is placed, still wet, in the camera and exposed to light. Then, it is immediately developed and fixed. A slow and inconsistent alternative to this process was the dry plate or preserved collodion negative, in which an additional coating is added to the sensitized plate to keep it moist, thus allowing the photographer to prepare it in advance.

Contact Print

A contact print is made by putting light sensitive paper in direct contact with a negative and exposing it to light. The resulting image is the same size as the negative. Since the practice of enlarging a negative was not mastered until the 1880's, most 19th-century photographs were produced through contact printing.

Cyanotype

In 1842 the astronomer Sir John Herschel, who had discovered the light sensitivity of iron salts in his scientific research, invented the cyanotype. To make one, paper is coated with iron salts and then dried in the dark, thus making it photo sensitive. An object, drawing, or a negative is placed in direct contact with the paper and then printed out in direct sunlight. The exposed paper reveals a mauve image until it is fixed in water. The oxidation of the chemicals creates a brilliant blue image.

Daguerreotype

The daguerreotype was introduced in 1839 by Louis Jacques Mandé Daguerre and was the first photographic process to have widespread commercial success, only to be superseded two decades later by ambrotypes, tintypes, collodion on glass negatives and albumen prints. The daguerreotype is a unique photographic image on a sheet of copper coated with silver. The advantage of the daguerreotype over other processes was its stunning clarity. Because of its delicate nature, in the 19th century, it was usually preserved in a sealed leather case under a sheet of protective glass. To make a daguerreotype involves a series of complicated steps. The silver coated plate is carefully cleaned and polished and then fumed with iodine and bromine in a closed container to produce a light sensitive surface. The sensitized plate is exposed in a camera and then developed by the chemical action of mercury vapors on the exposed silver iodide surface to produce an image.

Gum Bichromate Print

Introduced in 1894 and popular into the 1920's, the gum bichromate process for making prints from negatives enabled photographers to create an image with a broad range of tones and diffused details, resembling a charcoal drawing or watercolor. A solution of gum arabic, pigment and potassium bichromate is brushed onto paper. After drying, the paper is exposed to light in contact with a negative. The gum bichromate hardens in direct proportion to the light exposure. Where the negative is dark, less light reaches the paper, and the gum does not harden. The soluble gum bichromate is washed away with water. The photographer can further manipulate the print by exposing the print a second and even third time after coating it with another layer of gum bichromate.

Photogram

A photogram is a photographic image that is created without a camera and relies entirely on the action of light on light sensitive film or paper. An object is placed directly on the film or paper where the object blocks the light, the paper is not exposed and remains white. William Henry Fox Talbot's first experiments with photography resulted in photogenic drawings, which later became known as photograms.

Platinum Print/Palladium Print

In 1873 William Willis was able to produce a viable platinum paper which was available commercially by 1879. In platinum printing, paper sensitized with iron salts is exposed to light in contact with a negative until a faint image appears. This paper is developed with chemicals in a process that dissolved the iron salts and replaces them with platinum, thus further bringing out the image. The final print has tones and textures not attainable with gelatin silver prints, and the process produces the most stable metal based print. During World War I, as the cost of platinum rose, palladium, which was somewhat cheaper than platinum but depended on the same process, was introduced as a substitute.

Printing-Out Paper

Printing-out paper refers to silver-chloride paper that is used to produce a photographic print from the action of exposure to light on the paper in contact with a negative. The image appears during the process of exposure to the light, not in a developing tray with a chemical bath. The exposure process can be halted at any time, at which point the excess silver is removed in a water bath and the print is toned (optional), fixed and washed again.

Silver Bromide Print

See Silver Gelatin Print

Silver Gelatin Print

The first papers coated with an emulsion of gelatin silver halides were introduced in the 1870's, following the introduction of gelatin on glass negatives. This innovation came into general use in the following decade and has remained the standard form of black and white photography because of its superior efficiency, consistency and stability than the preceding albumen process.

Tintype

The tintype was invented by Hamilton Smith in 1856. The name tintype is misleading since the process depends on a thin sheet of japanned iron, not tin, as the substrate for the image. Like the ambrotype, the tintype is a collodion image that appears to be a positive against the dark support. It is underexposed and then developed in iron sulfate and fixed in cyanide. Tintypes were inexpensive to produce and were a very popular method of portraiture in the second half of the 19th century. In some countries, their use persisted well into the 20th century.

Van Dyke print

Also known as a kallitype, this process is the same as making a cyanotype. Unlike the cyanotype, the chemistry produces color tones from black to brown and sepia to purple.

Wet Plate Photography (see collodion on glass negative)

Sources:

Baldwin, Gordon. *Looking At Photographs: A Guide to Technical Terms*. Malibu: The J. Paul Getty Museum, 1991.

Rexer, Lyle. *Photography's Antiquarian Avant-Garde: The New Wave in Old Processes*. New York: Harry N. Abrams, 2002.

Wikipedia, The Free Encyclopedia

<http://en.wikipedia.org/>

THE LOUNGE

Liz Steketee: Reconstructing Memories

By altering old family snapshots with digital tools, Liz Steketee has re-written her family history to suit her own point of view. *Reconstructed Memories* takes the form of a series of family photo albums with altered photos that adhere to the artist's revisionist history. Presented in a mismatched 1970's living room, all are welcome to take a seat and peruse her reconstructed artifacts. Steketee selects unrelated images and digitally manipulates them into unlikely combinations to create new memories. She forges new relationships, addresses old confrontations, imagines different experiences, and faces old demons. "I disrupt linear narratives and recompose events, establishing my family history as a construct," explains Steketee. "Once these new snapshots have been finalized digitally, they are printed, aged and weathered according to their appropriate time period. This rebuilding of memory has allowed me to establish my own version of reality, as I prefer it."

Based in the Bay Area, Liz Steketee received her MFA in photography from San Francisco Art Institute. Her work has been exhibited at SF Camerawork, Rayko Photo Center in San Francisco as well as the Center for Fine Art Photography in Fort Collins.

Related Program:

August 12, 7-9pm

Tintype demo with Michael Shindler

Space limited, \$10

RSVP at info@sjica.org or call 408 283 8155

Coming soon:

01SJ Biennial "Build Your Own World"

September 16-19 throughout San Jose

<http://01sj.org>

Stay informed at www.sjica.org

Join our mailing list, see what's new
and download this gallery guide



Celebrating 30 Years

San Jose Institute of Contemporary Art
560 South First Street
San Jose, CA 95113
tel 408 283 8155 www.sjica.org

Hours

Tues - Fri 10 - 5
Sat 12 - 5
First Fri 10-10
Closed Sun-Mon