Disrobing in the Library of Congress

The Art of Rebecca Hackemann

New T.R. Williams Mysteries
A pack of flash bulbs has also been left on the floor, one of which was most likely used to light this scene. I especially like the vintage blonde wood television set with its curved edge screen! This Kodachrome slide in an old-style gray Kodak cardboard mount with red edges is unlabeled.

The second slide, also in an unlabeled old-style Kodachrome cardboard mount, was taken from the opposite end of the same room, and shows who I am assuming was the man of the house relaxing with a Miller High Life beer while looking at stereo slides. A Realist red-button viewer with an AC adapter cord is on the table in front of him, along with a large tray of stereo slides, an additional slide case beyond that, and the front half of a Realist eveready camera case.

Oddly enough, besides having been taken in the same room, these views have something else in common: both include a Milwaukee Journal in the foreground!

This column combines a love of stereo photography with a fondness for 1950s-era styling, design and decor by sharing amateur stereo slides shot in the "golden age" of the Stereo Realist—the late 1940s through the early 1960s. From clothing and hairstyles to home decor to modes of transportation, these frozen moments of time show what things were really like in the middle of the twentieth century. If you've found a classic '50s-era slide that you would like to share through this column, please send it to: Fifties Flavored Finds, 5610 SE 71st, Portland, OR 97206.

As space allows, we will select a couple of images to reproduce in each issue. This is not a contest—just a place to share and enjoy. Please limit your submission to a single slide. If the subject, date, location, photographer or other details are known, please send that along too, but we'll understand if it's not available. Please include return postage with your slide. Slides will be returned within 6 to 14 weeks, and while we'll treat your slide as carefully as our own, Stereo World and the NSA assume no responsibility for its safety.
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T.R. Williams, "Turning Barley." From the feature "T.R. Williams: Scenes in our Village -- New Discoveries, New Mysteries" by Brian May & Elena Vidal.

Back Cover:
Rebecca Hackemann, "The Institute of Incoherent Geography" from the feature "Optical Sculptures: Rebecca Hackemann's Stereographic Art" by Bruce Bahlmann.
A “New” 150 Year Old Stereo Mystery

Brian May started out with the solution to one stereo mystery (“Our Village Found at Last!” Vol. 30 No. 1) and has now ended up with an even stranger mystery embedded within the same “Scenes in Our Village” views by T.R. Williams. Why would a stereographer with the skill and experience of Williams make his views in the “retro” manner described in this issue’s feature by Brian May and Elena Vidal? And why use the puzzling, nameless camera that evidence suggests must have been employed?

Regarding those “vertical stereo cameras” photographed in Sydenham Crystal Palace in 1854, my own guess is that such a camera, used in the vertical position, could have been intended for shooting wide base stereos (maybe about 6 or 7 inches?) by sliding the camera to the other side of the board on which it seems to rest between exposures. By coating a single plate, placing it in the camera and shooting the left image through the top lens, sliding the camera to the other end of the board and shooting the right image through the lower lens, a mildly hyper stereo pair could have been created with minimal time lapse between the exposures. But that’s NOT how Williams used such a camera, as revealed by the sample views in the article. We invite readers to send in their thoughts as to how and/or why T.R. Williams shot sequential right/left pairs but simultaneous upper/lower images.

Renew Everything!

Many NSA members will receive renewal letters near the time this issue is mailed. The form, as usual, includes the opportunity to make an extra donation to the organization and its very special publication.

As both a nonprofit and the publisher of a unique example of the print media, the NSA is being hit with the dual challenges of stimulating growth in membership and trying to encourage existing members to renew and include donations at a time when so much is already needed by causes with infinitely more compelling emergency and humanitarian needs. In fact this year it feels sort of creepy to even mention donations while so many desperate, basic needs go unfilled in places like the mountain villages of Pakistan.

I have no idea if the concept of “donor fatigue” applies to non-profit organizations that are in no way charities, but simply interest groups without corporate ties or financial motives. I do know that the world’s response to disasters and emergency human needs depends heavily on media attention and convenient donation venues. It’s a system that works surprisingly well in dramatic situations for brief time periods, but that needs some basic organizational renewal for the sake of folks like those in Pakistan and any number of less publicized places.

A donation to the NSA of course feeds or shelters nobody. It’s really more of an investment in your own historical/artistic/technological passions that can be so important to renewing the human spirit in distressing times. And while we won’t take it personally if donations lag this year, that concept of renewal is more vital in every sense. Entities from ecosystems to societies to the NSA depend on constant renewal for survival. The good thing about the NSA is that we only need it once a year! But that one renewal a year is essential to nourish all those diverse and wonderful stereoscopic passions—and to keep exposing more people to the astounding multi-dimensional potential of visual communication.
Coming Soon to Stereo World

W.E. James

Mid 19th century stereographer William E. James is the subject of an upcoming article by his great grandson Randolph James. W.E. James was willing to travel almost anywhere in pursuit of his craft, from his home in Brooklyn to the middle east to Arizona and California. His views taken aboard the steamer Quaker City were later used as the basis for illustrations in Mark Twain’s Innocents Abroad.

Deep Tennis

Views of people playing tennis from the 19th and early 20th centuries are among the very rare. But founding NSA member Brandt Rowles has assembled several such gems into an interesting article (“Lawn Tennis and Stereoviews”) that includes background about what was worn for the game and what it all cost in the 1890s. More can be found in his book Lawn Tennis as shown by 19th Century Photography, recently published by Lulu Press, and available from www.lulu.com.

Drawing on the 3DD

Vladimir Tamari designed his first three Dimensional Drawing machine (3DD) in 1964. Since then, between painting, working in physics, and creating Arabic computer font designs, he has improved the device many times but never gone into commercial production despite articles in Stereoscropy, Camera Review and Popular Mechanics around 1984. A new Stereo World interview by Jean Poulot reveals the inventor’s fascinating history and range of interests along with some samples of mechanical 3-D drawings like this one done using the 3DD.

Magic Without a Mouse

Sculptor Kenneth Snelson reveals the pre computer graphic techniques behind his 1984 tabletop 3-D constructions in “Analog Stereo Magic”. Shortly after that, he started producing his imaginative, CGI atom stereos (SW Vol. 15 No. 1 page 17).

ISU Eastbourne

Can you name these NSA folks having fun at the 2005 ISU Congress in Eastbourne? A report from various people who were at the well attended event will cover the projection shows, exhibits, workshops and tours plus the organizational details leading up to 2007’s joint NSA/ISU world event in Boise.

GONE MADD

by AARON WARNER

3-0 by Ray Zone.com
Optical Sculptures
Rebecca Hackemann's Stereographic Art

by Bruce Bahlmann

The making of contemporary conceptual fine art begins with an artist's careful selection of the subject and ends with the method the artist uses to present the subject in a truly original way. While these criteria are the essence of what separates casual amateur artists from those highly innovative, trained, creative, and skilled in the art, it by no means guarantees their popularity or acceptance of their work within the art world. In the world of modern abstract art, specifically the art of stereo photography, selecting subjects and composing them in an original way is especially difficult. The following article explores the journey of one such artist who is reinventing the stereo art form in order to fulfill contemporary conceptual fine art criteria.

Photography: Much has been done, it is difficult to produce unique original work

Similar to modern day photography, stereo photography hasn't changed much over the years. Stereo imagery has been observed using some variation of the initial Holmes style pedestal stereoscope for years with some relatively recent digital format exceptions that require a computer to display.

In the same way that a frame is carefully chosen to present a painting in the best possible manner, an optical sculpture can be equally as important in presenting stereo images. The Holmes style viewer supported a clip for a card which held the two images, a visor that trained the viewer's eyes on the stereo images by manipulating the distance between the images and the lenses, as well as a stand (or pedestal) or a handle that allowed the viewer to optimally view the image. Some Holmes style viewers attempted to emulate the look and feel of fine furniture or sleek lines that might prompt their owners to proudly display them while others were more compact to the point where the viewer could store the apparatus in their pocket for portability.

The benefit of the Holmes style viewer was that it maintained the correct distance between image and the lenses; it could be viewed anywhere, it required only light (no wires, electronics, or batteries necessary), while allowing viewers to easily change the stereo photographs by simply replacing the card being viewed. However the idea of this apparatus never remotely resembled something people wanted to proudly display—let alone hang on the wall.

Similarly the idea of a portable stereo viewing device is a nice tool for stereo photographers but since it required viewers to have one handy as well as constantly adjust the correct viewing distance, such an apparatus also had its limitations.

While there is always the art (the stereo images) which speaks for itself in terms of the creativity of the photographer and the reaction the viewer has to the art, the delivery of stereo art or more specifically the viewing mechanism has always been either obtrusive, inconvenient, or unwielding in its technical or display requirements.

Reinventing the Delivery of Stereo Imagery

Rebecca Hackemann (www.rebecca-h.net) is an emerging contemporary artist/photographer but unlike many other black and white photographers, she has brought about a modern day reinvention of older stereo photographic presentation and content that begins with the evolution of her own stereo image delivery device she calls an optical sculpture.

Rebecca's first attempt at creating an optical sculpture was the cardboard box shown here which was complete with viewing lenses, an internal battery operated light source activated by a switch on the side, and a compartment that was filled with slides of stereo images that when placed into the slot just between the lenses produced a perfect stereo image for the viewer.

The cardboard box was covered with tea-stained Japanese paper and included many different instructions all around the box to show the viewer how to operate the viewing mechanism. While this initial attempt at creating an esthetically pleasing stereo viewer with many of the same advantages of the initial Holmes style viewer...
Flea Dream no. II: "The Dream Inspector", 2001

She wondered if she had changed at all during the night.

Stereo pinhole photo.

"The Institute of Incoherent Geography", 2002.

From the rooms of THE INSTITUTE OF
Incoherent Geography

...
First Stereoscope, 1993. A mobile sculptural object containing six 3-D slides about dreams.

was a success, the requirement of batteries (or anything other than light) was unsatisfactory. Further refinement was deemed necessary to produce a desired sculptural quality in the image delivery device.

Rebecca's next attempt at refining her optical sculpture was to build on her lessons learned to create a viewing device that did not require batteries. This creation was made of wood joined by nails and glue. Holes were drilled in the wood to house the viewing lenses and two stereo images affixed to the inside the enclosure opposite the lenses at the proper distance and viewing angle for the viewer. On top the enclosure (near the images) was velum paper which permitted diffused natural light to enter the optical sculpture allowing the stereo image to be viewed without the need for batteries.

Although this approach was popular, the mixture of wood and velum paper construction wasn't durable, and it lacked the sculptural qualities needed by viewers to proudly display such wall hung art. Cleaner lines were needed in the optical sculpture.

Rebecca next attempted moving to a molded transparent optical sculpture to illuminate her artwork within a more smooth, durable, and pleasing enclosure. She created a plastic mold that allowed a semi clear rubber to be poured into it yielding the open box shown here. Once complete, holes were drilled into the mold for lenses which were inserted as well as properly aligned stereo images. The top was covered with a cream colored canvas that was covered with an acrylic clear gel that made it look like skin or parchment. While this transparent box was much more aesthetically pleasing, the time required to construct the box and prepare it for display of the stereo images was overwhelming.

Through the years, Rebecca has fine tuned her own delivery device to an art. The latest optical sculpture approaches fine art in its own right and features a popular wood enclosure that is resistant to expansion and contraction with age. The wooden enclosure has holes drilled into it in preparation for lenses added later and is nailed and glued together and primed with all-natural rabbit skin glue and then covered in homemade gesso (the white undercoating of oil paintings). The gesso is from a 16th century recipe that is used for its archival qualities (meaning that it won't decay over the years) and its thick application. Gesso consists of rabbit skin glue and marble dust that can be easily sanded to a very smooth finish. Once sanded, the optical sculpture is coated with conservators' micro-crystalline wax to produce a sheen that makes it look like marble.

Atop this optical sculpture is a small rectangular hole that allows images and a \( \frac{1}{16} \) inch thick visual divide to be affixed down the center of the enclosure. The images are 3 x 3 inches and sit 8 inches away from the lenses which are affixed to the outside of the optical sculpture. The lenses are optical grade glass bi-convex lenses with a 4x magnification, a focal length of 300 mm, and a diameter of 38 mm. The rough dimensions of the optical sculpture are 8 inches wide, 5 inches high and 9 inches deep. The rectangular hole is then covered with light diffusing Plexiglas and some meaningful aspect of the image housed inside the box is hand written on the outside of the optical sculpture with archival quality paint.

Rebecca has gone to great lengths so that her optical sculp-
tures will stand the test of time and don't require any electricity, batteries, or a computer. Similar to a painting on the wall that only requires natural light, so long as there is light of any kind (incident light), one can forever enjoy the personal experience of viewing her art through these hand crafted and esthetically pleasing optical sculptures.

The art inside presents a personal visual experience between the medium and the viewer

Rebecca spends a lot of time thinking about each shot and her art form spans many humorous contemporary political and societal issues as well as language and how its meaning is constructed. Rebecca’s stereo art represents a world that reflects images that have been carefully planned out and matched with representative text during a lengthy idea/creativity stage. Sets or subjects are then constructed or made up within a studio, photographed using a Sputnik 120 stereo twin-lens reflex 2 camera or dual Rolleicord 120 twin-lens reflex cameras or two homemade pinhole cameras (made from converted Holga 120 cameras), and then (if necessary) any other desired effects are constructed in the dark room prior to final image printing (the most common effect is the addition of the text to the photograph). The resulting prints are stereoscopic black and white constructed photographs (silver gelatin prints) of a fictional world with text.

Assembly and presentation

Once these individual piece(s) have been assembled and mounted on a wall, they become part of the wall, thus allowing potential viewers to observe other viewers interacting with the visual sculpture without knowing what they are viewing or seeing. Similarly, when the viewer is looking in to the image within the box, they may realize that others could be observing them, however their primary focus is their experience of viewing the image within the box.

Experiencing Rebecca's art is about looking and seeing. The content of photography in general is about how we see the world. Just as two human eyes see in 3-D, so do the lenses on a stereo camera.
I doubt that I will ever recall the source of my stereoview "Disrobing" from the series "My Lady's Bath" by William H. Rau. I probably bought it at a stereoview show, but I don't remember. After a while, and after looking through thousands of views, I become so mesmerized that I stop paying much attention to the details of what I am buying. I know that I had already owned a number of Rau stereoviews, and I remember the reason why this one caught my eye. Below the photos, there is handwriting in black ink that states, "X2714 My Lady's Bath - Disrobing (1) Copyrighted 1900 by William H. Rau." Was this an original signature by the famous photographer? It would be interesting to find out. Some months after my purchase, I finally took the time to attempt to verify the signature using data and images on the Web. On re-examination, I noticed ink stamps on the reverse side. A blue stamp contained the phrases "Library of Congress" and "Not to be taken from the Library." A black stamp informed me "TWO COPIES RECEIVED, Library of Congress, Office of the Register of Copyrights. JAN 12 1900." Was I holding stolen property? I doubted it, as the copyright had surely expired decades ago, and there was no longer a need to retain samples as proof of copyright. A pencil note on the card indicated that I had paid only $2.50 for the view.

William H. Rau (1855-1920) was a professional photographer for at least 46 years of his life. He married the photographer Louise Bell, who was the daughter of another photographer, William Bell. In 1874, when Rau was only 19, William Bell secured a position as his son-in-law as a photographer on a US Government expedition to the South Seas to observe the transit of the planet Venus. Subsequently, Rau's life was filled with travel and projects based upon his photographic talents. He made an extensive set of stereoviews in Egypt and worked for a time in the Southwestern United States with the photographer William Henry Jackson. He was the official photographer for the Pennsylvania and Lehigh Valley Railroads as well as for exhibitions celebrating the Louisiana Purchase and the Lewis & Clark Expedition. In 1885, he opened a photographic studio in Philadelphia where he became a successful portrait photographer. Today, his work can be found in many museum collections, including the Smithsonian, the New York City Museum of Modern Art, the Getty Museum, the George Eastman House, and the Library of Congress. In addition to his studio portrait work, Rau made stereo-views of ladies wearing bloomers and corsets. This was considered to be risqué photography during the Victorian era, and the series, "My Lady's Bath", is from that time. Other samples of Rau's risqué stereo work can be found on the web site, http://victoriana.com/library/doors/stereoviews.htm.

The site's illustrations demonstrate that Rau pursued a number of risqué themes besides bathing. However, the common thread in all of those views was that they exclusively depicted women wearing just their undergarments. By today's standards, these pictures seem modest and even a little prudish. However, I wondered how they might have been seen in their time. One opinion can be found in a perceptive essay by Heather Palmer at the web page http://victoriana.com/library/doors/ TheStandard.htm. She analyzes a risqué 1890s magazine, The Standard, and points out that "the sight of a woman's legs were [sic] considered to be so aphrodisiac to men that women sometimes made 'skirts' for their furniture." Palmer's thesis is that Victorian risqué pictures were perceived then as we now perceive pornography.

By definition, "a copyright" is the exclusive right to copy a work. The first copyright protection laws were prompted by the invention of the printing press, which made it very easy to copy books. Creators and/or owners of written materials needed protection from copy theft. A prototype for U.S. copyright law was the 1710 legislation in England known as the Statute of Anne. That act established some limited protection for an author's ownership of copyright for a period of 14 years, with optional renewal for an addition 14 years. Clearly, copyright protection was an important issue in the United States from the outset. In 1787, Article 1 of our Constitution stated that "the Congress shall have power - To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

In 1790, the First Congress of the United States implemented this Constitutional provision with our country's first copyright act. As with the Statute of Anne, it provided for two 14 year protection intervals. The original act only covered
maps, charts, and books. Congress extended the first protection interval to 28 years in 1831 to give American authors the same protection as those in Europe. Photography had not even existed when the first copyright laws appeared, but the importance of photographic copy protection was considered very early on. The Civil War photographs (and stereographs) of Mathew Brady were largely instrumental in making our Congress aware of the need to protect photographic ownership. Thus, on March 3, 1865, President Lincoln signed the legislation which added photographs to the list of copyrightable works. For many years, copyright recording and enforcement was the responsibility of all of the U.S. District Courts, but, in 1870, a law centralized U.S. copyright functions in the Library of Congress (LOC). That same law required that two copies of a copyrighted work be deposited within the Library. Though the deposit provisions were not always enforced, those deposits have helped to make the LOC the largest and most comprehensive library in the world. Considering stereoviews alone, the Library's web site [http://lcweb2.loc.gov/pp/stereohtml/stereohome.html](http://lcweb2.loc.gov/pp/stereohtml/stereohome.html) reported in July of 2005 that its holdings in the Prints and Photographs Division totaled over 52,000 views. My short history covers U.S. law up through the copyrighting of Rau’s 1900 stereoview, “Disrobing.” Many changes to U.S. copyright laws have taken place since that time. I planned a vacation in Washington, D.C., in June of 2003, and I allocated a portion of my visit to
learning, first hand, the workings of our Copyright Office. My rationale for approaching the LOC would be the mysterious Rau view. My friends told me that I was crazy to investigate potentially stolen property. However, I was willing to return the view if it were proven to be stolen.

I began my search at the LOC’s Jefferson Building. This imposing 1897 structure is the place that most tourists identify as the LOC. Located next to both the U.S. Capitol and the Supreme Court, it is easy to find. Notable among its famous collections on display is a Gutenberg Bible, the first book printed with movable type. At the information desk, I learned that the Copyright Office is in the James Madison Building, located across the street to the south. All of my subsequent research was in the Madison Building.

After going through the omnipresent Washington metal detectors and bag searches, I went to the Copyright Public Information Office on the fourth floor. I explained the uncertain origins of my Rau view to a staffer and was happy to find that he was also a collector of stereoviews. This helpful man gave me a list of offices to visit for my search. First, he told me that I would need official permission to use the collections, and this could be accomplished by getting a library card.

To me, a library card from the LOC was the ultimate Washington keepsake! Apparently, other people had had the same idea. There was a sign in front of the first floor office announcing that such cards were “NOT AVAILABLE AS SOUVENIRS.” After waiting in line, I filled out a computerized form and was photographed. Another short wait and I received my full color Reader Identification Card. It has no expiration date.

Returning to the fourth floor, I was told to go to the “Certificates and Documents” section. There, I stood in another line only to learn that no records existed for the year 1909. No reasons for that omission were offered.

In another room on the fourth floor, I searched through a portion of the Copyright Office’s card catalog that dealt exclusively with photography. Because of the vast number of copyrights, and also because of the changes over time in techniques for recording registrations, records are divided into nine time periods. The “Graphic Arts Index for 1898 - 1937” was housed in rooms that reminded me of the huge government warehouse at the end of Raiders of the Lost Ark. The rooms were filled with cabinets of file cards organized primarily by claimant. It was here that I found my first hard information, the original registration card for the series, “My Lady’s Bath.” While individual views in the series were not identified by name, I matched the two handwritten numbers on my view with an entry on the file card. The file card indicated that there were nine different stereoviews in the series. Unfortunately, there was nothing on the file card to indicate what had happened to any of the pairs of copies that Rau had submitted. The library staff obligingly allowed me to photograph the card and one staff person even removed it from the tray to make my job easier.

My next stop was on the third floor at the Prints and Photographs Reading Room. There, I found a block of cabinets holding thousands of stereoviews. Each view was in an archival plastic sleeve, so gloves were not required for viewing. Currently, these cabinets hold virtually all of the LOC collection that has been cataloged and is readily available for inspection.

The views were filed by author or by subject. The subjects were arranged alphabetically, but there was no master sheet listing all subjects. Thus, a search by subject could entail reading through hundreds of subject cards in various drawers. Many views had custodial stamps on their backs, indicating that they had come from the copyright collection. However, I noted that other views had no such stamps, and my guess is that they had come from other sources. I found five copyright collection views from the Rau “My Lady’s Bath” series filed under the subject of “Bathing,” but I didn’t find the other copy of my particular view.

I was able to locate a Rau stereoview from a different copyright series, and its copyright registration handwriting was very different from the handwriting on my
The curator looked through several very dusty ledger books, but never recorded. I solicit reports of but the data may have been lost or that must have existed at one time. Rau's "My Lady's Bath" series. Copyright registration of a Rau view from a later series, showing different handwriting from that found on the "Disrobing" view.

view. Thus, I now suspect that my view does not contain an original Rau signature, but that his name was written in by a staffer during the registration process. After showing my stereoview to several staff members at the Prints and Photographs Division, I finally found a curator who offered an explanation for my view's history. He remembered that there had been a LOC curator in the late '70s who had exchanged some LOC stereo holdings with a professional collector for views that the LOC wanted to add to their collections. However, I was told that the practice is now discouraged. The curator didn't think there were any records of that exchange. This information was the only thing I learned that day to explain how my view had left the LOC.

Still following the suggestions from the Copyright Public Information Office, my final stop that day was in the Madison Building's basement to search for my view's original Certificate of Registration. The curator looked through several very dusty ledger books, but never found the pertinent document that must have existed at one time.

Looking back on my day at the LOC, I wish I could have found more information about my view, but the data may have been lost or never recorded. I solicit reports of other stereoviews that were once a part of the LOC's copyright registration collection and any further information regarding the history of how these views entered private hands. You can contact me at davidhorin@stanfordalumni.com.

My research did lead me to discover that the Prints and Photographs Division of the LOC and the LOC copyright records are an important resource for stereoview historians. Following my Washington, D.C., vacation, I have continued to visit the various LOC web pages and have corresponded by email with Prints and Photographs curators. Email replies to my questions regarding the LOC collections have arrived within a few working days, and sometimes within minutes.

Access to the LOC stereoview collections can be obtained in several ways. One way is to do what I did. Get a library card and visit the Prints and Photographs Reading Room (LM 339). Another is to visit the online catalog at http://lcweb2.loc.gov/pp/stereoquery.html. If you want to spend the time, you may be able to make arrangements to see the thousands of uncataloged stereos that are not kept in the Prints and Photographs Reading Room. Instructions for viewing these unprocessed collections can be found at http://www.loc.gov/rr/print/info/022_unpr.html.

Web References
Information on the life and work of William H. Rau can be found at:
www.getty.edu/art/collections/bio/a1741-1.html
www.clemusart.com/exhibit/legacy/bios/bios-r.html
Information on copyright law and history can be found at:
http://arl.cni.org/info/frn/copy/timeline.html
www.edwardsamuels.com/illustratedstory/1866.htm
http://digital-law-online.info/patry/patry5.html
www.copyright.gov
A good starting point for all information about the LOC is:
www.loc.gov

Rebecca Hackemann
Stereo Art

(Continued from page 7)
provide a 3-D illusion in photography. This theme carries through into Rebecca's photographs and the things that one might not normally see (or perceive). Playing with associations between the collective image bank that people hold in their minds unconsciously and pushing these associations between the text and photograph is intentionally meant to challenge the mind to relate the photograph to the text through rhetoric and something personally meaningful to the viewer.

There is a reason way Rebecca's images are stereographs and not paintings. The actual medium of her work is unified with the meaning of the content of the photographs. That is what conceptual art is. There is a concept behind the meaning of the art form such that the form and the content are allied—meaning the medium itself is not a gimmick (it is not there just for fun). The stereoscope (optical sculpture) is about sight, draws attention to sight, as does the meaning of the combination of the photographs and the text.

Bruce Bahnmann is an independent author who contributes to various publishing sources. He may be reached by e-mailing info@bears-eye.net.
3000 More Biographies of Pioneer Photographers

review by John Dennis

In Stereo World's 16 eulogies to Peter Palmquist after his death in 2003 (Vol. 29 No. 3, page 24), nearly everyone made some reference to the fact that his years of research into the photographic history of western North America would be a lasting and priceless legacy. As his collaborator Tom Kailbourn put it, "Future historians will learn to their delight that he left them many guideposts and roadmaps to the writing of photo history."

Another outstanding example of that legacy has just been published by Stanford University Press, Pioneer Photographers from the Mississippi to the Continental Divide—a Biographical Dictionary, 1839-1865 is the second volume of the comprehensive biographical dictionary of 19th-century western photographers that Peter Palmquist and Thomas Kailbourn had originally envisioned as a simple study of early California photography.

While maintaining the time frame of the first book (SW Vol. 26 No. 6, page 11), the new volume extends the geographical coverage east to the Mississippi River and even to the river's east.

(Continued on next page)

Burnett, David L. (b.c. 1836) Daguerreian, photographer; active Mount Pleasant, Iowa, 1858–59, 1862.

David L. Burnett was born in Ohio around 1836. On December 23, 1858, J. C. W. Hall advertised that he had taken over the daguerrean gallery formerly operated by D. L. Burnett on "Jefferson street, west side public square, near [the] Post-office," Mount Pleasant, Iowa. An 1859–60 county business directory listed the daguerrean studio of Hall and Burnett at No. 13 west side of the Public Square in Mount Pleasant; the owners were David L. Burnett and J. C. W. Hall. At the time, Burnett resided on the north side of Henry Street, between Adams and Washington Streets. (Also residing at that address was Rev. Hiram Burnett.) The 1860 census of Mount Pleasant described Burnett as a twenty-four-year-old "artist" with $200 worth of personal property. He and his nineteen-year-old wife, Julia A., had a one-year-old daughter, Alice B.

It is supposed that David L. Burnett was a partner in Burnett Brothers, photographers, who applied for a $10 tax license in Mount Pleasant in 1862.


This fairly typical entry for an obscure photographer can lead one to wonder if Mr. Burnett's share of the studio provided enough to support Julia and little Alice.

One of the new volume's several views shows a sign for Hamilton Biscoe Hillyer's Art Rooms, Austin, Texas, c. 1868. His 1 1/2 page biography reveals that he operated studios in several Texas locations besides Austin, married another photographer who was the divorced mother of a small child after his first wife had died, and ran unsuccessfully several times for the state legislature.
Can You Identify the Subjects of These Views?
Neal Bullington

David Wood, Steve Collward and Bill McClintock all provided information about the Unknown featured in the November/December issue [Vol. 31 No. 3]. It is the Hasbrouck House in Newburgh, NY, sometimes called "George Washington’s Headquarters". Washington operated here from April 1, 1782 to August 19, 1783, and it was here that he proposed the "Order of the Purple Heart". This Dutch Colonial fieldstone house was the first historic site to be preserved by a state.

Mr. Wood also provided the unknown for this issue. It is an unlabeled gold card showing a gentleman who appears to be quite tall. Wood wonders if it could be an Austrian named Josef Winkelmaier, who was 8’9" and was exhibited in London in 1887.

Going crazy guessing the who, what or where of unidentified views in your collection? Get help from the entire NSA membership by sending views to The Unknowns, 5880 London Dr., Traverse City, MI 49684 with return postage. Even views with printed titles from major publishers can sometimes fail to identify some aspect of the subject. (Unusual subjects or interesting street scenes are more likely to be printed than generic houses or pastures.) Send information on subjects you recognize to the same address.

3000 More Biographies of Pioneer Photographers

(Continued from previous page)

As with the first volume, looking up a specific name can easily lead to reading several pages of entries with their narratives of so many lives involved with the new craft of photography on the frontier, not to mention the fascinating 60 page introduction "Photography Goes West". As Martha Sandweiss of Amherst College concludes in her Foreword, “...the reader can all but hear the passion with which Peter and his collaborator, Tom Kailbourn, engaged their massive research project, recovering from oblivion and bringing to life scores of little-known photographers. And in these stories of love and loss, struggle and success, live the sound of life coming at us, a tribute to the men who penned these biographies as well as to the subjects they celebrate.”

Pioneer Photographers from the Mississippi to the Continental Divide - A Biographical Dictionary, 1839-1865
We have been fascinated by the study of 1850s British photographer T.R. Williams for many years. Pursuing visual clues in his well-loved “Scenes In Our Village” series of stereo cards, in 2003 we were able to solve (see “Our Village Found” SW Vol. 30 No. 1, 2004) a long-standing mystery: we established the identity and location of the village, happily still a beautiful country idyll to this day; it is the village of Hinton Waldrist in Oxfordshire, England.

We are preparing publication of a book detailing our research on the life and work of T.R. Williams, but, for every answer we have found, it seems there is another question.

When one has spent literally thousands of hours gazing through the “stereo windows” of a favorite group of stereoviews, certain things become very familiar. The techniques used by the photographer, in composition, lighting, use of human subjects in landscapes, exposure, coloring, etc., all add up to a distinctive style, and a way of communicating ideas, which after a while speaks like an old friend. It is often possible to imagine oneself at the scene when the photograph was taken, and experience a strong sensation of “knowing” what was in the photographer’s mind at that moment. As in art of all kinds, the finished work is often very revealing of the artist. These insights from the photographs themselves, together with scraps of information which can be gleaned from literature current at the time, from quotes, letters, patents, census entries, etc., gradually add up to form a colorful picture of a photographer, his life, his motivating forces, and his work, at a distance of, in this case, almost exactly one hundred and fifty years. We will offer some of our findings in this area later.

However, a body of information such as this also reveals other clues: we can speculate on the kind of cameras in operation, and how they were deployed in capturing a stereo image.

In the case of T.R. Williams, and with reference in particular to his “Scenes in Our Village” series, (SIOV) we have discovered some very odd clues indeed.

Evidence in the cards

A stereo photograph may be a much richer source of information about what was going on at the moment of its creation than a sin-
gle “mono” image. In such a three-dimensional view we see the space which objects occupy; a whole model with palpable size and shape is in effect reconstructed in our heads. This trick is pulled off, of course, by presenting the eyes with separate photographs, each containing the different minor variations resulting from the different positions they were taken from. These minor differences, known as parallax, are interpreted by our brains as evidence that we are looking at solid objects.

If we know the separation of the two lenses in a stereo camera, from the stereo photo they create we can construct a map of the view in three dimensions. By actually measuring the parallax differences in the two images forming a stereo pair, we can quite accurately make depth measurements (though to set the scale we also need to know the focal length of the lenses).

Conversely, if we know the real positions in space of the objects, from their parallax it ought to be possible to work backwards and determine the separation of the lenses. This will be useful in our investigations (fig. 1).

Using a conventional stereo camera, the two images in the left and right frames are captured simultaneously. But stereo images can of course be created in other ways, without a stereo camera. In fact the simplest way of producing a stereo pair of images, is sequentially, i.e. by taking one photograph, moving the camera a few inches to one side and taking another. The result will depend on the separation between viewpoints, but also on what happened between the two exposures. If something in the subject area has moved in this time, the two images may be very different, which can be annoying; but if the discrepancies are small, the effect is often very engaging and entertaining. We are in effect seeing two different moments in that day when the photographer set up his camera on the tripod—a kind of mini-movie.

For the views in the series “Scenes in our Village”, we believe that Williams did not use a conventional stereo camera in a conventional way. In every case, close study reveals that small movements have taken place between exposures; this clearly indicates that the left and right images of his stereoviews were captured sequentially.

TRW’s working methods begin to be revealed in the very first card in the SIOV series, the now familiar view of Hinton Waldrist church (fig. 2). The church tower houses a clock, and examination of the hands of the clock immediately tells us that time has elapsed between frames. (Fig. 3) In the case of the Winter version of this view, the time elapsed seems to be 2 minutes. The clock in the left frame says “12:15”, and that in the right frame, a little less clearly, “12:13”. TRW made his right-hand exposure first, then moved his camera to the left and made his second exposure. He was able to expose two negatives in less than 4 minutes.

Even without this nice helpful clue, there is evidence to be found in his studies which include people in the foreground. It can be seen that in every case in SIOV the human figures have been not only
carefully placed, but arranged in positions which are stable, enabling them to keep still between exposures. Anything solid is an aid in this: a walking stick, a fence, a gate, a wall, etc., and on the whole it works just fine. But these are outdoor photographs, not studio studies, so Nature always injects her own contributions. If there is even a small breeze, loose clothing will flutter, hair will be ruffled, tree branches will sway, and if the details of a face are discernible, there will always be small variations, because it's impossible to hold any expression for more than a few moments; after that it becomes “frozen”. A detailed stereoscopic examination of the figures in “The Church” reveals evidence of these small variations, confirming that the view is sequential. This finding is borne out in almost every SIOV view.

We know that Williams possessed a stereo camera—and one which evidently served him well; he was one of the very first photographers to produce “ instantaneous” views of events in the news. His stereo photographs of the “Launch of the Marlborough” in July 1855 at Portsmouth were taken from a moving ship, evidently with a stereoscopic camera, and are wonderfully sharp. This is more than a year before the SIOV series was publicly launched by the London Stereoscopic Company, in December 1856. Of course the SIOV views may have been actually photographed over a period of a few years, earlier than this. But we have evidence of Williams using a stereo camera even in the early 1850s. The evidence appears in a stereo card of Penge (near where the Crystal Palace was rebuilt in 1854), blindstamped TRW, which is definitely not sequential, and is clearly dated 1853. So we can be certain that Mr. Williams was completely capable of taking perfect

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![Fig. 4. T.R. Williams, “The Village Schoolmistress.” Two variants.](image)

from Norton collection.

from May Collection
simultaneous stereo views with a stereo camera around this time. For his SIOV collection he chose not to do so. Why? Was he anxious to preserve his freedom to choose different interocular separations for each view? Well, maybe; yet in SIOV the separations seem to be essentially all the same.

Perhaps, then, we can infer that Williams actually preferred the influence of Nature to TRW's choice of sequential stereos in this case. We feel that he may have been making a choice to include we are viewing. So perhaps Williams left his stereo cameras at home on his trips to Hinton, and the whole question is neatly tied up? But things may actually be less simple than this.

Vertical Pairs

The next way of seeking information about the manner of the taking of the photographs is to look for alternative views of the same scene, taken almost at the same time. We are now exploring the variants. Since SIOV views are quite rare anyway, any one present-day collection is unlikely to include many significant variants. However we have been lucky in the new era of digital scanning to collect some "virtual" copies of the holdings of the current collectors we know; many of them have been kind enough to share their images with us in this way.

Looking at multiple cards, then, of a single SIOV view, it seemed at first that all the prints for one scene had been made from one negative. The actual images looked identical, and only differences in cropping were immediately apparent—usually just a high crop or a low one, presumably from a slightly larger negative than the frame size of the prints. But were they really prints from the same negative? The most sensitive way to compare prints is to mount them side by side and view them as a pair in a stereo viewer. The first example we studied more closely in this way was "The Village Schoolmistress" (fig. 4). One scan was from our own collection and the other from a card in the collection of Russell Norton. Making the
comparing, we found that a com-
ting, apart from a bit of "flashing"
due to coloring differences. There
was, however, a strange feeling
that the negatives were perhaps
not completely the same; the
absolute flatness resulting from two
prints from an identical negative viewed as a stereo
is something quite recognizable, and
this was not what we were seeing.
Inspection under high magnification revealed that in
the two versions of this view, objects in the background appear to be at dif-
ferent heights, relative to the fore-
ground. In particular it can be seen
that the fence behind the standing lady's head is higher in our card
than Rusty's (fig.

6). This in spite of the fact that the
lady has evidently kept as still as a
rock for all the exposures. It fol-
ows that our view was taken from
a slightly higher viewpoint than
Rusty's. This was immediately
intriguing. We began checking
what could be found in the other
SIOV views for which we had vari-
ants. This investigation is still
going on, as we encounter more
cards, but we now have at least 18
instances of similar phenomena in
other "Scenes in Our Village" It
seems more and more likely, as the
evidence accumulates, that for
every scene in the series there are
two, and only two, very similar-
looking variants, taken from two
viewpoints one above the other.
If this is a correct conclusion,
there is a positive way to test it.
Supposing two variants were
indeed taken from positions verti-
cally one above the other, we
ought to see a stereo image by
turning the images on their sides
and viewing them as a stereo pair;
(fig. 7) shows this for the
Schoolmistress view. As can be
seen, the effect is unmistakable. It
is as if we are laying with our head
on one side with our eyes one
above the other. The whole scene
leaps out in three-dimensional
splendor. It is possible to go fur-
ther. By comparing the parallaxes
between the lady's head and the
fence behind, vertically in the con-
figuration just described, and hori-
zontally between the two frames of
one card, we can estimate how far
apart vertically the lenses were,
compared to the interocular sepa-
rative of the original paired
frames. Without dwelling on exact
measurements, it can immediately
be seen in (fig. 8) that the vertical
parallax is about half as big as the

Fig. 8. Parallax measurements, indicated by the length of the red lines: (top) horizontally in the two frames of one card, (bot-
tom) vertically between the left frames of the two variants. Ver-
tical separation is about half the horizontal separation.
horizontal one. We estimate that the interocular spacing in the SIOV series was quite a bit more than that of human eyes, perhaps because TRW enjoyed the slight "hyper" or exaggerated stereoscopic effect this produced in landscapes, or perhaps due to the limitations set by the size of his cameras. If we supposed the horizontal lens separation to be 6 inches, the corresponding vertical separation would be about 3 inches.

So what we are now saying is that it looks as if TRW used essentially a stereo camera on its side to take a pair of images, and then the camera was moved a few inches horizontally, and the other images were exposed. This is bizarre. A diagram will make it clearer (fig. 9). It is also possible that there were two of these vertical cameras, set up ready for exposure, so no movement would have to be undertaken.

We would expect the two images from viewpoints directly above one another to be simultaneous, if it were indeed one camera capturing them. Is this so? A perfect test is the view called "Turning Barley" (fig.10). The two variants arranged sideways make a pair displaying a perfect stereo image. Turn the page sideways to see this, or see (fig.11) for detail. But there is one lady who has popped out from behind a roof in one side of the stereo, but was absent in the other (fig. 12). Sure enough, in the sideways view we see a perfect stereo image of her, made by the two left-hand frames, but she is completely absent in the right-hand frame stereo (fig. 13). It all ties in. The vertical pairs are simultaneous. The horizontal pairs, as mounted on the cards, are sequential. There are many other instances of this to be found in other SIOV views; to date we have found the effect in 30 of the 59 views.

Fig. 10. T.R. Williams, ''Turning Barley.'’ Two variants.
Hardly believing this conclusion, though we had logically been driven to it, we began asking new questions. Was this normal? Did any other photographers of the period work in this way? Did TRW use this method in all his work? The latter question is quite easy to answer, but begs more questions; we have found little evidence in any other branches of Williams’ output of a “vertically aligned stereo camera”. Variants of this kind simply do not appear in his Still Lifes (except one!), his views of Crystal Palace, or his portraits. So why for “Scenes in Our Village”? Moreover, did any other photographers of the 1850s use a similar technique? Was there any other evidence that a “Vertically Mounted Stereo Camera” (VSC for short) might have been something one would come across in the 1850s? In the literature we had so far found no reference. But then some kind of magic happened.

**The Guildhall Daguerreotype Stereos**

Our curiosity was aroused by hearing that the Guildhall Library held evidence of some very unusual stereo cameras. Recently the curators were kind enough to allow us access to their unique collection.²

This particular set of daguerreotypes was rediscovered in 1996, a bunch of loose silvered copper plates, wrapped in newspaper, which had narrowly escaped being thrown away, perhaps because many of them were badly tarnished and difficult to view. Realizing their potentially great importance, the present curators rescued them, and it was ascertained that the group comprised 14 images of statuary in the “new” Crystal Palace in Sydenham in 1854. Two of the plates were seen to contain, in the background, glimpses of two very unusual cameras mounted on tripods.

Our first discovery, as we had hoped, was that in fact the images in these daguerreotypes all match up to make seven perfect stereoscopic pairs.³ In (virtually) assembling the stereos so they can be viewed, we have horizontally reversed them all, correcting the inversion of the daguerreotype process. This means we can orientate ourselves correctly in the Crystal Palace, and read the titles on the statues! The vital key “snapshot” is shown in (fig. 14).

So not only do we have a photograph of two intriguing daguerreotype (?) cameras, but we have it in stereo, giving us much more information. The cameras, apparently seen from behind, have their backs off (detail, fig. 15), and both of them appear to be constructed of two similar chambers, each with its own object lens, fixed one directly above the other. The similarity to our (fig.9) is striking! It also seems that they are mounted on some kind of a-symmetrical assembly of wooden plates (fig. 16), possibly a sliding box or hinge arrangement for moving the camera the requisite distance sideways to produce, sequentially, a stereo pair. But here we see two of these cameras, a few feet apart and apparently trained on the same spot—the Ceres and Proserpine statue, which appears in close-up in another stereo pair in the collection.

It is tempting to wonder if the close-up of the Ceres and Proserpine statue in this collection of images was taken by one of the cameras we see in the (fig.14) daguerreotype. We can see no way
to confirm this, but it may be so. Certainly all the images were taken in a small area in this “court”, from various viewpoints. What we do not see, in this group, is any evidence in the group that two stereo images were obtained from one shot, one from a viewpoint above that of the other—which is the output we might expect from these unusual vertically paired cameras. Of course this small set of plates could be part of a much larger set—there is no information available as to how they found their way to the Guildhall. Also nothing in these images particularly suggests T.R. Williams’ hand.

However, once we have seen that such a camera exists, in 1854, in the Crystal Palace, it is immediately evident that it is possible that T.R. Williams possessed something similar to photograph his “Scenes in our Village”; by an amazing stroke of good fortune, perhaps this is exactly the apparatus we were looking for.

We would be fascinated to hear if anyone reading this article knows of any other instance of a “Vertical Stereo Camera” employed in this way, or any other evidence that such devices existed. And, again, why? It does not seem likely that the technique was used simply to generate more negatives to print from. In the same amount of time Williams could instead have made two similar simultaneous stereos. Although we have theorized that Williams used his VSC for his “Scenes in Our Village” out of choice, allied to a feeling of closeness to Nature, we would be pleased to hear any other explanations!

We wish to thank all the collectors and experts who have assisted this research: Prof. Roger Taylor of the University of De Montfort, Leicester, Gwyn Nicholls, Russell Norton, Ken and Jenny Jacobson, Paula Fleming, Jonathan Steele, Phillip Garner, Graham Wood, David and Terry Alison, Sue Foxford, the curators of the Guildhall Museum, Pam Roberts, Richard Dallmeyer, Kenneth Brown, Mrs Emma Williams (decd), Richard Gray, Justin Shirley-Smith, Sara Bricusse, Beryl Vosburgh, Wim Van Keulen, Michael Pritchard.

Photographic credits: Brian May collection (figs 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13) Russell Norton collection (figs 4, 5, 6, 7, 8), Ken Jacobson collection (figs 10, 11, 12, 13), Guildhall collection (figs 14, 15, 16).

(Continued on page 29)
Digital, Circular, Polarized Poultry

The "Deeper" Meaning of Chicken Little

by Ray Zone

"It is when we come to consider the depth image as a whole that the number of variables becomes so great as to make accurate prediction of its appearance virtually impossible."

—Raymond and Nigel Spottiswoode, The Theory of Stereoscopic Transmission & Its Application to the Motion Picture.

November 4, 2005 is an historic date for stereoscopic motion pictures. With Chicken Little 3-D opening in 84 digital cinema theaters across the United States, it is the day the Real D cinema platform, partnering with Disney and Dolby Labs, was effectively deployed in theatrical exhibition for 3-D using the Christie (CP-2000) 2K digital projector, a dual-stream server and a triple-flashing "Z-screen" serving up 72 frames a second to each eye, running at 144 hertz. To ensure functionality of the new cinema format, a Dolby technician was at every one of the digital 3-D theaters during the opening weekend of Chicken Little. Turn your head sideways while watching Chicken Little 3-D, if you like, and the three dimension effect won’t break down. That’s because the “disposable” plastic glasses, which you can take home with you after the movie, use circular polarizing filters. The higher frame rate is not visually noticeable and that means that the left and right eye views that are polarized at the projector do not have “ghosting” or leakage between the two views when projected on the 30 to 40 foot silver screen in the theater.

Cock-A-Doodle-Doo

Critics reviewing the 2-D version of Chicken Little gave the film mixed and negative notices. The worst was likely the New York Times review by A.O. Scott which characterized Chicken Little as “a terrible movie—a hectic, uninspired pastiche of catch phrases and clichés.” Writing in the Los Angeles Times, Carina Chocano acknowledged that “though it has its moments, [it] mostly just feels anxious and overreaching.”

The film does begin rather tentatively with a few narrative false starts, one of them referencing a previous Disney (cel) animation mega-hit, before launching into the tale. The story that unfolds reveals how the embarrassed title

Chicken Little shows off the film’s custom, circular polarized 3-D glasses from a theater seat. © 2005 The Walt Disney Company

Chicken Little and friends evade the space aliens. © 2005 The Walt Disney Company

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character shows pluck and redeems his reputation, and his relationship with his rooster father, through determination in a very dimensional game of baseball, and by warding off an alien invasion.

As the inaugural computer-generated (CG) animated feature produced in-house after terminating its relationship with Pixar, Disney has a lot riding on Chicken Little. After seeing some 3-D tests of a forthcoming Disney CG feature made by a free-lance visual effects artist, the decision to produce a stereoscopic version of Chicken Little was made rather late during production, just 14 weeks before the release date. Disney wanted to open strong with its first in-house CG animated feature film, and, after the opening weekend, it’s pretty obvious the roof of the chicken coop has been raised.

In its first three days of release Chicken Little grossed Box Office receipts of $40.9 million playing on 3,654 screens. The 84 digital 3-D screens grossed $2.1 million for a per-screen average of $25,000. That’s against a per-screen average of $8650 for the 35mm 2-D version. Most of the digital theaters playing Chicken Little in 3-D, however, did charge a premium of $1.50 per ticket.

A Stereo Window on the Barnyard

To create the second eye view for the stereoscopic version of Chicken Little 3-D, Disney retained the services of Industrial Light and Magic (ILM) based in Marin County. In all a total of 1400 shots had to be converted to 3-D in a very short period of time.

The stereo window is very precisely set in Chicken Little 3-D and almost all of the action happens behind that apparent 3-D window. There is no inappropriate “window violation”. The few isolated instances when some balls or leaves fly off screen into the audience space are handled well, without breaking the edges of the cinematic frame. There is also very little overall parallax with on-screen separation between left and right eye images usually staying within 3 inches. That’s a judicious and conservative use of 3-D with stereo images that are very easy and restful to view over a 90 minute period. This is the kind of control that computer imaging can give the stereo conversion artist.

The 3-D in Chicken Little refreshingly acts like a corrective to the gross parallax errors audiences have had to endure over the decades in viewing three-dimensional films. In previous years, onscreen parallax values have been measurable in terms of feet rather than inches. The result of this excessive parallax, of course, has been audience eye-strain and all-too-brief, and cyclical, markets for 3-D movies.

Now, with the new digital 3-D platform, eyestrain, excessive parallax, ghosting and mismatched stereo pairs can become relics of stereoscopic cinema’s analog past, the long film-based prehistory leading up to the present hour. And, not surprisingly, it is an hour in which theater owners, faced with diminishing box office receipts, are attempting to provide a “differentiated” visual experience that cannot be reproduced on increasingly sophisticated home theater systems.

How Much 3-D Is Too Little?

Colum Slevin, senior director of computer graphics at ILM, compared production of Chicken Little in 3-D to a “white knuckle” ride, taking shots that had been in production four years and producing stereo conversions of them in three months. In the Hollywood Reporter (11/3/05) Slevin observed that “Chicken Little was never planned as a 3-D movie.” ILM delivered the stereo version of the film to Disney on September 19 at a cost of about $8 million.

Disney had hoped to show the complete 3-D version of Chicken Little October 24 at the ShowEast Convention in Orlando, Florida. The 3-D was a little too conservative, however, and several improvements had to be made which Disney handled in-house. Chuck Viane, Buena Vista Pictures Distribution president, had told ILM that the audience “needed to be guests in Chicken Little’s house, not spectators.”

On Saturday, November 5, on the 3DTV list at yahoogroups a post was made by a gentleman named Phil McNally. “I am a Brit,” posted McNally, “now living in California (5 years) working as a stereographer and animator. I made my first stereo image in 1991 and have been an enthusiast ever since... I worked at ILM on the Stereo Chicken Little. I supervised all the stereo settings for every shot except the few that Disney re-rendered themselves last minute.

“My criteria was to hold back, place everything behind the stereo window and avoid divergence,” noted McNally. “For the most part this is how it is but of course I could not hold off the requests for eye poking 3-D indefinitely and ultimately some of that was added. I still hope it is the most comfortable 3-D film ever made.” McNally’s strategy for stereo conversion was a sound one, and it certainly produced a comfortable viewing experience, if coming at the cost of some 3-D excitement.

An Early Warning System

Over fifty years ago, two other Brits also fretted excessively over “violations” of the stereo window in 3-D movies. Raymond and Nigel Spottiswoode produced several 35mm twin-strip 3-D films for the...

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On January 3, 2004, the day that the Mars Rover, Spirit, landed its stereo photographic equipment on the surface of the red planet, a group of eleven children, ages ten through fourteen here on Earth, were learning how to make stereo cameras and to take stereo photos for themselves.

Stereo Photography Workshops were conducted by artist/photographer Virginia A. Moore and stereo photographer Stuart Stiles at Orange County Community College in Middletown, New York (SUNY-Orange), during 2004.

Both two-day workshops were funded by grants sponsored by The Interactive Museum in Middletown, from the New York State Council on the Arts' Decentralization Program administered by Arts Community Grants of Orange County, with additional funding by the Middletown Rotary, and Friends of Middletown Thrall Library.

While the children were arriving at the workshops, a variety of stereo viewers were placed on the desks, around the room for them to explore. When all were present, artist/photographer Virginia Moore explained how she shows depth in her photographs and paintings. Virginia can not see stereo and must rely upon monocular cues! Empty stereo slide mounting frames were given to everyone.

Workshop participants teamed up to assemble pairs of single use cameras that they would share in taking stereo photos.

Holding the frame at arm's length, members of the workshop used one eye to look through the right opening of the frame to see how the world would look if they had only one eye. A few other simple exercises provided opportunities for both monocular and binocular experiences of seeing in depth.

What if two cameras were to be used together—like looking through a pair of binoculars? To show what would happen, two digital cameras were mounted on a bar, much like the camera that our space explorers included on the Mars Rovers. Each participant came to the tripod, as another participant sat for a portrait. Pressing both shutters simultaneously, they took portraits of one another.

The images were processed into stereo views on a notebook computer. Now it was time for the children to assemble cameras. Small teams worked together to build each twinned single use camera that they would share, as they took their stereo photos.

The participants went on a walking tour of the campus where they composed and captured pictures that would illustrate the stereo concepts they had learned. In addition to the twin rig camera, a stereo slide-bar for a single camera allowed the children to use close-up photography techniques to shoot stereos of some of the abundant plants from the college gardens.

Viewing the finished product.
The second day of each workshop involved the making of a low cost and easily assembled stereoscope. Each participant assembled a folding 3d Book Viewer that will work with antique cards as well as with their personal stereo photographs. The intention was to make the children's continued experience with viewing of stereo photography as easy as possible.

Once the viewers were assembled, the prints of their stereo photos were distributed to the children. They would learn the challenges of producing stereo pairs from the sets of prints that had been taken by their twin rig cameras. To enable the children to align prints on a stereo card, one print was taped, at the bottom, to a plastic ruler that was placed flat on the table. The second print of the scene was held to the left, so that the bottom edges of the two prints were aligned.

The stereo viewer was held in the other hand, so that the children saw with each eye the print on the corresponding side of the viewer. If the photos did not look right, the loose print was moved to the right of the taped print and once more the card was viewed. The children watched the prints come into view in stereoscopic depth, as they moved the prints into position. Once they saw the stereo effect, the two prints were taped to the ruler. The assembled pair was then fastened on a larger sheet of paper by means of double-faced photo tape. The ruler was removed, and another pair of images could be aligned by repeating the process.

Their assembled cards worked pretty well, however each pair was scanned and run through stereo editing software in order to make the prints ready for public display. Each exhibit was primarily the work of the children themselves.

(Continued on page 27)
A New Format for the Stereocard

The print folios of the SSA have seen a number of innovative ideas for variations of the stereocard format. With a stereoview titled "First Day of Spring," David Goings (#1082) sent around the Avian folio (AP-1) a most clever view. With stereo pairs shot using a Kodak DC290 digital camera and a side-step, David used Adobe Photoshop to build the unique stereocard and print both sides out using an Epson printer and Epson matte paper.

The stereocard itself features two vertical 3 1/2 by 7 inch views on cards hinged together. This size is even larger than an "Imperial" size stereocard. David also creates beautifully presented digital stereo backs to his views that quite often include smaller side-by-side pairs for parallel free-vision. When the hinged stereoview is folded and placed horizontally in the stereoscope, two additional backs are available.

David has made one of the folded backs as a conventional 3 1/2 by 7 inch stereoview and the second back includes two side-by-side stereo pairs and information about the different views. This is certainly a format that is rich with stereo information.

"I've printed favorite views 7 by 9 inches in landscape on 8 1/2 by 11 paper and hung them on the walls of my office," writes David, "but never considered making cards until Jack Swarthout (#902) and Joyce St. John (#987) sent around foldout, double-sized cards. So, I have dubbed this the 'Swarthout/St. John format'.

"In addition to a larger 'main view,' there is more room on the back for other images and context." David points out the difficulty in registering the larger, vertical images and the necessity for squaring the corners, both of which have to be bilaterally symmetrical.

"I also wonder about using the 'back' as a full sheet with top and bottom areas instead of a 3 1/2 by 7 inch front and back." Response within the Avian Folio was generally positive.

"Thanks for the recognition, Dave, but I, in turn, must pass it back to others before me," writes Jack Swarthout. "The technique can be abused too easily by not having enough 'story' information at the top. Of course, a picture can be made taller or cropped shorter to fit the 'story.'"

"David, you flatter me!" writes Joyce St. John. "Your card is beautiful. You made excellent use of all the card area and the seasonal views were great."

"David, what a classic, beautiful presentation," writes Ernie Rairden (#965), SSA Supply Secretary. "The matte surface, flat black, and excellent color make for a fine card. It's a format that some will have to free view and with an infinity spacing of 3 3/4 inch, it's a free view killer. I pulled viewer apart for a little extra help but the card and hinge format is great."

"Beautiful card all around," writes Phyllis Maslin (#973) "The tall view is stunning in composition and print quality. I love the matte paper. You did a great job hinging the card. More, more!"

First Pikes Peak International Digital Stereo Photo Exhibition

The first Pikes Peak International Digital Stereo Photo Exhibition (PPP), with SSA member Wojtek Rychlik (#1097) serving as Chairman was held recently. According to Wojtek, "It was the first large format digital exhibition approved by the Photographic Society of America (PSA)." Five judges were used for the online judging to insure objectivity and the SSA was well represented at the exhibition with Diane Rulien (#1021), Boris Starosta (#1099) and Ray Zone (#984) serving as judges along with Jim Long and Etienne Monneret. 32 Entrants from 11 different countries submitted 120 digital stereo images for consideration.

First Day of Spring 2005
Dolph Park, Ann Arbor

First Day of Spring 2005
Dolph Park, Ann Arbor
Hey Kids, Stereo Photography is out of this World!
(Continued from page 23)

Original work by the participants was bound in a notebook for the exhibit at the Science, Math, Art, and Technology Links 2004 interactive exhibition for children of all ages, as part of the Lyceum Events at SUNY Orange. An exhibit of stereo images taken by the workshop was also placed at the Middletown Thrall Library.

Did the children really learn about stereo photography? From comments overheard during the exhibit, be assured that those who brought their friends and families to see their works were able to give good explanations of what they had done and why they needed two photos. They were clear that the two photos were not identical.

Those viewing the gallery of stereo images in the exhibit at the college, were extended these words of welcome:

The photos in this 3-D gallery are the first stereoscopic works of children, ages ten through fourteen, who participated in a two-day workshop at Orange County Community College, Middletown, New York. Each new stereo photographer in this group deserves our highest praises. How many of their age-mates have ever done what they have done by creating such 3-D photos as these?

In this group, we may have someone who will design the next generation of digital stereo cameras, digital stereoscopic viewers, or large 3-D screens for home movies. We may have someone who will explore outer space, beyond Mars, and inner molecular structures by producing full depth images. No matter what the participants in this exhibit do in the future, they have already taken a significant step in their learning by exploring how to make their own 3-D photographs.

Thank you for taking the time to study their stereo views of this beautiful campus.

A young eye for the abstract is revealed in "Mastodon Exhibit Reflections."
It would be hard to imagine April 18, 2006 (the 100th anniversary of the 1906 San Francisco Earthquake) passing without the publication of at least one “Coffee-table” book illustrating the disaster. What’s really amazing is that the first one to appear looks back at the event through stereo-views!

*Earthquake Days* by NSA member David Burkhart includes over 100 views of the city before, during and after the earthquake and fire that destroyed 508 blocks and left 200,000 homeless. The richly detailed text includes historical background and personal accounts from average citizens, politicians, writers and journalists, as well as that of Enrico Caruso. Texts from view backs contribute significantly—with factual corrections inserted by the author where needed.

Dramatic illustrations and maps from newspapers and magazines of the time augment the views nicely, as does an interview by the author with a survivor of the quake, who was three years old at the time but remembers walking past remaining ruins at ten or twelve. *Earthquake Days* doesn’t limit itself to traditional disaster views, but includes numerous views of buildings or areas both before and after the quake.

Views of the October, 1868 San Francisco earthquake by Carleton Watkins (including one reissued by Isaiah Tabor) fill one chapter. The irony of the loss of Watkins’ negatives to Tabor in 1870 and their later destruction in the 1906 quake is outlined in the captions, along with the sad story of Watkins’ loss of sight and commitment to a state asylum six years prior to his death.

The views are printed in full color, preserving the original tones and mount color, and most appear at the bottoms of pages with an enlargement of one image (about 8x8 inches) occupying the rest of the page. The views themselves are reproduced at 5½ inches wide—which leaves space for detailed captions although the supplied Loreo Lite viewer can easily fuse full size stereoviews. The effectively screenless reproduction of views would allow the use of a shorter focal length viewer as well.

All of the major view publishers of the early 20th century are represented, including Keystone, Underwood & Underwood, G.W. Griffith, Universal Photo Art, International Stereograph Co. (C.L. Wosson) No. 20621, “On the watch for looters (valuables lie buried here). Heart of Chinatown where frightful mortality resulted from quake. San Francisco, Cal.” (Shown at the same size used in the book.) Above this view on page 73, the left image is enlarged to nearly 8 inches wide. On the facing page is reproduced a proclamation by Mayor Schmitz regarding the fate of looters and the cut-off of all gas and electric power.


The views by smaller publishers like Clinton Johnson and Tom Phillips along with with pairs from unpublished images in the Keystone-Mast collection are added to *Earthquake Days*, providing a better and bigger selection of 1906 earthquake views than even many collectors have ever seen.
The “Deeper” Meaning of Chicken Little

(Continued from page 23)

1951 Festival of Britain that were projected on a silver screen at the Telecinema theater which was specially constructed on the banks of the Thames river for the festival. The Spottiswoodes summarized their stereographic philosophy in a highly theoretical book *The Theory of Stereoscopic Transmission & Its Application to the Motion Picture* (UC Press: 1953). For the most part, the book is a highly abstruse collection of mathematical formulas for binocular disparity, convergence, magnification and other stereoscopic factors. About the stereo window, however, the Spottiswoode brothers were very rigorous.

“It is well known,” the Spottiswoodes wrote, “that if an object stands on ground which is at or behind the screen plane, and its upper part projects forward into space, this part will seem to come ‘through’ the screen unimpeded... As soon as such an object is traversed—either by its own movement or the camera panning—to the edge of the screen, so that it begins to pass out of view, its position becomes uncertain and the eyes can no longer fix it.” The result, the brothers stated, would be that the 3-D audience would experience what it would characterize as a ‘fuzziness’ or ‘blurriness.’ “It is the consequence,” they wrote, “of a flat contradiction between two sets of evidence presented to the mind.” If, in other words, an image is ‘cut off’ at the edge of the screen, occluded, the brain tells us that it is behind that edge, as with an actual window.

One creative solution the Spottiswoodes proposed, and actually put into use with a 1952 3-D film called *The Black Swan* was to print a stereo window with a black surround right into the film which would itself float off the screen. This new window “thus greatly increases the stereoscopic space” even though, the Spottiswoodes acknowledged, “it sacrifices some of the dramatic possibilities of the depth image...”

Some Stereoptic Possibilities

The stereo window remains inviolate in *Chicken Little 3-D* and consists simply of the edges of the projected cinematic frame. Additionally conservative is the interocular, or distance between the left and right eye cameras, which seem to be consistent throughout *Chicken Little* at about 2½ inches, the same average separation between two human eyes.

Now that stereoscopic filmmakers at last have a “transparent” projection medium to tell their dimensional stories, we can ask, and even demand, that 3-D movies progress. The possibilities for stereographic narratives are infinite. A 3-D film includes visual space behind the screen (negative parallax) and audience space in front of it (positive parallax) both of which the 3-D storyteller should exploit artistically. This has already been done with the Disney theme-park films *Muppetvision 3-D* with an amazing trompe l’oeil effect in the audience space and Murray Lerner’s *Magic Journey’s* in which a brass ring spins slowly aloft in mid-air. These effects are now relatively easy to achieve on the computer without an injudicious “violation” of the stereo window.

Another stereographic practice that should become standard in a CG film is the variable or animated interocular base, which can change over the course of a shot. This technique has been used in IMAX 3-D films previously with *Cyberworld, Santa Vs. the Snowman,* and *The Polar Express.* Lerner’s *Magic Journeys,* composting CG and live action together, actually used different interocular bases for two different visual elements in the same shot.

Though *Chicken Little 3-D* makes no use of these stereoscopic film techniques, it is, nevertheless, a fitting first film for the new digital 3-D cinema platform. It is a tabula rasa for 3-D film, an impeccable blank slate with no stereographic errors. If *Chicken Little* speaks in a 3-D whisper, at least it is very pleasing.

T.R. Williams' “Scenes in our Village”

(Continued from page 21)

Notes

1. 1850s stereo images are famous for the “ghost” images which came about because something significant changed while the camera was being moved to its second position. In some cases, there are people visible in one frame but not the other, or, for instance, a horse and cart appears in one image and not the other. When we view the pair, our eyes receive conflicting messages, and we perceive a transparent-looking object, floating on a solid background, or sometimes a kind of flashing effect, as our brain attempts to sort things out.

A whole series of stereo cards were produced in France in the 1850s exploring the possibilities of deliberately moving things between the two exposures, they are called “Epreuve de Movement” experiment in movement. While viewing these cards, by blinking alternate eyes, objects can be made to jump about - and if both eyes are kept open, the curious flashing effect becomes noticeable. There is at least one known Claudet daguerreotype in which he has perhaps been the very first to have the inspiration to attempt such a thing. The result, a man moving his hand in and out while smoking a cigar, is stunning. The movements are not subtle in these photographs, so there is a loss of true stereo effect in the areas which move. TRW was known for being very subtle and if he were aware of such experiments, as we may suppose he was (TRW in his youth was employed by Claudet), he might be expected to operate in a more restrained manner!


3. The daguerreotypes were evidently intended to be viewed in stereo, but it is not clear whether they were ever mounted so that this could happen. The pattern of tarnish is not inconsistent with the plates having been housed in a standard stereoscopic glass mount of the period, but there are no marks from breaking glass on the image surfaces, or remnants of adhesive or tape, and one wonders why, if they were originally mounted as stereo, they would have been removed and left loose. What is certain is that there are bona fide stereo pairs of photographs. 

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Canon Digitals Project Drug Research

Stereoscopic 3-D image projection can provide a powerful and effective means of communicating complex visual information for science and industry. High-resolution systems capable of such display can be large and expensive, but one corporate AV specialist recently discovered a smaller, more affordable, yet high-resolution alternative. Tony DeFrancisco, AV Manager at AstraZeneca R&D Boston, harnessed a pair of Canon's new Realis SX50 Multimedia Projectors—featuring SXGA+ (1400 x 1050) resolution to provide 3-D image displays for the company's research facility in Waltham MA.

"Most of the 3-D systems out there are packaged units, and the system that we had before wasn't capable of the resolution that we needed," DeFrancisco explained. "We went to one 3-D vendor and they wanted $60,000 for their system."

DeFrancisco needed a high-resolution means of displaying 3-D computer graphic renderings of complex molecular structures and an alternative to the costly stereoscopic image presentation systems currently on the market. He also required one that was compact, easy to operate, and affordable.

"I went out and did some research and found this gem—the Realis SX50," he recalls. The world's smallest and lightest LCOS (Liquid Crystal on Silicon) projector, Realis SX50 features 2500 ANSI lumens, 1,000:1 contrast ratio, a Canon zoom lens, and patented AlSYS (Aspectual Illumination System) optical technology. "I bought a pair of Realis SX50's and mounted them in a frame that calibrates the projection so it overlaps at just the right distance. There's also a little interface box that works with the computer outputting the 3-D image; it gets the signal to the projectors in the right format. Our scientists create 3-D graphics of chemical compounds and molecules using computer software. Then they bring those files to the AV room, put the 3-D glasses on, and view the stereo images.

The $4,999 Realis SX50 projector weighs 8.6 lbs. and features a 1.7x optical zoom lens that can project a 100-inch image on a screen from 9.8 feet away. A native SXGA+ resolution data projector that can accept a wide variety of digital and analog computer-display formats, DVI video and all major component, composite, and S-video inputs; it can also display true 16:9 720p HDTV images.

3-D Antarctic Project Based on Vintage Hurley Views

Dr. Peter Morse, a lecturer and researcher in Digital Media in the University of Melbourne's School of Creative Arts, will travel aboard the Russian ice-breaker Vasily Golovnin for a two-month stint in Antarctica this summer. The visit will be documented in an online multimedia project—www.antarcticavirtua.net, and incorporate digitally generated images, video and written blogs, and even a book, which will be written entirely online.

The 3-D Antarctic project emerged from Dr Morse's longtime interests in stereoscopic photography and the early stereoscopic pictures taken in Antarctica by legendary Australian photographer Frank Hurley.

After working to repair some Hurley's badly damaged images at the Mawson Antarctic Collection in the Museum of South Australia, Dr Morse began to conceive of 3-D mapping of the areas of Antarctica where Hurley worked in order to reproduce the exact environments digitally.

Most of these images have never been reproduced, let alone viewed in all their "magnificent stereoscopic depth at high resolution—which reveals a wealth of information and detail that has never been seen before," he says.

"The project takes on the quality of a time-machine" he adds, "but rather than travelling back in time, I am hoping to recreate history in the present moment. The images I make are based on geophysical reconstruction, with information gathered from satellites and space shuttles, and moves into the realm of GIS and computer-based modeling of synthetic landscapes."

This column depends on readers for information. (We don't know everything!) Please send information or questions to David Starkman, NewViews Editor, P.O. Box 2368, Culver City, CA 90231.
List of Upcoming 3-D Films Continues to Grow

Legend of the White Horse - Fall 2005 (13 min) 3-D Simex/1works film.

Deep Sea 3D - Spring 2006 (40 minutes) IMAX sequel to "Into the Deep"
The Monster House - the 2nd film to employ "Performance Capture," will be released in more than 100 theaters
in REAL D's digital 3-D format with its 2-D national release on July 21, 2006.
The Ant Bully: IMAX 3-D Experience - 8/4/2006 (90 minutes) 3-D IMAX release with 2-D 35mm theatrical release.
Happy Feet: IMAX 3-D Experience - 11/17/2006 (90 minutes) 3-D IMAX release with 2-D 35mm theatrical release.
Dinosaurs From Patagonia 3D - 12/2006 LF film
Meet the Robinsons - Disney Digital 3-D, December 2006
Night of the Living Dead 3D - In post-production (working title was Zombies).
Everything - LF 3-D animated SANDEE film from the National Film Board of Canada.
Super Bowl to the Max - 3-D digital release (LF possibly also.)
Walking the Dogs - In development by Principal Large Format.

Man Eating Sharks - 3/2007, LF 3-D from Principal Large Format.
Beyond the Great Wall - LF film in development from SK Films.
Cell Wars - LF film in development from SK Films.
Crocs & Sharks 3D - LF film in development from IMAX.
Dolphins 3D - From 3D Entertainment, the producers of Ocean Wonderland 3D and Sharks 3D. Currently being shot at locations around the globe.
Journey 3-D - Walden Media and New Line's modern take on the Jules Verne classic Journey to the Center of the Earth.
Eveglades 3D - Spring 2007, produced and directed by Stephen Low.
Great White 3D - LF film in development from SK Films.
The Magic Tale - Film in development from Orbita Max, SPAIN
Surfari 3D - LF film in development from IMAX.
Fly Me to the Moon - nWave's first computer-animated feature film in 3-D.


Beowulf - From Shangri-La Entertainment and Sony, performance capture film directed by Robert Zemeckis.
Water Planet - MacGillivray Freeman Films first 3-D LF film.
Earth Impact! - LF film in development.
Temple of Angkor - Planned 3-D motion picture version of Robert Bloomberg's award winning stereo slide show.

Colours of Infinity - 5 minute 3-D LF film in development from Principal Large Format.

Journey to the Center of the Brain - 3-D LF film in development from SK Films.
Scorpions! - In preproduction.

Star Wars - All six films are being converted for 3-D releases, plus other possible new Star Wars projects.

Top Secret, 2nd James Cameron dramatic 3-D feature - 2009.

The Holmes Stereopod

Australian stereographer Paul Bourke has provided a fanciful if expensive solution to the dilemma of how to easily present digital stereo pairs in other than print or projected format. The storage and display potential of the iPod Photo, if doubled, offers this amusing looking concept—explained in more detail on his website http://astronomy.swin.edu.au/~pbourke/stereographics/ where he includes information on feeding iPod images to a pair of digital projectors as well plenty of other stereo tips.

Dubbed the "Stereopod!" by Wired magazine in July, 2005, the tiny screens of the iPods are clearly more suited for placement in a 6x13cm viewer without prismatic lenses. One wonders if the solution might be to present already paired images, slightly larger, on the screen of a portable DVD player with a hinged pair of lenses attached.
For Sale

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BOOK, The Siege at Port Arthur, hardback with 3-D viewer. $15 Econ Air. (Cash preferred). Ron Blum, 2 Hussey Ave., Oakland Park SA 5046, Australia.

CENTRAL PACIFIC RAILROAD Photographic History Museum. Stereographs of the first transcontinental railroad are now on display at http://CPRR.org


LAWN TENNIS VINTAGE STEREOREVIEWS. 5" x 7" flip book, 19 images. Loreno Light foldout stereoview included. Only 12 remain. $22 postpaid in USA. Brandt Bowles, 568 Blackhawk Trail, Loveland, OH 45410, bowles3d@cinicir.com

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THE OHIO Stereo Photographic Society invites you to our meetings on the first Tuesday of each month at AAA Headquarters at 5700 Brecksville Road, Independence OH. Web: http://home.att.net/~osps/ or George Themelis (440) 639-4752 or Chuck Weiss (330) 633-4342.

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SEND S.A.S.E. or email for sale list of Field-Sequential and Anaglyph 3-D DVDs, stereo slides. Chris Perry, 7470 Church St. #A, Yucca Valley, CA 92284, doctor3d@anemain.com (760) 365-0475.

STEREO PHOTOGRAPHY WORKSHOP Videos. Topics include Making Anaglyphs, 2D To 3D Conversion, Making Stereo Cards, etc. More coming. $25 each. Details: http://home.comcast.net/-workshops/ or send SASE for list to Dennis Green, 550 E. Webster, Ferndale, MI 48220.

STEREO VIEWS FOR SALE on our website at: www.daves-stereos.com email: cdwood@ptd.net or contact us by writing to Dave or Cyndi Wood, PO Box 638, Milford, PA 18337, Phone: (570) 236-8176. Also wanted: views by L. Hensel of NY and PA.

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Wanted

3-D IMAGE MAKERS: Share your vision with the international 3-D community! ISU STEREOCOPY editor Jan Burrand is looking for interesting 3-D images and articles related to their production. Jan@make3Dimages.com P.O. Box 174 Concord, MA 01742.

3-D NUDE STEREO SLIDES. 3-D nude stereo slides from the 1950s wanted. Will buy large collections or individual slides. Henry Feldstein, 107-40 Queens Blvd. #60, Forest Hills, NY 11375, (718) 544-3002, henryfel@msn.com .

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Recent happy customers have included National Geographic Magazine, whom we served up over 26,000,000 anaglyphic glasses for the 3D viewing of "Titanic" and "Norman Scandal." Six million viewers of Discovery Channel's Shark Week are staying out of the water after experiencing it with our 3D polarized glasses. Just last summer, our optical chefs concocted over 10,000,000 internet decisions for a special sweepstakes for Back® and Tiger Woods.

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STEREO WORLD January/February 2006 35
FINE OFF-EBAY STEREORVIEW AUCTIONS WITH DIRECT BIDDING ON-LINE, AS WELL AS BY PHONE, FAX, E-MAIL TO ME, AND POSTAL MAIL. (Paper Catalogues available.)

You are welcome to register for my stereoview auctions. There is no charge. I also have a separate registration for my View-Master (Etc.) Auctions, which have more-modern stereo and 3-D formats. I am presently selling off the Willie Aarts Collection with some of the Rarest of the Rare in View-Master reels and viewers.

I SPECIALIZE IN CONSIGNMENTS.
Consignments welcome, from a single view to giant collections.

← Left: Helene Leutner (German Actress)
→ Right: The Young Velocipedist

← Left: Edward Stokes, who shot Jim Fisk over a woman.
→ Right: View from the wood car, behind the locomotive in full motion.

← Left: Tissue Genre View.
→ Right: General U.S. Grant
Wow! 3-D is making a comeback. We have already surpassed the short 1980s revival and are approaching the 1950s level. Led by 3-D IMAX with Space Station, Polar Express, NASCAR and others for content and by Chicken Little for 3-D technology, the movies are again leading the resurgence.

The 2006 NSA Convention in Miami is our opportunity to accelerate the movement. We are starting Stereo Theater on Thursday, adding a second theater, a larger 3-D Art Gallery, an equipment exhibit, a model shoot, a stereo-view exhibit at a major local museum, a 3-D Innovation Expo and other events to showcase what the NSA has to offer. Lenny Lipton, developer of the Real D 3-D system behind Chicken Little 3D will be the banquet speaker and will give a technical workshop.

Already, the 3-D dealers are including Convention ads with their sales shipments. We will be doing more advertising than ever before. The Intercontinental Miami is located in downtown Miami on Biscayne Bay, right beside a major shopping/restaurant center and adjacent to Miami Beach and the cruise boat docks.

Enjoy A DDDelightful Trip
On the way to the Convention, take a 3-D vacation. Most of the family entertainment centers in Florida have 3-D movie attractions. Once there, the free Metromover adjacent to the Convention hotel will take you up and down the Miami coastline and connect to Metrorail and Tri-Rail.

Help the Entire NSA do this one!
Of course, there is a catch. In the recent past, a specific club has hosted the Convention. There isn’t a 3-D club in south Florida, so the entire NSA is hosting this event. We expect a large number of curious tourists and old-time 3-D Floridians to come to the Convention. To make sure that they have a good 3-D experience and recruit them, we all have to contribute an hour or two. Every 3-D club, domestic or overseas, is invited to set up an exhibit highlighting their club. We will have docent talks in the Competition and Art Gallery rooms to add to the attendees understanding. Or you can help to setup/tear-down the rooms or staff the registration desk. Everyone will get an opportunity to contribute and share knowledge.

No Stereo Left Behind
There are two general approaches to NSA conventions. One approach wants to not miss a thing—there should only be one event occurring at a time. The other approach doesn’t want to leave anything out. I am clearly of the latter persuasion. If you have to miss something that you want to see, you can come to Boise in 2007. David Kesner says that the joint ISU Congress/NSA Convention is going to be the best Convention ever. (He had better be planning something really special to top Hot Miami! - Cool 3D!)

The forms for the Convention are inserted in this issue. Look through them and make your plans and reservations now. See the website at http://2006.nsa3d.org/ for the latest information. See you in Miami!!!

–Bill Moll, Chairman,
NSA 2006 Miami Convention
From the rooms of THE INSTITUTE OF

Incoherent Geography