Anaglyphs X3
Riverside Report
William England’s 1867 Rhine Journey
A taste of the late '40s through the early '60s found in amateur stereo slides

by Mark Willke

Vintage Automobiles!

Our first view this issue by an unknown photographer was submitted by Chris Zombory in Illinois, who purchased it a few years ago as part of a lot of about 100 slides. Chris says, “I was after shots of '50s cars and got several nice ones. Lots more of '60s scenes, though.”

The slide is mounted in some sort of handmade or poorly-produced commercially-made thin cardboard mask, and the film chips appear to be Kodachrome. The mask is labeled with the number “1024”, and the caption “1950's stores - car close in f.g.”, but that unfortunately leaves the actual location as somewhat of a mystery! There are plenty of signs to read in the background, but I haven’t been able to spot anything there that would identify exactly where this shot was taken. I did notice that the gift shop lists “Seashells” on its sign in its window, which leads me to believe this may be a tourist stop in some coastal town. Wherever it was shot, this is certainly a nice close view of some classic '50s cars. Thanks for sharing, Chris!

Our second view (by a different photographer) shows another wonderful automobile which appears to belong to Johnny, the smiling Shell station attendant proudly leaning against it. (His name and the Shell logo are stitched onto his shop uniform, but may not be visible as reproduced here.) On the other hand, perhaps Johnny does not own the car, but is ready to take it to the station for an oil change or some other maintenance or repairs. (Imagine a service station that actually offered service!)

In an older-style (gray with red edges) Kodachrome cardboard mount, this slide is unlabeled. Other slides from this same photographer show dates from 1952 into the later '50s though, and most of his slides were apparently shot near where he lived and worked, in a suburb of Milwaukee, Wisconsin.

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 Record—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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Front Cover:
Three of the 54 stone towers of the Bayon, a late 12th century temple at Angkor
Wat, subject of Robert Bloomberg's Stereo Theater show "The Lost temples of
Angkor". The presentation won the Paul Wing Award at the 2002 NSA convention
in Riverside, California.

Back Cover:
"ENTREE DU CHATEAU DE RUNKEL SUR LE LAHN" (Entry of Castle Runkel on the Lahn) is
from the series "Views of the Rhine and its Vicinity" by William England. This is just
one of several gems to be found in the feature "William England's 1867 Rhine
Journey" by Hartmut Wettmann.
Keystone Returns to Meadville

It's certainly not often that we are able to announce the opening of a new stereo photography museum, but that's exactly what happened October 13 when the long awaited Johnson-Shaw Stereoscopic Museum opened in Meadville, PA exhibiting images and artifacts of the Keystone View company in the firm's home town.

Announced to NSA members at the 2001 convention in Buffalo, the museum has been a family project of brothers Lance and Eric Johnson for several years. Members of a family going back three generations at Keystone, the museum collection consists of material passed down to them, their own collecting efforts, and a huge donation of Keystone files and equipment that had once been destined for a landfill.

The 1856 building housing the museum was originally built to house offices of the Huidekoper's Holland Land Company, responsible for the disposal of hundreds of thousands of acres of land used as repayment of loans from Dutch merchants during the American Revolution. From 1929 to the late 1990s it functioned as a church, and sale of the remaining pews helped cover some of the operating costs of the museum. Endowed with a Historical Society plaque, the building is quite adequate in space and very appropriate in its longtime connection with local Meadville history.

The Johnson-Shaw Stereoscopic Museum will be a lasting tribute and home for the industry of stereography, with the primary focus on the collection of the Keystone View Company. The museum will display elements of the manufacturing process, the history, and the artistry of stereography. It will eventually include a research library, and play a marked role in providing new and previously undiscovered information to stereography enthusiasts and researchers. While visiting the museum, groups and individuals will enjoy a vast collection of stereo-views, stereoscopic equipment and documents in a hands-on environment. More on both the museum and its collection will appear in upcoming issues of Stereo World, including stereos of the displays and details of the fascinating family history and fortuitous preservation story behind it.

October through February, the museum is open Wednesday, Thursday, Friday 10am-4pm, Saturday 10am-2pm, and is closed Sunday, Monday and Tuesday. Adult admission is $5.00 with students and seniors $3.00 and Children under six free.

The Johnson-Shaw Stereoscopic Museum is located at 423 Chestnut Street, Meadville, Pa. 16335, www.johnsonshawmuseum.org. The museum website includes more background information, press coverage of the institution, and a gallery of samples from the large collection of Keystone views. One timely subject included in the gallery is a group of eight views of Iraq at: www.johnsonshawmuseum.org/iraqgallery.htm.
House of Wax director Andre De Toth died of an aneurysm October 27th at his home in Burbank, CA. De Toth was born in Hungary, where he studied law, acting, photography, sculpture and painting under the imposing name Sasvrai Farkasfalvi Tothfalusi Toth Endre Anral Mihaly.

After making five films in Europe in the late '30s, he escaped World War II by going to England in 1939. He moved to Hollywood in 1942 where his first film was Passport to Suez (1943). In 1952, Jack Warner picked him (despite the fact that he had lost an eye as a child) to direct the 3-D classic House of Wax.

The film that inspired the Hollywood 3-D boom of the 1950s, Bwana Devil, had been showing in Los Angeles for just two days when its box office success prompted Warner to license the Natural Vision process for House of Wax. The February 23, 1953 issue of the exhibitor trade publication Film Bulletin predicted, "While the novelty of Bwana Devil captured the public's imagination, and will probably continue to roll up fantastic grosses for months to come, the Warner film promises to have even greater impact." Released on April 25, 1953, House of Wax proved indeed to be a box office smash. The four-track "Warnerphonic" stereo sound added to a sensational storyline, which was a remake of The Mystery of the Wax Museum, originally released by Warners in 1933. In a race to lead the 3-D bandwagon, House of Wax filming was completed in 28 days and the film was being screened 90 days after Warner ordered it made. With a production cost of only $628,000, House of Wax ended up as the seventh top money-making film of 1953. House of Wax would come to be one of the most widely recognized and respected of all the 1950s 3-D films, with showings in 3-D retrospectives and festivals long after most of the others had been forgotten.

Corrections:
Our apologies to Van E. Beydler, whose name was misspelled in the Donors list in Vol. 28 No. 6.

In the piece on the Missouri State Fair View-Master reels (Vol. 28 No. 6 page 25), the third paragraph refers to "the" Missouri as if we were talking about the river instead of the state—we don't know what late-night digital demon inserted that extra word.

Incidentally, the Missouri State Fair View-Master packet is listed as item VBP-1290 at $12.95 from www.3Dstereo.com, 3D stereo.com, Inc., 1930 Village Center Circle #3-333, Las Vegas, NV 89134.

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-John Dennis

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Romanticism about the Rhine was in full swing in the summer of 1867 when William England journeyed along the river. This movement began in the early 19th century with the poets Friedrich von Schlegel, Achim von Arnim, Clemens Brentano and Heinrich Heine, who caused an uproar with their poems, songs and legends. Lord Byron was also in the region in 1816 and his poem “Childe Harold”, a hymn to the landscape and history of the Rhine, gave rise to a tremendous enthusiasm for the river and its legends. William England's rustic logo printed on the left side of cards in the series.
vicinity in England. A year later William Turner's romantic paintings of the Rhine appeared as did the photo series "Les bords du Rhin" by Blanquart-Evrard (Lille) in 1853. Freiligrath's fiery poem calling out for the renovation of Roland's Arch, which had collapsed during a storm, was published in 1839; the crown prince and later King Friedrich Wilhelm IV of Prussia rebuilt Castle Stolzenfels according to plans made by Schinkel in the 1830s and 1840s. Rhine romanticism not only gave rise to a stream of tourism. Photo series of the Rhine also became very popular. The newly formed "Kölner-Düsseldorfer Steamship Co." caused by a merger of the shipping companies in Cologne and Düsseldorf carried around a million passengers a year—half of whom were English.

William England, born in London in 1830, worked for a daguerreotype studio in his early years (1840 to 1845). In 1854 he joined the London Stereoscopic Co. and finally rose to be their chief photographer. He traveled widely; USA in 1859, Paris in 1861, Switzerland, Tirol and Italy from 1863 to 1865 and returned with a series of magnificent photographs which were highly praised.

The magazine of the German Photographic Society, Photographische Mittheilungen, carried the following article in 1867: "Mr. England is an artist, who has won great fame with his photographs of Switzerland. Many photographers


No. 47, "MAISON RUSTIQUE A BACHARACH" (Rustic House in Bacharach) from "Views of the Rhine and its Vicinity" by William England.
believed that Mr. Braun of Dornach had exhausted all aspects of Switzerland with his pictures and there comes Mr. England from over the seas and proves the opposite. Mr. Braun's far larger pictures have found a rival, something no one would have dared to believe. Where does the beauty of these pictures lie? Certainly not in their size—it is their artistic quality. This is their advantage over all other photographs of Switzerland. He has chosen the perfect place to photograph these magnificent landscapes, waited for the best conditions of light and of course handled the negatives so superbly that the photographs capture a certain mood and sense of time, which is often missing in other series of Swiss pictures. This is the secret of his success.

Traveling along the Rhine in 1867 was already quite comfortable. The traditional coach was hard and uncomfortable, and the roads often in bad condition. Travelers preferred the far more comfortable and cheaper modes of transport; ships and trains were faster and punctual as well. Steam ships that sailed from London to Mayence were quite luxurious and the social life on board was also far better than on land. After 1863, a railroad existed from Rotterdam to Constance and travelers could chose trains on either side of the river. There were also railroad connections along most of the bigger tributaries. The railroad along the Lahn was completed in 1862, the Nahe railroad in 1860. Although
there was no railroad along the Moselle, steam ships plied regularly after 1841.

During this period the photographer carried an enormous amount of equipment. Apart from the black wooden box which weighed around 10 Kg, there was a lens, a portable dark room, a crate that could be used as a table and dozens of bottles with various chemicals. In addition to this, there was a battery of glass plates, basins, glasses, distilled water, hooks and stands.

William England commented in 1862 about “present day photography”: “One requires a lot of patience, one is often unsuccessful—bad light, absence of the sun at the very moment when the plate is most sensitive, difficulties caused by changes in the silver bath. All this is rather unpleasant, and will remain so until we perfect the dry plate procedure. Where exposure times are not so important, these problems do not exist.” He further developed Russel’s Tannin procedure, which will present “better results than other dry plate procedures”. In 1867 his article “Modification of the Collodion-Albumin technique” appeared in the Photographischer Archiv where he describes a simplification of the same procedure “with very good results”. Even here he is very emphatic about the dry plate method: “there is hardly any other criterium of greater interest for the photographer than the dry plate technique, which will relieve him
of the necessity of carrying all the equipment that the wet plate procedure requires. In Chamonix I remember hearing of Bisson’s enormous preparations for climbing Mont Blanc; a battery of porters and guides, all laden like camels and of the nights that they would have to spend in the snow. If Bisson had had dry plates, it would have saved him a lot of worry and money as well. In the same article he wrote that he “would visit the Continent shortly; should this procedure be successful—which I do not doubt—then I will write about it in greater detail later”.

Most probably he used a camera with a special shutter which he developed himself in 1862. For street scenes and monuments, I use an achromatic double lens with a large aperture. Sometimes I have the aperture in front of the lens, sometimes behind it, now I use it quite close to the plate and find that this position gives me the best results.”

In May 1868 the German Photographic Society exhibited a “Collection of Rhine photographs” by Mr. England, which he had published a year earlier.

The chairman exhibits a collection of photographs by Mr. England; Mr. Moser, sen. has loaned them to the society. These are the first large series of dry plate photographs, which are available. The quality of the photographs is almost as good as those taken with a wet plate. However the pictures are blurred at the edges, which leads us to assume that Mr. England used larger apertures because the plates are not that sensitive.
The speaker is of the opinion, that although these photographs have their merits, one cannot say that the dry plate technique is superior to the wet plate procedure. It should also be pointed out that certain popular regions like the "Siebengebirge" are not included in the series. Mr. England was indeed in these areas, and it appears that these dry plates failed him at the crucial time.

Most probably the series 'Stereoscope Photographs' entitled "The Rhine and its vicinity" was taken during this journey. The series comprises 80 stereo photographs of the Rhine from Cologne to Mayence, and of the Lahn and the Nahe. Priority is given to the big cities. There are 11 photographs of Cologne, Coblenz and the surrounding areas, 7 pictures of Wiesbaden, then a famous spa.

However it is the Lahn which is well presented—there are 16 pictures. Photographs of the Moselle are lacking completely. There are only two pictures of Mayence, and four of the lower Nahe. This series also seems to be incomplete.

Whether this is due to the unreliability of the dry plate procedure, to the lack of transport or perhaps other causes, is hard to tell. There certainly could be a connection with the fact that there were no trains along the Moselle. An interesting fact though is that a lot of the pictures portray people, which was quite unusual at this period due to long exposure times. However they seem to be the same people, perhaps the photographer and his wife.

(Continued on page 13)
Tony Alderson
1954 – 2002

At 48 years of age, Tony Alderson, stereographer, cartoonist, and ukelele player has passed away. Succumbing to liver and kidney failure in North Hollywood, California at 10:30 pm on Tuesday night, October 22, Tony went to the great 3-D drawing table in the sky.

Hired by Susan Pinsky in 1982 to work at 3D Cosmic Publications, a division of 3D Video Corporation, Tony converted Jack Kirby's art to 3-D for the "3D Cosmic" book Battle for a Three Dimensional World. He also created numerous stereo conversions, including one for a Friday the 13th Part 3 poster in 3-D that has since become highly collectible.

Tony is the artist responsible for the NSA 2002 Convention logo. He also created the logo in 1986, the last time the convention was held in Riverside, California.

The new logo was a graceful computer-generated montage combining the classic Holmes stereoscope, Sir Charles Wheatstone, and a Keystone motif with some California oranges and blossoms. The 1986 logo, with deft line art rendered into 3-D, combined the Keystone motif and a stereoscope which held an actual stereo pair showing palm trees against a sunset, symbols of Southern California.

At 3D Video Corporation, Tony produced the stereo conversions for the Jaws 3-D gum trading cards published by Topps. He wrote an interesting "3-D bible" for the artists at Topps and it contains some clear observations about stereoscopic fundamentals for neophytes. "In the 3-D conversion process," Tony wrote, "I take the drawing you supply me as the left image. I then simulate the right image by cutting apart copies of the drawing and reassembling them with the proper displacements to create retinal disparities when viewed." Tony always wrote about stereography with great clarity.

After leaving 3D Video Corporation in 1983, Tony began working in motion pictures creating special effects for films like Metalstorm 3-D for which he did stereoscopic rotoscoping. At the same time he served as President of the Stereo Club of Southern California (SCSC) from 1983 to 1984 and its Program Director in 1985-86.

Tony's monthly covers for SCSC's 3-D News during his term as Presi-
dent were witty stereo-delights. His inaugural page was a side-by-side 3-panel "freevision" stereographic cartoon showing him blasted out of a cannon straight at the reader. For his final cover Tony produced the very first anaglyph issue of 3D News. It featured a self-caricature and a visual joke about the "stereo" window.

Over the years Tony produced stereo conversions for such 3-D comic books as Sheena 3-D, Spirit Classics in 3-D, The Rocketeer, Spacehawk 3-D, Dracula 3-D and 3-Dementia Comics which reprinted one of Tony's great humorous inventions from 1985.

“Noble crusade or cynical scam?” queried Tony who depicted himself as a hapless cartoonist fleeing a demonic cyclopean businessman whose pockets overflow with cash. The comic was 3D Zomoid Illustories, the world's first to be published "in the miracle of FREEVISION." The narrow, vertical side-by-side cartoon panels related “The Nightmare of 3-D Jonestown" and was a thinly veiled and very humorous expose of the rise and fall of the 3D Video Corporation.

During his twenty-year career as a stereographer, Tony used NASA satellite telemetry to produce computer-generated anaglyph "flythrough" movies of Yosemite and Venus for a 3-D CD-ROM project. He also created numerous grayscale depth-map stereo conversions for two different series of Star Wars lenticular 3-D trading cards. Tony wrote numerous articles on stereography for magazines such as Stereoscopy, published by the International Stereoscopic Union, the March 1993 issue of which includes his essay “An Introduction to 3-D Computing.”

Tony worked on many film and TV projects with his business partner Frank Isaacs at the AI (Alderson-Isaacs) Effects company which they co-founded together in 1994. They both recently won Emmy awards for their special effects on Dune, which premiered on the Sci-Fi cable channel in December 2001.

Though he has diverse stereographic accomplishments, I always thought of Tony Alderson as a stereo caricaturist, poking devastating humor at himself and the highly competitive world of 3-D business. As a kind of prescient finale to his stereographic work, Tony presented a slide program which was a career overview titled "Make Those Lenses Swing" at the NSA 2002 Convention. A Memoriam for Tony was held on October 26 at "Chez 3-D," the home of Reel 3-D's Susan Pinsky and David Starkman in Culver City, California.

—Ray Zone
Anaglyphs Arise

Some of the most effective anaglyphic images ever created have been phantograms, 3-D drawings or photos designed to be viewed from an angle (usually about 45°). Some, like the large creations of Boris Starosta, are intended to be seen from a standing position with the image laying on the floor in front of you (see www.starosta.com). Smaller, page size phantograms are designed for viewing as they lay on a table. Regardless of size, the effect of these precisely distorted images when viewed with anaglyphic glasses is to present an image that seems to stand on the page, matching the perspective of an actual object seen from the same angle.

Phantograms (also known as stereoscopic anamorphics or as free standing anaglyphs) abandon any pretense of a stereo window, creating a "real image" on and above the plane of the paper. One of the most fun is "Immaterial Chess-Game" by German 3D-artist Achim Bahr, showing a chess board on the table in front of you with pieces just asking to be picked up and moved. An exceptional series, also by Bahr, was published in 1989 by the German Federal Postal Services in the form of large "Telegram" cards. One reveals a plate with cake next to a cup of coffee and shiny silverware. Above the cake hovers a bee, daring anyone to catch it.

The concept has now been commercialized by a Canadian company using 3-D modeling software to produce FramoGrams", color anaglyphs printed in very high resolution on 8x10 inch sheets for viewing at an angle. The eight different images shown on the company website include a variety of familiar things like the train shown here, a motorcycle, a rock band, a grasshopper, a car, etc. Whatever the images might lack in excitement, their detail is impressive; with great attention to shiny surfaces and textures.

Unlike most similar free standing anaglyphs, FramoGram images rise not from a blank page, but from a surface printed in a color or pattern appropriate to the object standing on it. A little ghosting is detectable, but the background colors and patterns help minimize it. All the colors used are well controlled to avoid rivalry.

The company, Magic Mosaics Ltd., will produce custom FramoGrams for presentations, promotions, advertising or any other requirement. The potential for things like fast food joint place mats, greeting cards, notebook covers, gift wrap, etc. is intriguing. The 8 x 10 inch FramoGrams (including anaglyphic glasses) are $15 each plus $5 shipping and can be ordered at www.magicmosaics.com/framogram/. Magic Mosaics can be contacted at 101-4448 Houlihan Ct., Victoria BC V8N 6C6, Canada.

To create your own free standing anaglyphic drawings (without a computer!), or to simply understand better how they work, Stereoscopic Drawing by Arthur Girling includes a section free standing anaglyphs, and is available from Reel 3-D enterprises or the NSA Book service, www.stereoview.org.

Cygnus Closing

Cygnus Graphic, the Phoenix mail order firm specializing in 3-D related books, posters, viewers and miscellaneous hardware will sell its remaining stock and cease business by around the end of 2002. Owner Duncan Woods said he needs to devote his time to translating, mapping projects, and teaching, but will continue his involvement with 3-D on a hobby basis.

Starting in 1990, Cygnus Graphic grew into a significant retailer of modern published material illustrated in or discussing just about every stereographic technique, with an annual catalog that had reached 50 pages by 2000. While many of the items included can now be found on the web sites of other retailers, none offer the cornucopian variety of 3-D publications and images that Cygnus featured in a single catalog.

A final mailing to previous customers will list the remaining books (many now out of print and in limited supply) and the discounted prices. To get a copy of the close-out product list, contact Cygnus Graphic, PO Box 32461, Phoenix AZ 85064-2461, (602) 279-7658.

"Locomotive", a FramoGram by John Adlersparre. ©2002 Magic Mosaics Ltd.
William England’s 1867 Rhine Journey

(Continued from page 9)

This series must have been an uncommon success at the time. Soon after, plenty of illegal copies appeared. Their attraction holds even today, at a time when we are literally bombarded with visual impressions. The three-dimensional view of the Rhine and its vicinity before the two world wars is a fascinating experience.

William England continued his search for a better dry plate technique. In 1871 he described the “Morphine dry plate procedure”: “those who want to prepare very sensitive plates, should use morphine”. He wanted to use these plates on his next trip to the Rhine. “I have used this procedure often last summer, and don’t think that any changes are necessary. I have used them together with the wet plate procedure and have obtained quite good results. Unfortunately, the outbreak of war has put an end to my journey. Still I have complete confidence in this procedure and prefer it to all other dry plate procedures that I know of, on the condition that the plates are not kept too long.”

For more of William England’s Rhine views visit: http://www.wettnam.de.

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I 1982, when I first started to take stereo photographs and attempt to make 3-D conversions, I was passionate about anaglyphs. So passionate, in fact, that I saved examples of poor 4-color printing where the red and blue printing plates were out of register just because it reminded me of anaglyphs. I'm still passionate about anaglyphs and that is because my first exposure to stereography was with anaglyphs that were highly effective. I'm speaking, of course, about Three Dimension Comics featuring Mighty Mouse, the “World's First” 3-D comic book, published by St. John in September, 1953.

In 1983 I joined the National Stereoscopic Association and from the very beginning was impressed with John Dennis’ global treatment of all forms of stereography in the pages of Stereo World, including anaglyphs. And, since 1983, it might be fair to say that more printed impressions of anaglyph images, both black-and-white as well as “polychromatic” or full color, have been produced and printed than in the entire century succeeding their invention. Since 1983 millions of printed anaglyphic impressions have been made in every kind of publication from astronomy and natural history magazines to sports and children’s publications to newspapers, general interest and trade journals.

Ducos du Hauron discovered the principles of 3-color Subtractive filtration in 1862 and seven years later he produced a full-color lithograph using Red, Blue and Yellow pigments. By 1891 du Hauron had patented anaglyphic printing and after 1895 in America anaglyphic images began appearing as inserts in Sunday newspapers. Anaglyph projection of magic lantern slide shows existed at the time but, from the beginning, du Hauron favored printed anaglyphs because they were inexpensive and accessible.

Today, with proliferation of digital imaging, computers and software such as Adobe Photoshop, it is a relatively simple matter to produce anaglyphs for printing or display on the internet. The anaglyph works very well in the Red-Green-Blue Additive color space on the computer and internet. Think of the difference between Additive and Subtractive color this way: RGB combined with Additive (light) filtration makes White—RBY combined with Subtractive (printing) filtration makes Black (pure black is also used for CMYK 4-color printing).

One of the beauties of computer software is that it handles the conversion of RGB onscreen colors to CMYK printing for the user. It automatically converts the image from the Additive color space of the computer to the Subtractive color space of the printer. And the Additive display of RGB colors is very effective with the anaglyph. If properly produced, a computer or internet anaglyph image will have much less “ghosting” than its equivalent image in CMYK printing.

Jerry Chase and Boris Starosta have given us two excellent discussions of the anaglyph and its production using digital techniques on the computer. To commence his article “Anaglyphs on the Internet” Jerry Chase gives us a fine tutorial on the basics of internet images. He characterizes anaglyphs as “the 3-D that people love to hate.” That has certainly been my experience. Very early on in my career I took it as a personal goal to create anaglyphs that absolutely conveyed a stereoscopic experience. It was always a fine moment for me when a disbeliever looked through the “anaglyphoscope” at one of my images and made a spontaneous exclamation that confirmed the fact that they were actually having a “3-D moment.”

“When the angles of the perspective as seen by the camera lens match exactly the angles of perspective of the viewer, the mind relaxes and naturally begins to sense the reality of the scene,” notes Chase. He speaks as a
motion picture exhibitor of 25 years and as a professional photographer and here is espousing the benefits of orthoscopic stereo. Noting the differences in scale between the viewing of a stereocard through a Holmes stereoscope and an anaglyph enlargement, Chase elucidates the perceptual difference. This is a remarkable advantage for the anaglyph.

I have followed the progression of Boris Starosta’s increasing fascination with different forms of stereography for a number of years on photo-3d, the online discussion group. I remember when he espoused the orthoscopic stereo image in which the photography must conform to the trigonometry of the human visual system. Then, Starosta’s initial disdain for the anaglyph turned into outright fascination. He undertook a thorough and obsessive examination of every one of the anaglyph’s technical and aesthetic properties which included production of a landmark large-scale phantogram, floor-mounted in an art gallery.

The fruits of Starosta’s obsession are evident in his writing here along with some of his beautiful anaglyph images. Especially interesting are Starosta’s efforts to create anaglyphs that are inherently beautiful—his attempt to create “a print that has two functional viewing modes: flat and 3-D.”

The “polychromatic” or full color anaglyph has been the predominant strategy to make a stereographic image that is pleasing without the red/blue glasses yet has depth when viewed with them. It’s been a serious trade-off for the stereographer, especially with imagery that is predominantly bright red or blue, two colors that advertisers seem to love.

Though he has produced anaglyphic advertisements, Starosta always attempts to give his polychromatic images a “fine art” quality compatible with “the flat viewing mode.” In attempting to defeat what he characterizes as the inherent ‘ugliness’ of the anaglyph, Starosta has resorted to four powerful visual strategies: Camouflage, Obfuscation, Incorporation and Atmospheric Extinction. They are all cousins and Starosta has clearly explained them in relation to his images. He has also written an excellent tutorial on digital anaglyphs.

I do have to take issue with Boris on one count. He writes that “Anaglyphic prints suffer from a heritage of usage in comic books and in the commercial/novelty realm. As such they have been deficient in aesthetic and technical virtue...” Starosta’s preference for high art is in evidence here. He probably did not grow up reading comic books and thus assumes that they have no place in a museum. This is not the case. A simple perusal of art journals like *Juxtapoz* demonstrates the increasing prevalence of cartoon-style imagery and narrative art in galleries and museums.

A few years ago I reviewed a traveling exhibit at the Museum of Contemporary Art (MOCA) in Los Angeles called “High and Low.” This very well received show displayed actual comic book pages beside the large-scale Pop Art paintings that Roy Lichtenstein had derived from them. Oil paintings by abstract-expressionist Philip Guston were hung beside the original comic book art of R. Crumb which had inspired them.

There have been a number of “technically deficient” 3-D comic books over the years but *Three Dimension Comics* in September 1953...
In the fall of 1998, I began printing with a friend’s Epson 3000, preparing anaglyphs for display at a local gallery in my hometown of Charlottesville, Virginia. I experienced my first “anaglyph epiphany” with the printing of the image entitled “Blue Light.” My friend, who had been very skeptical of my interest in 3-D photography, said of this image, as it was coming off the printer, “that looks pretty good! It even looks good as a flat print.” (Figure 1) This comment really struck a chord within me, and in the years following has catalyzed the development of a fine art anaglyph style.

I had first started experimenting with anaglyphs a year earlier. Harold Baize gave me my first lesson in how to create bright anaglyphs in the RGB color system of the computer. I applied this to my first anaglyphs that I published on the web. I did nothing more with anaglyphs until the following summer when I printed up several larger anaglyphs at a local service bureau for the NSA convention in Richmond. Only one came out to my liking: “Air Park”. (Figure 2) Later I would learn why.

In Richmond, I met Gabriel Jacob, who showed me his remarkably effective anaglyphs made using an Epson inkjet printer. He taught me the secret of using alignment to minimize ghosting: that in an anaglyph it is typically better to compromise the stereo window in order to improve alignment (minimize deviation on-paper) at the point of interest in the picture. This renewed my interest in the medium.

Anaglyphic prints suffer from a heritage of usage in comic books and in the commercial/novelty realm. As such they have been deficient in aesthetic and technical virtue: in other words, most anaglyphs seen by the public are “ugly” and, adding insult to injury, do not reveal a satisfying stereoscopic complexity (image depth complexity).

Against this backdrop, it is no wonder that few fine artists have bothered to explore the medium or chosen it to bear their message. The problem of anaglyph “ugliness” is primary, because no one wants to hang an ugly print on their wall. Regardless of subject matter, aesthetics remain a key to effective artistic expression, helpful in engaging your audience.

I try to defeat this “ugliness” by hiding within my prints the very thing that makes them anaglyph: the color fringing along edges in reds and blues which is caused by the parallax/depth within the image. The end result is a print that has two functional viewing modes: flat and 3-D. In working with various images, I have discovered different approaches to the problem of the flat viewing mode:

Camouflage (“Voodoo Rider”). In these images, the fringing is obscured by the fact that objects of depth are blurred. The red/blue edges become part of motion blur and are effectively obscured—camouflaged, if you will, by their softness, by their similarity to motion blur. (Figure 3) This technique results in a tradeoff. Details in depth are lost, depth complexity is reduced.

Obfuscation (“Grinder”). These images contain random textures that hide the anaglyph fringing of the image. Thus the image does not appear doubled. For example, in the Grinder, the man is in register, and the spray of sparks, flying out of the plane of the print, creates a random texture which visually overpowers any anaglyph fringing. Thus even the sparks do not look doubled. (Figure 4)

Incorporation (“Blue Light”, “Air Park”). In these images, the fringing becomes part of the composition. In “Air Park”, the fringing on the floating aircar supports the illusion that it is in motion.
Atmospheric Extinction

("Air Park"). Atmospheric haze will reduce the contrast in distant edges, and thus will naturally de-emphasize fringing, while supporting the sense of depth in the 3-D viewing mode.

These methods to hide anaglyph fringing/doubling also function naturally to reduce ghosting, and thus enhance not only the flat viewing mode but also the 3-D mode. They are also especially effective in polarized projection (as long as alignment is perfect), and in the full color Stereojet print medium.

My explorations and experiments with fine art anaglyphs have begged the question: why bother with 3-D at all?! Why spend so much effort hiding the attributes of 3-D, when one can simply shoot flat and be done with the problem once and for all? I do not yet know the answer and may never know it. Certainly, some things are best shown in 3-D. Some things cannot be shown any other way! But what does this matter to art?

How To Make Anaglyphs Using Photoshop v.4 on a Mac or PC

Initially, I'll assume you are working with RGB color left and right source images. I use three different procedures for creating anaglyph images for glasses with red lens on left. Before you start, have both the LEFT and RIGHT images (scan files) open in the software.

Full Color

To preserve all color in your anaglyph (desirable if your source images have pale colors to begin with), proceed as follows:

1. select all of the LEFT image window (ctrl-A).
2. in the channels palette, select just the red channel.
3. copy the image (it goes in the clipboard).
4. move over to work in the RIGHT image window.
5. select all.
6. select just the red channel.
7. paste.

This pastes the red channel taken from the LEFT image into the red channel of the RIGHT image. Skip down to 8.

Partial Color

To preserve some color in your anaglyph (desirable if your source images have fairly strong colors to begin with), proceed as follows:

1. select all of the LEFT image window (ctrl-A).
2. (do not select a channel—i.e. all channels are selected)
3. copy the image (it goes in the clipboard).
4. move over to work in the RIGHT image window.
5. select all.
6. select just the red channel.
7. paste.

This pastes the all three channels taken from the LEFT image into the red channel of the RIGHT image. In effect, it pastes a grayscale conversion of the entire LEFT image into the red channel of the RIGHT image. Skip down to 8.

Monochrome

To make a grayscale anaglyph (desirable if your source images
have very strong colors, and you wish to remove all color rivalry), proceed as follows:
1. convert both your LEFT and RIGHT images to grayscale (menu>image>mode>grayscale).
2. select all of the LEFT image.
3. copy the image (it goes in the clipboard).
4. move over to work in the RIGHT image window.
5. convert this RIGHT image back into RGB (menu>image>mode>RGB).
6. select just the red channel.
7. paste.

This pastes the LEFT image into the red channel of the RIGHT image. Other than the characteristic red and blue edge fringing, your anaglyph will appear gray.

**Finishing Your Anaglyph**

8. After making the anaglyph file, apply corrections to alignment: In the channels palette, you can have just one channel selected (i.e. #1 red), but still see a composite of all three channels (i.e. a full color image) shown on screen. This is handy, because you can tweak the position of the red channel while looking at your anaglyph in real time. This greatly speeds the removal of scaling errors, rotation, and setting the stereo window. You can commence with this work immediately after step 7. in the procedures above. Finally, after making all of your alignment corrections, you can crop the image down to eliminate edge misalignments and/or rivalries.

**Hue Shifting**

I've had some stereo pairs that required special color tweaking to make into good anaglyphs. For example my series of "Blue" nudes—images that were strongly blue in lighting, thus giving very little to no information in the red channel. I was able to make these into nice color anaglyphs by using not the red channel out of the LEFT image, but the green or blue channels, then copying and pasting them into the red channel of the RIGHT Image to make the anaglyph. Wholesale image color shifts can be achieved this way, while restoring a fine functionality to the color anaglyph. You can take any mixture of channels from the LEFT Image, including after changing the colors of the LEFT Image, and paste these into the red channel of the RIGHT image to achieve any color result desired. Just remember that you cannot shift colors (mix channels, shift hue) AFTER the anaglyph file is made.

For more samples of Boris Starosta's art and techniques, visit: www.starosta.com/3dshowcase/ihome.html.
Like many other people, I caught the 3-D bug at an early age. In my case, part of the attraction may have come from my undiagnosed nearsightedness, which made the family stereograph collection a crystal clear world, better seen than the real world until I was fitted for my first eyeglasses in fourth grade.

Time has passed, but my interest in 3-D has not. In the intervening years I have become computer literate and acquired some skill at rescuing damaged photographs using digital techniques. Personal experience and examining many 3-D web pages has made me aware of both the possibilities and limitations of 3-D on "the web." I share some of my knowledge now in hopes of seeing great 3-D on the internet available to everyone.

Before exploring the restoration of a sample stereograph and presentation of it on the "net," I think it important to briefly explain the limitations of the internet as a display medium.

There are two primary limitations that any 3-D internet site must address. The first is a limitation of download speed. The majority of people still browse the internet using a 56k or slower dial-up connection. Image files must be kept as small as practical to reduce "loading" time and maintain the interest of the audience. Large files effectively limit a site to people with broadband connections.

There is currently only one adequate "native" image format that browsers can view without having to also download a "plug-in" or suffer through long download times. That format is the jpeg or jpg image. Many people are unaware that the image quality and file size of a jpeg image can be adjusted to optimize it for quick loading, extreme detail, or a compromise between those extremes.

Another vital format for archival purposes is the tiff or tif image format. Whereas a jpeg file loses a certain amount of picture information in the recording of the image, a tiff file does not lose any information. Tiff files are huge in comparison to jpegs and not suitable for presentation on the web. However, a tiff file can be stored or sent on a CD while crunched in size by "zipping" the file. Zip files are compressed files that take up less space than the original files.

I think you can already understand that ideally the original scanned file should be kept as a zipped tif file, and the presentation image should be stored on the website as a jpeg image.

The second limitation of the internet has to do with monitors. The standard used for monitors is that each square inch of a monitor is 72 pixels by 72 pixels, the historical root of this being the "point size" used in printing. The common resolution for ink jet printers has been 300 pixels by 300 pixels per inch, but is steadily creeping upward. Obviously much more detail can be shown on a printout than on a monitor.

Because of the slow speed of most internet connections and limited resolution of monitors, most presentation images should not only be in the jpeg format, but stored in the coarse 72 pixel per inch resolution used by the monitors. Any greater detail cannot be seen, and simply increases download time.

The 72 pixel per inch resolution limitation immediately suggests that free viewing of small parallel images will only provide very low resolution images that are totally unsatisfactory to most people. Cross eyed viewers can use larger images, but there are practical limits to size there as well. Additionally, many people cannot easily merge cross-eye images, limiting the audience for such a website.

Another method of viewing 3-D on a computer involves the use of...
shutter glasses and a monitor that can provide an interlaced image. Describing how interlaced images are used on computer monitors and TV is beyond the scope of this article. In short, the interlaced image is actually two images with one image displayed before the other, allowing them to be separated out with the use of light blocking shutters. Some monitors and televisions display interlaced images, but many more recent monitors and TVs, flat panel and laptop displays cannot show interlaced 3-D images. In any event, shutter glasses cost enough and are difficult enough to attach and use that they aren’t popular outside of the dedicated gamer groups, some scientists, and 3-D buffs. Clearly, shutter glasses aren’t the best solution to make 3-D accessible to everyone on the net.

Home-brew mirror systems can work on monitors, but these also suffer by being additional bulky hardware requiring tedious setup and an initial expense. I have found that mirror systems also take away from the “You are there” look of good 3-D.

The drawbacks of the other display methods leave only anaglyphs, the 3-D that people love to hate. If you’ve only ever seen a bad anaglyph movie, you may think the medium has no potential. While there are distinct limitations, I can easily disabuse you of the “no potential” notion. Simply point your browser to http://webhome.infonie.fr/alpes_stereoj_index.htm and see what one European has been able to do with full color anaglyphs. Viewing a few of the large images on this site will quickly convince you that anaglyphs have possibilities as a display medium.

I make full color anaglyphs, but black and white images are the best starting place for the novice, which makes converting early stereographs an excellent starter exercise.

I enjoy converting stereographs into anaglyphs for a number of reasons. The primary reason for doing such work is obviously conservation and restoration of the image, but the fun part is the impact that can be made with a larger copy of the image. One crucial fact that I have learned in over twenty-five years in motion picture exhibition and as a professional photographer is that realism requires proper perspective angles, a feat only possible when viewing large images.

When a person takes a snapshot, shoots a movie, or sets up a 3-D shot, the angles of the original perspective are all natural and the images flow naturally. When viewing snapshots, we recognize the images and the consistency of the angles, but small snapshots don’t have the punch of reality, partly because the perspective within the photo doesn’t match the obvious reality of the environment, and partly because the flimsiness and movement of the paper constantly cues us that it is a miniature. Seeing movies on a big screen in a movie theater, we get more punch—things look more real than in our snapshots because the perspective is closer to real life and the “window” is stable. When we view 3-D, we get an additional boost towards recreating reality from the distance cues. This is all good, but...

When the angles of the perspective as seen by the camera lens match exactly the angles of perspective of the viewer, the mind relaxes and naturally begins to sense the reality of the scene! 3-D ranging is easier as the cues are consistent with the angles. With this accomplished, the primary missing element to the illusion of a reality beyond the stereo window is the element of ranging eye focus. The 3-D image is rarely in the same depth plane as the original photographed object. Even this limitation can be partially overcome. If a person wears reading glasses as well as the red/blue lenses, or a nearsighted person removes their corrective glasses, the focus of the eyes is shifted to a more natural position. As many of us learned with our first cameras, the focus differences past fifteen feet are minimal compared to close-ups, and both the camera lens and the eye can be fooled.
What now becomes apparent is that the net allows something that previously was only available using rear screen projection; true angle 3-D viewing of an illuminated image! While hand viewers and other presentation methods do allow rear illuminated images, rarely is the viewed scene in the correct perspective relative to the observer. Now my excitement of restoring these old stereographs becomes more apparent. In a sense, it is now possible to “see” these old scenes, not as a small image, but as they were seen by the original stereographer!

In truth, many of the finished presentation images we will make won’t be quite large enough to fully match angles, but the difference between the old stereograph card and the image on the monitor will be huge, and some special shots may match angles exactly. Now it is time to examine the example original stereograph.

I’ve chosen this Keystone view of Manhattan from the Brooklyn Bridge because it has a lot of detail, and has dark cables on a light background. If not handled properly an anaglyph of this stereograph could have objectionable ghost images of the cable. Some ghost images are inevitable because of filter limitations, but they can be minimized enough to not be a distraction, as will be shown.

I use Adobe Photoshop 5.0 LE for image processing and have a Microtek scanmaker 4600 that I use to make scans. This scanner has the capability of 2400 x 1200 dpi optical resolution. Although I use Photoshop for most of my work, I do have other programs that I use for some effects and repairs. The steps outlined here should be used as a guideline for your own scanner and software use. Individual steps may vary.

1. The very first thing I do is to clean the image and the scanner glass of any stray dirt or marks. These could cover up detail later and would have to be corrected in the image manipulation.

2. Once the scanner and stereograph are clean and the stereograph on the scanner, I overview the image and select only the card area plus a little extra safe margin to scan. I then set the resolution to 600 dpi (optical).

Stereographs are often contact prints of glass negatives and have tremendous detail as original photographs. 300 dpi is simply not enough resolution for any serious conservation work. To prove the point, here is a close up of the example stereograph taken from the 600 dpi scan.

While people viewing the finished image will get only an overview, this quick enlargement of the boat in the center of the picture shows that the boat belongs to the Jersey City Stockyard Company and has a man standing on the top deck. This detail would be muddied in a 300 dpi scan, and the digital image would be less useful as an archival copy when the original finally fades.

If you have a scanner with only 300 dpi resolution or problems with not enough memory, then by all means, scan at a lower resolution. The difference on the web presentation image will be minimal, even though a printout will not have as much detail. The important concept is to get your images scanned properly and into the image editing program before they fade or are further damaged by wear or other causes.

3. When scanning the stereograph, I press the curl out as best as possible so that the image contacts the scanner glass and doesn’t arch above it. If it does lift up it will be out of focus or subject to reflection off the shiny surface of the photograph. Most of the older stereographs don’t have an appreciable curve or glossy finish and are easier to scan.

4. If there is staining or color detail, I save the raw image as a RGB color tiff file. That file is usually about 26 megs in size. A gray scale tiff file can be used if the images are in good condition with no staining. A grayscale file will be less than 9 megs in size. It is very important that this original scan not be manipulated in any way before saving. Once the original archive image is saved and the presentation image made, it can be zipped to save some space and copied onto a CD for storage. If your disk space is at a premium, a jpeg file of the image can be saved. At medium compression, this will give a file about 1 meg in size. Some image data will be lost, and each opening and re-saving of the image will degrade it further. Try to save the original image as a tiff file if at all possible, and be detailed in your filename description of the image. A sample filename for this image might be “Keystone image 32703 Manhattan Skyline from Brooklyn Bridge 1930 with wharves and boat”.

Now is the time to mention in passing that there is a cross-eyed 3-D jpeg file format called a jps file. There has been a noble effort by one programmer to make an automatic conversion of a jps file into an anaglyph using a Java applet. While semi-satisfactory for casual viewing, this applet can leave obvious ghosts and is not as discrete as the image editing that is needed for great views. I cannot recommend jps format for stereograph conservation.

5. If there are no stains on the image to remove, I click on the Photoshop menu “Image” select “mode,” and finally “grayscale.” I discard the color information, leaving just the two grayscale photos. The grayscale images are easier to adjust or correct if there is damage to the stereograph.

6. I now click on “Image,” “Adjust,” and then “Levels.” A histogram (graph of how much of each level of gray is in the image) appears. Most of the time there is a flat space at either end of the graph.

Immediately under the graph are three triangular sliders. From left to right, they represent maximum
black, midscale gray, and maximum white. I slide the two outside sliders until they are just under the “toes” on their ends of the graph. This will increase the contrast. The middle slider may be moved slightly to right or left so that the image can be brightened or darkened. Once I’m satisfied, I click on “OK.” Any correction to the image must be done now. Dirt and scratches may be removed using standard Photoshop techniques. It is important to note that any adjustment of one image so that it doesn’t match the other image will result in that area of the anaglyph going red or blue, which can be disconcerting. Avoid performing any extensive correction until you are skilled at using Photoshop.

7. I now set the image window and size to a convenient working size using the “Navigator” dialog box and by dragging the edges of the image box with the mouse. If the image of the stereograph is not exactly horizontal, I use “Select” “All” and “Edit” “Transform” “Rotate” to correct it.

8. I use the marquee tool (the dashed box on the upper left of the tool bar) to select the left image only.

9. “Edit” and “Copy” brings this into the clipboard. “File” and “New” will attempt to open a grayscale box with dimensions matching the selected image. I add about 200 pixels to each dimension in this box, and change the mode from “Grayscale” to “RGB color.” Once I’ve done this, I click “OK” and then “Edit” “Paste” the left image into the new box.

10. The “Layers” dialog box now shows a white background layer and a new layer, which is active. I now click on “Image” “Adjust” “Levels” to reopen the levels dialog box. Since this is the left image, I need to remove all blue and green information. I click on the down arrow to the right of the “Channels” text box and select “Green.” Once this is selected, I select the right output levels text box and replace the number there with a zero. The image will immediately turn a magenta color. I then select the “Blue” channel and set its output level to zero as well. The image is now only red and black. I’m now finished with the left eye image.

11. I re-select the original grayscale image, and using the mouse, slide the square dotted line box over the right image. Again, I “Edit” “Copy” and then select the image box containing the new red image. I “Edit” “Paste” the right image into the box, where it makes a new layer covering the red image.

12. I now select “Image” “Adjust” “Levels” “Channel” “Red” and set the output of the red channel to zero. The image immediately turns blue-green.

13. Now the magic begins. I go to the “Layers” dialog box and adjust the opacity of this layer to 50%. Even though the overall image is dark, the red image is now partly visible!

14. I enlarge the image box and image and switch to the “move” tool (upper right of the tools menu). Finding a high contrast object within the images, I move the blue image until there is no vertical displacement of the images. This cable stay on the bridge made a convenient alignment image.

In some less professional stereographs, it may be impossible to line up both the left and right sides of the two images. This means that one of the images is twisted in relation to the other, and will cause eyestrain. If this is the case, I use the “Edit” “Transform” “Rotate” tool to twist the image back into registration.
15. Now, using the navigator, I enlarge or reduce the anaglyph image until it is the size I ultimately want to display on the web. I recommend two sizes, one with the image eight inches wide, so that it can be printed directly to a printer, and the other to match the angle of view of the original camera. Many stereograph views will end up being about thirteen to twenty two inches wide. When displayed on a large monitor, the viewer sitting at 18" to 22" from the monitor will see the lines form the exact same perspective that was seen by the photographer. The viewer with a smaller monitor may have to use the scroll bars and enlarge or reduce the anaglyph image until it is the size I ultimately want to display on the web easily (no spaces and eight numbers or letters if possible). The jpg file will get its own HTML page. Placing it on a page with other text and information could be very frustrating for people with a slow internet connection, although it is possible to include a paragraph or two of text above the image for the viewer to read as the image loads.

16. Once the perspective and angles match, I adjust the spacing of the images so that the apparent distances mimic those seen in real life. Separating the images will push objects away and increase the scale and depth. In general, everything will be behind the "window." Objects on the horizon should never be separated by more than two inches or some viewer’s eyes will go walleyed. An average adult has a 64mm interocular, and children have less. Exceeding this dimension when separating images will cause headaches.

This is a great point to play with Photoshop to view your image in different ways. By using the “Navigator” box it is possible to zoom in on a particular area of the photograph of event get the feeling of flying through the image. I’ll sometimes do this, adjusting the image separation as needed to make the close-ups available in comfortable 3-D. This has an added side benefit of finding dirt or dust that might have been missed in the original spotting of the image.

17. Once everything looks good, I use “Layer” “Merge visible“ to bring the two layers into the background as a single image. This allows the next step.

18. By separating out the red and blue/green images, and then recombing them, I have lost the full grayscale range. Black registers as black, but bright white only registers as a medium gray. I correct this by opening up the “Image” “Adjust” “Levels” dialog box and sliding the “white” slider to the left, until it is under the right edge of the histogram. This restores the contrast range, and I click on “OK.”

19. I wait until now to tweak the final image size. I may make a tiff file copy of the anaglyph at this point for archival purposes. Resizing is accomplished by using “Image” “Image size” and “Print size”. I set the output width to 8 or 13 inches, or whatever width I had predetermined, and then I reduce the dpi to 72dpi (or 300dpi if the image is designed to be used offline and printed). I then click on “OK.”

20. I am close to done, but there are another couple of finishing touches left. First, I use the line tool to create a black window for the images. This window makes a huge difference in the level of reality perceived. I can’t stress strongly enough that ONLY the area containing both right and left images should be visible. The fringe areas where there is a red or blue fringe must be covered by the black. Once this is done, the depth level of the monitor screen becomes the window. Because monitors are glass, the window illusion becomes especially strong.

21. I use the text tool to place a caption directly on the window frame or in the sky of the photo. It is possible to make this 3D, but I feel that distracts from the image so I use a golden color for the text that can be seen by both eyes. Having the caption in the image file means that it never gets separated or lost.

22. The file now gets saved as a medium resolution jpg file. I try to use a name that will translate to the web easily (no spaces and eight numbers or letters if possible). The jpg file will get its own HTML page. Placing it on a page with other text and information could be very frustrating for people with a slow internet connection, although it is possible to include a paragraph or two of text above the image for the viewer to read as the image loads.

23. Before closing Photoshop, I change the image width to two inches and make a second jpeg copy of either this file or the “flat” image. I use this as a thumbnail on an index page of up to twenty images.

The final file sizes will be about 11K for the thumbnail, 100K for the 8” wide image, and about 200K for the big image. In some cases, you may want to make the larger flat image available or provide “detail” enlargements.

You may see some of my work, including the completed big web view of this scene at: http://www.ElectricRailroad.com.

I am available for digital restoration of damaged stereoviews at 310 SW 66th Terrace, Margate, FL 33068. If you have old stereographs of the Waterbury Vermont
or Stowe Vermont area, I would be very interested in converting and archiving them.

Pairs

Since writing the article on anaglyphs for the web, I have been made aware of the many advocates of cross-eyed and parallel free viewing. Both of these methods of viewing have advantages, and I would be remiss if I didn’t mention that many people would like to have these alternatives available on every 3-D web page.

One method of accommodation is to provide two more sets of alternate pages, one for parallel freeviewers and one for cross-eyed freeviewers. This starts to use up storage space on a web site and can make generating the pages more tedious. A different method of accommodating these viewers is to make a single composite image with the left hand view on the left, a right hand view to the right of it, and then another copy of the left hand view on the far right. Both types of freeviewing are then available from a single image, depending on which image pair is chosen.

Because people can have difficulty freeviewing, it is a good idea to allow the viewers to be able to resize the image and reduce the distance between image points. There is a single html command that makes this easy:

```html
<img src="myimage.jpg" width="100%" alt="[MY IMAGE]"/>
```

By using this command, the width of the image is the same as (100% of) the width of the viewer's browser window. Resizing the browser resizes the window without any additional formatting or code. Use of the "width" HTML command also allows a single large or high resolution image to serve both as the image to view and a printable image.

Further, both quality mirror and software aids to viewing are available from various sources. There is an active photo-3D group on Yahoo Groups that often has discussions on the subject of viewing on the web and links to free or reasonably priced viewing aids. I recommend this group to anyone wanting to study the subject in more detail.

My opinion that converting old stereographs to anaglyphs creates an exciting new method of viewing these images still stands, but in deference to many other more experienced stereographers I will readily admit that color images do not always fare as well with this method of exhibition, and that adding freeviewing options for at least your color images is an important concession to the viewers of your web pages.

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**Upcoming NSA National Conventions**

**July 23-29, 2003**

At the Embassy Suites in North Charleston, South Carolina

Contact Bill Moll for more info or questions: whmoll@aol.com

**July 2004**

At the Doubletree Jantzen Beach in Portland, Oregon

Contact Diane Rulien for more info or questions: NSA2004@cascade3d.org
Next year can be measured in more dimensions than just time, thanks to the Stereoscopic Landscape Calendar 2003 by renowned stereographer Dale Walsh of LaSalle, Quebec. Each month of the 8 x 7 inch calendar features a full size, color stereoview of a dramatic landscape in Canada, the U.S., or Australia.

The pages are spiral bound and lay flat for easy viewing, and the views are printed at the bottom of the page so that the entire calendar can actually be inserted in a stereoscope. A lorgnette viewer also comes with the calendar, attached by a long beaded chain. Along with the name and location of the scene, lines on the back of each page indicate where to cut when the month has passed, in order to end up with a standard size view that can also serve as a postcard thanks to the heavy stock used.

I must admit I’ve never reviewed a calendar before, but this one is a gem that clearly deserves mention. “Morning River Mist” at Mount Tremblant, Quebec, serves far better as a cold January image than any snow scene. In April, the almost spooky straight rows of trees at the Tumut River in Australia draw you into the hall like shadows. A balancing rock in Arizona’s Marble Canyon fills the frame in August, and the cover shot of fall in Hull, Quebec, makes an enticing October image. Some unwritten law dictates that all calendars have a sunset shot, but the stereo of Sandbanks provincial park in Picton, Ontario easily beats any flat ones. One little extra you won’t find in other calendars—the dates and locations of the 2003 ISU Congress and NSA Convention appear on the May and July pages.

November: Sandbanks Provincial Park, Picton, Ontario. (Stereo by Dale Walsh.)
Sixteen years after its first visit there, the NSA returned to Riverside, CA, July 11-15, 2002, thanks to efforts by energetic volunteers from the NSA and the Stereo Club of Southern California. Both the city and the NSA had changed in the meantime, with the current anxious state of the country and the rest of the world contributing to a certain change in atmosphere regardless of location. Added to a general apprehension about nearly everything, arriving to find the host hotel in the middle of a massively disruptive remodeling project was hardly encouraging. But once 3-D images filled the screen of the Stereo Theater and enthusiasts filled the aisles of the Trade Show, it became easy to indulge in the feeling that things really could go encouragingly well in at least one very special field of human endeavor.

The Riverside Convention Center is located right across a small plaza from the ill-fated Holiday Inn and provided a cool haven for the 800+ people attending one or more of the convention’s functions. The Convention Center staff was exceptionally helpful with numerous efforts involved in setting up the event. The weather, always hot in July, was unusually humid and made everyone grateful that good breakfast and lunch sources could be found just a couple of blocks down Riverside’s Main Street Mall.
Continuing down Main Street Mall two more blocks brought you to the famous University of California Riverside/California Museum of Photography. On Sunday, Curator of Collections Steve Thomas welcomed several groups of NSA members for special tours and round table discussions about the Keystone-Mast archive of over 350,000 stereo negatives and prints. (See Lawrence Kaufman’s article in this issue.)

**Video & Digital**

The NSA Electronic 3-D Stereo Theater returned this year with a wide variety of video and digital presentations. Included Thursday were the videos *Breaking the Stereo Window, Mousetrapped, and A Visit with Paul Wing* by Ron Labbe, *Reflections of a Golden Age* by David Burder, *Dynamic Digital Depth's Demo reel*, *Ray Hannisian's Video Samplers, Al Razutis' Meditations, Takashi Sekitani's Fireworks in 3D, Corkscrew Hill and Santa at Radio City* both from Kleiser-Walczak Construction Company, a video from Simon Bell, *A Bath Plug's Adventure* (a stills program) by Takashi Sekitani and still programs from Jim Gasparini and Ron Labbe.

3D videos on Sunday included *Fishing in Alaska and A Climb to the Summit of Aconcagua* (the highest point in the Western Hemisphere) from Thomas P. Riederer’s TreeDFilms.com.

**Workshops**

**3-D DOODLING.** Presenter: Jim Olsen. Using paper rectangles and carbon paper, participants created 3-D doodles for Holmes cards.

**MAKING “STORE BOUGHT” LOOKING STEREO CARDS.** Presenter: Georgette Freeman. Using a slide presentation and a live demonstration, renowned contemporary stereo card maker Georgette Freeman showed how she makes her distinctive cards, as well as giving pointers on her view of stereo card aesthetics.

**DIGITAL MICRO/MACRO 3-D.** Presenter: John Hart. Methodology and examples of making stereo pairs by digital processing and optical sectioning.

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*Angkor Wat from Robert Bloomberg’s Paul Wing Award winning Stereo Theater show “The Lost Temples of Angkor.” The early 12th Century temple is the world’s largest religious structure, its five lotus-shaped towers representing the peaks of Mt. Meru, home of the Hindu gods. The pool of waterlilies and lotus towers is one of two that face the main entrance and really don’t have a name or any great significance, other than providing a wonderful stereo photo op.*

*This 1953 Dodge Kingsway is from the Stereo Theater show “Classic American Cars of Cuba” by Simon Bell, which won third place in voting for the Paul Wing Award. To see more car 3-D from Cuba, visit: [http://simonbellphotography.com](http://simonbellphotography.com). Many similar images (although fat) will appear in the book [HARROTS OF CHROME: Classic American Cars of Cuba](http://simonbellphotography.com) by Simon Bell and George Fischer.*
This view of a butt painting competition is from the Stereo Theater show "The Burning Man Festival 2000-2001" by Franklin Flocks—one of two shows in Riverside documenting the annual Nevada desert event whose participants are frequently very over or under dressed for the climate.

Renowned stereographer David Lee goes over control of image density in his well attended Riverside workshop "Using Photoshop to Make Stereo Images".

NSA 2002 Stereo Theater Programs

by Mitchell Walker

This year I was presented with the awesome task of running the Stereo Theater. I thought it was going to be an easy job, until a last minute reality check descended upon my conformable feeling of contentment. Looking at this overwhelming task of organizing and presenting various stereo slide programs from a diverse group of individuals, I had a nightmare that I could not pull this program off. After exchanging several e-mails with Lawrence Kaufman and several other individuals, the task became less and less demanding. Several people helped out with the set-up and projection of the various programs, and I think they deserve some recognition: Gary Greenspoon, Merrill Moore, Bob Brackett, Jon Golden, Cecil A. Stone, Ron Labbe and others assisted in making this year’s NSA Stereo Theater a success.

The NSA Stereo Theater in Riverside featured a distinct selection of programs from across the country. Members of the Stereo Club of Southern California were well represented. There were several programs from members who shared in stereo, with the NSA audience, their experiences and insights of working in the Hollywood film industry. Listed are the programs that were presented at this year’s NSA convention in Riverside.

VISIONS IN DEPTH BY PAUL WING presented by Ron Labbe chronicles the collecting and shooting life of longtime master, Paul Wing... as told by Paul himself. It was put together in 1990. We saw many of his favorite images from his outstanding collection of many thousands. Tissues, hyps, pseudos and color stereos that were shot by Paul in 1940, were all there.

UNDERWATER IN 3D by Kenny L. James. A close-up tour of California's marine life, colorful and exotic sea species of the California coast along the Santa Barbara Channel. It included lobsters, anemones, sea lions, rock fish, and other creatures. Many...
of the images were photographed with an Image 3D camera enclosed in a special custom underwater housing; “The 3D Explorer” designed and built by Mr. James. Mr. James has dived and taken underwater stereo pictures for over 30 years.

MY TWO NEW BEST FRIENDS OR I’M IN LOVE WITH MY ANNIE MORPHIC by Paul Pasquarello. A series of anamorphic stereo images of Buffalo, New York, the Western United States, Spain and France. All photographed and projected with special anamorphic lenses.

WORLD TRADE CENTER AFTERMATH by Sheldon Aronowitz and John J. Zelenka. Aronowitz and Zelenka’s stereo documentation of the destruction and aftermath of the World Trade Center disaster was photographed in and around “Ground Zero” starting around September 15. It covered the initial disaster, the
The 2002 Trade Fair as seen from a 2nd floor room of the Riverside Convention Center.
(Panorama by Richard Twichell)

THE ROBERT M. WALDSMITH AWARD for Meritorious Service went to Dan Shelley.

THE AWARD FOR BEST STEREO WORLD ARTICLE ON HISTORICAL STEREOSCOPY went to Richard C. Ryder for “From the Gates of Hell” in Vol. 28 No. 5.

THE LOU SMAUS AWARD FOR BEST STEREO WORLD ARTICLE ON MODERN STEREOSCOPY went to Sheldon Aronowitz and John J. Zelenka for “Documenting 9/11 in Depth” in Vol. 28 No. 4.

THE PAUL WING AWARD FOR BEST STEREO THEATER PRESENTATION went to Robert Bloomberg for “The Lost Temples of Angkor”. Second

aftermath, the recovery effort, and the closing ceremonies after the clean up. Months were spent photographing the area around the site and the effects on the neighboring communities. All images were shot with a Realist, RBT, Yashica twin camera and Sheldon’s full frame Ricoh. (Awarded Special Recognition.)

ORCHID AND OTHER FLORAL WONDERS by James Comstock Provided
3-D Close-up photography of orchids and other beautiful and fascinating floral wonders. Working for a number of years, Comstock painstakingly lit (some with a special fiber optic lighting device) and photographed with a slide bar and SLR camera a number of exotic and rare orchids and other flowers, which he and a number of his friends grew over the years. (Winner of the Best New Presenter Award.)

CINEMA STEREO: A BACKSTAGE GLIMPSE AT HOLLYWOOD by Scott Ressler, who works as an assistant cameraman in the film industry, gave us a behind the scenes look at motion pictures on which he worked, from 1996 to the present including some not yet released pictures.

THE BURNING MAN FESTIVAL 2000-2001 by Franklin J. Flocks. A stereo look at the Burning Man Festival held in the Black Rock Desert north of Reno, Nevada every year in late August. Approximately 20,000 people gather on a dry lake bed to create a sensory overload of surrealistic art worthy of anything done by Salvador Dali. Burning Man attracts a number of 3-D photographers who, like Flocks, record this bizarre event.

MONUMENTAL MAYANS by Phyllis Maslin gave viewers an interesting glimpse of a few of the Mayan monuments on the Yucatan Peninsula of Mexico.

COME TO CHARLESTON NSA 2003 An invitation to the City of Charleston, South Carolina, site of the 2003 NSA convention. Beautifully photographed by Bill Moll and Steve Hughes, this program was a short introduction to the sites and sounds of the city of Charleston and a look at the convention center and host hotel where the 2003 NSA convention will take place.

3 X G2 by Gary Greenspoon presented three short pieces: “Images from Thailand”, “2:26” (A program of macro photography), and “That Next Door Down Thang”, which consisted of some favorite images of Greenspoon which were preceded by a reading of the award winning short story “Thang”, by

THE WILLIAM C. DARRAH FELLOW AWARD for Distinguished Scholarship and Extraordinary Knowledge of Stereoscopy went to former NSA President Brandt Rowles.

THE PAUL WING AWARD FOR BEST ARTICLE for Extraordinary Knowledge of went to Robert Bloomberg for “The Lost Temples of Angkor”. Second
Place went to Lynn Wyett for “Shooting Stars”. Third Place went to Simon Bell for “Classic American Cars of Cuba”.

THE BEST NEW STEREO THEATER PRESENTER AWARD went to James Comstock for “Orchid and Other Floral Wonders”. A Special Recognition Award went to Sheldon Aronowitz and John J. Zelenka for “World Trade Center Aftermath”.

Competitive Stereoview Exhibits

Vintage Views:

THE BEST NEW THEATER PRESENTER AWARD went to Louise Goldstein for “Ellis Island, Gateway to Promise”.

SECOND PLACE went to David Klein for “Benjamin Franklin Foster's Fabyan House: The People”.

THIRD PLACE went to David Klein for “Benjamin Franklin Foster's Fabyan House: The Place”.

Modern Views:

FIRST PLACE went to Larry Ferguson for “Having Fun in the Studio”.

SECOND PLACE went to Robert Bloomberg for “Flights of Fancy”.

THIRD PLACE went to Linda Thompson for “Bastanchury Days”.

HONORABLE MENTIONS went to Terry Wilson for “Chirissy” and to Dale Walsh for Stereoscopic Landscape Calendar.”

BEST NEW EXHIBITOR AWARD went to David Goings for “Ann Arbor Through the Seasons”.

Although Reel 3-D Enterprises hasn’t yet become a Krispy Kreme doughnut franchise, the recent spread of the chain up and down the west coast did provide David Starkman and Susan Pinsky with some neat hats (as well as snacks) while behind their Trade Fair table.

Drawing a constant crowd to one end of Jon Golden’s 3D Concepts table was the new lighted Stereo OPTICARD viewer with its 100mm achromat lenses that magnify every detail (and every flaw) of classic stereoviews. Designer John Dukes, right, explains features of the high-end scope to potential buyers. (See SW Vol. 28 No. 6, page 6.)

Martin Gardner. It was an unusual presentation of images created by Gary Greenspoon.

THE LANDSCAPE SHOW presented by Stereo New England Group. A collaborative program that included works of participating members of the New England Stereo Club; Paul Wing, Ron Labbe, Jon golden, Ed Shaw, Bob Brackett, Jan Burandt, Bill Sallin and Dick Koolish. This beautiful stereo program featured landscapes of the New England area.

LA 3D, STEREOSCOPIC VIEW OF LOS ANGELES AND HOLLYWOOD 1900-2000 Presented by Ray "3D" Zone featured vintage and contemporary views of Los Angeles by a variety of stereographers, assembled by Ray Zone.

MARDI GRAS MASQUERADE by George Vidacovich was a colorful look at the costumes, people, and parades celebrating Mardi Gras in New Orleans.

THE LOST TEMPLES OF ANGKOR by Robert Bloomberg. A thousand years ago the great Khmer civilization arose in the jungles of Cambodia and eventually dominated all of Southeast Asia. The magnificent architecture and exquisite sculpture of its temples illustrate the myths, religions and history of this remarkable culture. After years of terror under the Khmer Rouge followed by war and instability, Angkor is again open to foreign visitors. Now a World Heritage Site, the ruins include Angkor Wat, the largest religious structure in the world. This fascinating look at the Khmer Civilization was written by Robert Bloomberg with Marilyn Freund, who also provided the narration. The original music was composed and performed by Robert Bloomberg. The 25 minute, seven projector multimedia presentation was controlled from a Mac Laptop with "Dataton" dissolve units. This very impressive program was awarded First Place (the Paul Wing Award) as the best program presented at the Stereo Theater.

MARGETTE'S HOLLYWOOD presented by Ray Zone and the Stereo Club of Southern California. Aloha! was Marjorie Webster's greeting as the hospitality director for the Stereo Club of Southern California. As a member, she shared with us her rich heritage of Hollywood history. As a publicist to various stars of the fifties and sixties, she was fortunate to capture some of them at work and at play with her Kodak Stereo Camera, Kodachrome film and blue flash bulbs. Bob Cummings, Danny Thomas (on the set of his 50's TV show Make Room for Daddy),
Keynote

In a room on the second floor of the convention center near the competitive stereoview exhibits, an autostereoscopic video demonstration ran continuously for all who wanted to step in and see it. The TriDef 3-D TV System is a product of Dynamic Digital Depth, Inc. (DDD) and provides easy viewing of sharp images that range in depth from subtle to pronounced. In his Awards Banquet keynote speech, “Bringing 3-D to the Mainstream”, DDD president and CEO Chris Yewdall explained how that display system is combined with advances in 3-D content creation and marketing to move 3-D into mainstream entertainment. His presentation included 3-D digital projection (using glasses) of 3-D conversions done by DDD from 2-D videos, films and digital files.

Using a minimum of technical jargon, Yewdall went through the process DDD uses in creating “depth maps” from either 2-D or 3-D images to create digital files for use in either flat or 3-D display systems. Transferred to a DVD, the files can be run in autostereoscopic systems using lenticular screens or barrier strips, or for interlaced sequential viewing or anaglyphic images. For more on the variety of services offered by DDD, visit: www.ddd.com.

3-D Dive In Pool Party

The only official event of the convention actually scheduled at the Holiday Inn was a “dive-in” 3-D movie party, inspired by the success of the playful pool projections at NSA Y2K in Mesa. But even in an area unaffected by construction, the hotel’s jinx seemed to manifest itself in the form of missing equipment that meant only the well worn 1941 anaglyphic short Third Dimension Murder could be shown—several times. A bar set up at the pool’s edge and free drink coupons handed out by the hotel (perhaps to diminish any likelihood of the world’s first stereo siege) helped many of us keep things in perspective, if not in perfect focus or fusion.

Hotel Adventures

The Holiday Inn’s remodeling project came as an unpleasant surprise to both convention organizers and attendees. Entering through the parking lot or a side emergency exit, guests discovered that the lobby consisted of an intersection of two hallways where a registration desk had been set up on two folding tables.

the notorious gangster Mickey Cohen and Jayne Mansfield moving into her Pink Homby Hills estate were some of the celebrities featured in this nostalgic 3-D look at Classic Hollywood.

U R THERE 3D by Abe Perlstein gave us an eclectic blend of surreal and psychedelic inspired landscapes, highways stretching to the horizon, the majestic desert, colorful wildflower displays, aerial perspectives, behind-the-scenes of Hollywood feature films and television productions, provocative female nudes in spectacular natural settings, and architectural studies in both color and stark black & white. A very spectacular program.

CLASSIC AMERICAN CARS OF CUBA by Simon Bell. Photos of the classic American cars that are still on the road in Cuba. The images were part of the photography for his (flat) upcoming book CHARIOTS OF CHROME: Classic American Cars of Cuba co-authored with George Fischer. (Third Place winner in Stereo Theater voting.)

I GOTTA THING TO MAKE THOSE LENSES SWING by Tony Alderson presented a short retrospective of his stereo work and showed some movie visual effects, special 3-D displays and numerous stereo conversions he has done during his career in the motion picture industry.

LESBIANS, THESPIANS, HOOKERs, HOOFRs AND OTHER CINEMATIC DELIGHTS by Mark Kernes gave us a back stage look at “Adult” film stars and freeze frames of their performances. (As in past conventions, this show was presented for adults only at 10:00 pm following the Spotlight Auction.)

1998 VIEW-MASTER INTERNATIONAL SEQUENCE EXHIBITION Presented by Mitch Walker and the Stereo Club of Southern California. A repeat presentation of the View-Master sequence exhibition from 1998. The late Bill Duggan said this was the best View-Master program he had ever seen.

10 YEARS OF BURNING MAN by James Comstock. A fake anthropological study of “Black Rock” city, its inhabitants, its art and culture. It contained customs never before seen by the outside world.

WIDE WATERWORKS by Dale Walsh used panoramic medium format slides to show images of water, ships, boats, lakes, harbors and other interesting sites. The images were projected ten feet
other problems encountered, the air conditioning failed in some guest rooms although it worked well in others. The lack of any real lobby made it hard to meet other members except in the adjacent bar or restaurant, so to some extent the lobby of the nearby convention center served that purpose. (The holiday Inn restaurant did provide reasonably priced dinners at hours when the eateries along the Main Street Mall had closed.)

There would have been a certain heroic aura to the hotel’s efforts to persevere through all of it, had the disruption been due to some natural or man-made disaster. But the mess was all Holiday Inn’s own unannounced doing, and the staff had clearly lost patience with the continuing turmoil and inevitable guest complaints. By Saturday, the management had offered all NSA members a 10% discount on their room charges and had given out so many free drink coupons that the hotel’s tiny bar actually ran out of the house wine.

Just two blocks down the Main Street Mall, the official overflow hotel (with rooms at $14.00 more a night) was literally a world apart. The historic Mission Inn proved to be an oasis for many members whether they were staying there or not. Not ever a mission, and far grander than the name “inn” would suggest, the hotel offers organized tours of its sprawling maze of courtyards, balconies, halls, towers and stairways. It has its own museum full of artifacts illustrating its complex history from 1876 through its 1980s-90s restoration.

Whole wings, sections, floors, galleries and other features have been added over the years representing a variety of imitative styles and/or romantic whims. The impression, wandering through arches, stairways and balconies with increasingly unlikely (and sometimes non-existent) connections as you work your way to the upper levels, is that the place must have been designed by the architectural firm of Disney, Escher and Seuss.

Thanks to:
Lawrence Kaufman, NSA 2002 Riverside Chairman.
Mike Aversa, NSA 2002 Riverside Co-Chairman.
Quentin & Ellen Burke, NSA 2002 Riverside Registrars/Treasurers.
Charley Van Pelt, NSA 2002 Riverside Trade Fair Manager.
Mitchell Walker, NSA 2002 Riverside Stereo Theater Director.

CALIFORNIA DREAMIN by Christopher Olson. A number of images and icons of California photographed by Mr. Olson accompanied by the music of the California lifestyle.

DREAM SERIES 7 AND 8 by Lynn Butler. Surrealistic and manipulated images of horses’ dreams and those of their owners.

MEETING OF THE MINDS by Phyllis Maslin presents an interplanetary conference of aliens and their musical conversations. It consists of matter manipulated into forms with music created by the Experimental Project at the Music Museum in Seattle. Their musical interpretation of what the voices of the aliens might sound like is accompanied by Maslin’s images which also features photographs of the museum designed by architect Frank Gery.

ABOUT THE BIRDS AND THE BEES presented by Norm Henkels. A stereo spectacular of macros and ultra close-ups of flowers, insects, etc. all photographed by Norm Henkels of San Diego, California. He also featured some of Lew Miller’s legendary butterfly close-ups which were done in the early 50s with daylight Kodachrome, blue photofloods and a slide bar.

SHOOTING STARS by Lynn Wyett gave us glimpses into three kinds of “Shooting Stars”: 1) Stereo images of his work in the motion picture industry, 2) his true passion of shooting astronomical subjects in stereo, and 3) the 2001 Leonid meteors in 3-D. (Second Place winner in Stereo Theater voting.)

In addition, we had other significant presentations. Two Programs were presented by Cecil A. Stone: 1) “Our Tallest National Monuments, St Louis Arch at Night” 2) “Slot Canyons of the Southwest, Utah and Antelope canyon in Arizona”. “Dances with Butterflies” was presented by Melody Steele.

The stereo theater ended with “Show and Tell Time”. This gave members an opportunity to show their work to the NSA Audience. Participants included: Jim Gasperini, Ralph Johnson, Don Parks, Bob Verezia, Mitch Walker, Jason Ryan, Dorothy Mladenka, Gary Greenpoon, Ed Jameson, John Hart and Peter Rogina.
I. NEXT YEAR:

NU 2003 will be at the Embassy Suites Hotel in North Charleston, South Carolina. Contact Bill Moller for more information or questions: whmoll@aol.com or visit the NSA 2003 web site at: http://shuphes.org/nsa2003.


Mary Ann Sell, NSA President for constant communication, helpful advice and continued support. Linda & David Thompson, for hosting planning meetings and NSA View Competition Directors. Dave Wheeler, NSA 2002 Riverside/NSA Spotlight Auction Director.


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Tony Alderson,
Jon Golden,
RBT mounts for Welcome to Riverside show and Stereo Theater assistance and advise.
Gary Schacker,
Welcome To Riverside photography.
The UCR/California Museum of Photography and Steve Thomas, UCR/CMP's Curator of Collections.
John Jerit and American Paper Optics, for continued generous support to NSA.
Dynamic Digital Depth Inc, Australia, DM1020 S-Video Demultiplexer loan for Electronic Stereo Theater.
Kleiser-Walczak Construction Company, for supplying copies of Corkscrew Hill and Santa at Radio City.

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Volume 29, Number 1 STEREOWORLD
Founded in 1973, the UCR/Cali-
ifornia Museum of Photography
(UCR/CMP) has promoted pho-
tography, related imaging tech-
ologies and the apparatuses that
support these visual forms for
almost three decades. UCR/CMP's
permanent collections include the
Keystone-Mast archive of over
350,000 stereoscopic prints and
negatives dating from 1870 to
1940, the Bingham Technology
Collection of 10,000 cameras and
viewing devices, many prototype
cameras that were donated by the
late Seton Rochwitve and the Uni-
versity Print Collection, which fea-
tures work by well-known artists
such as Ansel Adams, Walker
Evans, Barbara Morgan and
Edward Weston. Many items from
these collections and archives can
be seen in the museum's main-
level Permanent Collections
Gallery daily (see SW Vol.9 No.2,
pg. 20-23).

Crossing A Sea of Time
I have learned a lot about the
museum's collections and exam-
ined quite a bit of their vast hold-
ings over the past five years during
visits and outings with the Stereo
Club of Southern California (SCSC).
I was fortunate enough to also be
able to attend a Museum fund rais-
er prior to the SCSC visits. The
UCR/CMP held what they called
their "Fabulous 3-D Fundraiser" on
Monday, July 1st 1996. The reason
for the get-together was the west
cost premier of the large format
(LF) film "Across the Sea of Time"
(1995). The film that Sheldon
Aronowitz recently called "The
best 3-D IMAX movie produced to
date—the standard...by which all
other should be judged (and noth-
ing has even come close)". I feel
that the UCR/CMP, by supplying
copies of the Keystone-Mast
images used in this film, helped
make this film the landmark that it
is.

Jonathan Green, the director of
the UCR/CMP talked at length
about the museum. He thanked all
the people responsible for helping
make the film possible. Seeing the
Keystone-Mast stereo photographs
on the six story high screen is an
awesome visual experience! The
vintage photographs certainly
heighten our sense of what it
would be like to be thrust into the
midst of turn of the 20th century
New York. I wish the stereo views had been on the screen a little longer. I found myself trying to examine every section of the 80 x 100 foot screen. There was so much to look at. The screen was filled with vivid definition. When they faded from old to present day, I wished that I could reverse the film and compare them closer. The UCR/CMP has about 1,000 New York views in their collection. Of the 100 used about half had never published. The Museum's contract took a year and a half and thirteen rewrites, the museum received a flat fee for every second of screen time plus payment for the use of their name.

CA vs PA

After the screening about half of the audience joined at Bertlini's Authentic Trattoria where Jonathan Green told the amazing story behind how the Keystone-Mast collection made its home in a California museum. Sacramento businessman and NSA member Mead Kibbey had long been fascinated with the probable existence of the Keystone-Mast collection. He mentioned it on a camping trip with other corporate executives. Incredibly, one of them had once owned the collection and sold it. Kibbey spent months tracking down and finding 350,000 negatives and prints in an old schoolhouse. The Keystone View Company had purchased the old Meadville High School building in 1929 and moved their factory and offices there in 1930.

Kibbey was able to enlighten the Mast family of Davenport, Iowa that a donation of the collection to UCR/CMP would be more financially advantageous to them (they had the collection up for sale for a fraction of its appraised value). Kibbey also managed to fend off an attempt by the University of Pennsylvania to acquire it. In fact the Governor of Pennsylvania tried, with a literal twelfth hour decree, to make the collection a national treasure so it couldn't be taken out of their state. Fortunately for the Museum it didn't work and they were able to get the 27 tons of glass negatives loaded from the vault of Keystone's old headquarters in Meadville, Pennsylvania and trucked across the State line. In recent years, we have become aware of other items from the Keystone View Company that have been acquired by third generation former Keystone employees brothers Eric and Lance Johnson. Thousands of additional Keystone views, glass slides, stereoscopes, related equipment and documents that for many years were thought by collectors to have been destroyed will soon be found in the Johnson-Shaw Stereoscopic Museum set to open in Spring 2002 in Meadville, Pennsylvania. (213 Wood St., Meadville, PA 16335, www.johnsonshawmuseum.org)

NSA 1986

On April 23, 1985 Stereo Realist camera inventor Seton Rochwite and his wife Isabella donated to the UCR/CMP their collection of prototype photographs that Seton had created since the 1930s (see SW Vol.12, No.3, pg.24-25). In 1986 many NSA members were able to check out the museum when the UCR/CMP hosted the NSA convention. A recent topic of discussion list lead NSA Board Chairman Bill C. Walton to collect how the UCR/CMP "...is very protective of [their] images. I recall the happiness of all the collectors who attended the 1986 NSA Riverside Convention because they thought they could more or less “run wild” in the collection and have copies made of all those images that they had been wanting for so long. But when the first copies were made they each had a big stamp across one image that read (more or less) "From the Keystone Mast Collection UCR". This stamp sort of destroyed the stereo effect and a large howl was heard throughout the area. It took the personal intervention of then NSA President Tex Treadwell to convince the curators that the collectors were just that and weren’t interested in further reproduction of these images, and it would certainly make the images more interesting to view without the UCR stamp. So a “major riot” was prevented and I think most folks went away satisfied”.

Keystone-Mast Online

In recent years, in addition to making copies from the Keystone-Mast Collection available for sale, UCR/CMP has been busy putting the images on their website, where they can be viewed for free. Its 350,000 items offer an encyclopedic view of world history and cultural diversity. Up to now, access remained a manual process of physically examining the company’s original file prints and deteriorating ledgers. In 1998, the National Endowment for the Humanities, division of Preservation and Access funded the museum’s first large-scale Keystone-Mast cataloging project. This project is known as the “Stereographs of the Americas” (SOA). SOA is a detailed illustrated record, documenting the sites, events, and cultures of the Western Hemisphere. The two-year project produced approximately 18,000
in 1990, helping make one of Riverside's best-kept secrets public. For the past five years, the Stereo Club of Southern California has taken an annual group outing to the museum, where Steven Thomas, the current Curator of Collections, has graciously been our host.

I find one of the highlights of a visit to the UCR/CMP is the building itself. Renovated by architect Stanley Saitowitz, this one-time dime store now portrays a machine in the service of art. Saitowitz's design treats the building as a metaphor of the camera. Such things as the museum's third-floor, walk-in camera obscura, dark rubber floors, gray-scale walls, and exposed air ducts produce an environment in which the people inside may be seen as the camera's film, absorbing light and information, becoming vehicles for transmission of the museum experience. UCR is now attempting to negotiate to acquire the building next to the museum, which will more than double the museum's current space.

In 1996 a new addition joined the sidewalk in front of the museum, a cloud fountain. The fountain, a street-level mist-maker replaced a broken down pool and fountain. The Museum was still waiting for funding of a computer interface to allow visitors inside UCR/CMP to adjust the color and intensity of the fountain lights, when the cloud was turned off due to litigation. After a couple years, the cloud fountain has been turned back on to the pleasure of both adults and children.

In the fall of 1999, UCR/CMP opened Digital Studio, the museum's new community imagining and technology center. Here children and adults alike explore and use the tools that support computer-based creative expression. Digital Studio is the new home for the museum's long-standing digital media literacy programs including Digital First Sundays, a fall through spring series of free, family-oriented workshops on digital culture, and Digital Wizards, the museum's after school youth intern program.

Across from the museum's admissions desk is the Jordan & Taylor iMac Internet Gallery. Here visitors can experience UCR/CMP's ambitious and well received online museum on the World Wide Web, http://www.cmp.ucr.edu, as well as "visit" the collections of other museums from around the world, such as the Louvre Museum in Paris. Printed instructions and museum staff help newcomers learn how to "surf the net," registering over 5 million hits monthly and linked to over 2,300 other sites on the Web, here visitors from over 100 countries of the world have viewed the museum's online exhibitions, education and collections projects and original works of digital art. A special highlight of the web site is a Collections page devoted to 3-D anaglyphs and digitally scanned stereo views from the museum's Keystone-Mast Collection. 3-D glasses are provided by the museum for use in the Internet Gallery and can be ordered by mail from the Museum Store.

In addition to the museum's permanent gallery installation, which surveys the social and artistic uses of photography and the history of the camera, UCR/CMP also presents changing exhibitions that address visual culture as fine art, social commentary and history. Ranging from issue oriented exhibitions such as In Our Sights: Artists Look at Guns to Ex/Changing Families: Two Stories of Adoption to history and shows such as Forgotten Marriage: The Painted Tintype and Decorative Frame, 1860-1910 and Ocean View: The Depiction of Southern California Coastal Lifestyle, single artist shows...
such as Douglas McCulloh's Chance Encounters: The LA Project and Deborah Lefkowitz's Choreography for Six Unending Seconds, UCR/CMP's changing exhibitions empower audiences with an understanding of how photography and related media have played a critical role in shaping both their culture and their daily lives. The museum's exhibitions page maintains an online archive of past exhibitions.

The museum's exhibitions change quarterly. Current exhibition information can be found on the UCR/CMP web site or by calling the museum's 24-hour information line (909) 784-FOTO. The museum's quarterly newsletter, FotoText, is an award-winning publication that features extended discussions of the museum's exhibitions and programs by scholars in the arts and humanities. UCR/CMP often times helps supply stereo images for other museum shows. One such exhibit was Inventing the Southwest which was showcased at the Gene Autry Museum of Western Heritage. This exhibit had 32 stereo cards on display, most of which were fabulous. Unfortunately, as many as ten of the cards appeared to be pseudo. A couple of images also had extreme retinal rivalry, apparently due to the negatives starting to deteriorate.

UCR/CMP's Museum Store features a fine selection of books and periodicals for learning about photography and related visual technologies. Whether your interest is in photography as a fine art, the history of the camera or tips on archiving photographic images, you'll find what you're looking for at the Museum Store. The store also carries posters, greeting cards, educational toys, and special gift items. Many items in the store are often 3-D related. A recent addition is the limited edition View-Master reel produced by the Stereo Club of Southern California entitled George Lewis: Keystone's Last Stereographer. The seven images on the reel were provided by the UCR/CMP in exchange for a number of the reels to sell in the Museum store (see SW Vol.27 No.1, pg.31). The reel is based on an article of the same title that was the cover story of Stereo World Vol. 20, No.5.

UCR/California Museum of Photography is located at 3824 Main Street, on the Pedestrian Mall in downtown Riverside, California. Regular Gallery and Museum Store hours are Tuesday through Sunday, 11am-5pm. On Wednesdays, during the downtown Riverside Street Festival season (April through October) the museum is open until 8pm. The museum is closed Mondays, Admission is free to all. Children 12 and under must be accompanied by an adult. For more information about UCR/CMP, call their 24-hour info line (909) 784-FOTO or visit http://www. cmp.ucr.edu.

UCR/CMP Receives "Save America's Treasures" Grant

Those who visited the UCR/CMP during the NSA 2002 Riverside convention heard about the UCR/CMP Collections room more than doubling in size when the UCR takes over the adjacent building. The Rouse Building on the south side of the UCR/CMP was purchased by UCR and the city of Riverside for renovation into the UCR Barbara and Art Culver Center for the arts.

The UCR/CMP will receive a $500,000 grant to protect and preserve the Keystone-Mast Stereographic Collection.

On September 25th the President's Committee on the Arts and the Humanities (PCAH), National Park Service (NPS), National Endowment for the Arts (NEA), National Endowment for the Humanities (NEH), and Institute of Museum and Library Services (IMLS) jointly announced the awarding of $15,600,000 in Save America's Treasures (SAT) grants to help preserve and protect our nation's irreplaceable cultural heritage. Through the Congressional-appropriated Historic Preservation Fund's SAT program, 80 projects in 36 states, the District of Columbia and Puerto Rico will receive funding for critically needed repairs and restoration efforts for some of the nation's most threatened historic places, archives, and artifacts.

UCR/CMP houses the Keystone-Mast collection of 250,000 glass-plate negatives and related prints totaling over 350,000 items. While UCR/CMP has carefully maintained the collection, made it widely accessible, and has begun to catalog and digitize its images, in its current storage units it remains vulnerable to great damage as it sits at the center of three of the most active earthquake faults in America. This grant will provide a state-of-the-art seismic isolation and storage system in the museum's extension into the new collection space in the Culver Center. For more information see the UCR/CMP website: http://www.cmp.ucr.edu/.
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SSA International Stereocard Exhibition

The results are in on the SSA 2002 International Stereocard Exhibition. Bill Walton served as Chairman with Jack Cavender as Co-Chair. The Judges were: Diane Rulien, Phyllis Maslin, and Shab Levy with Norm Henkels serving as alternate.

After showing at the NSA 2002 Convention, the entire SSA Exhibition was seen at the Creative Exposures Camera Club in Columbus, Georgia on August 20 and the Columbus Artists Guild on August 22. Thanks to all who participated, the judges, Jack Cavender and especially Bill Walton, tireless champion of the venerable stereocard medium. Here are the award winners:

Best of Show PSA Gold Medal
Valeria Sardy
“Special Lighting”

The Yellowfoot Award for Best SSA Member
Ernie Rairdin
“Yosemite Park, El Capitan”

Best Novice Award
Eugene Mitofsky
“Beautiful Music”

The Keystone Award for Best Portrait
Dr Louis F Romain
“Maestoso”

The Ray Bohman Award for Best Scenic
Ron Fredrickson
“Frozen Beauty”

The Infinity Award for Best Hyper
Ronald J Leonard
“Harbor at Sydney”

Best Monochrome Award
Bill C Walton
“Organ Grinder”

The David Hutchison Award for best depiction of richness in an urban setting
Rolf-Joachim Skolaster
“Site Ardente”

Best Humor Award
Ernie Rairdin
“Wow, that’s me”

The Frank Lloyd Wright Award for Best Architecture
Jack E Cavender
“University of VA #4”

Best Presentation Award
Dale Walsh
“Sunset, Sand Banks Provincial Park”

Judge's Choice
Ron Fredrickson
“Golden Kettle”

Judge's Choice
Anil Agashe
“Ducked”

Judge's Choice
Boris Starosta
“Spinning Away”

The accepted Stereo Cards of the SSA International Stereocard Exhibition also received two informal judgments during their two showings in Columbus GA. This seems to create more interest than just displaying the cards. Ribbons, which are not for use as PSA equivalents, are awarded. The cards which were awarded Ribbons this year were:

Creative Exposures Camera Club, August 20, 2002
1st Place: “Photographer on the South Rim” by Ernie Rairdin
2d Place: “The Tubadon” by Richard M Twichell
3rd Place: “Libelle” by Klaus Kemper

Columbus Artists Guild, August 22, 2002
1st Place: “Japanese Garden, UBC” by Dale Walsh
2d Place: “Site Ardente” by Rolf-Joachim Skolaster
3rd Place: “Sunflower Petals” by Carole Honigsfeld,

All cards and the remaining awards were mailed on August 24, 2002. The Catalogues were mailed out on September 26, 2002.

Awards Plaques for Distinctive Service

At the Annual SSA Friday Night Supper held on July 12 at the SSA 2002 Convention, Awards Plaques were presented to three very important members of the SSA. Shab Levy was presented with an etched plaque in recognition of his outstanding service as Membership Secretary. Bill Walton was commended for his service in originating and running the Speedy Folios for 23 years. And, not least, Nor-
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recommends continuation of $10 per year dues. There are 33 SSA 2000 Membership Yearbooks still for sale at $10.00 each. A new member or renewal that signs up for $20 membership to include 2002 and 2003 will receive a copy free while they last. Membership Secretary Paul Talbot has the Membership Yearbooks and can be reached via email: ptww@flash.net or contacted by telephone at: (512) 219-8408.

An Opportunity For Service

The SSA is looking for a dedicated stereographer to take over for John Baker as Treasurer. It's an opportunity to be of service in one of the oldest and greatest 3-D organizations in the world. If any one has an interest in serving in this vital capacity please email me at: r3dzone@earthlink.net

A New SSA Website

Your input is solicited regarding the construction of a SSA website. One of the salient features could be online tracking of folio boxes so that all members will know when to expect deliveries on their circuit.

What should be on the SSA website? This is your opportunity to make suggestions, volunteer or put in your 2 cents on this new and very important SSA initiative. So email or write your opinions or suggestions to your circuit secretary or Paul Talbot. The subject of the SSA Website is now open for general discussion.

SSA Display at NSA Convention

Shab Levy, David Thompson and Ernie Rairden were appointed as a committee to construct a new portable display for exhibition of the accepted works in the SSA International Stereocard Exhibition. Shab has created a very promising design that will be cost effective and very portable for many years of use. David Thompson is a master craftsman and he will be building the display in his deluxe workshop.

Flensburg Online

Bill Walton has sent in the following report which will be of interest to all SSA members. "I am 'friends'," writes Bill, "with the webmistress of Flensburg Online, in Flensburg Germany. I wrote her about one of my Flensburg 3-D pictures which won a prize (Best Monochrome) in the SSA Exhibition and she put a little piece on her website. If you want to check it out go to: http://www.flensburg-online.de/.

Look for Flensburg in 3-D with the picture of The Organ Grinder under it. This paragraph has 3 things you can click on.

First click: Takes you to the front page of my 3-D section on the website. The small wedding pictures enlarge when clicked on. By scrolling down you will find 5 'Teil'. The first four anaglyphs of my Flensburg area stereos and the 5th is my Bio.

2nd Click: You get the anaglyph of the Organ Grinder and when you click on the image you get the label.

3rd click: A copy of the entry form for the SSA International Exhibition".

Bob and Audrey Kruse are responsible for this charming "Stereo Doll". Audrey fashioned the doll and its clothing and Bob made the miniature stereoscope that she is holding. This lovely stereocard has been delighting folks on the Avian Circuit for the past few weeks.
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BOOK, The Siege at Port Arthur; hardback with 3-D viewer; $15 Econ Ed. (Cash preferred). Ron Blum, 2 Hussey Ave., Oaklands Park SA 5046, Australia.

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

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NEW REVISED EDITION of John Waldsmith's "Stereoviews. An Illustrated History and Price Guide" is available signed by the author, $24.95 softbound, add $2.95 postage and handling. "Stereo Views, An illustrated History and Price Guide" is available signed by the author, $24.95 softbound, add $2.95 postage and handling. For a free list, write, call or fax Cygnus Graphic, PO Box 32461, Phoenix, AZ 85064-2461, tel/fax (602) 279-7668.

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ALWAYS WANTED TO BUY: Early photographic views and stereoviews of New Hampshire White Mountain and northern N.H. regions, 1850s-1890s wanted for my collection. Town views, main streets, bridges, homes, occupational, coaches, railroads, etc. wanted from Bartlett, Bethlehem, Carroll, Conway, Crawford Notch, Dixville Notch, Franconia, Franconia Notch, Glen, Gorham, Gunwathre, Lisbon, Littleton, North Conway, Mt Washington, Whitefield and areas. E-mail images to dsundman@littletoncoin.com, or send photocopies to David Sundman, President, Littleton Coin Company, 1309 Mt. Eustis Rd., Littleton, NH 03561-3735.

BICYCLES AND MOTORCYCLES. Any stereoptics, photographs, ephemera, medals, catalogs, memorabilia, etc. related to early cycling. Single or collections. Generally 1860-1955. Permanent view wanted, L. Hersh, PO Box 211, Chagrin Falls, OH 44022-0211, Phone (440) 895-5702, paula.obie@hotmail.com.


COLLECT, TRADE, BUY & SELL: 19th Century images (cased, stereo, CDVs, cabinet & large paper) BILL LEE, 6856 Gardiner Way, Sandy, UT 84094. billleedie@juno.com Specialties: Western, Locomotives, Photographers, Indians, Mining, J. Carbutt, Expeditions, Ships, Utah and occupational.

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FAIRMONT, WEST VIRGINIA stereoviews and stereographs from elsewhere in West Virginia. I also buy other West Virginia photos, including postcards, and old paper items. Tom Prall, PO Box 155, Weston, WV 26452, wwabooks@aol.com.

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