A taste of the late ‘40s through the early ‘60s found in amateur stereo slides

by Mark Wilke

An Anniversary Celebration

Thanks to Bruce Hodgson of Ontario, Canada for this interesting set of railroad views. He relates that they feature the Santa Fe Railroad, and were taken by him at Albuquerque, New Mexico’s 250th anniversary celebration in the 1950s.

The first two views show “the christening ceremonies of the pre-inaugural Hi-Level El Capitans,” he reports, and it looks like quite a crowd has gathered to watch the activities. I noted several people holding still and movie cameras, but did not see any other stereo cameras present. Bruce says he shot all of these views with his Kodak Stereo camera on Kodachrome film.

The final view shows period costumed passengers arriving on a 19th century train, and I believe I can see its stack in the background of the first view as well.

This column combines a love of stereo photography with a fondness for 1950s-era styling, design and decor by sharing amateur stereo slides shot in the “golden age” of the Stereo Realist—the late 1940s through the early 1960s. From clothing and hairstyles to home decor to modes of transportation, these frozen moments of time show what things were really like in the middle of the twentieth century.

If you’ve found a classic ‘50s-era image that you would like to share through this column, please send the actual slide or a high-resolution side-by-side scan as a jpeg, tiff or photoshop file to: Fifties Flavored Finds, 5610 SE 71st, Portland, OR 97206. You can also email the digital file to strwd@teleport.com. If the subject, date, location, photographer or other details about your image are known, please include that information as well.

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. 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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The National Stereoscopic Association
is a non-profit organization whose goals are to promote research, collection and use of vintage and contemporary stereoviews, stereo cameras and equipment, and related materials; to promote the practice of stereo photography; to encourage the use of stereoscopy in the fields of visual arts and technology; to foster the appreciation of the stereograph as a visual historical record.

Annual membership dues: $32 third class US, $44 first class US, $44 all international memberships. Annual memberships include six issues of Stereo World, a plastic lorgnette viewer, and a membership directory.

Member, International Stereoscopic Union
Editor's View

Computerizing the Tinting Brush

The cover of this issue, from the 3-D Theater show “The Civil War in Color” by David Richardson, combines the wet plate technology of 150 years ago with today’s digital image technology. That is, the color was added by a computer before the image file was printed as a high resolution replica view or projected during 3D-Con. As far as I know, this is the first “computer colored” vintage image ever to appear in these pages and it brings up some important questions, the first couple that come to mind being:

1. When is this an interesting idea?
2. When is this an unfortunate idea?

In this issue, you’ll see another version of this same view in the form of a badly tinted and faded paper print, made many years ago and tinted in the hope of increasing its appeal to the public. The quality of hand tinting in stereoviews ranged from even worse than this example to exquisite tinted stereo Daguerreotypes, rare Keystone views etc.

Like classic Greek sculpture, color was applied to many 19th century photos without concern for any sort of grayscale purity or the possible intentions of the original creator of the negative. Part of the restoration process for such images could be seen to involve restoring that faded (and possibly poorly executed) tinting. In fact, perhaps restoring the intended tinting color in a way only now possible.

As David Richardson did with the Civil War stereos, this ideally involves the digital use of colors close in hue and saturation to 19th century tints, as if one of the young women tinting views for pennies each in 1855 were given decent pay, a better chair, and nearly infinite control of her single bristle brush, as well as infinite patience, time and eyesight to perfectly tint every millimeter of the image. Provided it’s clearly identified, this could certainly be classified as an interesting idea.

While the difference may be hard to quantify, there comes a divide between digital tinting as an element of restoration and digital colorization of images that never felt the tinkle of a tinting brush. Recently, historic black and white photos from the Civil War to the 1960s have appeared, digitally colored in imitation of Fujichrome at http://lightbox.time.com /2012/10/25/a-vibrant-past-colorizing-the-archives-of-history/#ixzz2AL8PlQk.

To see Lincoln in a famous portrait suddenly acquire the blue eyes and pink complexion of Peter O’Toole is jarring to say the least. But even (or especially) the images that seem “just right” in color present a problem. The famous Alfred Eisenstaedt LIFE magazine shot of the sailor kissing the nurse in Times Square at the end of WWII is so perfectly colorized that it could pass easily for the sort of color news photo that LIFE would commonly publish ten years later.

This isn’t necessarily a rant in defense of “the intentions of the artist” because those can at least be institutionally preserved and some (quite possibly Eisenstaedt included) would be delighted by the concept. But colorized versions of historic photos are now convincing enough that inevitably some will end up unidentified as such on popular history sites, networks, and even in textbooks, either intentionally or because a chain of people eventually assume color images like the example above to be the original. While history itself may not be severely changed as a result, the perceived history of photography certainly
would be, and there’s simply an underlying untruth involved absent any mention of the alteration. Clearly, a potentially unfortunate idea.

So, what about conversion of existing images to 3-D? Clearly, nobody will take conversions of things like famous paintings as the originals. Historic stills converted to 3-D and not identified as such are less likely to be reproduced later in 3-D than flat colorizations are likely to be reproduced in color, as that’s much easier. The 3-D Theater at 3D-Con included a fascinating example of both technologies when Dr. Barry Sandrow showed Legend 3D’s combined 3-D conversion and colorization of the famous clock sequence in Harold Lloyd’s 1923 comedy Safety Last. Sandrow is a pioneer of digital colorization of movies, and later adapted his process to 3-D conversion.

While efforts like his in colorization may be reviled among some fans of black and white films, the addition of color to the Lloyd film provided a vintage, subtly tinted effect that blended impressively with the smooth conversion to 3-D. Lloyd’s granddaughter Suzanne, in conversation with Ray Zone on stage at 3D-Con had no doubt that Lloyd would have been delighted to see the results of both alterations to his film. Judging from the hundreds of thousands of color 3-D slides he produced in the 1950s and ‘60s, it seems a safe conclusion that the conversion and tinting in this case isn’t in conflict with the artist’s ultimate wishes. At the least, this example is an interesting idea, inspiring hope of seeing the entire film converted and identified as such, with appropriate credit to Legend 3D, which also converted the 3-D rerelease of Top Gun. (Which raises the question of whether a well known 2-D film later converted to 3-D will, like new 3-D films, also play in 2-D at the same theaters!)

It’s certainly possible that movie audiences and consumers of the future will assume today’s 3-D conversions of existing films to be the originals. Given such an impressive and unstoppable technology, the best to be hoped for may be that such conversions are prominently credited, if not in a spirit of full disclosure at least to give digital companies like Legend 3D wider recognition.

\[\text{Flat Progress at GE}\]

NSA member Kent Bedford recently found this 1950s employee suggestion box poster from General Electric at an antique show. It shows a television set of that era as an improvement over a vintage stereoscope, despite the orders of magnitude in differences between their images in terms of resolution, not to mention dimensions. He concludes, “In terms of antique value I’d take the stereoscope and cards over a 1950s TV any day.”

\[\text{GONE MADDD}\]

by AARON WARNER 3-D by Ray Zone

*AH, YES, ANOTHER 3-D COMIC BY THE ARTIST KNOWN ONLY AS CYCLOPS!*
Speedy Keystone Print Folio

Speedy Keystone is a black and white stereoview card print folio with David and Linda Thompson serving as Circuit Secretaries for the folio. It’s a small but very competent group of stereographers who produce work that is intriguing in monochrome.

Two Speedy Keystone photographers recently produced stereocards that touched upon a photographic theme.

Peter Jacobsohn’s stereoview titled “Henry Taunt, Brady Agent” is a witty tribute to 19th century stereographers. It was captured at a Civil War re-enactment.

Taking a close look at the stereo camera on Henry Taunt’s tripod, it becomes evident that the photographer is using a twin digital rig.

“Henry has a homemade camera rig that consists of two digital cameras behind the camera body,” writes Jacobsohn. “He finger synchs the cameras and claims about a 75% success rate. His outfit allows him to get close to the action during re-enactments. I have seen his work and have to say it is very good.”

Peter shot this stereoview with a Fuji W1 3-D camera, aligned and married the images using Stereo Photo Maker (SPM) and printed it out on an iP6000D Canon printer. He used Ilford paper to achieve a sepia toned look.


Thomas Moore produced the stereoview card titled “Taking Pictures” using his homemade pinhole camera. The view of the miniature figures was shot in bright sunlight using an 18 second exposure on 120 size T Max 100 negative film which was developed at Ritz Camera. Moore then scanned the image on an Epson 2450 and printed the view out on an Epson 2200 printer using Epson glossy paper.

Speedy Keystone Folio member Bill Patterson found Moore’s view “Clever and different,” also noting that he has “enjoyed your views over the years.” Brandt Rowles characterized Moore’s work as “Pinhole camera magic” and added “Keep these coming.”

SSA in the 21st Century

A recent email exchange on the SSA egroups list (StereoscopicSociety ofAmerica@yahoogroups.com) addressed the issue of using the internet to digitally expand the scope of the SSA. This is one of the primary tasks of David Kuntz, new General Secretary of the SSA.

“While you will hardly find a greater enthusiast for digital imaging (as applied to appropriate projects!) than myself,” wrote Boris Starosta, “I do have to question whether the unique beauty of a hand-made stereograph (stereocard, stereoview, stereo slide, etc.) can ever be transmitted digitally. And that’s putting it mildly.

“No digital medium can replace holding tangible artwork in one’s hands. Nothing can replace the postal folios, for their functionality in putting tangible stereoviews in your hand, and moreover, for helping the novice learn how a tangible stereograph is made!” Aside traveling thousands of miles every time we wish to view or hold each others’ stereoviews, a postal folio is fabulously economical, regardless of nominal rate increases. In this sense the postal folios are comparatively priceless. Sure the whole world is constantly moving towards greater cost efficiency (and lower quality), but does that mean the SSA should also? “I think the options on the digital side are already numerous

“Henry Taunt, Brady Agent” by Peter Jacobsohn was shot at a Civil War re-enactment. Everything is accurate to the period except the 3-D camera itself.
and significant. For the SSA to start spending its resources there would seem like ‘following’ rather than leading. Resources spent on digital matters would also inevitably take away from the advocacy for the making of tangible stereoviews. That’s where the SSA is unique, and that’s where I would like to see the organization redouble its efforts.”

Thank you, Boris. Those are sentiments that I think all SSA members share.

David Kuntz is the General Secretary of the Stereoscopic Society and in that position, according to the Membership Rules of the Society, is also “responsible for trying to keep the Society functioning effectively and harmoniously.” Folio secretaries and any member of the NSA interested in the SSA are encouraged to contact David via email at: davidkuntz@cox.net

How to Join the SSA

To join the SSA one must first, of course, be a member of the NSA.

There is currently no fee for joining the SSA. For placement in a stereocard, transparency or digital folio of their choice the new SSA member must notify Membership Secretary Dan Shelley at the following address:

Dan Shelley
4366 Morning Glory Road
Colorado Springs, CO 80920
(719) 209-2799

dan@dddesign.com

The Stereoscopic Society of America is a group of currently active stereo photographers who circulate their work by means of postal folios. Both print and transparency formats are used, and several groups are operating folio circuits to meet the needs in each format. When a folio arrives, a member views and makes comments on each of the entries of the other participants. His or her own view, which has traveled the circuit and has been examined and commented upon by the other members, is removed and replaced with a new entry. The folio then continues its endless travels around the circuit. Many long distance friendships have formed among the participants in this manner over the years.

Stereo photographers who may be interested in Society membership should contact the Membership Secretary, Dan Shelley, 4366 Morning Glory Rd., Colorado Springs, CO 80920, (719) 209-2799, dshelley@dddesign.com

The Hard Copy

STEREO WORLD Index


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There was great bias against immigrants as well as virulent racial hostility in New York City in the 1830s. Public schools were segregated, blacks were not permitted seats in cabins on Hudson River steamers but had to ride on deck no matter how bad the weather, white churches segregated blacks in separate pews, etc. While there were a number of white supporters, inevitably blacks were subjected to violence.

Beginning on July 7, 1834 in New York, four nights of anti-abolitionist riots beset the black community and their friends. Black and abolitionist merchants were targets for attack and the homes of abolitionist brothers Arthur and Lewis Tappan were sacked. Black men married to white women were attacked. Causes of such atrocities on the part of hundreds and thousands of citizens are always multifaceted, this being no exception. The forces of nativism, abolitionism and its opponents, and the fear and resentment towards blacks from the Irish underclass and other immigrants in the highly segregated yet mingled Five Points district all played a role in the violence.

This was the climate in which the Colored Orphan Asylum was established. In line with the white paternalistic standards of the time, it was white women who established the orphanage. The black community at the time had few educated individuals and a lack of individual and collective wealth. The fact that white women ran the institution permitted it to avoid the politically charged issue of social equality.

The Colored Orphan Asylum was formed in November of 1836 and they could not find space to rent to care for black orphans. They decided to purchase a building which they did, located on Twelfth Street between Fifth and Sixth Avenues in Manhattan. By June of 1837, eleven children rescued from almshouses were living there. The early years were difficult both financially and in developing relationships with the black community.

On May 1, 1843, the orphanage moved to their new home on 43rd St. and Fifth Ave. which is where, during the Civil War, it faced its greatest existential crisis as it was totally destroyed by mob violence in July 1863.

Approximately 12 children entered the orphanage during the Civil War because their fathers had been killed in battle or because their absence had made it difficult for their mothers to care for them. Some prior residents of the asylum went on to fight for the Union. One, James Henry Gooding was born a slave in 1838 in North Carolina; his freedom was purchased by James Gooding, possibly his father, and he came to New York. He entered the orphanage on Sept. 11, 1846, and remained for four years. After several whaling voyages out of New Bedford, Gooding enlisted in the 54th Massachusetts Volunteer Infantry, Company C on February 14, 1863. He wrote 48 letters that were published in the New Bedford Mercury between March 3,
congress unfairly affected poor, working class men as they could not afford the $300 to hire a substitute. The Irish and the blacks were often competing for the same menial jobs and there was great tension between the groups.

The Colored Orphan Asylum was targeted as it was viewed as an example of how New York's upper class spent their money favoring blacks over the Irish. The young orphans had plenty to eat, clean beds to sleep on, and were provided an education. On the day the orphanage was burned to the ground, there were 233 children in residence. It is almost certain that some of those children are pictured in the four rare stereoviews accompanying this article. We do not know who the photographer was of these images but they were certainly produced prior to the draft riots, probably circa 1860. If anyone has other such images of the Colored Orphan Asylum, either interiors or exteriors, or any information as to the photographer, the author would be most interested in hearing about it.

There is much information available on the internet as well as in publications on the details of the events of the day of the burning. In the end the children escaped to a police station on 35th St. where they remained for several days. On July 16th, under guard of Zouaves and police, the children were transported to Blackwell's Island (today, Roosevelt Island) where they remained into the fall of 1863. A temporary home for the children was established at the former home of Hick-
son Field in the hamlet of Carmansville on the upper west side of Manhattan at 150th St. and Broadway. While it was ill-suited and in quite a state of decay, it remained the site of the orphanage until May 1868 when they relocated to their new site at 143rd and Amsterdam Avenue in undeveloped Harlem where they remained until 1907. The final move was to 261st and Palisade Avenue in the Riverdale section of the Bronx. Under various societal and legal pressures far beyond the scope of this article to discuss, the Colored Orphan Asylum changed its name to the Riverdale Children’s Association in Feb. 1944. The admission of white children also began around that time. Of course, in addition, there were enormous changes in the way children in need of social welfare services were cared for. There was growing disapproval of orphanages and the transition had to be made to serving children in foster care. The Riverdale property was sold but the Riverdale Children’s Association, through a series of mergers, is now alive and well and operating as the Harlem Dowling-West Side Center for Children and Family Services. This organization is still carrying on the vital work begun so long ago by the brave founders of the Colored Orphan Asylum. I encourage you to visit their website and to support them: www.harlemdowling.org/.

References:
Wikipedia.

Untitled tinted view of playroom with boys and girls, Colored Orphan Asylum.
Another collaboration between NSA members David Klutho (Stereographer) and Ron Labbe (3D graphics) has produced a book filled with big and bold anaglyphic stereos of animals in 17 zoos around the United States. Many of the 11x11 inch pages of Zoo 3D: An Incredible Animal Adventure are dominated by full bleed stereos, and only a few of the 80 pages feature images much smaller than a half page. Regardless of the size of the animal or the image, most of these are close-up portraits showing every feather, fang, scale or antennae in dramatic 3-D.

The text is presented in extensive captions, most in reversed white type within the images that remains easily readable through the provided glasses while never conflicting with any occupied plane of depth. The occasional, inset “Did You Know?” text boxes also use reverse type and are also carefully placed within or beside images. A few smaller inset images appear in corners of larger shots of the same species, except in the case of a young American Alligator, whose claws and snout extend beyond the inset frame (and off the page) to float above the background of a two-page spread view of a Cuban Crocodile.

While it’s probably good the gimmick wasn’t used for many image combinations, the effect on pages 66 and 67 is astounding. The toothy jaws of the two reptiles nearly meet in negative space above the pages on either side of the gutter with neither image interfering with the other. Another example of manipulated image borders has the nose of a Giant Anteater extending above a page crawling with large ants.

None of the images include bars, cages or fences, with the exception of those few that include humans. One shot of a gorilla includes a wall with a plastic dome that extends into the animal’s space. A child leans into the dome smiling at the gorilla, leaving it stereographically unclear which primate is on exhibit, or which is the greater threat in need of containment by the dome. The book ends with four pages of zoo animals (A duck, Meerkat, scorpion, and California Sea Lion) presented as dramatic phantograms, here called Digital Anaglyphic Vertically Inclined Displays—a name unlikely to catch on. The Meerkat and the scorpion are particularly good examples of the technique, regardless of what you call it.

Kultho’s stereos, from action shots of large animals to close-ups of medium and small creatures are riveting, and the portraits of several animals could serve as posters for their endangered species. On page 16, an Orangutan stares into the camera with a thoughtful, questioning expression that would challenge the most skilled CGI artist trying to animate a jungle story. Ghosting is nonexistent in most of the best images, a minor annoyance in others, and a serious problem in only a couple of views, especially one of some unfortunate Humboldt Penguins.

While aimed at a young audience, adults who purchase the book for children or grandchildren will want to spend some time with it before gift wrapping. Special treats to look for are the hidden images inside the front and back covers, visible only with anaglyphic glasses.
3-D Theater

A total of 79 shows of various lengths and sources were projected during the five days of the 3-D Theater at 3D-Con in July. Historic, scenic and experimental presentations were joined this year by some exceptional narrative videos along with more music videos than ever before. Many of these are available for viewing online, either complete or in part, and an encouraging number of them can be viewed in multiple 3-D formats. Whenever possible, these links are provided with the show descriptions here. As well, many of the music videos are available for the Nintendo 3DS. Instead of choosing awards exclusively through a team of judges or through audience ballots, this year saw both methods employed, which resulted in some presentations receiving double awards.

Projection programs were joined in the theater space by panel discussions, one-on-one interview/conversations, the presentations of guest speakers, the Keynote, and the awards ceremony, moved there because the annual banquet was held in a tightly packed restaurant across the street. Some of these events included 3-D projection, adding to the total number of shows this year. All who contributed shows, their time or expertise to the 2012 3-D Theater deserve thanks, especially Theater Chair and Projectionist Eric Kurland. The shows are described here in approximate order of presentation.

INTRODUCTION AND WELCOME by Convention Chair Steve Berezin opened the Theater Wednesday evening and included a showing of some Keystone views of his dad's family and house taken in Norwalk OH in 1932 as part of a Keystone promotion offering custom family views to those purchasing the complete World Tour set with stereo scope. (At first, some of these images wouldn't appear on screen—ironically the only easily noticeable glitch in five days of nearly flawless digital projection.)

NSA 2012 PROMO WELCOME TO COSTA MESA by John Hart (CA) and Stephen Les tours the area attractions and the 3D-Con facilities at the Orange County/Costa Mesa Hilton Hotel.

DIGITAL DARKROOM by Steven Kochones is a documentary about 3-D artists based on the early 2012 exhibit of the same name at the Annenberg Space for Photography in Los Angeles. (See SW Vol. 37 No. 4, page 30.) Christopher Schneberger, one of the artists interviewed (and also a presenter at 3D-Con), introduced the film and described the production process. Also appearing in the very professionally made documen-
As he did last year, Ron Lobbé produced an introductory video to run at the beginning of each block of 3-D theater shows. This year’s thirty-nine second video features images like the 3D-Con logo and this interesting magazine cover brightening billboards in a grey urban setting. While not strictly in competition with other shows, the video was so popular with the audience that they voted it a Special Award.

Circular polarizers from Actif, thanks to Nancy and Ray Moxom. These are the same projectors that the LA 3-D Club uses for their monthly screenings and quarterly “open screenings” at the Downtown Independent theater in Los Angeles. Projector details are at www.projectorcentral.com/pdf/projector_spec_2533.pdf.

The 3-D Theater’s elegant, circular polarized glasses from Actif, thanks to Bryan Underwood. This was the second use of circular polarization at an NSA Theater. The first, long before Hollywood embraced it, was in 1984 in Manchester, NH thanks to NSA member Bob Brackett and the Polaroid Corporation. But the Actif glasses do look way cooler!

Eric Kurland with the LA 3-D Club’s pair of Projection Design F3 projectors which provide 5500 lumens each and a resolution of 1400x1050. The huge lenses seen here are the EN16 Long Tele Zoom which allowed for an 85 foot throw to the screen in the 3-D Theater.
REAL TITANIC 3D by Jim McManus is an amazing collection of accidental stereo pair images of the doomed ship taken during construction, after its launch and at the outset of its final voyage. An interior stereo of the ship’s grand staircase is especially striking. Unlike James Cameron’s film, these shots required no CGI or conversion for 3-D, just careful matching and sizing of historic photos from various sources. Like many accidental stereos taken by separate cameras or sequentially by the same camera, hyperstereos are common among these, a real advantage in long shots of the Titanic under way.

EASTERN STATE PENITENTIARY by Terry Wilson explores this long closed institution in Philadelphia. Once the most expensive prison in the world, it stands today a ruin of crumbling cellblocks and empty guard towers, open to tourists as a “stabilized ruin” with restoration limited to making buildings safe for visitors and preventing further deterioration. Known widely through photos and films, this show adds eerie depth to the world’s first true “penitentiary,” a prison designed to inspire penitence, or true regret, in the hearts of convicts housed in vaulted, sky-lit cells. (WINNER, Second Place for Best Still-photo Based Show.) See www.easternstate.org.

THE CIVIL WAR IN COLOR by David Richardson compares hand-tinted Civil War stereos with digitally restored and tinted versions of the images. Working from original negatives in the Library of Congress, tints similar to those used in the 19th century are added with a precision not matched on prints by even the best artists of the day. As each vintage stereoview appears on the screen (often terribly faded, poorly tinted or both), it is replaced with a nearly flawless digital image not attempting “natural” color but more perhaps what the view colorists of the time would have produced had they been able. (WINNER, Best First-time Presenter Award.) See www.civilwarin3d.com/html.

VIEW-MASTER MEMORIES by Wolfgang Sell includes images from inside the View-Master factory and from advertising reels as well as displays of reels, cameras and projectors.

RECONSTRUCTION: TOHOKU, A YEAR LATER by Hiroyuki Nakamura shows stereos of northeastern Japan taken at the same locations the tsunami hit in 2011.

COLONIAL WILLIAMSBURG MEMORIES by Bob Shotsburger combines commercial View-Master reel images with those from personal family reels from 1939-40 to 1971 to reveal the tourist areas, the college and downtown streets in both the summer season and covered with snow.

DUBAI – MEGAPROJECTS IN THE DESERT by Peter Schmidt and Peggy Martin tours the oil wealth financed tallest tower, largest shopping mall and world’s first 7-star hotel through stereos that glow with gold and shimmer with silk.

CLEAR BUILDINGS by Boris Starosta animates the construction progress and changing transparency of building elements seen in his article in the May/June 2012 Stereo World.

IN CONVERSATION: SUZANNE LLOYD included projection of a selection of Harold Lloyd’s stereo images as part of an onstage conversation with Ray Zone about her famous grandfather. He was seldom without his Realist from 1947 through the 1960s, and recorded trips, friends, and family in 3-D with an eventual accumulation of over 300,000 stereo slides. Suzanne remembers being the subject of many, as were people like Marilyn Monroe, Humphrey Bogart, Lauren Bacall, Betty Page and Ronald Reagan and countless others who visited Lloyd’s 16 acre Beverly Hills estate Greenacres. She lived there from childhood until his death in 1971, and her memories of life with her grandfather and his dedication to 3-D photography provided a deeply personal account of
The man behind the images on the screen.

CONVERTING 2-D TO 3-D by Dr. Barry Sandrew of Legend 3D included the famous clock scene in Harold Lloyd’s 1923 Safety Last, restored, carefully tinted and converted to exciting 3-D that had the audience clapping for more. He followed this with a detailed discussion of the art and science of 3-D conversion for various Hollywood clients. Legend 3D is a Hollywood leader in 2-D to 3-D conversions, and is housed in Bungalow A at Hollywood Center Studios where its first tenant, Harold Lloyd, produced many of his famous films. See www.tvtechnology.com/article/legend3d-steps-up-d-to-3-3d.

CHOMPERS TEASER by Jesse Blanchard provides a surprise ending to a relaxing bath for Candy the puppet, who learns the hard way why those old bathtubs had claw feet. The short video is a teaser for a full length puppet horror feature. See http://vimeo.com/42858748.

THE SKYLINE AND SCREE by John Hart (Co) takes the audience for a mountain ride on Colorado’s Skyline and Scree railroad, which climbs some grades so steep that a cog rail is required for part of the journey. What takes this video out of the realm of most excursion train sceneries is the “G scale” (Garden scale) size of the model railroad, documented using a pair of small cameras with a small base that just fits on one of the cars. At times the impression is one of a slightly hyperstereo video taken from an actual train. At other times it’s one of having been shrunk to fit the scale of a model as it moves down the track, over bridges, along steep cliffs and past other speeding trains. (WINNER, First Place for Best Video.)

PARANORMAL: WHAT IS BEHIND THE DOOR? by Mark Willke documents a winning performance by Portland’s Sunset High School Marching Band and Auxiliary in a hyperstereo 3-D video using cameras aligned and synchronized by uniquely inexpensive methods. See Mark’s detailed “making of” article in this issue.

THE SIMPLE CARNIVAL – EVERYTHING THAT GROWNUPS KNOW by Jeff Boller is an intriguing, hand drawn/computer animated 3-D music video.

MAPPING CHANGE IN SIERRA NEVADA FORESTS by Steven McQuinn demonstrates the value of colorized topographic maps in 3-D for following Sierra Nevada vegetation changes resulting from warming climate conditions. In a study of the Lake Tahoe area, a 3-D model of the lake and its temperature layers is removed from the map and viewed from its side for study like a plastic toy. The 3-D video is shown at the UC Davis Tahoe Environmental Research Center, Incline Village NV. See www.youtube.com/watch?v=qZGo-v146y44.

HOW TO DRAW A CAT by Robert Bloomberg reveals (in detail that only close-up 3-D can offer), a new and hitherto secret drawing technique that involves no art school tuition, no camera obscura and no computer generated imagery. (WINNER, First Place in the Audience Awards and Second Place for Best Video.)

CHEF JOHNNY ZONE PRESENTS: FLASH-FRIED BRUSSELS SPROUTS by Ray Zone is a three minute cooking tutorial following every step of that process in close-up 3-D video precise enough to convey the smells of the kitchen and
3D FAMILY GHOST STORIES by Claudia Kunin is a series of animations using montages of the artist’s own images with those from the family archive. See http://claudiakunin.com/FGS.html.

THE CHARLATAN by Ray Zone is a delightful fantasy about a mad doctor, his assistant, and their victim, with 3-D Theater projectionist Eric Kurland himself as the deformed assistant and Ray Zone as the hapless victim.

WHERE THE WIND BLOWS by Arianna Andreatta demonstrates in it’s brief one minute and twelve seconds how much can be done in experimental stop motion animation. To the music El Condor Pasa, a lone leaf is blown through different environments to its eventual destination. See www.youtube.com/watch?v=co-QVnZCY.

EMERGENCE: EXTREMOPHILES IN CAVES by Kerry Loewen. Dr. Penelope Boston and Dr Larry Krumpler explain how the search for extremophiles in caves is related to the search for life on other planets in a video created for the New Mexico Museum of Natural History and Science. See www.youtube.com/watch?v=1fl62ajTg7w&feature=relmfu.

NEMORPHEO by John Hart (CO) presents further explorations of constantly morphing fractal flames, the presenter’s favorite type of mathematically generated 3-D objects. (WINNER, Best 3-D Computer Generated Imagery Award.) 3-D still examples can be seen at www.hart3d.com/fractals/Fractals.htm.

SHINE by Jesse Blanchard watches a barbershop quartet nervously singing Shine on Me as they are eaten a piece at a time by an unseen offstage monster. See http://vimeo.com/28436796.

TARANG by Shyam Kannapurakkaran is a 3-D video collage of the Indian dance form “O Dissi” showing not just one dance but several edited together for a single coherent experience. Because it was shot in 3-D, the dance was filmed six times and each shot corresponded to depth cues for close, medium and wide shots. See http://escapeplanatx.com/tag/shyam-kannapurakkaran.

UNTITLED by Chris Schneberger is a rock ’n roll 3-D experience.

MOON DOG by Jacob Mendel is a “Lake Cheese” music video for the Detroit band Lord Scrummage following a search for justice in the case of a stolen song. See www.youtube.com/watch?v=95K76j7BWk.

COLORFUL VIBRATIONS by Steve Anderson explores the sight and sound of music with 3-D computer generated color forms.

TRUST IN LOVE by Frank Elmore is a 3-D music video of singer/songwriter Diane Altmare, positioning the images on the heat of the fryer along with the images. See www.youtube.com/watch?v=qi8Sckg3jY4.

An introduction to the secret of “How To Draw A Cat” by Robert Bloomberg, winner of First Place in the Audience Awards and Second Place for Best Video.

Industry Panels at 3D-Con
by Ray Zone

One of the special features showcased at the July 3D-Con of the NSA was a series of panels with motion picture professionals active in the current wave of 3-D films. This was a unique initiative of the L3D Club, host organization for 3D-Con, in focusing on synergy with the 3-D movie business, given the club’s proximity to Hollywood and the fact that many industry pros are L3D club members.

On the Thursday of the convention a special panel presentation took place with “Shooting 2D for a 3D World,” a discussion of the key creative and technical issues in shooting 2-D for a theatrical presentation that will be converted to 3-D. This panel was presented by Aaron Parry, Executive Vice President and Chief Creative Officer of the StereoD conversion facility along with Graham Clark, Stereoscopic Supervisor at the company. The highly technical discussion covered helpful tips for script, prep and shooting of a feature film.
photo album pages and shot with a Fuji W3. See www.youtube.com/watch?v=EVmvFCip13A as well as an amusing "making of" video at www.youtube.com/watch?v=vDrjOBSnYeU.

UNBELIEVABLE by Ty Evans is a slow-motion skateboard video shot on an indoor forest set amid constantly falling leaves for Levi’s. See www.youtube.com/watch?v=EVmvFCIP13A.

BASEBALL PROJECT – ICHIRO GOES TO THE MOON by Scott Ferril has the band in Minneapolis to perform their tribute to the Mariners/Yankees star.

DANCE MACHINE – NOTHING PERSONAL by Dan Harris is an anti-bullying video promoting a later full length feature.

MOON SHINING by Jacob Mendel is a black & white music video for the Ben Daniels band in which an idyllic picnic is interrupted by a wild foot chase. See http://vimeo.com/43878713.

AWOLNATION – NOT YOUR FAULT by Cameron Duddy is an animated music video set in an ice cave, on a desert island and on the moon. See www.youtube.com/watch?v=im9-sVdz8S.

OK GO – ALL IS NOT LOST by OK Go, Trish Sie, Pilobolus and Eric Kurland is a music video shot from beneath a glass floor on which the performers seem to defy gravity while morphing into a human kaleidoscope of strange creatures and letters. (WINNER: Third Place for Best Video.) See www.youtube.com/watch?v=ur-y7oOto14.

OK GO – SKYSCRAPERS by Trish Sie and Eric Kurland is an endless tango down Los Angeles sidewalks by a couple who’s wardrobes change to match the colors of the walls they dance past. See www.youtube.com/watch?v=8B-bHl0HBZ0.

FOSTER THE PEOPLE – DON’T STOP by Daniels follows the adventures of a woman taking a driving test that turns into a wild police chase with a more exciting ending than most music videos. See www.youtube.com/watch?v=15Aheh92qY.

THE SHINS – THE RIFLE’S SPIRAL by Jamie Caliri is a darkly animated music video following a battle between a young woman staging a desert magic show and three male magicians who try to rid themselves of the competition. See www.youtube.com/watch?v=jsqWjI7GkCE.

THE TOTALLY WOW – HEY YOU by Chris Young is a rap video set against a CGI background of explosions and burning cars. See http://thetotallywow.com/music_videos.html.

CHEERS ELEPHANT – BALLOON IN THE CITY by Ryan Suits follows a music video version of a Soviet era conman into space, through a wormhole and

Jim Chabin, President and CEO of the International 3D Society (I3DS) presents his illustrated talk “The Status of 3D Worldwide” tracing the history and current health of 3-D, especially films and TV systems, from a business point of view. His projected charts revealed overall growth despite the downturn reports and predictions of some entertainment industry writers. Clips from films winning recent I3DS awards were shown, and he also detailed Hollywood’s participation in establishing 3-D training programs for first responders in emergency situations.
onto a distant planet where a surprise awaits. See www.atomiccheesecake.net/ballooninthecity.html.

**3D FLY THROUGH OVER MINIATURIZED SAN FRANCISCO** by Katsuhiko Inoue uses the tilt-shift effect to create a hyper 3-D flight over the city from Google Earth imagery.

**WALLFLOWER TANGO** by Wolfram Kampffmeyer is the animated story of lonely Charlotte, who finds a thief about to steal her diamond but their fight over the stone turns into a passionate tango. When the police approach, the thief escapes and she returns to the tango saloon to wait for another invitation to dance. See trailer at www.imdb.com/video/wab/vI252I68889/.

**CANALS OF AMSTERDAM** by Masuji Suto is a study in hyperstereo, fast motion of boats using the city's famous canals—at one intersection having to back up to make a tight turn under a bridge.

**HYPER 3D FIREWORKS** by Katsuhiko Inoue reveals the depth of exploding fireworks through cameras separated by about 20 feet, providing the closest thing yet to a view from “inside” the spreading patterns.

**OUTSIPLOU** by Damien Montaron was probably the most surrealistic live action video seen at 3D-Con. People wander in a heavy tan mist along a narrow road past distorted buildings, across a railroad track, and sometimes over a sheer cliff. They struggle with clumsy burdens, vehicles, and each other, only to be obliterated by the occasional random falling body against which the omnipresent umbrellas offer little protection. Through it all a boy seems to search frantically for sanity, safety or a way out of the mist. It's creators offer few clues as to meaning beyond statements like: “There is this piece of land somewhere in a misty sky. There is this road unfolding from an edge of the world to another, rimmed by many human beings waiting for a path.” See www.youtube.com/watch?v=L3aRIJHEBP0 and a nearly as bizarre “making of” video at www.youtube.com/watch?v=lMQfBQkqt2I&feature=related.

**3D OSAKA STATION CITY** by Katsuhiko Inoue was shot on two sets of handhelds, Sony TD10s, recording clips using four kinds of stereo bases.

**THE KEY** by Stefan Schneider is a post-apocalyptic thriller in which people scrambling for food find themselves prisoners in a hole covered by a locked grate. See http://thekey3d.wordpress.com/about.

**THE TIME TO START MOVING AGAIN** by Hideyuki Asakura is a personal account of the recovery from the tsunami that hit Japan on March 11, 2011. “The road to reconstruction reaches far into the distance. But with the warm support of so many people, the journey will begin...”

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with additional comments about vfx (visual effects) production and actual conversion techniques.

Friday evening, after a late night block of 3-D music videos running in the Stereo Theater, USC Professor Perry Hoberman moderated a panel with many of the filmmakers present. The aesthetics and challenges of shooting 3-D music videos were covered in an illuminating discussion.

A major panel presentation took place on Saturday afternoon with a look “Behind the 3D of Columbia Pictures’ The Amazing Spider-Man.” Panel moderator Jon Schnitzer did an excellent job of eliciting insights from panelists Rob Engle, Stereoscopic Supervisor on the film, and stereographers on the project who included Eric Deren, Jason Goodman and Jeff Amaral. Clips from the film were intermittently screened during the discussion including one extended sequence shot from Spiderman’s point of view as he leaps from the top of one building to another with a bravura use of 3-D.

One of the challenges of 3-D clubs and organizations like the NSA currently is to remain relevant at a time when stereoscopic imaging goes mainstream. The presence of motion picture professionals active in stereo at 3D-Con attests to the continued relevance and importance of the LA3D Club and the NSA at a time when 3-D is becoming a normal part of the entertainment landscape and visual culture in general.
as sure as time marches on.” (WINNER, Best Screenplay/Story/Narration Award.)

OF MICE (A CAT) AND MEN by Fabienne Tsal is a 25 minute animated story, directed by Camille Bovier-Lapierre and set in the almost too perfect seaside town of Aigue-Belette-sur-Mer where a baker and his cat daily welcome customers to try the pastries. But at night, man and cat play a bitter comedy in their apartment while a tribe of mice hold strange ceremonies in the basement of the bakery. It’s a tale with depth going far beyond Tom and Jerry in more than just the stereoscopic sense. (WINNER, Paul Wing Award for Best of Show and Second Place in the Audience Awards.) See http://vimeo.com/40673738.

3DIMENSIONALE by Hermine Raab details the first 3-D film festival in Vienna, produced by Stefan Kreuzer with the cooperation of numerous stereographers.

ROBIN HOOD: GHOSTS OF SHERWOOD by Oliver Krekel and Hermann Miller is a trailer for a 3-D movie of that title. See www.youtube.com/watch?v= FpxI83Kic4&feature=relmfu.

2013 NSA PROMO by Barb Gauche and John Bueche tours the facilities and nearby attractions of the Grand Traverse Resort and Spa near Traverse City, MI, site of 3D-Con 2013, June 4-10.

BRIAN MAY’S A BRIEF HISTORY OF 3D by Dr. Brian May takes the viewer on a fascinating tour of 3-D history from the Victorian era to today in what was the U.S. premier of this recent documentary commissioned for Britain’s Sky3D TV. The show was introduced by Dr. May, who afterward talked at length on stage with Ray Zone about the future of 3-D production. See www.3dfocus.co.uk/3d-news-2/3dwords-3d-news-2/brian-mays-brief-history-of-3d-review-sky3d/4196.

SAFETY GEEKS: SVI by Tom Konkle follows the comic adventures of a semi-elite force of safety experts—a Monty Python inspired slapstick show that won the Best 3-D Television Comedy award at the 2011 Los Angeles 3D Film Festival. See www.youtube.com/watch?v=YmCRlIlbuKKM.

SHOWCASE OF AWARD WINNERS Sunday morning presented award winning shows as well as winners of the On-site still and video competitions sponsored by Fujifilm.

3-D IN VIDEO GAMES AND ENTERTAINMENT by Ian Bickerstaff, Simon Benson and Buzz Hays is a pre-recorded presentation demonstrating how to make the most of 3-D in game design. A Q&A with Mr. Hays followed the screening.

Friday After Dark - Adults Only Shows

HAROLD LLOYD’S NUDES by Greg Dinkins attracted a sizable crowd to this Friday night block of shows with an impressive collection of Lloyd’s many Realist format nude stereos.

WHERE THE BIRDS MEET THE BEES by Mark Kernes is a collection of images shot on adult movie sets over the past year.

HUSTLER VIDEO CLIPS by Mark Kernes is a collection of 3-D video segments shot on Hustler Video’s adult movie sets.
**Zombie Chic 3D** by Scott Ferril involves a stuffy, upscale dinner party interrupted by the zombie apocalypse in an especially gory black comedy.

**Penthouse Studios Selections** by Mark Kernes is a collection of adult video segments from the Penthouse 3-D Movie channel.

**Keynote**

2012 NSA Keynote Speaker Lenny Lipton spoke in the 3-D Theater Friday afternoon, relating both his own history of fascination with movie technology (starting with a projection experiment at age 12), and the whole history of 3-D cinema. Recognized as the father of the electronic stereoscopic display industry, Lipton was the lead inventor of the current state-of-the-art technologies that enable today’s theatrical filmmakers to project their feature films in 3-D. His work is also the basis for much of today’s 3-D TV technology. He has 53 patents granted with many others pending, and his 1982 book *Foundations of the Stereoscopic Cinema* still provides a wealth of information for both the novice and those already active in stereoscopic imaging.

From a uniquely “insider” point of view, he covered topics like dual vs. single projection concepts, screen size, 24 vs. 48 frames per second for movies, and his involvement in the development of both liquid crystal active 3-D viewing systems and passive systems for digital 3-D projection technology. He detailed the history of the polarizing modulator, or ZScreen, which led to the RealD projection system found today in 21,000 theaters, and offered his thoughts on many of today’s competing 3-D cinema and TV systems as well as on the cameras used to provide images for them. See www.lennylipton.com.

**3-D Glasses Fashion Show**

A first at any NSA convention, this elaborately staged event at the hotel pool Sunday evening exhibited the latest styles of 3-D glasses by 13 companies, from polarized to active LCD and anaglyphic products. Far from a static display, the glasses were modeled by 14 women and four men who circled the pool for all assembled to get a good look at the wide range of 3-D eyewear that has become available. Wearing stylish wardrobes complementing the glasses they were wearing, each model (plus their glasses brand and style) was announced from a poolside area illuminated with bright studio lights, from which they strutted in impressive fashion model walks, poses and twirls past more stereographers waiting around the pool.

Modeling were Ryan Colditz, Eric Deren, Nate Faulkner, Rick Schultz, Shannon Benna, Bambi Birnbaum, Timi Boose, Melinda Echevarria, Dianna Faulkner, Kati Fellion, Michelle Fryer, Meagan Kittridge, Maja Manojlovic, Nina Page, Kine Paulsen, Susan Pinsky, Alicia Robbins, and Betsy Rothstein.

Glasses producers represented were 3Bee3D, 3D Digital Photo, Actif, Blick 3D, Dolby (custom by Lightiron Digital), IngritDahl, Look 3D, Omega 3D, Oskav, Rainbow Symphony, American Paper Optics, and Volfoni.
The show was produced by Shannon Benja and Stereo Sisters, “A point of convergence for Women who work, live & love in 3D! Our focus is synergy among Women in 3D via mentorship, education & community.”

Special 3D-Con Thanks To:
John Hart (CA), Stephen Les and Oliver Dean for the “Welcome to Costa Mesa” video.
Guest Speakers Lenny Lipton, Dr. Brian May, Jim Chabin, Rob Engle, Eric Deren, Jason Goodman and Jeff Amaral.
Bryan Underwood for the Actif circular polarized 3-D Theater glasses.
John Jerit for the American Paper Optics cardboard glasses.
Jim Calverley for donations of On-Site Image Competition prizes from Fujifilm USA.
Stephen Klett for donations of displays, bags and prizes from nVidia.
Kimberley Klett for Displays and Monitors from LG.
Rich Dubnow for 3D-Con reels from Image 3D.
David Kuntz for the custom glasses logo design.
Ariela Stern, DDS, for Workshop Presentations.
Aaron Warner and Ray Zone for Tales From the 3-D Convention! promotional comic.

Barry Rothstein for donation of 3D Digital Photo Phantogram cards.
David Starkman and Susan Pinsky for Photographing in 3D books.
Berezin Stereo for donation of CDs.
I3D S for sponsorship of the Friday evening reception.
Chris Chinnock of Insight Media for media sponsorship.
Jacques Cote for images on the convention reel.
Steve Foldvari for Sony Creative Software.
Ian Bickerstaff of Sony Computer Entertainment.
Phil “Captain 3D” McNally of Dreamworks Animation.
The Downtown Independent Theater.
Jon Schnitzer of the Brain Factory.
Shannon Benja of Stereo Sisters.
Darren Bender of Bigger Pictures.
Irene Seuss of Sawdust Art and Craft Festival.
Drew Hendrix of Red River Paper for door prizes.

This year’s Dive-In Movie was Jaws 3D, easily visible from the dark corners of the hotel pool but mostly watched from deck chairs thanks to the relatively cool evening. Light spilling from the right here is from studio lights for the 3-D Glasses Fashion Show, still being used for some final model shots and by stereographers shooting each other in “glamour” poses.

Melinda Echevarria (3D Editing/Videography/Photography) models EX3D glasses under studio lights during the 3-D Glasses Fashion Show by the hotel pool. (Stereo by David Starkman)
I was pleased to have my first submission to the 3-D Theater accepted and exhibited at the recent 3D-Con in Costa Mesa. “Paranormal: What is Behind the Door?” documents the championship performance of the show by that name presented by the Sunset High School Marching Band and Auxiliary, from Portland, Oregon. The process of creating the 3-D video of the show was a long and challenging one, and in fact, looking back, I’m a bit surprised I was able to end up with a finished show at all! I am not a Hollywood movie producer, cinematographer or production company—just a Portland 3-D nut and the proud dad of a daughter who was a member of that band through all four of her high school years. I began helping to capture their performances on (two-dimensional) video when she was a freshman, since they were looking for parent volunteers. There was another band parent in charge of video who assembled all the footage at the end of the season and created a DVD for the band members. I was impressed with the way he edited video from two or three different vantage points into one show, cross-dissolving between them—it looked so professional! I had been into home movies since I was a teenager, documenting some of my family’s vacations with a wind-up 8mm movie camera, and more recently, trips with my wife and kids with a video camera, but I had never ventured into multi-camera work.

That band parent moved out of state once the school year was over, and I became the official band video guy. Starting with my single camera, I began adding more when I could get a good deal on eBay or Craigslist, so that I could do similar multi-camera coverage. Because of my desire to purchase multiple cameras on a limited budget, I was not able to go high definition. My format was widescreen MinIDV, with 720x480 pixels recorded onto tape. Not having any video assistants, I would station cameras on tripods in various locations in the stadium, all pre-aimed for when the band would enter the field and perform their show. I had no way to remotely start the recording process on all the different cameras, so I had to get them all rolling ahead of time, and then just let them run to be sure to capture everything. I could edit-out the extra footage later.

Being a Mac user, my video editing software was Apple’s iMovie, which does not offer multi-camera editing. But I soon came up with a complex and time-consuming process in that program that allowed cross dissolves between multiple video streams. I constantly tried to outdo myself as the seasons progressed, finally starting my daughter’s senior year with eight video cameras total, including a small one that I attached (with the band director’s enthusiastic approval!) to one of the marching snare drums, to provide a moving “on the field” view!

Although I had been shooting stereo still images for more than 25 years at that point, I had never attempted stereo video. But with eight cameras in my bag and the stereo bug in my head, I decided to try capturing my daughter’s final band season in 3-D video with pairs of cameras. Different stadiums presented different challenges, and I experimented with my setup throughout the marching band season. By the time the championship competition rolled around, I had a pretty good idea of how I needed to have things set up, and that final day’s performance is the one that I shared at the 3-D Theatre.

Since I was a one-man production crew, getting a head start in the setup of all those cameras was important. On the day of championships, I first placed a pair of Panasonic PV-GS500 cameras on tripods at the stadium’s highest vantage point (accessible only by a 10’ ladder, and there was some uncertainty about whether the public was even allowed up there for photography!) to cover the entire field. I knew that there would be little depth captured from that distance if I used standard eye-spacing, but luckily I’ve had quite a bit of experience shooting hyperstereo still images, so I eyeballed the situation and moved the cameras apart to provide some dramatic depth, hopefully without going overboard and hurting everyone’s eyes! I did not measure my final spacing, but I would guess the cameras were around eight or ten feet apart. Getting them both aimed properly required much
tweaking and fine-tuning, and a hot-shoe bubble level on each camera was a big help. Next I set up a pair of Panasonic PV-GS320 cameras to the left side of the stands, looking diagonally across the field to the right. Again, at that distance from the field, increased lens spacing was necessary to avoid a lack of depth, and those cameras ended up probably around four or five feet apart. My intent with this pair was to zoom them in a bit, to capture a closer view than the overall field view. But since I was dealing with a pair of separate cameras rather than a synchronized stereo rig, the setup and alignment on this pair was even more difficult than the last! There was no easy way to set both cameras’ zoom settings identically, so in addition to fussing with the aim of the cameras, a whole separate headache was getting both lenses zoomed to the same magnification. Judging entirely by how various objects aligned along the edges of the cameras’ viewfinders, I eventually was satisfied that both cameras were fairly well matched.

An unexpected and frustrating challenge in the setup of this pair of cameras soon surfaced. A pair of microphones mounted on very tall poles had been positioned along the front edge of the field, apparently to capture a high-quality sound recording of all the band’s final performances that day. I could see that the nearer pole was sticking up into my picture area, and because it was so much closer to the cameras than where the band would be located, I had two unappealing choices. I could either reduce the spacing of my cameras in order to place the microphone pole at the stereo window and keep the band from appearing too far off at infinity (but probably a bit flatter in appearance), or I could set up the cameras for optimum stereo capture of the band while ignoring the microphone pole and allowing it to violate the stereo window. I went with the second option, which I feel shows the band well, and the pole is not quite as distracting in the final presentation as I had feared. But it still bugs me when I see it hanging out there in the foreground, violating the edge of the window. I wish I could have run down to the field and pushed it over to get it out of the way before the competition began!

In previous years I had been placing one of my cameras on a light stand positioned right on the field near the cluster of percussion instruments (known as the “Pit”), and I wanted to continue capturing from that location, only somehow now in stereo. I first considered going with my Fuji W3, which is able to shoot video, but soon decided that would not work. When used to capture video in a widescreen format, that camera only functions at 24 frames per second (fps), and I found that when imported into my 30fps editing software, every fifth frame or so was repeated in order to bump the footage up to 30fps. This resulted in a choppy, stuttering effect, which was not acceptable. The same camera is capable of shooting 30fps, but only in the narrower 4:3 aspect ratio, which did not match the 16:9 footage from my other cameras. So I ended up going to ebay again, and scored a pair of Creative Labs “Vado HD” cameras, which record a true 30fps in widescreen format. I positioned these on a twin camera bar, with the lenses spaced somewhere around 3 or 4 inches apart. Since my nearest subject was going to a mere 6 or 8 feet away, I needed to stick with something near normal eye spacing for this pair. Through some online research ahead of time, I was aware that these cameras were known to record a rather weak, muted audio track, but fortunately, for this project, I was using the soundtrack from one of my other cameras equipped with an external microphone, so the quality of the Vado HD soundtrack was not an issue.

Considering that these two Vado HD cameras were purchased from the same seller at the same time, and arrived together sealed in identical packaging, I was surprised at how they ended up not being a very well matched pair for stereo. One camera was noticeably sharper than the other, even revealing the texture of the grass on the field where the
other saw more of a softer green area. These are bare-bones fixed-focus cameras with no adjustment possible, so there was no way to tweak the settings to get them to match. Fortunately, the small difference in sharpness doesn’t seem noticeable when viewing the finished show in stereo, but it can be easily seen when comparing the footage in the editing software. I also noticed that while mounted side-by-side on the bar and seemingly parallel to each other, one camera’s internal lens seemed to be aimed down a little lower than the other, requiring me to insert a few layers of index card under the front of it, to get both cameras looking in the same direction! But since the Vado HDs only set me back $25 each, it didn’t seem worth complaining too loudly about the manufacturer’s lack of quality control.

Sadly, the remaining two cameras in my bag were not used for stereo. The seventh was the “drum-cam” that I mentioned earlier, and the last one I operated on a tripod with a fluid head, zooming and following the action of the show. Even though I was excited about my stereo video experiment, the band was still expecting a traditional (flat) DVD set from me at the end of the season, so I needed to ensure I had plenty of good close footage to use in creating that as well. And since there was no way to uniformly zoom a pair of cameras on the fly, stereo in this case was not possible anyway, even if I had acquired one more camera.

Luckily, the question of how to synchronize all the cameras didn’t pose too big of a problem, because I had already been using a cool little trick I had found on the internet to synchronize all of the multiple (flat) video streams I had been dealing with in prior years. With all of the other cameras in position and rolling, the pair of cameras by the pit were the last ones I would put in place just as the band took the field and began setting up. (Once they enter the field, they are allowed only 12 minutes to set up, perform their show, and get themselves and everything else off the field again, or have points deducted from their score as a penalty, so there was no way to position that last camara rig ahead of time!) After the pit cameras were in place and rolling, I grabbed my trusty Vivitar 283 flash unit and manually fired it toward the percussion instruments just before rushing off the field and up into the stands to operate my camera there on the fluid head. The duration of the flash is so brief that it only appears in one frame of the video, so once all the footage is imported into iMovie for editing, that one frame in each video stream becomes a common starting point, allowing them all to be synchronized.

Actually, this process had worked fine for syncing my flat video streams, but it wasn’t quite as precise as I had hoped when applied to stereo, as there were times when a pair of cameras would still seem to be out of sync by some fraction of a frame. Once in a great while, the flash would not show up at all in one of the video streams, and I assume it must have fired precisely between frames as the camera rolled. And with the Vado HD cameras, which apparently scan each frame progressively from top to bottom (or vice versa), my flash would sometimes appear in only the top half of the frame from one camera but in only the bottom half of the frame from the other! Fortunately, situations like these did not occur often, and when they did, the discrepancy did not seem to be very noticeable unless there was very fast motion involved. Certainly it would have been preferable to somehow link the cameras together for perfect synchronization, but on my limited budget, I didn’t have access to anything so advanced!

After trimming all the video streams so that they began with the flash frame, I exported them back out of iMovie and had planned to bring them into Stereo Movie Maker, the free software from Masui Suto that is written for use on a PC. I first
attempted to run it through a PC emulator on my old G5 Mac, but found it ran too slowly and unreliably, so I ended up going back to eBay and purchasing a low-end refurbished PC specifically to run Stereo Movie Maker (and it’s similar sibling Stereo Photo Maker, which I use for stills shot with my W3). Getting the Mac and the PC networked together in order to move and share files between them was a huge challenge, extending over several weeks and pushing me extremely close to hiring one of those “computer nerds on call” services to get the two machines talking to each other. I may very well have cheered out loud the evening when I finally apparently hit upon the right combination of steps and settings, and was able to get them connected without calling in a professional!

At last I was able to see the Mac drives on the PC and vice versa.

Since I was used to the Mac world, where things just seem to work, I was not prepared for the nightmare of missing video codecs and incompatible formats that are evidently just a way of life with a PC. Even Stereo Movie Maker refused to open some video files, instead displaying the unhelpful message, “Your video does not have FOURCC code”. Searches on the internet for solutions to these problems often led to shady-looking websites where codec and converter download buttons could have easily added viruses or malware to my system instead, had I risked clicking on them.

I finally ended up purchasing a PC video conversion program called Movavi Video Converter in order to be able to convert and open certain video files along the way. I also found that I needed to purchase the PC Quicktime Pro key (even though I already own the Mac version!) to perform certain functions on the PC side that would not work using the Mac version. And I downloaded the Mac version of MPEG Streamclip, another video conversion tool, in order to be able to use their “Movie to Save as AVI” Quicktime export component. I’ll have to admit that as I write this nearly a year after the fact, my memory is a bit hazy on the details of exactly what problems these various tools were able to solve, but I do know that at the time, they seemed to be my only options to move ahead with the project.

After I was able to start opening files in Stereo Movie Maker, I found that the adjustments possible in that program are fantastic, and I was able to correct all sorts of sizing, alignment and rotational problems, distortion caused by camera convergence, and more! Once each left/right pair was looking good, I exported them as an anaglyph as well as individual left and right files. My plan was to do my final editing using the anaglyph, so that I could see what I was doing in stereo, and then perform the same edits to the separate left and right streams, so that I’d have a full color L/R version as well.

One snag that I encountered with Stereo Movie Maker was related to the widescreen MiniDV format that I was using. As I understand it, that widescreen format uses the same number of pixels as the standard 4:3 MiniDV format, except the pixels are stretched a bit horizontally to make the overall image wider. Stereo Movie maker apparently does not understand that format, because widescreen footage imported into it appeared squeezed back into a 4:3 aspect ratio. It wasn’t a problem working with the video while it was squeezed like that, but when it came time to export again, there seemed to be no way to specify that the exported footage should once again be widescreen, and it came out just as squeezed as it appeared when working with it in the program.

Another exporting problem with Stereo Movie Maker turned out to be related to it’s cropping function. After making all the alignment adjustments of the left and right video streams, there were always areas around the outer edges where the left and right streams no longer overlapped completely, and these areas could be easily cropped from within the program. But after doing this kind of cropping, I was left with the dimensions of whatever pixels remained, so that my standard MiniDV 720x480 footage might become non-standard 708x468 footage (or some other odd combination of width and height), which really doesn’t fall into any accepted video format at all. It seemed there should have been a way to output the cropped footage with some sort of mask around the outside that would take the place of the pixels that were trimmed, so that the resulting file would still be the 720x480 format that I started with.

More challenges surfaced when I began importing my Stereo Movie Maker files back into iMovie, where I had intended to merge together stereo video from all three vantage points to make one show with cross dissolves between video streams. I brought the anaglyph files in first, and discovered that they were being compressed somehow upon import, which caused the colors to shift and the edges of objects to be emphasized to the point where the anaglyph glasses were no longer working. There was so much ghosting present that the stereo effect was totally lost in a mishmash of double images. Also, iMovie was seeing and importing these files as the squeezed non-widescreen 4:3 format, since that’s how Stereo Movie Maker had exported them. Many evenings of experimentation were spent trying to solve these problems without success, so I finally abandoned iMovie for

(Continued on page 29)
A 40 Year Portrait Project

by Jim Payne

Jim Payne’s 3-D installation “American Portraits, 1976-Present” was among the numerous impressive entries in the 2012 NSA Art Gallery at 3D-Con in July, but many may find the personal story he relates here as compelling as his images of people “at home” in every sense.

I began taking pictures after I was given a Kodak Brownie by my parents. It was a small square plastic camera that took 127 film. I soon realized I was more interested in the images I captured while shooting from less predictable angles, like laying down looking up at the flow-ers as opposed to the ones I would take from the more predictable approach. There was a greater sense of discovery. To me, the pictures taken from an everyday viewpoint had much less surprise. Shooting from below would reveal the translucence of the petals or a silhouette against the brightness of the sky, which wasn’t something I saw everyday. The camera could help me capture those alternative views in a way that was much more revelatory. My interest in photography continued as I went off to travel across the country with my first 35mm rangefinder, and further when I bought my first SLR.

In time, I became more aware of and interested in the detail of life even when shooting from traditional angles. In my early 20s my work began to transition from nature photography to urban images, then from exteriors to interiors. Paying attention to the details in those interiors became a path to further exploration, and viewing images of the environments people created was like reading maps of their choices. The social, the historical and in many ways the relational details were unveiled. The things people have around them in their homes were and are indicative of their values, their habits, their histories, their preferences; revealing more than most people realized. My preference for documentary style photography solidified.

Even before the ease of Photoshop, photographers were able to manipulate images in ways that transformed them into imaginary visions. To me there’s an implication even in those images that there’s something based in reality, something I see as “true,” even when brought into an image and manipulated. That implication has fascinated me as a perception issue. We know that drawing, painting, and sculpture are imagined; although they may be based on real things, they are still handcrafted expressions. There’s something about photography that has a psychological implication that I’ve always liked to play with. Photo manipulation and darkroom work was very interesting to me early on but eventually I was ever more interested in what I could capture with as little manipulation as possible. My preference for in-camera composition has led me to limit myself to a rare cropping and only if the angle includes distractions. I also found that color is a completely natural way for me to see, unlike black and white, which is really a foreign language to me.

While still in my 20s and having discovered a strong preference for the documentary approach, I began the 3-D documentary project that I’ve been working on now for 37 years. The project originally began when I was working as a Building Inspector for the Federal Housing Authority and a college student. I was aware that all of the apartments in the complex were laid out identically, they all had two bedrooms, were all configured the same way, even had the same regulations forcing changes to paint or carpeting. In theory the apartments should have looked very similar but in reality were quite different. The reason they were so different I soon realized, was because consciously or unconsciously people create an environment that reflects their personalities. Sometimes that’s by design and intentional interior decoration, sometimes it’s by unknowingly reflecting their emotional landscape, and often it’s a result of cultural traditions. I noticed that the foreign exchange students from certain countries in Asia or in Africa didn’t put things on the walls at all because in their cultures the customs were to have bare walls. It was illuminating to see that and start to realize that there were discernable patterns that were cultural and socio-economic and I think, psychological. I am not an expert on any of those topics but I was struck by them.
The project’s intention also evolved significantly from its origin. I began shooting in black and white, doing traditional prints. I was almost finished shooting the initial group when I had a chance meeting with Bruce Davidson at a photo convention where he was the keynote speaker. He joined a group of students and me who were sharing images with each other. On reviewing my prints he commented that they “sucked.” I admitted as much and mentioned how black and white was an unnatural tool for me. He suggested I reshoot in color, which he felt I had a stronger relationship to. I wasn’t aware of who I was talking to until later that evening, but had already taken his comments into consideration. I called the people I had already photographed and scheduled reshoots in color. As I prepared to leave for the first appointment, I wondered what would happen if I shot them in 3-D. I had explored 3-D image making in an experimental camera class and knew it was relatively easy to capture 3-D images even with a traditional camera as long as the subject didn’t move. I had built a very simple wooden camera platform that fit on my tripod that provided a guide for 3-D image making. I decided to do it, figuring I could print them if they weren’t successful as 3-D images. After shooting the first few, I realized how immersive they were. When viewing them I felt almost as if I was in the room with the subjects. I continued the project shooting everything in 3-D. The original intention was to do the documentary for a few months as a college assignment. After the project was completed I edited it down to 15 images for the class. Later I was going to discard it because it was so difficult to show in 3-D. While I had designed a cabinet to display the project, it was clumsy at best. I was on my way to literally throw it in the trash when this little voice in the back of my head said, “or do it for 40 years and you’ll have something very interesting.” I decided to continue. Where the 40-year idea came from I have no idea. In hindsight it seemed like a good one because I was in my mid-20s and it seemed like I could work on it until the age of retirement, although that doesn’t occur so cleanly in today’s...
world. I went forth photographing my acquaintances, friends, and family as my life proceeded. The amassed images of the groups of people that I have known over time brought the project’s larger context to life.

All of this became threatened however, when I learned about Diabetic Retinopathy, a condition I’d never heard about, even though I have been diabetic since I was 3 years old. Retinopathy is a complication of diabetes that results when the eyes develop neo-vascularization. These new blood vessels are weak and fragile and if they hemorrhage into the eye the patient has blocked vision. My new doctor informed me about it and told me I should have my eyes checked. I was already well past the age where those problems usually start to occur. I was 23 years old when I went to see a Diabetic Retinopathy specialist in Chicago, Dr Eugene Light, who examined my eyes and informed me that I had very little time left and was going to lose my vision. At the time there were no available treatments for it. He said I should really consider doing something other than driving a forklift, which is what I was doing for a living at the time. Clearly, that wasn’t going to be viable for someone with vision problems. I was stunned to suddenly be told that I was going to lose my vision. This would be a challenge for anyone but even more frustrating for somebody whose interests were increasingly visual. I went home feeling very hopeless and overwhelmed about all of it. To my surprise, a few weeks later I received a letter from the State of Illinois Department of Vocational Rehabilitation, telling me that I was qualified for funding to go back to school and study something else so I could have a career after I went blind. I thought about it, researched it and found out that indeed money was available and that the state would pay my expenses and I could pick what I wanted to study. I con-

Diabetic Retinopathy

by Ray Zone

Stereoscopic photography has for years been an invaluable diagnostic tool for optometrists and ophthalmologists. One book, “Management of Diabetic Retinopathy: A Stereoscopic Presentation” by Edward Okun, Glen Paul Johnston and Isaac Boniuk (Saint Louis: C.V. Mosby, 1971, made 3-D a significant tool for diagnosis by using 16 View-Master reels along with a compact plastic folding V-M viewer affixed to the inside back cover.

“This book,” write the authors in a prefatory note, “has been designed in such a way that the stereoscopic reels, This 1971 book Management of Diabetic Retinopathy was subtitled “A Stereoscopic Presentation” and included 16 View-Master reels plus a GAF pamphlet describing use of the folding plastic View-Master viewer bound into the back cover of the book.
tacted the department, applied, and began thinking about career choices. When they asked what I wanted to study I chose photography. I don’t know if it was an oversight, or perhaps because they had surplus budget, but for some reason it didn’t cause them to blink, their response was instant approval. While it may seem like an odd choice, from my perspective it seemed that if I wanted to do photography I’d better do it before going blind. I enrolled and studied photography at Southern Illinois University, Carbondale, Illinois, which was regarded as a good program.

Fortunately I didn’t go blind at anywhere near that pace. While I was diagnosed as having less than 6 months before blindness in 1973, the condition hadn’t progressed when I went back to school in ’75 and finished in ’77. Almost 15 years later, in 1990, due to the retinopathy and in spite of the preventative laser photo-coagulation that had been done to prevent a hemorrhage or vision loss, I did lose sight in my left eye completely and had very narrow tunnel vision in my right eye for several years. It was very depressing driving around with one eye that I could see out of at all, which had tunnel vision and nothing else, and with the other eye completely opaque. At the time it really made me wonder if I’d been a fool and should have studied knitting or something. A couple of years later I was fortunate to be offered an experimental surgery to restore the vision in the left eye, which I did. It was successful, but revealed that I had grown a cataract on that eye while blind so while I once again had a complete field of vision and full color I was still legally blind and couldn’t focus the eye. It took another year before the cataract was removed and replaced and my vision returned to very near 20:20. Mean-
While the right eye's tunnel vision had gradually healed.

With vision restored to both eyes, I discovered that I no longer had stereovision. My eyes couldn't align themselves, my brain was receiving images that overlapped and didn't converge; I had two misaligned images, causing intense headaches. It took a while to regain control of the muscles in the left eye, which had been the blind one and to be able to actually see in stereo again. I continued wearing a patch over my left eye until my stereovision returned and the headaches diminished and eventually went away. I did very little photography for those years, hence the temporarily diminished production. All of these events have made my concentration on vision all the more intense. Having limited sight led to a stronger sense of composition because I couldn't see detail well through the viewfinder. Composition improved but the sense of exploration shifted from the shooting to the editing stage because I couldn't see fine detail until the film came back and I would view the images under high magnification. Gradually I regained momentum in my photo exploration.

As the project has evolved I have realized that history is now. In order to be effective really has to be captured, created, or written with a clear picture of the “here and now” as seen by the person doing the work. I think that's what's interesting in my own work. At the time that I began my project, macramé wasn't unusual, it was something a lot of people did, homes were full of it, hanging plants and macramé curtains, it was everywhere. So were cinder block bookshelves, an easy thing for students to assemble with very little cost. Many of these things were common but now are visible as common reflections of our collective past. Few people have rabbit ears on top of their televisions today and bookshelves are more likely from IKEA. Macramé is not as prevalent as it was, or shag carpets. I think historical perspective is created by being in the “here and now,” not by having a preconceived historical concept. It's a byproduct and it's as much of a surprise to me when I look at the older photos in my work to see how the things that didn't seem exceptional at all then, seem exceptional now. The bellbottoms and Afros; the sleek furniture in gray, black and red; the macramé and shag rugs all mark those times and trends. When viewed in sequential order it almost feels like time travel.

When I began the 3-D project I was shooting with 35mm transparency film. The available tungsten-based films at the time were Ektachrome, and there was also tungsten Kodachrome, KPA. Each of those films had a color bias, contrast variations, issues of reciprocity failure and archival differences. I still shoot transparency film for the 3-D project, but I shoot digital for everything else and am experimenting with shooting digital for the 3-D project since tungsten film availability and processing is rapidly diminishing. It’s an exciting transition because digital records the world differently. I believe the color is more accurate, the contrast is not only lower in its initial capture but it also has the ability to hold shadow detail and allows shooting in lower light. The technological advancements in the way digital records high-resolution images and the color palate and the amount of detail available are actually several steps up from film. I prefer it once I get past the nostalgia issue wrapped around film.

After expanding the project from the initial 15 images to a 40-year timeline, I didn’t see a reason to show the project with any regularity. In concept the collection of images required time to transpire in order for them to gain an additional per-
I stored them in a box.

I continued photographing people as my life evolved. As images came back from the labs (in those days I mailed the film to Kodak labs in Rochester, NY and Hollywood, CA) I stored them in a box but didn’t edit them at all. Twenty-two years later I finally decided to edit it to see if anyone would respond to my slightly more than half-complete project. My first challenge was editing the images. When I began looking at them I was frequently overwhelmed. Deaths, divorces, normal aging had transformed many of the lives I had captured. Other images were of people I had been close to but had completely lost track of. The feeling was like a kaleidoscopic flashback. I couldn’t spend more than an hour or so each evening because it was too emotional. After many months I mounted an exhibition, having decided that if people didn’t relate to it I would stop working on it. Fortunately the response was very favorable. I have continued to show it several times a year since and as noted, I am now in my 37th year of shooting. It’s easier to explain to people how to capture 3-D images than it is to explain why I choose to do this for so long. While I’m fortunate to have known interesting people and feel grateful for their participation, the concept of this project is bigger than any one of us. It is a window through which we view how we shape our lives and how they transpire over time within a larger context.

I continue to photograph my peers regularly, and don’t see a reason to stop. The project will almost certainly last longer than transparency film, and has already outlasted the technology to duplicate the images on film. I am now working on digitizing the historical images, and will transition to capturing new ones digitally soon. The original scope of the project was short term but that moment of inspiration turned it into a much lengthier enterprise. I presumed the difficulty in viewing would be resolved long before I completed the project. It now looks like the viewing solution may emerge as the project reaches its projected conclusion.

3-D Video on a 2-D Budget

(Continued from page 23)

This part of the project and tried a PC video editing program that I had found at a reasonable price called “Magix Movie Edit Pro 17 HD.” It seemed to allow the import of the anaglyph footage without messing it up, so once I got used to its interface and functions, I felt I was making progress. Like iMovie, this version of Movie Edit Pro was not equipped to deal with multiple video streams (or 3-D), so once again I had to come up with a workaround to be able to do that within the program.

Once I had completed the assembly of the anaglyph version of the film, I exported it and then hid the anaglyph Stereo Movie Maker files I had been working with. I then temporarily renamed the “left” Stereo Movie Maker files with the same names that the anaglyph ones had used, reopened the Movie Edit Pro document, and it automatically loaded all of the renamed “left” files in place of the anaglyph ones. I then exported the finished movie again, saving it as “left.” The next step was to hide the “left” files, rename the “right” files with the same names again, and reopen the Movie Edit Pro document once again, which automatically loaded all of the “right” files in place of the “left” ones. One final export of the finished movie provided the “right” video stream, so now I had an anaglyph version of the finished movie along with full color left and right streams of the same show.

I was hoping to create a separate DVD disc that contained the anaglyph versions of several performances in 3-D that I could include with the flat DVD to be distributed to all the band members, but that didn’t work out either! Even when starting with the nice-looking anaglyph versions of the movies that were exported from Movie Edit Pro, it turned out that the process of compressing them onto a DVD resulted in the same color shifts and edge boosts that I had encountered in iMovie, making the resulting anaglyphs on the DVD completely unviewable.

Still wanting to share the fruits of all my labor with the band (but not wanting to try to teach nearly 100 people how to freeview side-by-side L/R video streams), the only other plan I could come up with was to upload the movies to YouTube, which seems to have pretty good support for 3-D movies (even offering numerous 3-D viewing methods in a drop-down menu that can be changed on the fly). YouTube suggests not starting with anaglyphs, though, so I first needed to merge my left and right video streams into the side-by-side squeezed format that they prefer. Getting files uploaded to YouTube turned out to be a challenge in itself, with probably two out of three upload attempts stopping part way through with no explanation, but eventually my files were successfully transferred. Of course, when setting up a YouTube channel so that I could post marching band videos, it seemed too boring to just use my actual name—I wanted something that would sound like a real video production company that might document marching band competitions—so I settled on “Competition Media.” I have several 3-D marching band videos posted there now, and a slightly earlier cut of the one shown at the 3-D Theater can be seen at http://youtu.be/iiqOkUqQFHIM.

Watching videos on YouTube can be quite a small, low resolution experience (at least using the slow internet connection that my provider supplies, and using the squeezed side-by-side 3-D format that causes a loss of half of the original pixels!), so it seemed the perfect opportunity to submit the final show in full resolution to the NSA 3-D Theater, to be shown on the big screen. I regret that I was unable to attend the convention this year to see how it looked, but I was happy to be able to share the show with an audience that appreciates 3-D. And I’ll take credit for the stereo coverage of the band’s performance, but the real stars of the show are the dedicated members of the band itself, who put in an unbelievable number of hours learning, practicing and fine-tuning their show. They took first place in the AA-class with their performance, and I am glad to have been able to preserve it for them in 3-D.

Stereo World November/December 2012 29
To call Ray Zone’s latest contribution to the history of 3-D film “eagerly anticipated” would be an understatement. The follow-up to his 2007 book Stereoscopic Cinema and the Origins of 3-D Film, 1838-1952 continues this fascinating story nearly to the present with an equally intense historian’s attention to the technology, art and personalities involved—this time under the title 3D Revolution: The History of Modern Stereoscopic Cinema.

The story takes up with the 1952 release of Arch Oboler’s Bwanna Devil, which introduces the first of the author’s three epochs of modern 3-D: The Era of Convergence, 1952-1985, The Immersive Age, 1986-2005, and Digital 3-D Cinema, 2005-2009. The era of convergence was the time of dual strip camera rigs and projection, some designed in a hurry to take advantage of the sudden public interest in 3-D inspired by Bwanna Devil. The competing companies, technologies and personalities involved in those frantic days of a Hollywood threatened by television are covered in fascinating detail, even to the attempted suicide of Robot Monster director Phil Tucker following that movie’s critical and box office failure, although the film, regarded as one of the worst ever made, initiated the movie career of composer Elmer Bernstein, working with an eight-piece orchestra.

Among the book’s illustrations is the cover of the January 28, 1953 Hollywood Reporter announcing in a headline that a dozen 3-D films would be produced that year, with at least one from each major studio. That particular cover reveals much of the turmoil affecting the movie industry of the time, with one story announcing the opening of 89 more television stations by mid year and two others covering news of political censorship (the attempt to ban showing of Charlie Chaplin’s Limelight) and blacklisting by the studios.

The better known 3-D films of the 1950s like House of Wax, It Came From Outer Space and Creature From the Black Lagoon are well covered, but it’s equally interesting to read production and technical details (and critical responses of the time) about “3-D Noir” films like Man in the Dark, The Glass Web and I, the Jury. The same goes for 3-D westerns like Gun Fury and Arena as well as classics seldom seen in 3-D like Dial M for Murder and Kiss Me Kate.

The fairly sudden end of 3-D film production in the 1950s is covered with detailed attention to the technologies and economics of widescreen systems like Cinerama and Cinemascope, including the fact that the first Cinerama film opened two months before Bwanna Devil in 1952. Some in the industry seemed quite willing to ignore public confusion of wide-screen processes with actual stereoscopic systems in the push for wide-screen theater installation. Significantly, the myth of 3-D glasses dooming public acceptance of stereoscopic movies is dealt with through quotes from several people involved in the industry at the time, as well as a poll of filmgoers which found that most weren’t deterred from seeing more 3-D films despite some complaints about the poor comfort and small lenses of the 1950s glasses.

Single-strip camera and projection systems brought 3-D back to general release in the early 1980s starting with Friday the 13th Part III, and the many colorfully named single-strip systems involved (there were at least ten) are covered in illustrated detail. In full historian mode, Zone points out that single-strip 3-D movie concepts date back to 1833, with film examples from 1935, 1937, the 1940s, the early 1950s and 1970s.

Part II, “The Immersive Age,” includes attention to 3-D ride films and the history behind them, as well as other 3-D films created for them parks, all of which helped generate enthusiasm for 3-D among a new generation of audiences. Not surprisingly, ten of the thirteen chapters in this section deal in whole or part with IMAX 3-D films that foretold the coming of the revolution in the book’s title with their awe-inspiring size and effects, not to mention introducing stadium style seating now universal in movie theaters. Most of the chapters in this section are devoted to specific films and several include interviews with the filmmakers involved. Among them are Cirque du Soleil: Journey of Man (2000), Space Station 3D (2002), The Polar Express (2004), Sea Monsters: A Prehistoric Adventure (2007) and Mummies: Secrets of the Pharaohs (2008).

Part III, Digital 3-D Cinema, covers all aspects of this current era, from RealD and Z-screen technology to Dolby wavelength multiplexing, and from Chicken Little to Monster (Continued on page 35).
Where Fears Live

Joe Dante’s film *The Hole* gets US Theatrical 3-D Premiere

*by Ray Zone*

Long delayed for theatrical release, Joe Dante’s 2009 3-D feature film *The Hole* received its U.S. theatrical premiere in October with a two-week run at the Downtown Independent Theater in Los Angeles. On October second, the director appeared for the screening of the film and a Q&A with the audience afterwards.

Despite winning an award at the 2009 Venice Film Festival, theatrical release of *The Hole* was delayed in part because of the 3-D “traffic jam” in theaters at the time of its completion. Dante is the highly accomplished director responsible for film classics such as *The Howling* (1981), *Gremlins* (1984), *Explorers* (1985), *Matinee* (1993) and *Small Soldiers* (1998). *The Hole* is his second effort in 3-D. His first was the theme park large format 3-D attraction film *Haunted Lighthouse* (2003) which had a long run at Sea World in San Diego.

With *The Hole*, Dante used the Paradise FX toolset and expertise of stereographers Max Penner and Tim Thomas. Most of the shooting was done with two Silicon Imaging (SI) heads recording at 2K in a variety of configurations that included a beam splitter. This was essentially the same 3-D toolset that had been used a year previously for shooting of Thomas Jane’s *The Dark Country* in 3-D.

Dante makes excellent use of the mobility such a compact system offers for stereoscopic cinematography.

Written by Mark L. Smith, the story of *The Hole* tells about two brothers (Chris Massoglia and Nathan Gamble) who move to a new town and discover a mysterious hole in the basement of their house. Along with their neighbor (Haley Bennett), the brothers eventually find that the enigmatic abyss, which apparently has no bottom, is a repository for their individual, and deepest, fears. Frequently withholding information, very much in the style of 1940s horror film producer Val Lewton, Dante makes excellent visual use of the hole as an aperture through which the story is told, perfect for 3-D. The PG-13 film has plenty of chills but ironically they play largely unseen upon the imagination in the mind’s eye(s) and are even creepier as a result.

Even incidental scenes of Massoglia and Bennett walking down the sidewalk or conversing in front of a window in a diner make a strong use of 3-D in frame composition. The stereoscopic effects, however, are always seamlessly used in the story and at no time distract from the narrative. The audience consensus at the end of the film was how well suited the 3-D was for the story, and visa versa. Hopefully, Dante will continue to make 3-D films and bring his tasteful use of z-space storytelling back to the cinema screen once again.

**Q&A with Joe Dante**

After the screening, Ray Zone and Joe Dante had a conversation about the stereoscopic production and effects for *The Hole*. Then the director proceeded to field a few questions from the audience.

**Zone:** We’ve been seeing quite a few films that have used 3-D just incidentally as a way to make a few additional dollars. They haven’t had a story that has been built for and realized in z-space with an intentional and artful use of 3-D. Congratulations, Joe, on making a film with a true use of 3-D and not just as an afterthought.

**Dante:** I saw a lot of 3-D films when I was a kid back in the fifties and I’ve always been a fan of it. This current iteration of 3-D is much better. We don’t have to deal with photo chemical film, two prints and two projectors. Back then the cameras were bulky. You had to deal with synchronization. They would cut a frame out of one print and not the other. And there had always been problems with poor presentation.

This particular digital version of *The Hole* is rock steady. The cameras are good and easy to work with. *Avatar* showed how much could be done with 3-D when it’s done right and used as a storytelling tool. Now we see people like Marty Scorsese embracing 3-D.

**Zone:** I’m curious about your process in making this film. There are “gotcha” 3-D moments but there is also just a lovely awareness of 3-D in the way that you use the foreground and also shoot through things with your framing. There seems to be a real awareness that this is a 3-D movie and not just something that’s flat.

**Dante:** Well that’s true. I remember watching old 3-D movies on TV and thinking “Gosh, there are a lot of shots that aren’t like those in other movies.” But any director will tell you that using things in the foreground and the background are a plus. There’s not that much difference between composing a shot for 2-D and 3-D. There are just certain rules you have to

(Continued on page 35)
The Hart of Railroad Stereography

review by John Dennis

Sometimes the most amazing books appear suddenly from the most unexpected sources. Such is the case with Waiting for the Cars: Alfred A. Hart’s Stereoscopic Views of the Central Pacific Railroad. Partly in observance of the coming 150th anniversary of the start of construction on the Central Pacific Railroad in 1863, and partly because expanding a web-based 3-D gallery of Hart images “soon became a quest bordering on an obsession” for Wendell W. Huffman, the Nevada State Railroad Museum and University of Nevada Photography Professor Howard Goldbaum, this 480 page book was published by the above Museum in Carson City.

Many of the Alfred Hart stereoviews for the book were provided by NSA member Mead Kibby, who also wrote a biography of Hart for the book. It was Kibby who wrote the first published book on Hart, The Railroad Photographs of Alfred A. Hart, Artist (1996), reviewed in Stereo World Vol. 22 No. 5 page 18. While exhaustive in both railroad as well as photographic historical detail, its inclusion of 364 Hart railroad views (there may be nearly 500 total) was of value mainly for reference, as they were reproduced at barely over three inches wide. This made freeviewing easy, but image details were lost and there was no attempt at image restoration where needed.

Waiting for the Cars takes a different approach. By selecting 218 views, it was possible to reproduce each as both a full stereoview (one on each text page at six inches wide), and as an enlarged anaglyph on the facing pages. In the process of creating the anaglyphs, digital restoration was done to fix tears, foxing, marks and other distortions. Some window and foreground cropping was done on a few images, but a quick glance at the view on the facing page reveals that nothing of significance was removed and that the adjustments were for the sake of more easily viewed anaglyphs. In cases of views lacking any depth, whether by mounting accident or otherwise, conversion was added to the digital restoration efforts in the anaglyphs and noted as such in the accompanying text.

In the vast majority of the anaglyphs the restoration efforts were an impressive success, and more often than not I found myself primarily studying the anaglyph page for image details and an immersive effect. The problem of ghosting interferes with this in relatively few cases despite the high contrast of many scenes, sending the reader back to the original view. As always, a good desk lamp is important to do justice to Mr. Goldbaum’s efforts.

The anaglyphs are all presented against a black border, which provides a dramatic, movie screen sort of effect and removes the problem some people have with looking at a white page through the opposing anaglyphic filters.

The extensively researched texts for each view explain the activity or location recorded by Hart in as much detail as practical, covering railroad history as well as geographic and photographic topics. The views follow the construction of the Central Pacific from west to east, providing the reader a sort of 3-D rail journey from Sacramento to Ogden—a trip that took from 1863 to 1869. Hart’s several images of the iconic meeting of the Central Pacific and Union Pacific at Promontory Summit are of course included, as are some rarely seen later interior views taken in a Central Pacific dining car and two sleeping cars.

The original view reproductions on the text pages could easily have fit at a full seven inch width on the nine inch wide pages, better overcoming the half-tone width for those using any type of magnifying stereoscope. (At the six inch width, the...
views are easy to freeview. No lorgnette viewer is included to go with the anaglyphic glasses pocketed inside the front cover.)

The book's title comes from an 1867 account in the Sacramento Bee. A young boy looking at California views through a stereoscope was asked why he spent so long on one of Hart's views of tracks in Bloomer Cut, about 33 miles east of Sacramento. He answered, "I am waiting for the cars to come along". Three views of that very deep and steep-sided cut are included in the book.

Whether your passion is railroad history or stereography, Waiting for the Cars provides a rich abundance of both. Nearly every text page includes fascinating details about both the construction of the Central Pacific and Hart's work (both on his own and directly for the railroad) documenting it in dramatic stereos. Few railroad (or any other) construction projects have been so completely covered in stereoviews from beginning to end, from the tops of engine cabs, box cars, water flumes, embankments and snowdrifts. Sample pages can be seen at http://waitingforthecars.com where clicking on a view brings up the anaglyphic version. A dozen views not included in the book are also available on the site.

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Hart's No. 252, "Snow Gallery around Crested Peak." The man by the tracks in this view of an unfinished snow gallery in mountains 106 miles east of Sacramento is unidentified. The original view is reproduced on the page facing this anaglyph.

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Curiosity Gets the Hang of 3-D

Many of the initial stereoscopic images arriving from the Mars Curiosity rover have been hard to view, with extreme depth and rover parts interfering with good 3-D. That's started to change recently, and the two images seen here are encouraging examples. The anaglyph

Exposed bedrock on Mars named “Hottah”, stereographed by the Curiosity rover on the 39th day of the mission.

Curiosity found evidence of an ancient, flowing stream on Mars at a few sites, including this outcrop named after Hottah Lake in Canada. It may look like a broken sidewalk, but this geological feature on Mars is actually exposed bedrock made up of smaller fragments cemented together, or what geologists call a sedimentary conglomerate. Scientists theorize that the bedrock was disrupted in the past, giving it the tilted angle, most likely via impacts from meteorites.

The key evidence for the ancient stream comes from the size and rounded shape of the gravel in and around the bedrock. Hottah has pieces of gravel embedded in it, called clasts, up to a couple inches in size and located within a matrix of sand-sized material. Some of the clasts are round in shape, leading the science team to conclude they were transported by a vigorous flow of water. The grains are too large to have been moved by wind. Erosion of the outcrop results in gravel clasts that protrude from the outcrop and ultimately fall onto the ground, creating the gravel pile at left.

Curiosity’s Mast Camera acquired component images of this scene on the 39th Martian day, or sol, of the mission (Sept. 14, 2012). The Mast has two cameras, a telephoto right
eye with a 100-millimeter lens, and a moderately wide-angle left eye with a 34-millimeter lens.

The “scenic” image looking toward the horizon was downloaded in pair form by NSA member Ron Kriesel who notes, “I still have not worked out the rotational and lens angle differences from the Curiosity cameras so the far and near objects have some disparity in my renditions.” It was taken on the 58th day of the mission.

Color Me Digital

Crayola’s DigiTools division has announced “The next generation of digital art” with the DigiTools 3D app for iPads. A special dual tip stylus creates 3-D drawings for viewing with the chromadepth type glasses included in their 3D Pack. Also included is a Digital Stamper that brings up instant, animated 3-D images. Using fingertips, the app advertises an “authentic Crayola experience” with “virtual crayons, markers and colored pencils in real Crayola colors.” Not made clear is how much control kids will have over color choices and planes of depth, and nowhere is it mentioned that it’s the chromadepth concept that makes the app work. The app requires an iPad running iOS 4.3 or newer and an iTunes app store account. See www.crayola.com/products/digitools-3d-pack-product.

A Crayola DigiTool 3-D picture on an iPad screen. If you have any Chromadepth glasses, give this a try.

Vive la Revolution

(Continued from page 30)

House, Meet the Robinsons, Up, Coraline, Cloudy With A Chance of Meatballs, and ultimately to Avatar, heralding the triumph of the revolution. Animated films so dominate this era that live action 3-D is given its own chapter where films like U23D and Journey to the Center of the Earth are discussed along with the 3ality satellite broadcast of an NFL game to RealD equipped theaters.

The “depth” of coverage is easily as impressive as the earlier volume. 3-D Revolution provides the historical context and technical details of topics like recent anaglyphic films (Spy Kids 3-D), the Color-Code process, Horror films, and even some of the 3-D porno films that helped advance the technology (if not the art) of stereoscopic cinema. The one caution concerning the book involves the potential agony of reading about so many films one will probably never see. A few may eventually become available via Blu-ray, but for too many the intriguing descriptions in 3-D Revolution may forever be the best we’ll have. Ray Zone deserves our thanks for assembling so much historical research in these two books, and for recording the kind of history of current 3-D cinema that would otherwise be ignored—requiring someone like him to do the raw historical research 30 years or so from now.

Where Fears Live

(Continued from page 31)

follow. Directing the viewer’s attention might be different. Over the shoulder shots are just something that don’t work in 3-D.

I remember watching the first Journey to the Center of the Earth in 3-D. I saw a lot of over the shoulder shots and was thinking “there’s something I’m going to have to watch out for.” You just have to overcome your mistakes. The more mistakes you make, the more you can learn.

Zone: The Hole is actually your second 3-D effort.

Dante: Yes, I did a 3-D film for theme parks. That was R.L. Stine’s Haunted Lighthouse. It was 3-D plus they threw water on you during the film. You would have to wipe it off your glasses! That process involved two 70mm cameras that were strapped to each other. It took eight people to push it around. It was very frustrating. The Hole was exactly the opposite. I was very lucky to use the Paradise FX 3D rig. It was compact and simple. I could concentrate on the 3-D while we were shooting. We had underwater scenes where it all worked out just great. Plus those guys [Penner and Thomas] aren’t slick 3-D salesmen like a lot of people. They listen to the filmmaker.

Zone: Max Penner was also the 3-D tech on Dark Country, the Thomas Jane film, and pretty much the same toolset was used for The Hole. Were your tracking shots, using the compact SI heads with their camera mobility, planned ahead of time? Or did you just kind of do it on the fly?

Dante: We did our research. We went over to Paradise FX and did a lot of tests. They really contributed a tremendous amount. Especially when I asked them about different things we could do with the rig.

Zone: Watching The Hole, I kept thinking about Val Lewton.

Dante: He didn’t have any money! [laughter]

Zone: He got really creepy films out of no budgets.

Dante: Yeah. It’s not what you show that’s scary. It’s what you think!
A Battlefield Documented

review by John Dennis

There are of course density and contrast differences between the right and left images on these early plates, and some of the resulting anaglyphs can look uneven in tone and color with sky or ground areas that morph from red to cyan in different corners of the same image. But seen through anaglyphic glasses, all but the most extreme of these vanish, and none seem to interfere with the sharp stereo effect. With few exceptions, the anaglyphs (thanks to John Richter), fuse easily with remarkably little ghosting.

The full page images can have something of an immersive effect, which is impressive in the views of Sharpsburg and area farms and bridges but some other word is needed for the 15 views of the dead waiting to be buried two and three days after the battle. The introductory text explains that Gardner took 20 views of “The Dead of Antietam” and that he (with assistant James Gibson) took at least 85 stereos at or near the battlefield in September plus two views of Lincoln visiting McClellan there in October. Both of these now famous images are included full page in the book.

Most of the half-page or smaller anaglyphs are cropped to horizontal, concentrating on the subjects and leaving out foreground or sky areas. This may frustrate purists, but it can make anaglyphs easier to view when foreground details violate the window even more than usual in vintage views. It also of course allows the inclusion of more images in the book. Below two of the iconic “Dead of Antietam” stereos, the editors included the drawings made from them which appeared in the October 18, 1862 issue of Harper’s Weekly. Just how much more impact the actual stereographs had on the public when purchased or viewed in Brady’s gallery was a matter of conjecture in the press at the time.

A map (in 3-D!) is included showing camera locations around Antietam Creek and Sharpsburg, with numbers under each cameraman icon corresponding to numbers provided in the image captions. Students of Civil War history should especially appreciate the map and battlefield images, but the farms and houses within the battle area and places like Sharpsburg are equally well covered. The impressively sharp and clear stereos from Gardner’s negatives bring home the fact that war happened among real communities where people lived, not on a movie screen.

While it’s hard to beat an original view in a good stereo, it’s also impossible to ignore the fact that when they survive, the original negatives can provide far better images for historical purposes if not for collectors. In making such stereo so accessible to the public at this level of quality, the Center for Civil War Photography has done both U.S. and stereoscopic history a notable service.

Note:

A two-reel View-Master set of Civil War stereos from 1861 and 1862 is also available from the Center. It’s listed under “CDs and DVDs” on the Store page of their website, www.civilwarphotography.org.
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