Lurid media reporting of IRA activities in Northern Ireland might lead the casual observer to believe that this is a troubled land of turmoil and strife. Yet beyond the headlines the reality is very different. Apart from a few streets in Belfast or Londonderry which the prudent tourist would do well to avoid, the land of Ulster presents a tranquil and attractive face in a friendly and welcoming environment.

To redress the often misleading public image, the Northern Ireland Tourist Board recently commissioned well-known professional stereo photographer (and vice-president of the ISU) David Burder to make a 3-D audio-visual presentation intended to take viewers beyond the headlines in a whistle-stop tour of the more spectacular habitats, landscapes and wildlife of the six counties. The result was premiered at the recent major Environment, Wildlife and Conservation Exhibition held in London at Olympia Conference Center.

Although lasting only six minutes, the show, titled “Shades of Green” presents a dazzling kaleidoscope of 3-D images from aerial hypers to botanical macros and from castles to coastlines. Prominently featured is the unique world heritage site of the Giant’s Causeway, with its hexagonal volcanic rock formation [the often pirated subject of several 19th century views.]

Burder was given just a week to do the photography - barely a month before the exhibition opened. In that time he created nearly a thousand stereo images, many of them pictorial masterpieces in their own right, using five different stereo rigs and traveling non-stop around the province by air and fast car. Edited down to an equally fast-moving tape-dissolve sequence using four Carousel projectors working fully automatically, the result was undoubtedly the star attraction of the exhibition, as evidenced by the queues forming before each of the 40-plus showings every day. Equally impressive was the fact that, so far as we know, the projectors went through more than 250 showings without a single lapse in synchronization. This show is undoubtedly destined to become one of the 3-D classics.
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Front Cover:
One of the more unusual images seen by those attending the NSA Stereo Theater at this year’s NSA Convention in San Antonio, June 21-23. Craig Busch shot this ornate mask and costume as part of his stereo coverage of the Texas Renaissance Festival, one of the more exotic presentations on this year’s varied program. More on the convention appears in the feature “Deep in the Heart of Texas – NSA ’91.”
In Search of the First Stereo

While no conveniently dated stereo image pair exists as absolute proof, written evidence strongly indicates that the world’s first stereo photograph was made in 1839 or 1840 by William Henry Fox Talbot. Our feature “The First Stereo Photo” by Abram I.J. Klooswijk presents a letter from Charles Wheatstone to Talbot thanking him for “the photographs you have made for the stereoscope” and dated December 15, 1840. A later Wheatstone paper refers to seeing stereo Talbotype of statues, buildings and people “soon after” the announcement of the Daguerreotype in January, 1839.

This timing leaves only a few months during which one of those learning the new art of the Daguerreotype (technical details having been made public in August of 1839) could have produced, by accident or design, a photographic stereo pair prior to Talbot’s. While it's true that the principle of the stereoscope had been announced in mid 1838, it made far less of an international splash than did news of the Daguerreotype process. The thought of combining the two would certainly have occurred to many people eventually, but Wheatstone’s own request to Talbot for stereo photo pairs appears to have happened very early in the game – perhaps while Daguerreotypists were still learning the rather risky ropes of their process.

As with early photographic processes themselves, there could easily be an element of British/French rivalry involved in the question of the first stereo photo. Fox Talbot had made permanent negative/positive paper photographs since 1835, but didn’t share the process with the world. When the far brighter and sharper Daguerreotype was introduced, Talbot quickly (within weeks) exhibited what he had been up to, prompting Wheatstone’s direct request to him for stereo pair photos to try in the reflecting stereoscope.

None of this rules out the possibility that one of the many enthusiasts around the world experimenting with Daguerreotypes in late 1839 or early 1840 could have produced a stereo pair. Anyone knowing of evidence (written or photographic) for such a stereograph is invited to add more information to the historical record through the pages of *Stereo World*. Wheatstone himself thanked Fizeau and Claudet in his 1852 paper for “the first Daguerreotypes executed for the stereoscope” but gave no date for them. Equally undocumented, so far, are other claims for the first stereo photo, such as that mentioned for Moser of Königsberg in Wim van Keulen’s *3-D Imagics* (Nov./Dec. ’90, page 34). Among the historic stereo images reproduced on the 12 View-Master reels with that book, however, is a marvelous hyperstereoview of the Seine, boats and bridges in Paris, reel 2, scene 7.

The original is a paper print from a negative of Talbot’s Calotype process, a fine example of some very early stereography, but unfortunately not dated.

 NSA ’91

The coverage of this year’s NSA Convention in San Antonio shows some signs of an effort to include more examples of images from the projection program and the exhibits. While some (but not yet enough) convention presentations and exhibits become articles in *Stereo World*, many other fascinating images are seen only by those able to get to the annual events. As far as possible, future convention coverage will try to present at least a few samples from a variety of programs and exhibits for the majority of members whose only chance to see them at all is through the magazine.

This will mean fewer photos of people behind microphones, receiving awards, or eating dinner – and more images from the historic and current shows and exhibits that those people were there to see in the first place. Buying and selling stereographica is of course a prime reason for attending a convention, and shots of particularly interesting trade fair tables or room-hopping mob scenes will remain of interest. The reproduction of top items coming up in the Spotlight Auction has so far eluded us due to time constraints.

This year’s local convention committee presented an event rich in variety and loaded with interesting stereographica to see, talk about and buy. They succeeded despite problems faced by few other organizers of earlier NSA gatherings, such as a change in leadership at the crucial early stages of planning, the need to cope with a trade fair located several blocks from the headquarters hotel, and a medical emergency during the Stereo Theater presentations on the first day. Those in the San Antonio Convention Committee list, along with other volunteers, deserve the thanks of all NSA members for their skilled efforts.

**Date Correction:**

The date given in the March/April issue for next year’s NSA convention in Fort Wayne, Indiana is incorrect. The convention date has been set one week later than first announced.

Letters

Easter Island

In response to the article on Easter Island [Stereo World Jan./Feb. '91], I have been to this unique place and taken stereo slides of the Realist Format. I spent a week on Easter Island in October, 1980, taking about 150 stereograms covering most of the island from its Ahus, craters (at Rano Raraku I not only have stereos of the moais but also of "Tuku Turi", the 14 foot kneeling bearded man, totally different from the other stone statues)... Not to be forgotten are its people. I have stereograms of activities around Hanga Roa — people leaving Sunday mass (well worth attending if there on a Sunday, unusual beautiful chanting), a soccer game, etc... An excellent book on Easter Island was written by Father Sebastian Englert in 1970, Island at the Center of the World, New Light on Easter Island. It has been out of print for years and is only available at secondhand book stores.

Alfred Sinden (deceased) took many Realist format stereograms of Easter Island. He was a member of the Photographic Society of America's Stereo Division and I was privileged to view some of his fine work via our Circuits.

Marie-Francoise Brasquies
Forest Hills, NY

Anything but Stereo

I wish to warn owners of stereo cameras that they should not use 35mm “Hollywood” movie film. Several companies advertise this film for use in any 35mm camera. You can get prints, slides, or both from the same roll of film. However if you use this film in a stereo camera you can not get your film processed into either stereo prints or stereo slides. This is false advertising in view of their claim that you can use this film in any camera. I wrote a letter to the [Texas] company in regards this false advertising, including a suggested warning to stereo camera owners. However their reply was unresponsive to the issue of false advertising. Therefore I’m writing this letter warning other stereo camera owners. This may cause other readers to reply with their experiences or solutions.

Lawrence Lancaster
San Leandro, CA

Probably few if any of the labs specializing in Eastmancolor type film for slides or prints ever expect to see anything more exotic than the half-frame format. They lack the printer masks for Realist or, worse yet, 7-p or Nimslo format images. And even if they COULD manage to contact print slides from your (hopefully uncut) roll of negatives, they couldn’t mount them.

— Ed.

Niagara

A question about Mr. DiLaura’s final installment in Vol. 17 No. 6, figures 18, 19 and 20. Figures 18 and 20 seem to be taken about the same time. Figure 19 seems to have been taken at a different time, as Ms Spelterini seems to have lost her hat and peach baskets. Did Ms Spelterini make more than one walk on that day? Or was this photo taken on a different day? What is the history of this event?

Peter J. Thompson
Syracuse, NY

She may have kicked off the baskets and let the wind carry the hat away as part of the show, but note that there are far more people on the upper deck of the bridge in figure 19, indicating at least some time difference between this and the other views.

— Ed.

The comments about my article on Charles Bierstadt [Letters, Jan./Feb. '91] were most welcome. It is with regret that I apparently offended Mr. Lightfoot with respect to my comments about Edward Anthony. My remarks were intended only to inform about photographic business practices at the time Charles Bierstadt came to Niagara. I would be most interested in learning more about Antho-

ny’s work and I should like to invite Mr. Lightfoot to submit an article for consideration for publication in my new magazine, American Stereo Journal. At this time, we are inviting submissions for possible future publication. If interested, please write to: American Stereo Journal, PO Box S49, Cambridge, MA 02238.

Mark DiLaura
Brighton, MA

Contemporary Stereography

Most of your magazine is devoted to older stereo pictures. Some of these are quite amazing, and very worthwhile for viewing and reading by everyone. But I think that the magazine is too focused on this aspect; potential subscribers that aren’t that interested will be put off by so much space devoted to this area...

I, and I’m sure many others, would be interested in seeing current stereo pictures taken by readers of your magazine... They don’t have to relate to any particular article or subject, just a “Readers Views” section.

John W. Jamison
Houston, TX

Thanks for the effort that has produced a fine magazine. I have nearly every issue since its inception and can attest to the progress our organization has made. I look forward to receiving each issue.

I would like to echo the comments of many of your other members in wishing to see more contemporary stereography presented, and stereo-journalism of current events.

Roger Curry
Jacksonville, FL
I have been president of the NSA for one year, and during this year I have been overwhelmed by the generous donations of NSA members who have made it possible for us, the NSA, to make purchases of some much needed electronic equipment to help facilitate the publication of *Stereo World*. Your donations and help have also made it possible for the NSA to keep the dues structure stable and to keep your subscription to *Stereo World* a real bargain.

The NSA was formed to help better understand, preserve and promote the antique stereograph, but with our continued growth to over 3000 members, the membership in current stereo interest has exceeded those who collect the older views. I feel there is room in our organization to promote all types of 3-D, no matter what form. We are now in the process of getting our regional meetings more in line with our constitution and by-laws.

Our editor of *Stereo World*, John Dennis, is always looking for articles on 3-D, particularly anything on current stereo. Our number one priority this year will be to have *Stereo World* caught up and published on a timely basis. With our new computer graphics this should be accomplished in the near future.

Many of you in the past have been good enough to write to the officers suggesting changes and improvements, and I hope you will continue to feel free to write to me. Only if we know what you want from YOUR association can we make it more useful and interesting. Thanks again for your support.

Gordon D. Hoffman
President, NSA
918 E. 4th St. Road #206
Fond du Lac, WI 54935

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The First Stereo Photo
by Abram I.J. Klooswijk

Just over 150 years ago, on the 15th of December 1840, Charles Wheatstone wrote a letter to Henry Fox Talbot, from which comes the following excerpt:

"I thank you for the photographs you have made for the stereoscope; they do not exactly answer the purpose as the angle you have taken (47 1/2°) is too large and the differences in the two pictures are consequently too great, but they are sufficient to show that the effect when properly produced would be very good. 25° would be a much better angle. There is one precaution necessary to be taken to ensure the proper result: the two pictures should not be taken at times when the shadows of the object fall differently; they should either be taken one immediately after the other or, which would perhaps be better, at the same time on two successive days. A bust will be a good binocular object, but a carriage or a piece of machinery would, I think have an excellent effect."

This 1840 letter in Wheatstone’s handwriting is probably the oldest extant mention of stereo photography. Only a year later, in 1841, stereo photography was mentioned for the first time in print. Wheatstone’s letter also proves that Fox Talbot had taken the first stereographs 150 years ago!

Photography
Charles Wheatstone had experimented with stereo drawing since 1832. On the 21st of June, 1838 he held the famous reading in which he announced the invention of stereoscopic imaging, and presented the (mirror) stereoscope with a number of stereo drawings. (See Stereo World, May/June ’88.) Simultaneously Daguerre was busy in France improving the photographic process with which Niepce had experimented. Daguerre’s invention was announced by Arago in the French Academy of Science, on January 7, 1839. The news soon reached England, where Fox Talbot had also for some years experimented with photography. Like Daguerre he had found a method to fix the images, but unlike Daguerre he employed negatives (on paper) printing them again as positives. His oldest extant negative dates from 1835. After the French announcement, Fox Talbot quickly organized an exhibition of his paper prints, held on the 25th of January, 1839. He prepared a paper on his process for the Royal Soci-
ety, read for him on January 31, 1839.

Wheatstone held a second reading on stereoscopy in 1852 in which he said: “It was at the beginning of 1839, about six months after the appearance of my memoir [the first reading], that the photographic art became known. Soon after, Mr. Talbot, the inventor, and Mr. Collen (one of the first cultivators of the art), obligingly prepared for me stereoscopic Talbotypes of full-sized statues, buildings, and even portraits of living persons.”

As this reading was many years later, there have been some doubts about the exact history. Other witnesses have given other names for the first stereographer, even putting forward the Daguerreotype as the first stereo photography process. The photocopy of Wheatstone’s original contemporary letter proves, however, that he cooperated with Fox Talbot to get the first stereo photos, which were Talbotypes.

There are many interesting interwoven historical connotations to the events leading to this first attempt at stereo photography, as well as to the relations between Fox Talbot and Wheatstone.

Lacock Abbey

William Henry Fox Talbot (1800-1877) was the only child of a family which owned a manor with estate in Wiltshire, not far from Bath, some 100 miles west of London. The manor “Lacock Abbey”, in the even today idyllic historic village of of Lacock, had been owned by the family since 1540, when it was bought from King Henry VIII.

Henry Fox Talbot was the 10th generation on the Abbey. Today his great-great granddaughter still lives on the Abbey, which is now owned by Britain’s National Trust, and important parts of which are open to the public. Many places where the world’s first paper photographs were taken are still intact, and can be compared to the prints in Talbot’s famous The Pencil of Nature (1844), the first publication illustrated with original photographs ever to be produced for sale.

A few times each year recitals are given in the Great Hall of the Abbey, and Talbot’s descendant, a very amiable lady, assists in organizing the events. Last summer, before a concert in the Abbey, my wife and I spoke with her. With the other concert visitors we afterwards enjoyed a picnic with candlelight in the fine setting of the cloisters, which added to the indescribable sense of time travel on our pilgrimage to this historical (stereo) photographic site.

Henry Fox Talbot

Although he was owner of an agricultural estate, and lived most of his years in the country, Henry Fox Talbot was not at all a countryman. He was educated at Harrow and at Trinity College in Cambridge, and was a scholar of the renaissance type, of many-sided interests. He traveled a lot, in Britain as well as on the continent. Before his experiments in photography, he was elected Fellow of the Royal Society (1831) for his work in mathematics (contributions to integral calculus) and spectroscopy.

Apart from these subjects and his pioneer discoveries in photography, he experimented in physics and chemistry and was interested in astronomy. He obtained patents on motive power and silvering of metals, and in botany he discovered some new species of plants. He was an amateur in entomology and linguistics, and was a connoisseur of Egyptian antiquities. In his later years he was one of the few scholars who could read and translate classic Assyrian cuneiform tablets.

Henry married in 1832 and went on a delayed honeymoon to Italy in 1833. He had earlier used a camera obscura for drawing in Italy in 1823 and 1824. Now, at Lake Como, he tried to make...
to fade away. It occurred to me how charming it would be if it were possible to cause these natural images to imprint themselves durably, and remain fixed upon the paper!" (From the introduction to The pencil of nature, 1844.)

By that time Nicephore Niepce in France had already made the first still-surviving photograph (of his house in 1827), but it was not published yet. Niepce made his experiments knowing of the 18th century experiments with the darkening of unaided, he started his own experiments with fixing "photogenic drawings" in 1834, and soon also with images from small camera obscuras. In 1835 he made what was to become the oldest surviving negative, on which he later wrote: "Latticed Window (with camera obscura) August 1835 - When first made, the squares of glass about 200 in number could be counted, with the help of a lens." (This negative, now in the Science Museum in London, is two years older than the oldest surviving Daguerrotype.)

It is very exciting to see this latticed window still intact at Lacock Abbey, in the south gallery, looking out over a large meadow. Interestingly, the window was not an original feature of the Abbey. I understand that Fox Talbot himself had it made, to bring more light into the gallery. On Talbot’s negative in a lower corner and on the lower edge, the outlines of some outside trees are seen. Standing in the gallery today, we can see the very same trees, some a little higher.

A large pot with a plant in it now stands in the gallery, partially in front of the latticed window, but Fox Talbot’s great-great-great-granddaughter gave us permission to move it out of the view (under her direction) to make additional shots. I noticed that I had to stand against the opposite wall to get the window within the angle of my 30mm lens, so Talbot also used a wide angle for his negative. Indeed it is known that he soon found out that short focal distances substantially reduced his long exposure times. He used focal lengths of 2 inches (5 cm) for negative sizes of about 2 square inches.

**Scientific Research**

In the years 1835-1839 Talbot made no effort to publish or announce his photographic invention, which he felt was not developed far enough. Seen from 1991, and knowing the impact of 150 years of photography, it is perhaps hard to understand why Talbot had not concentrated all his efforts on photography. But he conducted
Calotype of the Patroclus bust by Fox Talbot from “The Pencil of Nature” (1844).

many other experiments in those years which he thought more important. Between the first negative (1835) and Daguerre’s announcement (1839) he published papers on optics, the chemistry of borax, properties of heat, integral calculus, optical phenomena of crystals, interference of light, and “a new property of nitre.”

In a similar way Charles Wheatstone postponed publication of his stereoscopy research. He probably conducted the most important stereo experiments before the year 1833, when Herbert Mayo first made a brief announcement of them. (See Stereo World, Sept./Oct. ‘83.) Publication was not before June 1838 because Wheatstone was more interested in his researches in electricity and the telegraph (1834-1841) and in acoustics (1833-1835).

Wheatstone and Talbot often corresponded on scientific subjects, and Talbot often called on Wheatstone during his frequent visits to London. In August 1836, a meeting of the British Association for the Advancement of Science was held in Bristol (near Lacock) and Talbot invited several leading scientists to stay a few days at Lacock Abbey. Among them were David Brewster, Charles Wheatstone and Charles Babbage (known for his calculating machine that was the predecessor of the computer, and also as the first sitter for a Talbotype stereo portrait, taken in 1841 by Henri Collen). Brewster wrote home: “This place is a paradise – a fine old abbey, with the square of cloisters entire, fitted up as a residence, and its walls covered with ivy, and ornamented with the finest evergreens”. The place has remained a paradise up to the present day.

Talbot discussed many of his scientific researches with Wheatstone and especially with Brewster, but probably not photogenic drawing, nor did he show the latticed window negative to his visitors, for he thought his researches unfinished. Also, Wheatstone obviously did not mention his stereoscopic drawings. If both men had been aware of the other’s results, they could have taken the first stereo photos then and there, in August, 1836.

Even in 1840, stereo photography was just a digression for both of them. The main point of Wheatstone’s quoted letter was not the taking of photographs for the stereoscope, but to inform Talbot that an “electrolytic engine” could be built for him for ten guineas, which Wheatstone could not pay because all his money was “employed for improvement of telegraphic apparatus”. In 1852 Wheatstone said that “soon after” January, 1839 he had stereo photographs made, but in fact it was autumn of 1840 before Talbot took them. In the year 1840 Talbot had many things to do. Apart from his research, he had the duty of sheriff of Wiltshire. Moreover, in September he made great progress in photography, when he discovered an improved technique, part of which was the development of a latent image. Talbot called the process Calotype, but Talbotype became the accepted name. He could reduce exposure times markedly. The patent application was filed in January, 1841, but between September and December of 1840, the first stereo photos were among the first Talbotypes.

**Reconstructing the First Stereo Photos**

The stereo photographs which Talbot did send to Wheatstone have not survived, and no other

A reconstruction of how the world’s first stereo photo may have appeared. This is the bust of Patroclus in the fox Talbot Museum, as seen at the convergence angle of 47.5° used by Talbot in the first pair of photos he sent to Wheatstone. With some effort, the nose and the base can be fused. Stereo by the author, 1990.
The bust stereographed at the 25° convergence angle recommended by Wheatstone. Stereo by the author, 1990.

The Patroclus bust stereographed using parallel axes and a more reasonable base of about 1:30 (equalling a convergence angle of about 1.75°) to show it in a viewable, current stereo form.

Stereo attempts by Talbot are known. The fact that Wheatstone mentioned a bust in his letter suggests that it was Talbot's subject in the stereo pictures he sent to Wheatstone. From Talbot's own notes it is known that he used a particular marble bust of Patroclus on at least eight occasions in 1840 for photographic experiments, changing lighting and camera obscura positions. In the first number of *The pencil of Nature* (1844) a view of the bust was published (see illustration) as well as in the fourth number. So it seems an educated guess that this bust was used for the first experiment in stereo photography as well. The original Patroclus bust is in the British Museum, but the Fox Talbot Museum has a plaster copy on display, which I used in an attempt to reconstruct the first stereo pictures.

I approximated the angle of 47.5°, which Wheatstone condemned, the angle of 25°, which he recommended, and a base that today is more common, about 1/30th of the object distance, which conforms to an angle of about 1.75°. Wheatstone, in his original (oral?) request to Talbot, probably didn't state a particular angle of convergence to be used for the stereo effect. It is also known from his 1852 reading that Wheatstone recommended large angles, like the 25° mentioned in the letter.

Making stereographs with converging cameras or lens axes is generally disapproved of today because it can result in opposite keystone distortions in the pictures which cannot be corrected in mounting for viewing in common stereoscopes or by projection. In taking aerial stereographs for cartography, for instance, the angle between the two aerial viewpoints, subtended at a place on the ground, is also very large, but the camera axes stay almost parallel.

However, in judging the results of the reconstruction of Talbot's stereo photo, we have to understand that this "parallel" presentation was not the way Wheatstone looked at the photographs. In the mirror stereoscope, the photos can be moved sideways on sliding panels, creating different angles of
viewing convergence. This can correct keystoning, providing a much better effect with the large convergence angle of Talbot's stereopair.

In normal binocular vision, a convergence angle of 47.5° means a subject distance of about three inches, which is extremely close. But many young adults (especially myopes like Wheatstone) can see things in stereo even at this distance. Therefore it is likely indeed that Talbot's first stereo photos were “sufficient to show that the effect when properly produced would be very good.” Obviously Talbot didn't have a stereoscope yet, so he couldn't judge the stereo effect himself. That the pictures did “not exactly answer the purpose” was apparently not only by the extreme angle of convergence but also by differences in lighting, the latter partly due to the relatively long exposures which the two successive photos required. Also, Talbot may have developed the first picture before taking the second, to judge exposure.

In his letter Wheatstone seems to criticize Talbot for having used a bust as the subject. It is a fact that the three-dimensional structure of the human face can be perfectly well appreciated in flat pictures, especially with subtle lighting like Talbot used in his Pencil of Nature photo of the bust. (As opposed to my shots, made with an unpleasant on-camera flash.) However, the less familiar and more three-dimensional structure of “a carriage or a piece of machinery” puts more emphasis on the advantage of stereoscopy. Wheatstone's remark recalls his 1838 reading, when he presented stereo drawings which were “only outline figures”, to leave no doubt that the stereo effect was based only on “the simultaneous perception of the two monocular projections, one on each retina.”

Acknowledgements

I'm indebted to Mr. Michael W. Gray, Curator of the Fox Talbot Museum, and to the tenants of Lacock Abbey. My documentation depends heavily on the (still available) magnificent Fox Talbot biography by H.P.J. Arnold.

Sources


“Some account of the art of photogenic drawing, or the process by which natural objects may be made to delineate themselves without the aid of the artist's pencil”, Royal Society Proceedings IV (1839) pp 120-121.

“Contributions to the physiology of vision - Part the second. On some remarkable, and hitherto unobserved, phenomena of binocular vision”, Charles Wheatstone, Philosophical Transactions of the Royal Society (1852) pp 1-17.


Outlines of Human Physiology, Herbert Mayo, London 1833.


WALLACE BEARDSLEY

The many friends and correspondents of Dr. Wallace R. Beardsley will be saddened to learn that he passed away in Florida on March 16, 1991. He is survived by his wife Natasha, who will make her home in Dunedin, Florida, where they had wintered for the last several years.

“Wally” earned his doctorate in astronomy at the University of Washington. He spent his career as professor at the University of Pittsburgh, until his retirement a few years ago. He was intimately involved there with the university’s Allegheny Observatory. Because of this location and professional concern, he had a deep interest in stereo images of astronomical subjects and the Pittsburgh area.

He also was one of the most knowledgeable students of views of the Pacific Coast, Alaska and Hawaii, and had been compiling listings of views by major western photographers such as Watkins and Muybridge. For the last several months, he had been preparing to make contributions to NSA's encyclopedia of stereo photographers. His files and records are being donated to the Holmes Library, where they will be used to assist in this project. His knowledge and cooperation will be sorely missed by all who worked with him.

- T.K. Treadwell

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STereo World May/June 1991 11
The Canadian Stereoscopic Collection, a joint venture of the Photographic Historical Society of Canada and Sheridan College in Oakville Ontario, was officially opened on October 17, 1990. The first request for information from the Collection was received from Mr. Abram Klooswijk of Rotterdam. Mr. Klooswijk was seeking a copy of a letter discussing stereo vision which appeared in the *Toronto Royal Standard* on November 28, 1836. A copy of this newspaper was located in the Metro Toronto Reference Library.

The letter was signed “THEOPHILUS”. Twenty years later in the *Toronto Times*, the author identified himself as being Mr. George Maynard, and he sent a copy of this second letter to Sir David Brewster. Brewster referred to Maynard’s *Toronto Times* letter in his own correspondence with Wheatstone in *The Times* (of London) of November 5, 1856. In the *Toronto Times* letter, Maynard expressed the hope that the comments in his original 1836 letter would prove to be the first on stereo vision. While it turned out that it was not the first on the subject, the 1836 letter was indeed an early discussion, being published two years before Wheatstone’s paper to the Royal Society.

Mr. George Maynard was a controversial figure. He was born near Bristol England in 1805 and graduated with honors from Cambridge. He came to Canada in 1836 to take up the position of second classical master at Upper Canada college, then a provincial grammar school for boys in Toronto. In 1838, he was appointed to the position of first mathematics master, a position he held until 1856 when he was forced to resign from the college. His great-grand-daughter described him as a brilliant mathematician with a violent temper. Over the years he had numerous disagreements with the other teachers at the college, and disciplinary troubles with the boys. One of the principals of the school said that “Maynard was more trouble than all the other masters and pupils together.” After leaving the college, he ran a private school for boys for a short time and died in Toronto in 1878.

The extent of Maynard’s contribution to the stereoscopic literature appears to be only the two letters in the Toronto newspapers. The first letter of 1836 is reproduced here. The second cannot be located as no copies of the *Toronto Times* of those dates are known to exist. However, in *The Times* (London) of November 5, 1856, Brewster does quote briefly from Maynard’s second letter, saying that it was “a long and very interesting article, occupying [a] whole page of the newspaper.” There is no reference to Maynard being involved in photography in any way. It was his excellent grasp of mathematics on which he based his comments in the letter.

References:
To the Editor of the Royal Standard.

Sir,—

Should you feel disposed to encourage Scientific communications, and oblige a subscriber, you will insert the following:

“A mind” says Sir John Herschell, who has once imbibed a taste of Scientific enquiry and has learnt the habit of applying its principles readily, to the cases which occur, has within itself an inexhaustible source of pure and existing contemplations - one would think, that Shakespeare had such a mind in view, when he describes a contemplative man as finding “Tongues in trees - books in the running brooks, Sermons in stones - and good in everything.”

It is a curious fact, that in spite of the vast attention which has been concentrated by writers of the greatest eminence on the structure and functions of the eye, not to mention the universal admiration which a mechanism so beautifully perfect has naturally elicited. One important peculiarity in the visual apparatus has been strangely overlooked; to wit the phenomenon of two such eyes horizontally disposed, and separated from each other by a considerable interval, the relation of the one organ to the other. In the elaborate treaties on light by Herschel, Brewster, and others, in which the construction and uses of the eye are largely detailed, no explanation is adduced of the important advantages accruing to us from the possession of two organs of vision instead of one - that is a single eye capable of admitting the same quantity of light, the amount requisite for distinct vision.

Now with a little consideration it will be sufficiently apparent, that, in the estimation of direct distances between different objects, the circumstances of vision with two eyes are the same in principle, and precisely analogous in their nature to those of the process necessary for the calculation by parallax of the moon’s distance or of any other heavenly body to which that method is applicable; the angular magnitudes, however, being determined contemporaneously and the linear unit being the interval between the eyes, the distance apart of the observations.

To render this intelligible to the general reader, we may suppose a sheet of paper placed on a table, a line being drawn across it and graduated, no matter how; let a slender body, (say a pencil case with a bob) be held at a reasonable distance from the eyes, and about two feet from the paper. If the usual effort be now made to estimate the distance between the object and the sheet, two images of the object will be observed, intersecting the graduated line at different points; the positions of which may be distinctly determined by closing the eyes alternately. If now the object be moved towards the graduated line, the distance between the points of intersection will gradually diminish and finally vanish as the object meets the paper; and it is only in estimating the distance or when the eyes are partly directed on the sheet of paper, that the two images are together visible. This circumstance of the division, as it were, into two, of small bodies, or the separation from each other of the edges of larger ones, is alone and altogether the means we possess of appreciating the relative small distances of the various bodies in our immediate vicinity, and it is the direct result of the organs disposed at an interval.

The applications of this principle are endless, observe the eye of the sportsman, the interval between bird and sight being thus neutralised. See the action of the plane and eye of the workman, all inequalities being thus congregated on a flat - witness the difficulty of securing with the hand hair or any other object hanging from the head, within range of the eye only. Hence it is that the shying animal surfs round square to the object of alarm. Hence the misperfection of Tellescopes, as generally constructed for all land purposes, to say the least - and the curious illusion, that a great fitter along below the lateral range of either eye over the nose, if its angular velocity be small, passes sometimes for a bird in the distance - on this account it is, that all pictures whatever be their merits, must either represent distant objects or be themselves placed beyond the reach of this property.

The parallactic result we have here described has nothing to do with distinctness of vision, it is a faculty of itself. To thread a needle with one eye closed, becomes difficult, not from want of light, the objects themselves are sufficiently distinct, but from the loss of a faculty of distinguishing distance - if the thread be grasped at a distance from the extremity, the eye having been previously closed for a few seconds, the effect is ludicrous and convincing. The faculty itself is limited, and does not extend to very great distances, in consequence of the comparatively small interval between the points of observation; but in all cases when immediate comfort is concerned, where variation in size and colour are not available, it is very effective. In every art, in all delicate operations, where much dexterity is required, especially where the hand is extended to many different points in succession, as in type setting, lace making, not to dwell on the minor operations of life, significant tho' endless - stitching, sawing, embroidering, music copying, and last tho' not least, the dismantling of a high waxed wick’d candle; to every creeping thing that creepeth on the earth, man, fowl, fish, reptile, how useful, this unobserved peculiarity in the ocular structure?

"The works of the lord are great - sought out of all them that have pleasure therein."

THEOPHILUS.
The hot and humid San Antonio weather which greeted NSA members arriving for the June 21-23 convention made the cool interior of the elegantly restored Sheraton Gunter Hotel seem doubly inviting. Awaiting the stereo enthusiasts who gathered for this 17th annual national meeting was a rich variety of events and exhibits arranged by the South Central Region of the National Stereoscopic Association. The convention officially got under way at 8:00 am Friday morning with opening comments by NSA Vice President John Waldsmith and a brief membership meeting chaired by NSA President Gordon D. Hoffman.

NSA Stereo Theater Highlights

Following a welcome from Program Chairman Dennis Wagner was "DEEP IN THE HEART OF TEXAS", a series of current slides of the San Antonio area by various NSA members, accompanied by a lively "San Antonio Rose" soundtrack. First time visitors were introduced to many of the stereo photo opportunities surrounding the convention site through these images.

"VIEWS OF OLDE SAN ANTONITE" was next, providing an entrancing, time-machine journey into the same area, with views ranging from well over 100 years old to scenes from the 1920s. The 62 views from the collection of Houston NSA member Robin Stanford were copied for projection by Craig Busch and were also part of this year's Invited Exhibit, "Texas Views". This meant that those who wanted to study a particular view from the Stereo Theater show more closely or check the title or publisher were able to examine the

Mexican Cavalier. By Henry Doerr, ca. 1870s. As seen in the Invited Exhibit and NSA Stereo Theater show "Views of Olde San Antone" at NSA '91. From the collection Robin Stanford.
original from Robin Stanford's collection in the exhibits area of the trade fair.

“A PRESENT DAY LOOK AT THE PAST - THE TEXAS RENAISSANCE FESTIVAL” features slides by Craig Busch from the annual medieval costume and craft fair. The color and exuberance of the costumes and people involved make events like this perfect for good, close stereo photography, and Craig's slides provide an intimate taste of medieval England as imagined by Texans of the 90s.

“A PRESENT DAY LOOK AT THE FUTURE” involves stereographic coverage by Craig Busch of a different sort of fantasy - the filming of the hit movie “ROBOCOP II” in Houston. As Location Manager for the film, he had access to sets, props, equipment and people seldom seen in anything but flat photos. His detailed behind-the-scenes stereos held the fascinated attention of members in the audience (some of whom later remarked that the slides were more interesting than the movie even if it had been in 3-D.)

“3-D MULTI-IMAGING IN A CORPORATE ENVIRONMENT” by Show Works of Dallas includes two of the commercial slide production company’s 9-projector 3-D shows. Made to promote cellular phone equipment, the images were planned for maximum visual impact through dramatic stereography to make each point in the client’s message not just clear, but memorable. Sequences with hot air

This ornate mask and costume appear in one of the slides from the NSA Stereo Theater presentation "A Present Day Look at the Past - The Texas Renaissance Festival" by Craig Busch.

Preparations on the set in Houston during the shooting of the film “Robocop II” from “A Present Day Look at the Future - Behind the Scenes of ‘Robocop II’ in 3-D” by Craig Busch.
balloons, striking scenes views, and deep architectural shots (combined with floating 3-D titles) all seem to flow into each other quickly and smoothly, programed with the music and narration for a slick and effective sales pitch. David Shinn and Tom Ivanses of Show Works answered questions about the planning and technical aspects of commercial 3-D slide production, which takes advantage of the tight pin-register photography and mounting already used for multi-projector commercial slide programs to create impressive full frame 3-D sequences. Only the repeatedly edge-violated stereo window tempered the audience’s appreciation of this look at stereo’s success in the realm of high-end corporate promotion.

“3-D’s GREATEST HITS” by Robert Bloomberg is a skillfully edited collection of current work by some of the best stereographers in the world, including everything from humorous trick effects to striking scenes and close-ups and a documentary sequence on the Bay Area Earthquake of 1989 shot by Bob Bloomberg himself. This is a more polished version of the show that was such a hit at last year’s convention in Manchester, now featuring synchronized music and narration on tape.

“CHENANGO COUNTY, NEW YORK – THEN AND NOW” by Brandt Rowles contrasts views of small towns from 1865 to the present, proving in many cases how little changes, in others how much. A fair percentage of the public buildings, schools and churches stereographed in the 19th century remain to be documented in small towns today, and Brandt includes several tips on how he achieved such impressive coverage of the “Now” half of the project. One point well made by the slides was that a clear and comprehensive image of the present scene is often more important than matching the exact inch the point from which the original view was taken— not to mention duplicating the same focal length lenses and angle of coverage on the film. Well executed “Then & Now” combinations hold a wide fascination even in flat images, but this show demonstrated their added appeal in stereo and may well inspire more such careful and extensive documentation efforts.

Mexican Jacal Family, San Antonio View Co., Frank Hardesty, ca. 1880. From the projection program and Invited Exhibit by Robin Stanford, NSA ‘91.
“101 WAYS TO DO 3-D CLOSE-UPS” by David Burder entertained as much as it instructed, with multiple examples of his fine work in nearly every stereo format and technique illustrating his tips for doing close-up work with a variety of equipment from the elegantly simple to the most complex and expensive. The actual secret involved, however, is really to become infected with David Burder’s irrepressible enthusiasm for stereo photography, which bubbles off the screen in nearly every shot and explains his literally worldwide reputation as a master of the art.

“THE SEASONS” by Marshall Rubin follows in full frame stereo the changes in both the look and mood of urban and forest areas around his New Jersey home through the seasons of a year. Easily the most personal of the presentations seen this year, “The Seasons”, with its music only sound track, moves from place to place and season to season more like a real memory than some bland scenic narrative or artsy tribute to nature’s seasonal wonders. Seen out of context, some of the images would look rather ordinary, but the progression of the sequences combined with particular water, ice, and forest path scenes left many people hoping for more efforts of this sort in the future.

“PARIS: 1850 TO DATE” by professional stereographer Guy Ventouillac opens with several rare old views of Paris that many had probably not seen before, including some tinted tissues of palace interiors copied for both front and back lighting examples. Other views follow the process of destruction and restoration over the years into the early 20th century. Guy’s full frame slides of Paris reveal the enjoyment and dedication of someone willing and able to wait for the ideal conditions of weather and lighting for the most dramatic possible stereos. Several monuments and buildings are captured at dusk with their artificial illumination balanced with the remaining skylight. Combined with this is composition for good 3-D impact in nearly every image. Following the show, anyone with anything near the means to go was talking about attending the ISU Congress this September in Paris.

Invited Exhibits
There were again two Invited Exhibits this year. On display with the other exhibited views in that section of the Trade Fair was the

Old Stone House on North Laredo Street. By H.L. Bingham, ca. 1870s. Judging from the grass growing on its sod roof, the old structure was probably at this point near the end of a long life. From the projection program and Invited Exhibit by Robin Stanford at NSA ‘91.

Paul Hickman Begins Recovery
Shortly before his slide lecture on M.M. Hazeltine was to be presented Friday afternoon, NSA member Paul Hickman collapsed at the rear of the hall. After being attended by paramedics he was taken to a San Antonio hospital where it was learned that he had suffered a serious stroke. Over the next few days his condition deteriorated to critical, but by mid July he had been transferred to a hospital in his home town and was reported to have started initial recovery from paralysis. Mr. Hickman is a professor at the State University of Arkansas and co-authored (with Peter Palmquist) the major four-part series on stereographer J.J. Reilly starting in the Nov./Dec. 1984 Stereo World. In a touch of nearly tragic irony, his presentation on Hazeltine’s Yosemite work was dedicated, in the program, to the memory of frequent Yosemite visitors Louis and Jewel Smaus.

“Texas Views” exhibit by Robin Stanford of Houston. Many of these views from her extensive collection were seen in the NSA Stereo Theater show “Views of Olde San Antone”, and members were able to study them selectively and at length in the exhibit, which
One of the more unusual items sold at Friday evening's very successful NSA Spotlight Auction was this heavy sheet metal and iron pipe stereoscope and paired 127 Kodak camera combination. Proud new owner Bill Walton's shirt advises "Just say no to oysters" following his lengthy recovery from a serious case of food poisoning.

Dealer Harry Porter, right, swaps Realist trivia with a potential customer over his wonderfully cluttered table at the Trade Fair in the huge basement of the San Antonio Municipal Auditorium. Workshops on slide mounting, super 8 3-D movies, and hyperstero were conducted in rooms adjacent to the Trade Fair area.

occupied several of the large metal frames on loan from a stamp collector's show.

The other Invited Exhibit consisted of only one projector, but an extremely rare and significant one to the history of stereo. Collector and current president of the Magic Lantern Society Jack Judson located in Vienna, Austria an 1880s "Biunial" magic lantern manufactured in Paris by Molteni and identical to those seen in contemporary illustrations of some of the earliest efforts at anaglyphic 3-D projection. Molteni is mentioned as having given public exhibitions of this method in Paris in the early to mid 1880s. Mr. Judson spoke about the history of the large dual lens projector as part of the program on Friday, explaining the dangerous operation of the "lime-light" burners used as the light sources in such devices. Oxygen and hydrogen are mixed through valves at the base of the projector and ignited inside to heat a cylinder of calcium oxide to the point of glowing a brilliant white. Fires and explosions were not uncommon in theaters of the day, and for stereo projection the operator had to control two burners at once. (While many magic lanterns had two or more lenses, most were used for fade and dissolve effects with flat images. Slightly later anaglyphic 3-D projection using superimposed single-slide red/green images, introduced by Ducos du Hauron and marketed by others around the turn of the century, would of course have been possible with any single lens lantern.) The Molteni projector was displayed in a large case near the entrance to the Trade Fair.

**Awards**

This year's Awards Banquet was attended by 165 people, and NSA President Gordon D. Hoffman announced the annual awards. The 1991 FELLOW OF THE NSA for distinguished scholarship and extraordinary knowledge of the field, awarded posthumously for the first time, went to Louis and Jewel Smaus.

The MERITORIOUS SERVICE AWARD went to Larry Hess for his work in computerizing and assembling the 1991 NSA Directory as well as several other projects.

The EDWARD B. BERKOWITZ AWARD for the outstanding historical article in a recent issue of *Stereo World* went to Mark DiLaura for the 3-part series on stereography of Niagara Falls starting in the Sept./Oct. 1990 issue.

The Memorial Award, now to be known as the LOU SMAUS MEMORIAL AWARD for the best article on modern stereoscopy in a recent issue of *Stereo World* went to Leon Kosofsky for his two articles (reprinted from the *PSA Journal* of 1970 and 1973) which appeared in the July/August 1990 issue under the title "A Look Back in Space and Time – The Apollo Stereo Record."

THE SPECIAL FINANCIAL AWARD went to two people; Steve Davidson for his substantial contribution of stock shares to the NSA, and to Russ Young for his continuing generous financial support of the organization.

**Competitive Exhibit Winners**

Views of a City, State or Region in the U.S. – "Virginia City, Nevada" – Jim Crain.


Transportation Views – "Modes of Transport" – Bill C. Walton.

Historic Events — “The Whiskey Crusade in Ohio” — John Waldsmith.

Quality of Life — “National Home for Disabled Volunteer Soldiers” — John Waldsmith.


BEST OF SHOW — “Virginia City, Nevada” — Jim Crain.

PRESIDENT’S CHOICE — “Modern Personalities” — Bill C. Walton.

Keynote
Guest speaker at the Banquet was Roy Flukinger, Curator of the Harry Ranson Humanities Research Center of the Photography, Theater Arts, and Film Collection at the University of Texas in Austin. His talk, illustrated with slides, focused on the Center’s famous Gernsheim Collection, which forms its foundation. The University’s photography collection has grown to true world class status, and today even includes the world’s oldest (and likely first) original photographic image, the famous 1826 plate by Niepce.

In discussing the history and operations of the Ranson Center, Mr. Flukinger related the story of Helmut Gernsheim’s first significant acquisition of historic photography. Between some discussions about collecting with photo historian Beaumont Newhall in London in 1945, Gernsheim went to a shop and purchased some Anthony stereo views of New York. He presented them to Newhall to take back to the Museum of Modern Art. Newhall rejected the gift and told Gernsheim, “Begin your collection with this.” From those Anthony views, the collection grew to include some 35,000 prints, a library of some 3,000 items, and about 300 pieces of equipment by the time the collection went to the University of Texas in 1963.

President’s Breakfast
For the second year, a special breakfast honoring NSA presidents

The Invited Exhibit Molteni Biennial magic lantern. Note the double set of oxygen/hydrogen valves at the front. No stereo image pairs were found with the projector, nor were any anaglyphic filters. The absence of filters may be due to the practice of binding filters to the rear of each slide for 3-D projection by many 19th century operators.

Cynthia Morton examines an 80 x 80 inch anaglyphic enlargement of a vintage stereo view in a corner of the Trade Fair area. Shown are Plains Indian prisoners at Fort Marian, St. Augustine, Florida in 1875-78. Once sold to tourists at a nearby resort, several of the views of prisoners will be blown up like this one for a traveling exhibit under the direction of NSA member Arthur Silberman, Director of the Native American Painting Reference Library. One goal is to help identify individuals for their descendants in Oklahoma. The large anaglyphs are created through computer scanning techniques by Earth Satellite Corporation of Rockville, MD. Stereo World will announce the schedule of the exhibit when it becomes available.
Roy Flukinger, Curator of the Ranson Humanities Research Center at the University of Texas, delivers the Keynote speech illustrated with slides of the famous Gernsheim photography collection at Saturday evening's Banquet.

Miss the Convention?

Limited quantities of the official NSA 1991 Convention program book, pin and T-shirt are available by mail from NSA, Box 398, Sycamore, OH 44882. All prices include postage.

Program ... $2.00
Pin ............... $3.00
T-shirt ...... $12.00
(L or XL only)

Miss the Convention?

past and present was held on Sunday morning. This year's event was somewhat more informal, with an appreciative "roast" of former NSA President T.K. Treadwell. His determined leadership, generosity, and often direct Texas language brought the NSA through a crisis period in the early '80s and also created the basis for several colorful stories about him during the breakfast.

San Antonio Convention Committee
Programs: Dennis Wagner, Roger Vernon
Publicity: Larry Jones, Brian Bennett
Exhibits: Bill Payne
Registrar/Treasurer: Carroll Bell, Mary Ellen Bell
Auction: Robert Duncan
Trade Fair: John Waldsmith
Logo Design: Roger Vernon
3-D Computer Graphic: Dick McBride
Program Design: Lisa Barnes

Correct date — Next Year
The 1992 NSA Convention will be August 14-16 in Fort Wayne, Indiana. The date in the Mar./Apr. issue was wrong — this one is correct!
While anaglyphic post cards and greeting cards are nothing new, Baylow productions of Long Beach, California has introduced a line of cards with the glasses built into one end of the card to avoid the need for envelopes or separate glasses. A perforated line allows the glasses to be removed for use, and a sample which recently arrived through the mail suffered no damage to the blue and red filters even though the card was bent in several places. The introductory line consists of three types of card retailing for $2.00 each: X-RAY GREETS showing a superhero character changing into his costume when viewed through different colors; SECRET GREETS in which the red-only filters reveal a message; and 3-D GREETS in which a multi-plane heart pops out of a random dot field.

Designer and NSA member John Balogh has been in the novelty paper-graphic and 3-D glasses business for over ten years and hopes to market the new line as retail greeting giftcards, collectible picture cards, and as promotional vehicles. As he did at a table at the NSA San Antonio Trade Fair, he invites members to send in 3-D ideas, art or photos for possible use on future cards. Send any submissions (or card orders) to John Balogh, Box 4434, Long Beach, CA 90804. (213) 383-2628.

Nightmare in 3-D

After slashing his way through several movies and TV episodes, the "Nightmare" character of Freddy Krueger (perhaps intimidated by the real-world violence of the '90s) will apparently soon end his film career, but with a 3-D sequence! According to industry insiders, Freddy's Dead; The Final Nightmare will include about ten minutes of anaglyphic 3-D worked into the plot, as was done in the 1961 film The Mask. Live action, computer graphics, and high-tech camera effects will take viewers on a 3-D trip inside the slimy labyrinth of Freddy's brain to directly experience his nightmares and personal demons.
The FED: A Stereo Political Contradiction?

When NSA member Michael Carrick saw the item on the Soviet FED stereo camera in the Jan./Feb.1990 issue, he made several copies to pass around during his two trips to Moscow later that year. He had no luck finding a camera while he was there, but thanks to the *Stereo World* article a Russian friend located and brought to the U.S. on a scientific exchange in May, '91, a complete FED "set" with some interesting new markings on the camera and projector.

Included in the set are:
- A FED camera, two lens shades, case, and neck strap.
- An ETUDE stereo projector with one adapter to hold mounted pairs of slides and another to hold pairs of slides in separate mounts.
- A portable silver screen (about 4 x 4 feet).
- Five pairs of plastic frame glasses.
- Twenty heavy plastic stereo slide mounts with glass and twenty heavy plastic single slide mounts with glass.
- A possible mounting alignment aid.
- A spare projector bulb and fuses.

A recent model FED stereo camera with its new message below the rewind knob. (Photo by Kathy Saviers.)

While the serial number of the camera in the earlier SW article was 900098, that of the camera in the set is 039692, dated October 30, 1990. But the most noticeable difference is the addition of the word "PERESTROIKA" on the front of the camera (and projector) beneath a stylized tower and star logo. Does this indicate that the factory in Kharkov has been restructured and sold to the employees or some other non-state entity? Or is the use of the word simply a marketing tool aimed at potential distributors and buyers (or even investors) in the west?

What makes the Perestroika label ironic is the source of the "FED" name on the other side of the viewfinder. The factory in Kharkov was at some point named after Felix E. Dzerzhinsky (1877-1926), founder of the Soviet secret police organization first known as the CHEKA, which later evolved into the KGB. His initials, already associated with the factory, became the name of the "FED" stereo camera. Certainly no other camera in the world echoes, on opposite ends of its nameplate, the wide political division in its country of origin - a division compounds the Soviet economic chaos which may keep the FED hard to find at any price.

The ETUDE stereo projector with two types of plastic slide mounts and both slide carriers. (Photo by Kathy Saviers.)
“Jim Henson’s Muppet*Vision 3D” opened at Disney World’s Disney-MGM Studios Theme Park in May following the settlement of a legal dispute between the Henson estate and the Disney Company that had some fans concerned that the 70mm 3-D film might never be shown.

Co-developed and produced by Disney and Jim Henson Productions, the film features all the regular characters from the Muppets television series. The famous Henson puppets and special effects are combined with Disney’s “Audio-Animatronics”, state-of-the-art 70mm 3-D film and computer graphics as well as new off-screen optical and mechanical effects that would have Captain EO running for cover.

According to Disney “Imagineering” designer for the attraction Paul Osterhout, it’s a “terrific inside joke” on 3-D. “The theater effects are more spectacular than ever, and since the characters are aware they’re in 3-D, they’re not a bit shy about leaning out over the audience and taking advantage of their 3-D situation.” The theater seats 584 people, all of whom experience squirting buttonieres, bubble showers, high winds, musket fire, cannon blasts, and a fiber optics fireworks salute as well as whatever appears on the screen.

During his work on the project, the late Jim Henson commented: “What we wanted to do was dream up all the 3-D gimmicks that we could and then figure out a way to put them all into one short film.” (In true Muppet style, one of Kermit the Frog’s opening lines is, “It’s going to be a great demonstration! And at no time will we be stooping to cheap 3-D tricks.”) If all this sounds a bit like watching a movie in a carnival fun house, the element to remember is the unpredictable, wild humor of Henson’s Muppets, and the hope to maintain is that it hasn’t all been “imagi-neered” into high tech slapstick.
Stereo to be Featured in Photo Lab’s New Gallery

Grand Photo of St. Paul, MN is the one-hour mini lab which has for some time now been offering a stereo print service for monolithic, transposed, ready to view print pairs from color negative film shot in 35mm stereo cameras. With a recent remodeling project, the store will now include a gallery displaying the work of local photographers as well as stereo images – a growing part of their business.

The initial six week show, going up in August, will include anaglyphs and card views by NSA member Craig Daniels, who has acted as a consultant on several commercial stereo photography projects including the Grand Photo lab service. The print pairs provided by the lab can be trimmed and mounted on standard cards or slipped into Q-VU fold-over self masking mounts, often with no cutting or trimming of the prints required. (See Stereo World Mar./Apr. ’90, page 38.)

Print pairs are $1.00 each, plus $4.00 processing and shipping per roll from Grand Photo, 1681 Grand Ave., St. Paul, MN 55105.

3-D Fireworks Glasses

One of the most unusual uses of “3-D” to help sell a novelty item was discovered by Stereo World Art Director Mark Willke in July at a fireworks stand. There among the more explosive products was a box of what looked like standard 3-D glasses, except they were day-glow green with “3-D Fireworks Glasses” printed on them. Instead of polarized filters, these glasses have the same type of crossed diffraction gratings etched on transparent mylar as found in glasses or other viewers sold in many science museum gift shops. The gratings produce multiple rainbow spectrums around any white light source. When aligned identically, the twin gratings produce 3-D rainbows and secondary images around and through bright objects, matching the depth perceived in the scene. While not mentioned on the glasses, the point of using them is that any light source acquires something of a “fireworks” effect. People who expect them to make distant fireworks jump into 3-D will be disappointed, not to mention the fact that fireworks are already brightly colored and only the few white ones would be enhanced by the glasses.

Pulfrich Video Kit

An ad in a recent issue of Radio Electronics Magazine offers “The Home 3D Television Kit” which is claimed to contain “Everything you need to make your own 3D videos!” They are assuming, of course, that you already have a camcorder, which is the only piece of equipment involved in shooting Pulfrich 3-D videos.

What the kit provides is a sample Pulfrich tape (“created by an Emmy-winning director”), Pulfrich glasses, and instructions. The kits are $25.00 plus $1.50 postage, which is a bit steep for a sample tape and a neutral density filter, but this is at least a system which will work, unlike some other mail-order offerings. Just how well it works depends on the imagination and energy of the person behind the camera.

Those interested in trying a home Pulfrich tape with their camcorder could probably save the $25 by reading the “Editor’s View” and the article “A Pulfrich 3-D History” in the Jan./Feb. ’89 Stereo World. The back of the flyer sent out by the company (Muse Creations, Box 489, Franklin, MI 48025) does give some good factual information on uses of the Pulfrich effect, and it mentions that the kit has a money-back guarantee for up to a 10 day trial period. (Thanks to Joseph C. Kalinowski for the tip.)

This column depends on readers for information. (We don’t know everything!) Send information or questions to David Starkman, P.O. Box 2368, Culver City, CA 90231.
President McKinley was one of the most frequently stereographed presidents. Most stereographs of him are today relatively common and can be had for little money. There are a number of regional stereographs that are much scarcer and command higher prices. The most notable of these is a series that was taken when he visited Arizona between May 6th and 8th of 1901. This is part of a much larger series of stereograph negatives taken while McKinley toured the United States from Washington to the Pacific coast to his intended destination of Buffalo, where he planned to celebrate President's Day at the Pan-American Exposition on June 13th. This trip had to be cut short when his wife fell ill in Del Monte, California. Stereographs were taken all along this route from Washington to California. Henry A. Strohmeyer, of the firm Strohmeyer & Wyman, was part of the entourage that traveled across the country with McKinley.

President McKinley's rail tour of the United States took place not long after the Republican President's second Inaugural. It was supposed to last seven weeks and cover 23 states and two territories for a total distance of more than 10,500 miles.

The presidential party left Washington on the Southern Railroad shortly before 11 o'clock in the mourning of April 29, 1901. The party consisted of President and Mrs. McKinley, Secretary and Mrs. Hay, Postmaster General and Mrs. Smith, Secretary and Mrs. Hitchcock, Secretary and Miss Wilson, Miss Mary Barber, Mr. Henry T. Scott, Mr. and Mrs. Charles A.

"President McKinley ascending the mountain to the Congress Gold Mine, Phoenix, Arizona." (Jeremy Rowe Collection)
President McKinley and his party on the Blue Tank Mountains, Arizona. (Author's Collection)

Moore, Secretary and Mrs. Cortelyou, Dr. and Mrs. Rixey, Assistant Secretary Barnes and Mr. M.A. Dillin together with a corps of stenographers and a number of press representatives.

The train consisted of an engine and seven cars. The combination baggage and smoking car “Atlantic”, the dining car “St. James”, two compartment cars, each with seven state rooms and two drawing rooms, the “Omens” and the “Guiana”; two twelve-section drawing room sleepers, the “Charmion”, occupied by the newspapermen, and the “Pelion”; and the private car “Olympia”, which was occupied by President and Mrs. McKinley.

The “Olympia” was 70 feet long and contained five private rooms finished in Mexican mahogany and maple. The private dining room at one end was furnished in vermilion. Servants were provided with large apartments. Silk, satin, plush and velvet made up the upholstering and decorations. Onyx and marble fittings, large mirrors and wardrobes and each private room contained the complete fittings of a bedroom. All had separate toilets.

The other cars of the train were equally elaborate. The smoking car contained wide vestibules, a barber shop, a bathroom with a tiled floor and wainscoting, and the smoking room was 21 feet in length, fitted with upholstered chairs, lounges, secretary, cabinets, a library, and a finely stocked buffet.

On the morning of May 3rd the president’s train reached Houston where he was met by a crowd of 25,000 people. The president held an impromptu reception and shook hands with hundreds of people. During their brief stay the party was continually cheered. Leaving Houston, the train’s next stop was at Prairie View, where the president was greeted by the faculty and students of the Black Industrial College located there. Late that afternoon the party reached Austin, where elaborate plans had been made for a public reception. At 2:35 in the morning of May 4th the president’s train arrived in San Antonio. The president was up at six on the back platform of the car reading a newspaper. At nine the president read a brief speech in front of the Alamo building, then reviewed the troops at Fort Sam Houston. The presidential train arrived there at 9:00 a.m. May 5th. Here he was met by Don Juan Hernandez, Commander of the Second Military Zone of Chihuahua and Governor Miguel Ahumada of Chihuahua. Don Hernandez personally presented a message from President Diaz of Mexico giving his best wishes to the chief magistrate of the United States. The president requested General Hernandez to convey to President Diaz his personal good wishes for the health and happiness of the president and for a continuation of the cordial relations at present existing between the two countries.

At 8:35 on the night of May 6th the presidential special reached Benson, Arizona. The station was illuminated and the president spoke a few words to the crowd. At 10:30 the train stopped at Tucson. The presidential train finally arrived in Phoenix at 4:30 on the morning of May 7th, a half an hour or an hour late.

The president through his private secretary expressed a desire to visit the Congress mine and see the workings before coming to Arizona, and this is what he did as soon as he arrived in Phoenix. The Southern Pacific Company, having charge of the train from New Orleans to Portland, Oregon, refused to turn it over to the S.F.P. & P., and the run to Congress was made with the S.P. engine, an S.F.P & P. engine going in advance as pilot. The train reached Congress Junction at 8:13 a.m. and was immediately transferred to the Congress road, where a run of three miles brought them to the Congress Mine. Here the party was taken by special train over the
switch back to the mouth of incline shaft No. 3 leading down into the mine. Here the party spent nearly three hours inspecting the mine and the big reduction plant, consisting of an eighty stamp mill and cyanide plant. All of the party except President and Mrs. McKinley and Secretary Wilson descended into the mine at a depth of 3,000 feet, but the president declined to make this trip. He entered the mine at a distance of 1,500 feet where he was greeted by a number of miners waving American flags in the depth of the earth, the tunnel being illuminated by electric lights. The scene made a decided impression on the president, as he remarked that he had seen the American flag floating from public buildings and from battleships, had seen it waved by school children, and had seen it in almost every conceivable shape and form, but that was the first time he had seen it waved beneath the earth’s surface and in the hands of the sturdy American miner.

The party of sixteen descending to the 3,000 foot level were given an exhibition of the men at work drilling and blasting and when all had returned to the surface, E.B. Gage, who escorted them through the property, took them down to the laboratory, where a bar of gold bullion worth $18,000 was melted for the benefit of the visitors. A touching incident occurred during this transaction. An employee of the company named Charles Richmond sustained a serious burn to his hand during the process. Although suffering intense pain, he tried to conceal it from the party. The president noticed the burn and his efforts to conceal it, and taking him by the hand he sympathized with him on account of the accident and remarked: “You are certainly a true and worthy American citizen, possessed of the true American grit.”

A half an hour before the presidential party returned to Phoenix, a gorgeously decorated train bearing members of the reception committee and its guests from Phoenix, Prescott and Tucson arrived. Within ten minutes a crowd assembled at the corner of Second and Jackson Streets, where the presidential party was to disembark. Upon the arrival of the president’s train the party was transferred to carriages. Rough Riders, members of the National Guard and the governor’s staff acted as escorts surrounding the carriages. The president and first lady sat in separate carriages. The president with Governor Murphy of Arizona and the first lady with Mrs. Murphy in the family carriage. The party traveled up the street to the new capitol building with bands playing and crowds cheering.

At El Paso the Phoenix delegation was officially informed that throughout the trip, the president had been relieved of handshaking as much as possible and it was strongly intimated that this feature of the program be limited to the fewest number possible. Mayor Ganz and Secretary Drachman of the local committee endeavored to comply with the president’s desire in this respect, and in issuing admission cards to the capitol building they gave out no more cards than they felt compelled to issue. This was in the face of general grumbling by those who did not understand the president’s wishes and insisted to the committee that everybody should be admitted. It was not surprising that some time before the presidential party arrived, more than 300 people inside the capitol waited to greet the president.

When the party arrived at the capitol the president was quickly escorted by Governor Murphy to the executive chambers and stood in the governor’s private office to receive territorial, county and city officials and the reception committee. After a hurried consultation between the president and the governor, the reception was suspended and Mr. McKinley with
Secretaries Hay, Hitchcock, Smith and Wilson and the governor hurried out through the corridor to the front portico where Governor Murphy gave an introduction, then the president spoke. On the return of the party from the capitol they were given a luncheon at the Hotel Adams where W.E. Defty presented to the president a valuable specimen from the Oro Grande mine.

The party was driven directly from the Hotel Adams to the Indian School through Central Avenue. As the presidential party entered the gates of the grounds it was met by the Indian School band playing patriotic songs. The superintendent, Col. S.M. McCowan, mounted on a black horse, led the escort down the long avenue. Here President McKinley addressed the pupils for a moment or two. While at the Indian School the president was presented with onyx specimens from the B. Heyman quarry, polished at the plant at the school and on which were pictures of President and Mrs. McKinley and the White House, photographed by Martin W. Mealey. The party then left the grounds as fast as possible with swift footed teams and returned to the city by way of Cave Creek Road. They were driven directly to the S.F.P&P. depot and entered the cars at once, remaining for the most part inside until the train left thirty minutes later. The president's Arizona schedule was laid out by Governor Murphy and the presidential secretary, George B. Cortelyou. This was the first visit by a president to the Arizona Territory.

The visit to the Congress Mine angered some Phoenix bigwigs, who had to condense their program into the little time McKinley had remaining after he returned from the mine. The Daily Enterprise, a Democratic paper, said a welcoming committee had spent a thousand dollars in county funds decorating the town, and then not everyone got to see McKinley. The newspaper alleged in an editorial that Murphy and friends "salted their mine to the extent of saving up and concentrating ore to mold a $28,000 gold brick and have it telegraphed all over the country what a fabulously rich mine the Congress Mine is...as a result of this scheme they may be able to float several million dollars of watered stock..."

The Arizona Gazette said the Enterprise story was "malicious and unjust." The Arizona Republican editorialized: "We know of only one man who came to Phoenix to see Mr. McKinley and did not see him. That man got drunk before he arrived within the city limits and remembered nothing more until he regained consciousness in the county jail next morning."

At nine o'clock in the morning of May 9th the president met Governor Gage and the California congressional delegation at Redlands, California. From there he went to Los Angeles. Minute stops were made at Colton, Ontario, and Pomon, and at 2:30 the train traveled to Ventura, Santa Barbara, San Luis Obispo and Del Monte. The party remained in Del Monte until May 12th. The presidential party arrived in San Francisco at 12:30 on May 12th, several hours ahead of schedule. Mrs McKinley was taken ill at Del Monte, so the president rushed to San Francisco, leaving the rest of the party at Del monte. A special of two cars and a locomotive was made up from the president's special. On May 13th the president visited San Jose and on May 14th the party officially arrived at San Francisco. On May 18th the president attended the launching of the battleship Ohio from the yards of the Union Iron Works. On the morning of May 25th the presidential party left San Francisco with Mrs. McKinley's health improving. The train passed through Sacramento, Stockton, the state of Nevada, Ogden, Omaha, Chicago, Canton, and Pittsburgh, arriving in Washington at 7:30 on
the morning of May 30th. Mrs. McKinley soon recovered from her illness, but months later, the president would finally attend celebrations at the Pan-American Exposition where he would be assassinated, and Theodore Roosevelt would become the next president.

Numerous photographs were taken of the president's visit to Arizona, both amateur and professional. The stereographs published by Underwood & Underwood are apparently the official stereographs of his visit, and the first stereographs taken of Arizona by Underwood. The big mystery surrounding the Underwood & Underwood stereographs is who took them. In the Keystone-Mast Collection at the California Museum of Photography in Riverside, in the Underwood handwritten ledger, the stereographic material is attributed to Lipton. I have never been able to find out who Lipton was. I suspect he could have been an assistant to Henry A. Strohmeyer. I still very much believe Strohmeyer took these negatives since he obviously had some kind of official capacity, traveling with the president's entourage.

In the Keystone-Mast Collection there are seven negatives of which only three were published as stereographs by Underwood. Of the four not published, the first shows President McKinley and three members of his entourage standing beside a large saguaro cactus titled "Pres. McKinley beside a giant cactus in Arizona." The second shows an unidentified bearded man holding his hat in his hand and standing next to the same saguaro and titled "McKinley's Tour in Arizona Against Cactus, Arizona." The third negative shows two goateed men holding their hats and standing beside a Yucca plant titled "McKinley's Tour in Arizona." The last negative shows a stagecoach with flags and people on top of it passing by part of a bleacher with two men watching from it, taken either at Phoenix or at the Indian school titled "McKinley in Arizona."

The girl photographing the president with her Brownie box camera (Congress Mine shaft No. 3) was Dorothy Jones, most likely the daughter of E.S. Jones, who at that time was manager of the Congress Consolidated Mines Company.

A number of amateur photographers took photographs of McKinley's visit using kodak box cameras. E.L. Andrews & Son, a Phoenix Photo Supply House, saw profit in McKinley's visit and advertised in the Arizona Republican Kodaks for five to thirty-five dollars with a 20 percent discount.

Henry A. Strohmeyer, the photographer in the presidential party, was a resident of White Plains, New York. He was part of the stereographic firm of Strohmeyer & Wyman of New York City during the 1890s and early 1900s, and official photographer to President Theodore Roosevelt. He died at the age of 85 on February 25, 1943.

More needs to be done to find out what photographs exist from President McKinley's railroad tour of April to May 1901, especially what was taken by amateur and other professional photographers. This may well be the tip of the iceberg.

**Sources**

*Arizona Republican* (Phoenix)

*Arizona Weekly Journal-Miner*


*Arizona Graphic*
A sample view from the Meyers 120 shows St. George's Serbian Church in Joliet, IL. (Stereo by Al Meyers.)

The Meyers camera's 103mm Graflex lenses are on a 73mm base and the self-cocking shutters are coupled with music wire. Exposure range is f/4.5 to f/32, 1/10 to 1/200. A spirit level is centered in the erecting wire-frame view finder.

The camera is easily disassembled for service or alterations. Note the elongated film window in the aluminum pressure plate.
NSA “old timers” who saw our March/April 1983 issue may recall the plans published there for the 120 stereo camera designed by John Martz. Interest in that format remains strong, and now Stereo World contributor Al Meyers has designed another do-it-yourself camera for those not interested in the search for an antique stereo or the expense of linked or spliced current-model 120 mono cameras. Naturally, anyone willing to invest the time and effort to build such a camera may well come up with alternatives to any of the construction details pictured here. Those wishing to compare notes with Mr. Meyers may contact him at 666 Orr St., Joliet, IL 60436.

The spring-loaded lens board from above. Focus is controlled by the central screw and the corner springs. With TX film, the average daylight exposure is 1/200 at f/22, giving enough depth of field to use zone focusing.

Looking straight in the open back, the four screws which allow easy removal of the one-piece film transport can be seen. Each image on the film is 58mm high by 62mm wide, allowing selective cropping for stereo window when prints are made. Five pairs are produced per 120 roll.
Sheep, Goats and A Mystery Folio

There has been a lot of activity in the print sector of the Stereoscopic Society, mostly due to the energetic and innovative leadership which has successfully carried us through a difficult but necessary division of the group. What was once simply the print circuit has now comfortably settled down into two groups that have completed a year of circulating their view cards. Dr. Dale Hammerschmidt of Minneapolis, MN heads the CP (Caprine) circuit and Judy Proffitt of Richmond, VA serves the same role in the OP (Ovine) circuit. Since the whole process had much in common with the problem of separating “sheep and goats” it ended up being reflected in the naming. It is sad not to see, regularly, the stereo views of long-time friends who are now in the alternate circuit. Still, the enjoyment of the folios remains the same. I am in the Caprine group, no doubt assigned so because I was born under the sign of the goat for whatever that is worth. (Actually, I got a message some months back in a fortune cookie at a favorite Chinese restaurant that stated, "no Capricorn has ever amounted to anything in the history of the world", a statement I cannot dispute.)

A very successful special event which Judy Proffitt originated for the OP circuit was the “Mystery Folio”. Each member submitted a viewcard which carried no identification and everyone else tried to determine who was the maker of the view. As they were about fifty percent successful in making the correct matchings. I was honored to serve as a mystery guest from the CP circuit but I was a poor one indeed, as nearly everyone correctly fingered me as the guest view-maker. I was successful on half of the identifications I attempted. It was great fun and well worth repeating sometime when things get dull. Thanks to Judy for carrying out a fine idea.

Another innovation that is in the works is a proposed yearbook project which would feature a portrait in stereo and a brief biography of each member. This seems like a long overdue endeavor and I hope it comes to pass. It is not an easy thing to bring to reality, and it does take time to get it all together in a group so separated by geography. In any organization of volunteers everything depends on the initiative of individuals for progress, and if we get the cooperation of everyone things can be made to happen. Competition for one’s volunteer time these days however continues to be fierce and I am impressed again and again by the determination the membership has shown to make The Stereoscopic Society work. Limitations of time and money often are the more critical constraints. Self financing projects are especially admired as Uncle Sam’s Postal Service eats up much of our limited dues.

Biker Blues

Dr. Dale Hammerschmidt, secretary of the CP print group has become an avid bicycling enthusiast.
The upside of this is in weight control and a feeling of fitness. The downside is that one must bike; broken clavicle and right shoulder, arm, and chest injuries for Dale. His helmet left a four inch deep dent in the car grill. However, Dale recommends biking to NSA members who wish to remain fit. He is coming along fine and said it only hurt if he moved. He will be back on his bike in a couple of months, stereo camera in tow.

Join the Fun
One of the biggest advantages to participation in the Society folios is the chance to see many of the best and/or most interesting stereo views currently being made. At least they offer a fine representative cross section of what your average stereo photographers are doing today. Most currently produced stereo views are not readily available to the public. One must seek them out. Even the work of such masters as Paul Wing or the late Pat Whitehouse is seen by relatively few people. The same is true of many other first class stereo photographers. The marvelous projection shows seen at national and regional meetings are actually relatively rare events, often involving an expensive trip if one wishes to attend. The Society folios come directly to your house by priority mail or UPS and the contacts become more personal with fellow members. But you do have to make stereo views yourself to participate. It is great to know stereo photographers from all over the country and, for that matter, the world. Those interested in Stereoscopic Society membership should write to the Corresponding Secretary, Jack E. Cavender, 1677 Dorsey Avenue, Suite C, East Point, GA 30344.

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- Hawaiian Fantasy (1976) (R)
- Political Pleasures (1975) (R)
- The Stewardesses (1969) (R)
- Criminals (1973) (R)
- Sexcollabor (1982) (XXX)
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The history of stereo photography is filled with stories recounting the fate of a stereographer's lifetime work. Horror stories abound of collections of negatives being dispersed by disinterested estate executors, consumed by fire, or relegated to obscurity through neglect. Often, what remains of a photographer's legacy exists only in bits and pieces; and those pieces are held by any number of collections, from private collectors to large historical archives. The task of the photo-researcher or scholar is formidable; piecing together a life's work or locating a high quality negative of a desired image is a time-consuming and often frustrating experience.

Occasionally, however, a photographer's negative collection falls into the right hands and thus escapes some of these problems. William H. Illingworth (1842-1893) is one of the lucky ones. Through a fortunate set of circumstances a large portion of his original negatives have survived and have now been preserved. In 1900, sixteen hundred Illingworth negatives were sold to Edward A. Bromley, a Minnesota photographer and collector. Bromley, in turn, divided the majority of his vast collection (over 7,000 prints and negatives representing more than thirty photographers) between three institutions: the South Dakota State Historical Society, the Minneapolis public Library, and the Minnesota Historical Society. In 1988, Bonnie Wilson, Curator of Sound and Visual Collections at the Minnesota Historical Society, recognized the historical value if the Illingworth collection and initiated the Illingworth Photographic Preservation Project.

This project evolved into a cooperative venture involving the three institutions holding the Illingworth collections and the National Historic Publications and Records Commission (NHPRC). The goals of the project were to locate and identify Illingworth photographs and negatives within each collection, to provide for the preservation of the negatives, and to create a complete set of reference prints.
and inventory for researchers. The combined efforts of these four institutions resulted in the identification and preservation of two hundred and twenty-six Illingworth negatives.

A grant from the NHPRC provided for the preservation of the identified Illingworth negatives. Doug Munson of the Chicago Albumen Works made intermediate positives and ester negatives of exceptional quality from the original collodian glass-plate negatives. The creation of ester negatives allows the glass-plates to be retired from active use, ensuring their continued survival.

Three sets of prints were made by the Minnesota Historical Society Photo Lab. These prints are contact prints of the full stereoscopic negative and retain the fine detail and delicate tonal range of the original images. Because the prints were made from the full negative, researchers have a unique opportunity to study the original uncropped image. One set of prints resides at each of the holding institutions, and a six-page inventory serves as a guide to the collection. The inventory is available from the Minnesota Historical Society for a $1.00 charge.

W.H. Illingworth is perhaps best known for his role as photographer to the Custer Expedition to the Black Hills of South Dakota in 1874. The stereos resulting from this expedition are fully represented in this project. Illingworth’s career, however, went well beyond that of expeditionary photographer. Traveling by railroad and wagon, Illingworth portrayed frontier Minnesota towns, romantic vistas, and the development of the cities of St. Paul and Minneapolis. Like many stereographers of his time, Illingworth made series of photographs that could be marketed as sets. Several of these series are partially represented in this collection, including: Stereographs of Minnesota Scenery, Minnesota and Upper Mississippi, and Stereographs of Minnesota and the Great Northwest. Many of the images in this collection are alternative views of a subject or are images (such as Indian portraits) that may never have been published.

Although the specific goals of the Illingworth Photographic Preservation Project have been met, the project is far from complete. The two hundred twenty-six images that were identified represent a fraction of Illingworth’s output. Many of the Illingworth stereocards located in MHS collections were not matched by a negative; Wilson is compiling a separate inventory of these images in hopes of developing a more complete record of Illingworth’s work. Collectors who are interested in furthering the Illingworth project are invited to send photo-copies of Illingworth stereos in their collections to Bonnie Wilson, MHS, 690 Cedar St., St. Paul, MN 55101.

For a full account of Illingworth’s life and career, see Jeffery Grosscup’s article “Stereoscopic Eye on the Frontier West” in Montana the Magazine of Western History, Spring, 1975, and Bonnie Wilson’s article “Working the Light: Nineteenth Century Professional Photographers in Minnesota” in Minnesota History, Summer 1990.

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STEREO WORLD May/June 1991 35
The Accidental Stereoscopist

by Mark Willke

Apart from my childhood View-Master reels and the few Realist slides shot by my dad when I was about a year old, stereo photography has only really been a part of my life for the past five or six years. I've often wished that I had been shooting stereo long before that, so that I would have been able to create a stereo record for myself of the various places I had lived and visited, the relatives who have since passed away, and my family during the years of my youth. I recently had an idea, though, on how it might be possible to get a 3-D glimpse of these times, places, and people.

Although my grandfather was not a stereo photographer, he did shoot quite a few 2x2 (flat) slides up until his death in 1975. I ended up inheriting his entire slide collection, so I pulled it out recently and began carefully searching through it, looking for situations where more than one exposure had been made of any particular subject. Luckily for me, my grandfather apparently rarely discarded his alternate and/or bracketed shots, because I found multiple shots of many scenes. The next step was to see if any movement had occurred between shots, and if so, whether it had been a suitable distance to create a viewable stereo image.

Some pairs showed no movement at all, indicating that he had either used a tripod or stood firmly in his tracks. Others, especially of outdoor scenery, showed so much movement that fusion was nearly impossible. People moving between exposures was a constant problem, and several pairs that could be fused into otherwise decent 3-D were ruined by this defect.

Bracketed exposures often provided stereo pairs, but of course, because of the fact that by definition, the two exposures are different, these pairs rarely provided acceptable stereo views.

My plan wasn't working so well, but then I discovered a stereo pair that made all my efforts worthwhile. The subject was a small summer cottage on a lake in Wisconsin where my grandfather had spent the last couple of summers before he died, and where my family had visited him and my grandmother often enough that I have many fond memories of the place. He had taken these shots from a boat out on the lake itself, and the boat apparently drifted slightly between exposures, providing a beautiful hyperstereo! (The fall foliage just happened to be near its peak when these shots were taken, although the black & white reproduction here doesn't do it justice.)

I did eventually find a second pair that worked well enough to warrant spending the time mounting it in a Realist mask, although unfortunately the end result was a hyperstereo of some unnamed canyon and therefore contained no sentimental value. Still, it was a fun search, and I was thrilled to discover even just the one cottage view. I feel almost as if I was allowed to go back in time 16 years to stereograph a piece of my past.

If you have access to a relative's collection of flat photographs and some free time, consider searching through it for accidental stereo pairs. Although the chances of two flat photos working together as a stereo pair aren't so good, you never know what you may find!

"Grandpa's Summer Cottage on Koonz Lake, Wisconsin, 1975". This unintentional hyper-stereo was discovered by the author while searching through his grandfather's collection of flat 2x2 slides. Although mounting a pair like this in a standard Realist mask can be quite a challenge, the results can be well worth the effort. (Photos by John Goetz, camera type and lens separation unknown).
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sion of The PhotoHistory VIII sym-
posium October 11-13 in
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eighth triennial symposium on the
history of photography sponsored
by The Photographic Historical
Society in cooperation with the
International Museum of Photog-
raphy at George Eastman House.

After a reception Friday evening,
Oct. 11, Saturday will be a full day
of presentations on all aspects of
photographic history and the
preservation/appreciation of pho-
tographica. A banquet and fea-
tured speaker are scheduled for
that evening. Since 1970, the
"PhotoHistory" events have
attracted scholars, collectors, and
dealers from around the world. As
in previous years, speakers will
offer a wide range of topics includ-
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phers, views of well-known pho-
tographers at work, and Zeiss Con-
tax history.

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3-D BATHING BEAUTIES. Sample slide/brochure only $2. - refundable on next order (we’re positive you’ll order again!). Complete set of six $8.95 or send SASE for free brochure! 3-D Dreams, Box #1441, Orem, UT 84059-1441.

3-D GLAMOUR SLIDES: See beautiful nude girls in 3-D! 10 slide sets; $21.00 each. Samples: $3.00 each. Viewers: $5.00. Information: free. Trading encouraged. D. Cole, Box 5019, Upland, CA 91785.

3-D NUDES, uncut, u-mount to your format. 24 exposures, approximately 19 slides, $30. Sheer Fantasy Newsletter, sample $4.50. $21 yearly sub, 12 issues. The Snap Shoppe, 1871 SW 37th Terrace, Fort Lauderdale, FL 33312.

3 WOOD SLIDE TRAYS, 10-1/2" long: $17.50 each. 50 views of Death Valley, Stereo-Realist format: $25. 50 California or Los Angeles views: $22.50. Airquip Stereo Theater holds 20 slides: $275. Art Faner, #101 - 1961 Center, Salem, OR 97301.

FRANKA BEAM SPLITTER with 52mm adapter ring, LN, $25 plus $4. shipping. S.R. Slater, PO Box 72935, Fairbanks, AK 99707.

KELI, soon to appear in her first photo shoot for Gent Magazine, available in exclusive 3-D slide set, 8 for $25. Adult film star AJA, shot for High Society, hot 3-D set of 8 for $25. Sample set of 10 different girls only $25. Foreign orders, add $3 per order. Orders receive my newsletter with loads of sexy girls and interesting adult items. Remember yesterday's erotica is today's art, why not support the arts. Len Rapoport, c/o MTI Group, 300 Highway 34, Suite 12, Aberdeen, NJ 07747.

POSTCARDS AND STEREOSCOPIC CARDS sent by mail order. I have several thousand stereoscopic cards and over 100,000 postcards, both views and topics. Send me your want list. Rich Spedding, 22 Tanglewood Rd., Sterling, MA 01564.

REALISTIC ST-41 3-5.5, camera, Exc., $115; ST-61 DC viewer, black w/red buttons, Exc.+ in original box, $85; Same, Exc.+ (no box), $65; Same, repaired, otherwise Exc.+, $40; ST-63 DC "Handi-viewer", green & black, original version w/double-element lenses, repaired crack & slight warpage, otherwise Exc.+, $25; Like-Life viewer, rarely early version from before name was changed to Life-Like, Exc.+ in original box, complete w/original instructions & warranty registration cards, $60; Realistic-format slide folders for use over aluminum masks. Easy-to-write-on plain white cardboard provides outer protection for your slides, 50 for $3.75, 100 for $7; Kodak PK-20 slide processing mailers, can be used for 24-exp. rolls, 3 each (50 available); Hand-lettered Sawyer's View-Master reels, $76, 111, 112, 145, 147, 164, 176, 180, 189, 198, 251, 291, $2.50 each. Please add UPS. Mark Willke, 200 SW 89th Ave., Portland, OR 97225. (503) 297-7653.

RUSSIAN FED-STEROE outfit. Includes stereo camera, lens shades, Stereo projector (220 volt), projector inserts for twin projector, $30.00. Stereo-Tach, very good condition, $40.00. Foreign orders, add postage $2.50 each. 50 California views, photos, pictorial "view" china, more. Please add UPS. Mike Carrick, 1230 Hoyt St., Salem, OR 97302, (503) 585-9900.

STEREO CAMERAS SINCE 1930, book showing 69 stereo cameras, each by 3 different makers. Stereo Realist format: $25. 50 California views, photos, pictorial "view" china, more. Please add UPS. Price $1000 firm. Mike Carrick, 1230 Hoyt St., Salem, OR 97302, (503) 585-9900.

STEREO-TACH, good condition $30.00. Stereo-Tach very good condition, $40.00. Both for 52mm lenses. Adapter for 49mm lens, $7.00. All postpaid. G.H. Sergio, 760 St., Staten Is., NY 10306.

STEREO-VIEWERS: Includes Stereo Realist ST-41 f3.5 camera, viewfinder, rare early version from before name was changed to Life-Like, Exc.+ in original box, complete w/original instructions & warranty registration cards, $60; Hand-lettered Sawyer's View-Master reels, $76, 111, 112, 145, 147, 164, 176, 180, 189, 198, 251, 291, $2.50 each. Please add UPS. Mark Willke, 200 SW 89th Ave., Portland, OR 97225. (503) 297-7653.

View-Master reel and packet sale. For list, send SASE to B.B. Blevins, 1724 Pluto Way, Sacramento, CA 95864.

VINTAGE STEREO REALIST camera, serial #A0878, (the 678th Realist body produced), with uncommon original-style focus dial & pointer, film sprocket & pressure plate, lens cover, and more. Even the plating on this early example has a different look than on the more common later cameras. A beauty in Exc.+ condition, complete with strap and original-style eveready case (with rangefinder window openings and purple velvet lining). $195 plus UPS. Mark Willke, 200 SW 89th Ave., Portland, OR 97225. (503) 297-7653.

AUSTRALIAN VIEWS and 1950s 3-D comics wanted for U.S. views (or cash), no Kilburn, Keystone, U&U please. All letters answered. Warren Smythe, 258 Cumberland Rd., Auburn, NSW 2144, Australia.

VINTAGE STEREO VIEWS by W. Hebben, Poo- ria, IL or Sproule, Peterborough, Ontario. Does anyone have information about either of these photographers? Andrew Hebben, 37 Parkview Drive, Peterbourough, Ontario, K9H 5M5, Canada.

BERMUDA, West Indies, Venezuela pre-1900. Also Red D (SS) Line voyages NY to Venezuela 1880-1937. Xerox/price please (stereo or photo) to F.J. Dallett, Box 6, Taconic, CT 06079.


TO RECEIVE free copy of "Index of Com- mercial View-Master Reels", send me photocopies of your commercial reels before December 1991. Submittals will be kept confidential. B.B. Blevins, 1724 Pluto Way, Sacramento, CA 95864.
WANTED


COLORADO AND WESTERN: Collect, buy, sell & trade. 19th Century images (Stereo, cabinet, cdv, large photographs, real photo postcards, and negatives.) Specialties: Locomotives, trains, towns, street scenes, and occupational. David S. Digerness, 4953 Perry St., Denver, CO 80212-2630.

CORTE-SCOPE SETS or single views, parts of sets, literature (no viewers please unless with set). Would also like to know about sets not listed in my book (see flyer in this issue). John Waldsmith, PO Box 191, Sycamore, IL 60178.

COWBOY PHOTOS, cabinets, cdvs, stereo views. Send copy and price. Pa-Has-Ka Books, 8439 Samra Drive, West Hills, CA 91304. (818) 348-9795.

CROQUET! CROQUET! CROQUET! Please send xerox and price of any stereo views or old photographs containing croquet matter to: Allen Scheuch, 53 W. 20th St., New York, NY 10011 (212) 929-2299.

FLORIDA STEREOS of historical value, especially Tallahassee, Tampa and Gainesville. Price and describe or send on approval, highest prices paid for pre-1890 views. No St. Augustine. Hendriksen, PO Box 21153, Kennedy Space Center, FL 32981.

GREAT BARRINGTON, Stockbridge, Egremont, Sheffield, Lenox, Lee, Monson, Massachusetts views wanted. Gary Levellie, PO Box 562, Great Barrington, MA 01230.

HEIDOSCOP user needs a spare plate magazine in 6X13 format. Top price paid! Dick Green, 401 Grant St., Longmont, CO 80501-5343.


JOHN H. FOUCH: Yellowstone series #38 "View Down the Ravine, on the Custer Field". Wanted for historical research. Would only need to copy or rephotograph, but would most like to purchase or trade (have Fouch #20, "U.S. Wagon Train" to offer). James Brust, 1907 Rapallo Place, San Pedro, CA 90732. (213) 832-7943 days, (213) 833-7477 eves.

KEYSTONE stereo view #20044. Oil occupational views, Wetzell County, West Virginia. Send copyphotocopy, T. Prall, Rt. 3, Box 146, Apt. 6, Buckhannon, WV 26201.

MILWAUKEE stereo views and real photo postcards. (Pre-1940). Especially street views. Xerox, approval, or description, will pay postage. Cary Sterneck, 11318 Ericston Dr., Houston, TX 77070, (713) 320-0277.

MT. WASHINGTON COG RAILWAY and Mt. Washington Hotel. Please send stereo, copies or photos and ask Robert M. Clement, Box 443, Franconia, NH 03580, (603) 869-3906.

MUYBRIDGE VIEWS. Top prices paid. Also Michigan and Mining - the 3 Ms. Many views available for trade. Leonard Walle, 60 Pinto Lane, Novato, CA 94947, (415) 525-1188 (work).

PERMANENT WANT: Stereo views of Boulder, CO and the Colorado Front Range; Colorado Boxed sets. Alan Ostlund, 479 Arapahoe Ave., Boulder, CO 80302, (303) 444-0645.

PHOTOGRAPHS in any format showing streetcars in Scranton, PA, Carbondale, PA or the Scranton area. Charles Wrobleski, 206 Green St., Clark's Green, PA 18411.

RACINE, WISCONSIN stereo views sought by historian/collector preparing photographic history. Wish to purchase, but also would like to know about xerographs of Racine stereo views. Frank Kratzer, 200 SW 89th Ave., Portland, OR 97225. (503) 297-7653.

SCHLIEFFER stereo views of general interest wanted. Address to Richard Beuerlein, 612 Suburban Park Avenue, Westfield, NJ 07090.

SCHEMATIC for the interface box which synchronizes a pair of LCD glasses to a VCR for stereo television. Information on stereo TV projects, viewing of side-by-side stereo TV, stereo TV and stereo computer, stereo TV products, stereo TV and side-by-side stereo TV. Send any views for my review. John H. Fouch, 2331 E. Del Rio Dr., Tempe, AZ 85282.

STEREO VIEWS on a Christmas theme. Nativity scene, Santa Claus, reindeer, decorated Christmas tree, etc. Horst Hoyer, 165 Watchung Ave, Montclair, NJ 07043.


VIEW-MASTER reels wanted: Paying the following amounts for any of these 3 reel movie/TV packets in near mint condition: $50: Munsters, Addams Family. $30: Lost in Space. $20: The Green Hornet, The Time Tunnel, Voyage to the Bottom of the Sea, and Dr. Who 3 reel sets. Will buy the above in lesser condition at lower prices. Also want 3-D movie demo reels. Elliott Swanson, Box 2324, Bremerton, WA 98310.

VIEWS OF THE GLASS MAKING INDUSTRY, glass exhibition, glass blowing, etc. Send info and price to Jay Doros, 780 Chancellor Avenue, Irvington, NJ 07111.

WANTED STEREO VIEWS of Porsche automobiles, all models. Am attempting to compile a history of the evolution of the Porsche sports-cars...from the late 1940s to present date. Of particular interest are any assembly, manufacturing views. Frank Kratzer, 1930 Villa Way South, Reno, NV 89509, Phone (702) 825-1988, FAX 825-3820.

WANTED STEREO VIEWS on a Christmas theme. Nativity scene, Santa Claus, reindeer, decorated Christmas tree, etc. Horst Hoyer, 165 Watchung Ave, Montclair, NJ 07043.

As part of their membership, NSA members are offered free use of classified advertising. Members may use 100 words per year, divided into three ads with a maximum of 35 words per ad. Additional words and additional ads may be inserted at the rate of 20¢ per word. Please include payments with ads. We cannot provide billings. Deadline is the first day of the month preceding publication date. Send ads to the National Stereoscopic Association, PO Box 14801, Columbus, OH 43214, or call (614) 827-2930. A rate sheet for display ads is available upon request. (Please send SASE.)
Calendar

September 2-7  (TX)  PHOTOGRAPHIC SOCIETY OF AMERICA annual Convention, San Antonio, TX. A full stereo program will be included. Contact Richard Frieders, FPFA, Conventions V.P., 1305 Foxglove Dr., Batavia, IL 60510. Or call PSA headquarters at 405-843-1437.

September 8  (AZ)  Phoenix Camera Shows, Best Western Sir Francis, Phoenix, AZ. Contact Dale at 602-266-3301.

September 8  (CA)  Pasadena Antique, Collectible & Usable Camera Show & Sale, Pasadena Elks Lodge, Pasadena, CA. Contact Anton at Bargain Camera Shows, Box 5352, Santa Monica, CA 90409. Call 213-396-9463.

September 8  (IL)  Chicago Fantastic Camera Show, Sheraton International O'Hare, Rosemont, IL. Contact Fantastic Photo Flea Market, 20219 Mack Ave., Grosse Pointe Woods, MI 48236. Call 313-884-2242 or 815-886-0101.

September 8  (NJ)  Second Sunday Camera Show, Community Fire Hall #1, Parish Drive, Wayne, NJ. Contact Second Sunday Camera Show, 25 Leary Ave., Bloomingdale, NJ 07403. Call 201-838-4301.


September 14  (CA)  Culver City Camera Show & Sale, Vetrans Memorial Auditorium, Culver City, CA. Contact Anton at Bargain Camera Shows, Box 5352, Santa Monica, CA 90409. Call 213-396-9463.

September 14-15  (MI)  24th Detroit Photorama USA, Dearborn Civic Center, Dearborn, MI. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236. Call 313-884-2243.


September 15  (CA)  Buena Park Camera Swap Meet, Sequoia Club, 7530 Orangetherpe Ave., Buena Park, CA. Call 714-786-8183.

September 21  (NY)  Camera Rochester's 3rd Annual Photo Fair, our Lady of Lourdes Church Auditorium, 165 Rhinecliff Dr., Brighton, NY. Contact Camera Rochester c/o Jim DiLorenzo, 235 Colonial Dr., W. Webster, NY 14580. Call 716-671-6974.

September 22  (MA)  Boston Antique Photo Show, 57 Park Plaza Hotel Howard Johnson, 200 Stuart St. Park Sq., Boston, MA. Images only. Contact Russell Norton, Box 1070, New Haven, CT 06504. Call 203-562-7800.

September 22  (IL)  Chicagoland's Camera & Photo Show, Holiday Inn, Rolling Meadows, IL. Write to Box 72695, Roselle, IL 60172. Call 708-894-2406.

September 22  (OH)  Cleveland Super Used Camera Show & Model Shoot, Holiday Inn Coliseum, Richfield, OH. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236. Call 313-884-2243.

September 22  (VA)  Barone Camera Swap Meet, Holiday Inn Crystal City, Arlington, VA. Contact Camera Swap Meet c/o Barone & Co., Box 18043, Oxon Hill, MD 20745. Call 703-768-2231.

September 23-30  (France)  THE 8th WORLD CONGRESS OF THE INTERNATIONAL STEREOGRAPHIC UNION will be held in Paris in the Palais de Tokyo Museum as the main event of the "International Festival of 3-D Images". (See Nov./Dec. '90, page 40.) For Congress information or to join the ISU, contact Paul Milligan (USA Rep.) 508 La Cima Circle, Gallup, NM 87301. Call 505-722-5831.

September 28  (OR)  Portland Oregon 3rd Annual Fall Camera Swap meet, Montgomery Park, 2701 NW Vaughn St., Portland, OR. Contact Dwight Bash, 2324 SE 11th Ave., Portland, OR 97214. Call 503-239-5617.

September 28-29  (OH)  Ohio Camera Swap, 68 Shadybrook Armory, Cincinnati, OH. Contact Bill Bond, 8910 Cherry St., Blue Ash, OH 45242. Call 513-891-5226.

October 6  (VA)  D.C. Antique Photo Show, Rosslyn Westpark Hotel, 1900 N. Ft. Meyer Dr., Arlington, VA. Images only. Contact Russell Norton, Box 1070, New Haven, CT 06504. Call 203-562-7800.

October 6  (CA)  Pasadena Camera Show & Sale (See Sept. 8.)

October 11-13  (NY)  PHOTOHISTORY VIII, George Eastman House, Rochester, NY. Photo historical symposium, banquet and trade show. Contact the photographic Historical Society, Box 3863, Rochester, NY 14604.
October 12  (CA)
San Diego Camera Show & Sale,
Albahr Shrine Temple, 5440
Kearny Mesa Rd., San Diego, CA.
Contact Anton at Bargain Cam-
era Shows, Box 5352, Santa Mon-
ica, CA 90409. Call 213-396-
9463.

October 13  (AZ)
Phoenix Camera Shows. (See
Sept. 8.)

October 13  (CA)
9th Santa Monica Camera Show &
Sale, Santa Monica Civic Auditor-
ium. Contact Anton at Bar-
gain Camera Shows, Box 5352,
Santa Monica, CA 90409. Call
213-396-9463.

October 13  (NJ)
Second Sunday Camera Show.
(See Sept. 8.)

October 19-20  (MA)
Photographica '91 - The Boston
Show, Armenian Cultural Center,
47 Nicholas Ave., Watertown
(Boston) MA. Contact PHSNE
c/o David Berenson, 32 Colwell Ave.,
Brighton, MA 02135. Call 617-
254-1565.

ARCHIVAL SLEEVES: clear 2.5 mil Polypropylene

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<tr>
<th>Size</th>
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<tr>
<td>16&quot; x 20&quot; (unsealed flap)</td>
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<td>$99</td>
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"Mexican Jacal Family" by San Antonio View Company, Frank Hardesty, ca. 1880. One of the fine views of the San Antonio area seen in the "Views of Olde San Antone" stereo slide show at the 1991 NSA Convention in that city. The view was also part of the Invited Exhibit of Texas views from the collection of Robin Stanford, on display in the Trade Fair area. More from the programs and exhibits appears in "Deep in the Heart of Texas - NSA '91" on page 14.