

Section Meetings

Chicago July 31, 2001

The July meeting brought 20 people to Post Effects for Martin Holmes' presentation, "Realtime Restoration of Film and Video Archives." Holmes, who is business development manager of Snell & Wilcox, began by stating that archival material has been of great interest recently due to its ability to fulfill the need for more programming on an increasing number of video channels. Factors in determining the usefulness of archival material are video and audio quality. From a business perspective, if archival material is not of broadcast quality, then the cost of restoring it impairs its usefulness. Being able to perform realtime restoration allows more archival material to become financially viable for broadcast.

Holmes described some common picture impairments that need to be addressed, including unsteadiness, grain, electronic noise, dirt, scratches, and geometric distortions. Importantly, correcting these impairments not only improves image quality, but also increases efficiency of the compression algorithms typically employed in the broadcast chain. He went on to describe a realtime image restoration system using Phase Correlation as a means of maximizing the restoration, without creating objec-

tionable artifacts as a result of the processing. He concluded his formal presentation by showing a videotape that demonstrated "before" and "after" versions of various clips processed by his system, Archangel. He fielded several questions from the audience before the meeting adjourned.— Steve Robinson, Section Chair

Hong Kong May 11, 2001

"New Media—24P Digital HD" was the topic of a half-day seminar that attracted more than 80 members and guests, who filled the studio of Radio and Television Hong Kong to capacity. The four invited speakers were Percy Fung, Film Magic; Shingo Toyotani, Imagica; Hiroshi Tsutsui, Sony Hong Kong; and H. M. Lai, Kodak Hong Kong. During the three-hour session each shared their knowledge and experience of digital high-definition format and its application.

After a brief introduction of the 24P HD video format, Fung presented video clips derived from film and 24P HD for comparison. He highlighted the image characteristics of 24P HD, such as smaller image size and greater depth of field. Fung pointed out that the development of high-definition media had great impact on the local content providers, as Hong Kong was one of the international production centers. He foresaw the impending transition to digital high-definition format, and encouraged his colleagues to jump on the bandwagon.

Toyotani gave a brief history of his company's involvement in high-definition video and its pre- and post-production service in 24P format. He

elaborated on various high-definition equipment such as HD telecine, film scanner, kinerecorder, laser film recorder, and CRT film recorder for making conversion. For conversion from video to film, Toyotani indicated that film recorders use digital data for their input and different types of video signals had to undergo data format conversion before they could be input into film recorders. He gave an overview of feature film productions, which employed 1080/24P format, and digital cinema projection in Japan. The latest development of a color management system, crucial to the process of video to film conversion, was also mentioned.

Tsutsui focused his topic on the hardware of 24P HD system. He pointed out that it was imperative that high-definition hardware be flexible and switchable to accommodate different recording formats. 1080/24P has become a universal and exchangeable format, and with high-definition original, has the flexibility to convert to other formats, to meet market demand. Costs of productions shot with 35mm film stock and HD video were also compared.

Lai divided his presentation into four areas: the current situation with both traditional and digital cinema, the expected changes brought about by digital cinema, the role of motion picture film manufacturers in the digital age, and the future of digital cinema. Business practices of studios and exhibitors in the U.S. were explained. With the introduction of digital light processor technology in 1999, a number of major studios have established digital cinema sites around the world to test and demonstrate its capabilities to worldwide audiences. He believes that digital cinema will not succeed unless it provides benefits to studios, service and equipment providers, and exhibitors. At the initial stage, film and digital cinema will coexist for years, and motion picture film manufacturers will continue to strive and improve new film stocks to meet market demand and also become major players in the digital cinema arena. For instance, Kodak and JVC are working together to develop a high-

SMPTE HOLLYWOOD FILM CONFERENCE

Date: October 27, 2001

"Tools to Craft the Modern Motion Picture"

Topics: Creating the Image, Manipulating the Image, and Preserving the Image

Additional information will be posted on the Hollywood Section website, www.hsmpte.org, as it becomes available.

quality, low-cost digital projector. In the next few years there will be an unclear business model until the studio determines how to subsidize the capital costs. Through a combination of technology and standards, new capabilities, industry consolidation, and new business models, digital cinema will become an attractive and viable business proposition in the industry. Lai concluded that the adoption of digital cinema requires great industry support and will take time.

The presentations were followed by a Q and A session with enthusiastic responses from the floor. Speakers were asked about the latest development of new CCD for HD camera in terms of resolution, sensitivity, decay rate, and the frame rate for slow motion application. The do's and don'ts of shooting with HD cameras for video-to-film transfer were also discussed.—Noel Leung, Section Manager

Rochester April 11, 2001

Frank Ricotta's presentation on the restoration of *The Wizard of Oz* attracted 78 people to George Eastman House. He described the most important aspects of the restoration project, and followed with a screening of a new Technicolor dye transfer print in its entirety.

Ricotta is manager of worldwide technical services for entertainment imaging, Eastman Kodak Co., and former senior vice-president of engineering and technical operations at Technicolor, Inc.—Vince Slavin, Section Chair

Rocky Mountain July 18, 2001

The Rocky Mountain Section meeting titled, "Progress in the DTV Transition in the Denver Market," was held at the KWGN transmitter site at Lookout Mountain in Golden, CO. The meeting, hosted by KWGN, provided more than 84 attendees with an overview of progress made in Denver by engineer-



The Rocky Mountain Section meeting in July was held at the KWGN transmitter site.

ing directors from AT&T Broadband, Crown Media, KWGN TV, KDVR, and various transmission service providers.—Rome Chelsi, Section Chair

San Francisco June 28, 2001

"Store it, find it, use it," the creed of today's asset managers, was the focus of the Section's June meeting titled, "Asset Management, or, the Program We Think We Want May Be Somewhere in That Pile, But Where?" Dave Stuart, Thomson multimedia Broadcast Solutions, Broadcast Automation (www.thomson-multimedia.com) hosted the event, held at the Philips Silicon Valley Center in Mountain View, CA. Sixty people attended.

Archival experts estimate that over a billion hours of film, video and audiotapes, and audio discs currently sit in storage around the world, with thousands of hours being added every week. Broadcasters, program producers, and archivists face the almost overwhelming task of keeping track of their holdings and accessing them in a timely way via asset management.

Accurate and easily accessible metadata and efficient delivery methods can transform a liability—an unknown reel in a can costing money to store—into a valuable asset and a potentially significant revenue source. While SMPTE, AES, and other industry groups are developing metadata standards, manufacturers are also working on solutions

to the challenges of asset management, including metadata methods and standards, physical storage, accessibility, and scheduling the time and method of media fulfillment.

Stuart was joined in the presentation by Thomson colleagues Allan Perrins and Adam Clarke, along with Philip Page and Jonathan Strausburg, Ascential Software, (www.ascential-software.com/), and Jim Leighton, Omneon Video Networks (www.omneon.com/). The group took the audience through the process of asset management, identifying different views and requirements from the components of storage, management, and fulfillment.

Perrins presented the differences in the requirements of each system component and the proposed open protocols that would allow cross-vender connectivity. Leighton discussed his company's IEEE-1394 Storage Area Network (SAN) architecture. Page and Strausburg conducted a tour through the operation of their Media360 Asset Management software, and Clarke covered the process of fulfillment automation.

The program ended with a brief Q and A session.—Peter Hammar, Secretary

San Francisco July 26, 2001

Nearly 50 people attended the meeting titled, "360° Immersive Video: 'You Are There!'" held at the SGI Presentation Center in Mountain View, CA.

Much has been written about interac-

tive television, including the convergence of the computer and TV. Some of the first steps in that direction—technology providing users with information on advertised products—are aimed more at pleasing program sponsors than helping viewers, and have generally failed to catch on. However, there may be hope for the illusive future of interactive TV. Immersive video, one of the most interesting new interactive technologies, permits consumers to pan and tilt their view in a

fully 360° video environment for highly engaging “you-are-there” experiences.

Leo Blume, Enroute Imaging, demonstrated an “inherently interactive” DVD on a Sony PS-2 PlayStation. Using Enroute’s product, a suite of technologies designed to deliver high-quality immersive video to a range of consumer devices, a user at home can pan, tilt, and zoom the content like a cameraman. The demo footage had been shot with a cylindrical bouquet of synchronized cameras

and stitched together with Enroute’s software.

Daniel Patton, Be Here Corp., followed with a demonstration of technology based on an optical lens that records a 360° field of view, using a single camera. He presented clips of sports and events using Be Here’s system, which is ENG-truck-mountable and operates in realtime.—Joe Wang, Manager, and Peter Hammar, Secretary

Book Review

Home Movies— A History of The American Industry 1897-1979

Home Movies is a deceptive title. *Alan Kattelle* has gone far beyond just the home-movie subject in his expansive book. That can be realized by reading the chapter headings. The book provides so much beyond the amateur movie topic. The first two chapters offer an excellent summary of the origins of basic photography and motion picture photography.

An overall impression gained by reading **Home Movies** is admiration for the author’s writing style; Kattelle is a master of descriptive prose. Engineers so often have reputations as pedantic writers and communicators. But this author’s engineering background is a strong asset. He has the technical know-how and curiosity to delve into the whys and wherefores continually, making the reading all the more interesting.

A basic and valuable element of **Home Movies** is its historical look at ten key companies, the backbone of the amateur home movie industry. Of course, the Eastman Kodak Company and its early key executives, scientists, and engineers provided significant contributions. At least a dozen are profiled, together with their contributions. George Eastman, Dr. C. E. Kenneth Mees, William C. Stuber, and Frank W. Lovejoy were especially pivotal in the early days.

Of particular interest to me was the

interplay among executives, film specialists, and equipment engineers as decisions were made that affected the emerging global industry. Some decisions were successful; others failed. In summary, Kattelle expertly pictures Kodak’s vital influence on the whole industry.

Another company, Bell & Howell, and its leaders are also studied in depth, from its beginning with Donald J. Bell, Albert S. Howell, and Joseph H. McNabb. Bell & Howell cameras made a major contribution to amateur movies. The meteoric rise of Charles H. Percy to become B&H president in his early 30s was impressive.

Other companies are examined, some in fair depth: The Pathe Companies, Victor Animatograph Corp., DeVry Corp., the Keystone Companies, Paillard-Bolex, Universal Corp., the Revere Camera Co., and Technicolor.

A significant segment of the maturing story includes color, the influence of World War II, the development of sound for small film gauges, and finally Super 8—all are reviewed in careful detail. The coming of video changed the home movie industry, with the eventual decline in sales of motion picture film, and equipment.

Literature, company publications, and photographic movie magazines were basic elements of the home movie industry. The Amateur Cinema

League and the Photographic Society of America also played important roles, as did movie clubs across the country.

While the subtitle of the book states 1897-1979, the author brings us into the 1990s with a more personal touch. He gives accounts of some interesting stories of **Home Movies** and their makers plus reviews of several amateur film festivals. Finally, to conclude the narrative portion, Kattelle covers the collecting and preservation of films.

The final 101 pages carefully document and support the text with extensive chapter-by-chapter footnotes, an extensive bibliography, picture credits, and 15 appendices. As an example: Appendix 1 is a survey of 22 archives worldwide. Five appendices are chronologies of cameras and projectors manufactured by five companies from their start to the present. One appendix pictures the identification marks of 24 camera types.

The years of research that went into **Home Movies** are obvious. In a generous gesture that may long serve as a model for others, Alan Kattelle decided to publish this book himself. The motion picture industry is indebted to Alan for his perseverance in producing such a valuable contribution to world, and particularly American, history.

—Thomas W. Hope
SMPTE Life Fellow