Michael Dolan

In this column, we provide interesting historical briefs from the journal articles of days past. The purpose of this column is primarily entertainment, but we hope it will also stimulate your thinking and reflection on the Society's history, how far we have come in the industry, and (sometimes) how some things never change. This column is sponsored by Television Broadcast Technology, Inc., since March 2001: http://ieeexplore.ieee.org/document/7257346.

25 Years Ago in the Journal

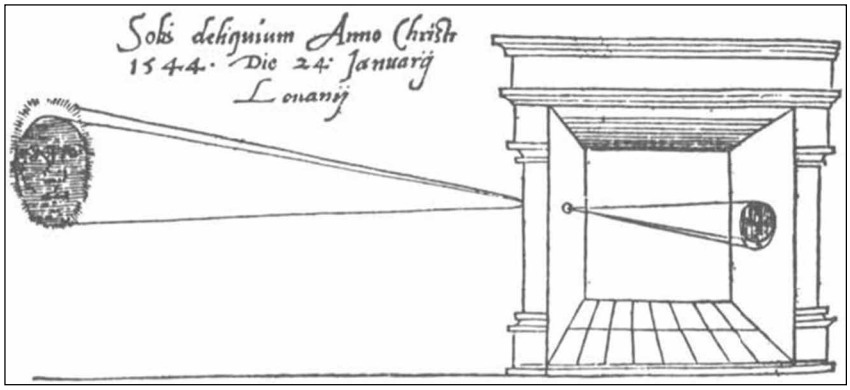
The January 1997 *Journal* published in "1996 Progress Report" by Linda Young and Robert B. Kisor: "Motion Pictures: 70% of all film color negative going directly to telecine…the year that recognized the importance of video dailies and the cinematographer's need to better communicate with his or her video post-production and computer graphics counterparts…Imax theaters are expanding and expected to achieve a worldwide total of 170 by 1997…Silicon Graphics unveiled an open platform system for unprecedented real-time previewing of digital film effects…[with] an SGI Onyx workstation with InfiniteReality graphics, several Ciprico Model 7000 Fibre Channel RAID Disk Arrays, and a Viewgraphics Dataview adapter …Television: Time Warner completed its merger with Turner Broadcasting…the agreement of a final digital videodisk (DVD) standard…HDTV broadcast licenses were granted to three stations, NBC, CBS, and PBS affiliates. CBS was the first to actually transmit an HD signal on 23 July …NHK has developed a portable HDTV camera that outputs HDTV and NTSC signals simultaneously…ZDF, Mainz, Germany, started transmitting MPEG-2-coded and fully DVB-compliant programming…MPEG-2 compression became a reality as chip sets from Sony and IBM were finally available in quantity." For the full article, see https://ieeexplore.ieee.org/document/7243668.

50 Years Ago in the Journal

The February 1972 *Journal* published in: "Contributions of Dutchmen in the Beginnings of Film Technology" by S. I. van Nooten: "The first Dutchman who might be mentioned in connection with static projection is Gemma Frisius because the oldest known illustration of a camera obscura was published in one of his works. There is no suggestion that he invented the camera obscura since it had been known long before his time. At the end of the 10th century, its principle had already been described, and Leonardo da Vinci (1452–1519) gave a sketchy picture of it in his *Tratto della Pittura*. The camera obscura was used, for example, as an aid in painting or in the study of solar eclipses and it was for the latter purpose that Gemma Frisius made use of it. For the full article, see https://ieeexplore.ieee.org/document/7240026.

75 Years Ago in the Journal

The January 1947 *Journal* published in: "Magnetic Sound for Motion Pictures" by Marvin Camras: "Three fundamentally different sound recording methods can be used with motion pictures. For a long time, the mechanically cut or embossed recording was the most highly developed, and the first talkies used a phonograph disk synchronized with the picture. An optical soundtrack, however, is so satisfactory for most sound on film work



Camera obscura (**Fig. 3** from *Trans. SMPE, Feb. 1972*, p. 117).

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that it is now used almost exclusively…It appears that film recording techniques have approached closely to theoretical limits of perfection, and there is no reason to expect revolutionary changes in the near future. On the other hand, we have by no means reached the ultimate in magnetic recording heads or media. Theoretically, a magnetic track can be at least as good as an optical one, and the magnetic record should give a greater dynamic range without resorting to artificial noise reduction schemes." For the full article, see https://ieeexplore.ieee.org/document/7251611.

100 Years Ago in the Journal

The May 1922 *Journal* published in "President's Address" by L. C. Porter: "In the past, the ladies have always been welcome at our conventions, but this is the first time that official provision has been made for their comfort and entertainment. We are glad to have you with us and hope you will find our convention both interesting and profitable…Any great industry to settle down to a permanent, stable base, must standardize...Things which, if standardized, would make for progress and save the industry a great deal of money. For example, there is no such thing as standard film density, standard screen illumination, standard actinicity of artificial illumination in the studio… There are still many unknown factors that affect the industry; often things which are not germane to any one of our members, but which, nevertheless, should be carefully studied. For example, no one till date knows how rapidly a motion picture screen loses its reflecting power due to aging, collection of dust, etc. Undoubtedly, there is a point where it becomes more economical to renew the screen than to furnish the additional illumination necessary to make up the loss; but where is that point? Many of us know that there is a difference in definition, or sharpness of pictures projected with various lenses, yet no one knows how to measure it in exact terms, so that one lens may be compared with any other lens in quantitative units. We should have such data. At present, only about five percent of the light generated for motion picture projection ultimately reaches the screen. What an enormously inefficient thing a projector is!" For the full article, see https://ieeexplore.ieee.org/document/7229931.