

50 years ago in the Journal

A. S. Howell and J. A. Dubray, "Some Practical Aspects of and Recommendations on Wide Film Standards," Jan. 1930

Sound pictures of the sound-on-film systems have altered the size and shape of the screen. From a rectangle whose sides were in the ratio of 3 to 4, the screen image has become almost square. It has assumed a shape which not only presents no advantage whatsoever over the rectangular shape, but which imposes doleful aesthetic limitations upon the artisans of the screen. The natural consequence of this situation is retrogression in artistic expression and rebellion on the part of the final judge, the public.

We purposely use the expression, "rebellion," because it is supported by the fact that, for perhaps the first time in the history of motion pictures, a number of exhibitors and at least one of the greatest distributing and exhibiting organizations in America have taken matters into their own hands and have reduced the height of the projector aperture. They have considered it essential to maintain the rectangular form of the screen even at the risk of cutting off parts of the heads of the performers, or some detail at the lower part of the picture area essential to the story and part of the general scheme of composition. Such procedure is rebellion and, what is more important, it is, seemingly, justifiable.

Edward W. Kellog, "Some New Aspects of Reverberation," Jan. 1930

. . . A single voice or a violin is a faint source of sound for a large auditorium. The only means hitherto possible for producing sound in large volume has been to multiply the number of singers or violins, so that the choruses of two hundred voices and one-hundred-piece orchestras have been employed where the finest possible in musical entertainment has been sought; but in the effort to bring up volume we have made great changes in tone quality. Multiplication of sources gives a sound wave of great complexity as compared with the wave from one source. Why not have both types of sound available at all degrees of volume? We have heretofore had our choice between a single voice, always faint, and a chorus either faint or loud. Let us add the fourth possibility, making the list include a single voice either faint or with abundant volume as well as the faint or loud chorus. This added element is made possible by electrical equipment and it is a distinctly

new musical effect. It has been well established that a change in volume results in an alteration of sound quality. We shall still have our large choruses and orchestras, but is anyone prepared to say that a quartette of fine well trained voices reproduced with the volume of the large chorus will not afford still greater pleasure to many listeners, or that a violin solo at band volume may not be a delightful form of music? The electrical system may go even further and give us what are essentially new musical instruments. A magnetic pickup attached to a violin bridge, for example, would probably give us a violin with a different but pleasing voice quality, while preserving all the power of expression which the violin now possesses.

25 years ago

John I. Crabtree, "Motion-Picture Laboratory," Jan. 1955

The birthday of the motion-picture laboratory can be considered as coincident with the date of August 1889, when George Eastman sent a supply of motion-picture film to W. K. L. Dickson at the laboratory of Thomas A. Edison in Newark, N.J., for use in his Kinetoscope.

The evolution of the motion-picture processing laboratory may be traced from the early days of reel-and-trough processing by Pathé and Gaumont up to the present day of highly efficient and complicated machine handling. During this half-century, many changes have been introduced in order to render the necessary services, to guarantee a uniformly high quality, and to meet economic requirements. In the early operations, processing was controlled largely by visual judgment. When photographic sound recording was introduced, sensitometric and other instrumental controls were adopted and a general refinement of laboratory methods soon followed. The complications of color photography required new techniques and new tools, especially as regards printing machinery. Laboratory work in the service of television is one in which the element of time is emphasized greatly.

During the latter half of the period, a system of motion-picture photography for the amateur involving the making of direct positives by reversal has resulted in the

growth of a system of custom processing laboratories. At the same time the ramification of services to professional motion-picture production has been met by the development of new techniques and new functions while a high standard of quality and service has been maintained.

The work of the motion-picture laboratory is becoming more and more technical, requiring the combined efforts of mechanical engineers, chemists and physicists to produce pictures having the maximum definition and photographic quality of which the film is capable, in the shortest possible time and at the least cost.

The significant growth of 16mm film in the professional field, and especially that of television, combined with the demands of color processing, will necessitate greater refinement of laboratory mechanisms and procedures in the future, but I am sure that the facilities which our Society is providing for cooperative effort will contribute greatly to attainment of these goals.

Errata

September 1979 *Journal*, "Motion-Picture and Television Technology in the People's Republic of China: A Report" — p. 610, abstract should have read: "Traveling and living expenses in China for each individual were the responsibility of the Chinese Government; incidental expenses were paid by each individual"; p. 610, column 1, para. 1: Mr. Seto Waiman was not among those who greeted the SMPTE group at the Beijing Airport; p. 612, column 2, under **Beijing Central Laboratory**, should have read: "16mm release is accomplished by the 32mm method"; p. 612, photo caption should have read: "Milton Forman in the Shanghai Exhibition Hall . . ."; p. 613, the center-left photo caption should have read: "A tea commune in Hangchow"; p. 613, top- and center-right photo captions should have indicated that the gentleman appearing with Frederick M. Remley is Wang Feng, Deputy Director of CCTV; p. 614, column 3, **Shanghai Film Laboratory**, the color imbibition process for release prints was in fact built to the Chinese own design; p. 615, bottom-left photo caption should have indicated that the photos on the wall are Mao Tse-tung and Hua Kuo-feng; and p. 618, column 3, **Acknowledgment**, should have read: "Special thanks are due Paul Yang . . . who came to the United States almost 20 years ago."

September, p. 698, second item: "A condenser microphone, Model U 89 . . ." should read "A Neumann U89 condenser microphone . . ."