

lar fixation exercise, demonstrating "crossed" (near) and "uncrossed" (far) images with respect to each eye when the eyes are alternately closed.] He continues, "Thus, some neurons detect relative 'nearness,' and others detect relative 'farness.'"

He concludes the section by describing classes of people with presumed neural deficiencies, who have difficulty in judging distance by means of binocular cues.

I believe that the discussion that I have excerpted above conveys a very important distinction in defining and providing knowledge on the mechanism of binocular vision, along with insight on the "merging" of the disparate images. It also acknowledges that there are many cues that are used in depth perception.

Whatever perceptual mechanism underlies Vision III's effect, it is clearly not stereopsis, since the

above-described sensing of retinal disparity does not take place when both left and right retinal images are simultaneously identical. It appears that all classes of imaging devices for visual purposes that heretofore have been classed as stereoscopic since Charles Wheatstone's invention of the stereoscope in 1832 have made use of stereopsis, even though the visual mechanism of stereopsis was not realized until considerably after the day in 1904 that Theodore Brown spoke before the Optical Society of Great Britain, when he said to the contrary, in effect, that any object seen in relief of its surroundings and with solidity can be said to be seen stereoscopically. (I am indebted to Mr. Mayhew for his reporting of these two historical events, in addition to his generally excellent historical coverage.) I agree with his observation that "concepts grow along with knowledge." Thus, I

believe that scientific knowledge on the subject of stereopsis and hence, the previously established usage of the word "stereoscopy," which still prevails in technical parlance to connote the utilization of stereopsis, has increased since the time of Theodore Brown's statement, and evidently without general knowledge of his statement or regard for it.

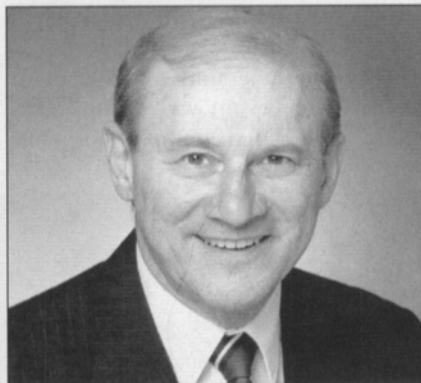
An alternative term used by the author, *depth enhancement*, is, to my thinking, a very complimentary general descriptor for Vision III. Stereoscopy is the accepted technical usage for binocular vision with retinal disparity that I strive to preserve. In future discussions of stereoscopy, will the technical community have to ask, "With, or without, retinal disparity?"

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**June 17, 1993**

## 1993 Progress Report to Appear in April 1994 *Journal* SMPTE Executive Vice-President Stan Baron Named Chairman

The 1993 Progress Report will be published in the April 1994 issue of the *SMPTE Journal*, according to Editorial Vice-President David L. George, Imagineering Ltd. The Progress Report is a summary of technological advances in the motion-picture and television industries. The report will be international in scope, with information contributed by SMPTE members from around the world.

SMPTE Executive Vice-President Stanley N. Baron, NBC, is the Chairman of the 1993 Progress Report Committee. Editorial Director, Motion Pictures, Frank Ricotta, Technicolor, Inc.; Editorial Director, Television, Paul Berger, CBS; and the Progress Committee members will contribute to the report under Baron's supervision. SMPTE Engineering Vice-President Kenneth Davies, Canadian Broadcasting Corp., will



Stanley N. Baron

cover developments from SMPTE engineering committees, many of which have worldwide significance. In addition, a report on the Society's educational activities will be provided.

All companies are invited to submit information on new equipment and new facilities that were introduced in 1993. Information should be submitted on the forms supplied by the SMPTE, which are being sent to all

Sustaining Members. These forms can be obtained by writing to the SMPTE at the address below. Glossy black-and-white photographs are preferred; some color photographs will be published if they are of special interest.

The basic criteria for acceptance of material is that the information be factual (no opinions or editorializing), that the new developments occurred in 1993, and that the material be relevant to motion pictures, television, or related fields. All submissions must be received by December 1, 1993. The SMPTE reserves the right to determine the suitability of all material submitted for the report.

Send your information to the Editor, *SMPTE Journal*, 595 W. Hartsdale Ave., White Plains, NY 10607. The material can be faxed to (914) 761-3115. Please note that no material will be accepted after the December 1 deadline.