Motion Pictures and Television Education

By HERBERT E. FARMER, Education Advisor to the SMPTE President

MANY OF THE problems facing the motion-picture and television industries may well be attributed to simple "growing pains." It is a generally accepted fact that a large percentage of the responsible technicians, artists and supervising personnel in motion pictures have been with the business since the early days of sound or before, and are fast approaching retirement. Many in television came from radio, having started in television about the same time. For the most part the industries, while concerning themselves with training programs to help their people keep up with technological advances, have not paid much attention to the education of those who will be holding the reins in the future.

Recognizing that any medium which has the capability of reaching and affecting the thinking of men should be of concern to higher education, many universities and colleges have instituted curricula in motion pictures and television. In general the goal has been to achieve professionalism in the arts and techniques but a more important goal is that of offering a background of knowledge to enable us to understand the world we live in, the people who live with us, and the scientific laws governing what happens to things. The most important goal is that of training young people to think and to draw valid conclusions based on facts.

Traditionally the motion-picture and television industries have looked upon themselves as trades and many people employed therein have felt that the only way to learn the trade was by apprenticeship and experience. While most students realize that experience is a great teacher and that there is no substitute for some of it, it is not necessary that they make all of the mistakes in order to learn. Too frequently a person speaks of twenty years experience when he means one years experience, twenty times.

There is no doubt but that the trend of thinking in the two industries is toward changing from trades or technical jobs to professions. When young people attempt to learn what they can from teachers and from publications, both students and teachers are giving *full time* to shorten the period of "apprenticeship." Guided experience in actual production is like a period of internship during which concentrated effort is made to telescope years of experience rather than face situations at random as they happen to come (the one year's experience, twenty times).

Fortunately many people outside the fields of education are beginning to think along these lines. The September, 1962, *Journal of the Screen Producers Guild* is devoted entirely to the problem. Lou Greenspan, Editor of that publication points the issue this way:

". . . that unless the film industry does something about transfusing fresh blood into the veins of the business, it will surely die of anemia.

"There are many sides and many arguments to this recurring problem. Some say it is the fault of the crafts and their unions that young men and women . . . are not given the chance they deserve.

"Should they be given the opportunity they seek?

"Nearly everybody is agreed they should— but how, where and when?. . .

"Perhaps the studios are as much to blame as the unions. There was a time when,. . ."

The titles of some of the other papers also indicate the urgency of the problem: "*Quick, Watson, The Needle*" by William Perlberg, "*Make Way for Youth*" by Mervin LeRoy and "*Where Is the Key to the Blood Bank*" by William Ludwig.

The papers which follow describe the training as it exists today, how it got there, and some of the thinking for the future. Young people *are* studying diligently and the talented ones *are* finding positions, although largely in the nontheatrical fields of industry, education, religion, government and the military. It is possible that when more of them find their way into entertainment, this will be mutually rewarding.

Training Motion-Picture and Television Technicians for the Decades Ahead

By JOHN G. FRAYNE

From the history of the progress of the motion-picture industry and from the briefer and varying pattern of the television industry there emerges part of the basis for planning the education of future technicians. Recent scientific discoveries and new technological developments, current or potential, require educational emphasis on the physical sciences and on new techniques of recording pictures from motion.

FROM WHAT happened in our industry's past, and considering the present art and science, we can predict the training needed for the decades ahead. As one studies this problem one is quite astonished at the relatively few basic changes that have taken place in the past 50 years. We have added sound and color and the wide screen. These have been part of an evolutionary progress over the years. Professor Chrétien's anamorphotic lens system, for instance, was described in this *Journal* 30 years ago.

What was the motion-picture industry like in say the 1910–1920 decade? The tools were simple and crude by today's standards but there was 35mm film with sprocket holes very much like those of today. There were Bell & Howell cameras, hand cranked, of course, and Bell & Howell printers varying only in details from the printers used today. The projectors had Geneva intermittent motion and were hand cranked in theaters here and throughout the world. There was heavier reliance on the use of sunlight, hence the location of the industry in Southern California in the ante-smog days of this fair metropolis. We had crude Moviolas, the standard speed was 16 frames per second, but this was only nominal since cameras were hand cranked, and motor-driven projectors were coming in but with doubtful speed control, if any.

Personnel in the Past

What kind of people worked in the studios, laboratories and theaters of those days? There were no trade schools, there were no cinema departments in universities, so obviously the employees were picked up hither and yon and by dint of sheer effort they became the basis

Presented on May 6, 1960, at the Society's Convention in Los Angeles, by John G. Frayne, Consultant, 1580 La Loma Rd., Pasadena, Calif. (This paper was received on June 30, 1960, and very slightly revised in 1962.)