

Book Reviews

Full Length Animated Feature Films

By Bruno Edera. Published (1977) by Hastings House, Publishers, 10 E. 40 St., New York, NY 10016. 200 pp. Illus. (color and black-and-white). 8½ × 11 in. Price \$35.

Bruno Edera's definitive and comprehensive study of the feature-length animated film — the first book ever written on this specific subject — comes at a particularly auspicious time when the style and methods it discusses appear to have reached their peak and when a new and different genre seems about to emerge. In the view of many students of animation, this peak has been marked by two current animated features, Richard Williams' *Raggedy Ann & Andy* and Disney's *The Rescuers*. Both are done in the classical Disney style in all its lushness of detail, with a profusion of separate drawings to give a perfect semblance of movement, and all other amenities that characterize the great Disney achievements.

The anticipated change to a more stylized method of drawing, while retaining full animation without recourse to rotoscoping, is what makes Edera's book an eminently topical discussion of animation at its highest technical and artistic levels. Edera's qualifications in this field are unquestionable. From his original extensive catalog of animation literature published over 10 years ago to the present volume, he has been one of the leaders in Swiss animation, representing his country on the ASIFA Council. At present, he is Production Co-ordinator of the Educational and Scientific Department of *Télévision Suisse Romande*, located in Geneva.

In his foreword to the book, its editor, John Halas, offers an expertly written overview covering the history, national origins and technical aspects of the animated feature film. This last part is of special interest, as it discusses the various stages of production as well as such variants as collage and direct painting on film, silhouette, puppet and computer generated animation. While these techniques apply to animated films of any length, its inclusion serves as a useful frame of reference.

The main body of the book reviews production in all the main world centers of feature-length animated film production, noting the characters of each area, the problems peculiar to it, its subject and story-telling methods, its financial conditions, its manpower, distribution, and box office aspects. The differences are underlined and made more explicit through the abundant use of illustrations, both color and black-and-white, of excellent choice and perfect reproduction.

Beside the main Eastern and Western Europe production centers, second only to the U.S.A., less familiar countries such as Israel, China, Korea, Vietnam, India and Japan are well represented and their work brought to the fore. The amount of information gathered by Mr. Edera, its detailed and painstaking research, its accuracy, scope and the profusion of source material

make this book an outstanding reference work that no student or scholar can ignore.

The book concludes with an alphabetical catalog of virtually all animated features, with full production data and summaries of plots. Further addenda include a cross-index to the main catalog organized by country of origin, a bibliography covering books, articles, catalogs and reviews. — *George L. George*, N.Y. Directors Council, Directors Guild of America, 685 West End Ave., New York, NY 10025.

Walt Disney: An American Original

By Bob Thomas. Published (1976) by Simon and Schuster, Rockefeller Center, 630 Fifth Ave., New York, NY 10020. 380 pp. Illus. 6 × 9½ in. Price \$9.95

Bob Thomas, who writes a daily column of Hollywood news and gossip for the Associated Press, has the journalist's knack for ferreting out facts, stringing them out in an orderly and entertaining fashion, and organizing the material in a manner pleasing to the reader. This skill also applies to his books about Hollywood tycoons, *King Cohn*, *Thalberg* and *Selznick*, and now Walt Disney, all well researched, appealing, suspenseful — and pointedly uncritical. It is difficult to gauge to what extent this last characteristic is intentional. Innocent unless proven guilty, Thomas must be assumed to be honestly admiring of his subjects, all successful and powerful men who left a permanent mark on the Hollywood film industry.

His latest volume, *Walt Disney: An American Original*, written with the assistance of Disney's family who opened to him the family archives, traces a full-length portrait of the late creator of Mickey Mouse. Thomas draws an impressive record of achievement, following the boy cartoonist through high school, his failure at becoming a Hollywood director, his teaming up with celebrated animator Ub Iwerks. Success ensued, not without setbacks. The 40's were financially rough, but the studio survived and later, thanks to diversification — television, Disneyland, Davey Crockett hats — it became a highly prosperous venture.

Among the facts Thomas overlooks, or alludes to only veiledly, are Disney's autocratic nature, his pitiless perfectionism, the cruelty that pervades his early works. Elsewhere, Disney's rapaciousness is well documented, for example his refusal to buy from Johnny Gruelle's impoverished widow the rights to *Raggedy Ann & Andy*, saying, "We won't pay a cent for *Raggedy Ann*, as someday it'll become public domain and we'll have it for nothing." Another instance of record was the salary he paid his inkers in 1938 — \$16.00 for a 6-day, 48 hr week. Art Babbitt, probably Disney's best animator, recalls "as far as (Disney's) politics were concerned, they were medieval . . . he was a caveman." All this led up to the bitter 1941 strike that caused many of his most creative artists to leave the Disney Studios.

But this may be less significant than the fact

that Disney, an entrepreneurial rather than a creative personality, is given in Thomas' book an image that will satisfy and engross the readers it is meant to reach. — *George L. George*, N.Y. Directors Council, Directors Guild of America, 685 West End Ave., New York, NY 10025.

The Animated Raggedy Ann & Andy: An Intimate Look at the Art of Animation Its History, Techniques and Artists

By John Canemaker. Published (1977) by Bobbs-Merrill Company, 4 W. 58 St., New York, NY 10019. 292 pp. Illus. 8½ × 11 in. Price \$25 (Softbound \$12.95).

As its subtitle indicates, this excellent book goes beyond a step-by-step report on the making of the animated feature film *Raggedy Ann & Andy* to offer a knowledgeable look at the art of animation as exemplified by its outstanding personalities. Author John Canemaker is well qualified for this task: an independent animator/filmmaker himself, his movies have been widely screened and his writings on the medium widely published.

Based on the popular children's tales, written and illustrated by Johnny Gruelle and first appearing in the early '20s, *Raggedy Ann Stories* seemed ideally suited for animation. In fact, they were taken to Walt Disney in 1938 by Gruelle's widow. But Disney, although a friend of her late husband, is reported to have declined, stating that "someday it will become public domain and we'll have it for nothing." The rights were then assigned to the Max Fleischer studios, which produced a 22-min animated short in 1940. Two more films based on Gruelle's characters were made in 1944 and 1947 by Seymour Kneitel, a former member of the Fleischer studios.

This was the situation in 1973 when Richard Williams, a Canadian animator working in England, was approached with the *Raggedy Ann* project. Williams had gained a reputation for his imaginative animated titles on a number of feature films and, in 1972, received an Oscar for his animated short, *A Christmas Carol*.

Raggedy Ann & Andy was started early in 1975 and completed by the end of the following year. Animation was done mainly in the New York studio with some work farmed out to Hollywood. It is this process that Canemaker follows so expertly in his book. He describes in detail, and with the help of numerous and beautifully reproduced illustrations, the intricate and painstaking work of animation. He gives credit to the guiding spirit of the enterprise, director Williams, and to his staff of animators, largely drawn from the ranks of former Disney artists.

It is veterans like Art Babbitt, Grim Natwick, Art Hambro, and gifted Europe-trained artist Tissa David, who provide continuity for the history of animation in *The Animated Raggedy Ann & Andy*. Through them, the reader is made aware of the evolution of the art, from Emile Cohl and Winsor McCay to Ralph Bakshi through Oskar Fischinger, Disney, Fleischer, Tex Avery and the UPA's innovative techniques. Canemaker has thus artfully woven historic perspective into his record of the making of one particular contemporary film. — *George L. George*, N.Y. Directors Council, Directors Guild of America, 685 West End Ave., New York, NY 10025.

BBC Handbook 1977

Published (1977) by the British Broadcasting Corp., 35 Marylebone High Street, London

W1M 4AA, England. 352 pp. Illus. $5\frac{1}{2} \times 8$ in. Price £1.50.

The *BBC Handbook 1977* contains, in an easy-to-follow arrangement, detailed information on all activities of the British Broadcasting Corporation. A valuable reference work it is also a delight to read. The polished style, most unusual in comparable reports, makes for a pleasurable reading experience even though the main purpose of the report is to provide a factual analysis of BBC activities during the previous year.

The Foreword by Sir Michael Swann, Chairman of the BBC, does not project any gloriously optimistic outlook; on the contrary, he notes that "The BBC, like the rest of the country has had to economise throughout the last year . . . Next year is not likely to be any easier for us . . . Though we have kept going on licence fees that have risen by less than almost anything else, we cannot survive much longer without an increase." And the Introduction by *Handbook* editors notes that "inflation menaces not merely development of BBC services . . . but it will force further reduction in the output of programmes."

In spite of financial woes, however, the quality of the BBC programs has not deteriorated. This candid appraisal of BBC's financial difficulties, far from having a depressing effect on the reader serves to confirm his admiration of British tenacity in the face of adversity and his confidence in the ability of the BBC to continue to provide outstanding programs and services.

The *Handbook* contains three parts: (1) Annual Reports and Accounts; (2) Programme Review; and (3) Reference. Four sections under reference are: Broadcasting Services; Engineering and Technical; Constitutional; and General Information.

The Engineering and Technical section describes BBC's engineering projects and advanced equipment including digital systems, the pcm sound-in-synthes system; and CEEFAX. This section also contains maps and tables giving details of all BBC domestic television and radio transmitters including separate maps for the 625-line color television services and the 405-line monochrome television services. — *Edit.*

Radiation, Light and Illumination

By Louis Erhardt. Published (1977) by Camarillo Reproduction Center, 616 Calle Plano, Camarillo, CA 93010. 360 + viii pp. Illus. Diagrams. $5\frac{1}{2} \times 8\frac{1}{2}$ in. Price \$22.50.

In 1909 Steinmetz wrote an important book on light and illumination which was much admired by the present author, to the extent that, after all the new material which has since been developed on the subject, he felt that a re-creation of the book was fitting to bring it up to date. So very much substantive matter on the subject was evolved in the intervening time that it seems almost a hopeless task in a book of some 400 pages. However, the author's background is steeped in illuminating engineering, and he has solved the problem by a partiality to this aspect of the new material, covering the remainder with somewhat less emphasis. Nevertheless, the overall treatment is generally quite good, and the language is reasonably clear and thorough.

The context of the book contains an introduction on the sun, followed by chapters on radiation, its applications and photo-effects, and on the properties of light, vision, and incandescence and incandescent lamps. These are followed by chapters on luminescence and luminescent lamps and their starters. These chapters

also include information on multivapor lamps and the lamps used in copying machines. Also included are discussions on xenon arc and flaming arc lamps (such as used in motion-picture work) and searchlights. A short section covers light emitting diodes of a type used largely for indicators. A final section in the chapter covers lasers, including holography. A mention is made (unfortunately quite scanty and glib) of "Q switching." A short chapter describes light measurements, both visual and physical, followed by one on distribution and control of light flux. Three long concluding chapters are then given on illumination, first "by definition," then "by design by engineers," and finally "by design, expanded." These last, comprising some 80 pages, cover much modern detail on illuminating engineering. The book then closes with three appendices and a brief bibliography.

The matter of color is a disturbing element in the study of illumination. The author first discusses it in the rather standard manner, using the CIE diagram. But the effects of color are complicated, especially in illumination, and fairly extensive further explanation is required. The author encounters the situation that objective specification of illumination requires three parameters, hue, luminance, and saturation. But as noted by Ralph Evans and others, in a subjective appreciation of the effects of illumination, the term "brightness" really covers, in addition to "luminance," a quality which might be called "vividness." Evans noted that fixed luminances of blue and yellow light, for example, give quite different impressions of vividness. Thus the matter of colored illumination runs into lengthy discussion.

The book will be of importance to all students involved with light, but of course will be especially valuable to those whose field is the use of illumination. — *Pierre Mertz, Meadow Lakes 901, Hightstown, New Jersey 08520*

Television Video Transmission Measurements

By L. E. Weaver. Published (1977) by Marconi Instruments Ltd., Longacres, St. Albans, Herts, AL4 0JN, England. 113 pp. Illus. Diagrams. 8×11 in. Price £7.50.

This is a completely revised edition of Leslie Weaver's earlier book with the same title which appeared in 1971. It has a larger format and an improved presentation using many colored figures and diagrams.

Paraphrasing the introduction to Mr. Weaver's book, its dust cover states: "This book has been produced to advise practising television engineers of some of the techniques which have been found operationally satisfactory for the measurement of the various distortions of the video signal, as a result of long experience in the field of television broadcasting. Attention has been focused on the most basic measurements, with particular reference to the handling of color signals." The author has indeed succeeded in producing a book for practicing television technical personnel.

The material is up-to-date and covers operational measurements of level, linear waveform distortions, non-linearity distortions, noise and return loss, using no theory or mathematical methods.

The first chapter is on picture quality and covers the philosophy regarding quality targets. This is a particularly important subject and for this reason the chapter should, perhaps, have been more detailed; however, Appendix 1, "Estimated performance of PAL system from coder input to final transmitter output," and Appendix

4, "Reference list of picture impairments," form useful supplements to the first chapter.

The last chapter treats insertion signals (in American nomenclature, vertical-interval special signals). The effect of APL on vertical-interval test signals (VITS) is explained. On the other hand, the subject of automatic measurement of VITS is treated only summarily.

Appendix 2, "Equalization," should prove useful as a quick reference to the subject and Appendix 5, "Color bar signal," contains information about the various forms of this signal in use elsewhere.

Finally Appendix 3, "Visual assessment of picture quality," gives rather sketchy information. Perhaps the author felt that practicing television technicians need not have more information on this subject.

One important subject, that of the measurements on a radiated signal and the influence of the vestigial side band method of modulation on them, coupled with the nature of the measuring demodulator, is not treated in this book.

Each chapter and two of the appendices have their own list of references. These individual lists are far from covering their field well.

This new edition of *Television Video Transmission Measurements* should prove very useful, especially for the European readers to whom it is addressed. Its usefulness for American readers could be, perhaps, diminished from the fact that all test signal photographs, examples and, in general, all data refer to European practices with only passing references to their American versions.

Nevertheless this is an excellent elementary book and it is recommended to those having to deal with measurements of the objective impairments caused by the transmission of television video signals. — *C. A. Siocos, Engineering, Headquarters, 7925 Côte St.-Luc Road, Montreal, Que., Canada H4W 1R5*

Electronic Imaging Techniques

By Eli Levitan. Published (1977) by Van Nostrand Reinhold Company, 450 W. 33 St., New York, NY 10001. 196 pp. Illus. Diagrams. 8×9 in. Price \$17.95.

In spite of its title, this is a broad review of several areas of visual communication technology. The first of two parts is a discussion of "conventional processes," i.e., stand animation, optical effects, and film processing and editing. Technical terms are in boldface, and each chapter is followed by a glossary, features which enhance the book's value as a reference. This section should prove to be a useful introduction to the above subjects for those who use animators, editors, and labs as services.

The second section of the book is entitled "Computer Controlled Techniques" with chapters headed "Animation and Electronic Imaging," "Computer Opticals," "Videotape," "Electronic Edition," "Computer-Controlled Processing and Projection" and "Computer Glossary." In the first and by far longest of these, the author attempts to introduce the reader to many of the electronic and digital image-synthesis systems developed in recent years. Unfortunately the inherent difficulties in this task and the author's apparent unfamiliarity with his subject have resulted in several flaws in treatment.

The most serious of these shortcomings is the lack of a general categorization scheme to relate the properties of the various systems discussed. Instead, the author has chosen simply to pass a great deal of information directly from his sources to his reader with very little digestion in

between. The result is a jumble of details with no useful emphasis on the important issue of comparative capability. No clear distinction is made between 2-dimensional and 3-dimensional digital animation; and image resolution and generation speed are given far too little attention.

A second major drawback is obsolescence. In a field which is developing so rapidly, no survey such as this can stay current for long. Yet, most

of the major computer animation systems in operation today, e.g., those of New York Institute of Technology, Information International Inc., Evans and Sutherland, University of Illinois, and Ohio State are not discussed; yet all of these have been in operation for several years.

In the remaining chapters of the second section, the author returns to subjects he evidently knows well. Especially good is the treatment of

videotape and video ("electronic") editing which covers both CDL and CMX systems.

In the final analysis, this book offers a valuable introduction to several areas of film and video production and editing; but it is not a useful guide to the growing array of computerized image synthesis systems. — *Jack Heyl*, Mathematical Applications Group, Inc., 3 Westchester Plaza, Elmsford, NY 10523



Section Meetings

Australia, 28 Sept. — The meeting was held in the Club Room of the Legion Club at Wilmoughby, a suburb of Sydney, where Francis Lord read a paper entitled "Understanding the Zoom Lens of Today." Lord is one of the foremost authorities on photographic optics and is one of the proprietors of Angenieux Australia Pty. Ltd. The guest of honor was Bernard Angenieux who is paying a short visit to Australia. He is the son of Pierre Angenieux, founder of the Angenieux Company, manufacturer of world-famous lenses for photography and television.

The meeting was preceded by a dinner provided through the courtesy of Angenieux Australia and invitations had been sent to all SMPTE members in Australia and to special guests, including members of the Australian Cinematographers Society, and to film and television cameramen. There were 105 members and guests in attendance. Lord's paper was well received and a vigorous question-and-answer period went on for well over an hour with both Angenieux and Lord answering the questions. — James E. Pemble (Secretary-Treasurer), Agfa-Gevaert Pty Ltd., 4 Eastcote Rd., North Epping, Sydney, Australia, 2121.

Chicago, 20 Sept. — The meeting was held at NBC's Studio D with an attendance of 55 members and guests. The program was in two parts — the first on Trends in Camera Design and the second on Real Time Coding of Motion-Picture Film. The guest speaker was Jack Behrend of Behrends, Inc. He first discussed the new generation of film cameras — light, quiet, self-contained and flexible. As a demonstration the new Aaton camera was shown. In the second part of the program Behrend gave a special report on real time coding. Although real time coding has been a state-of-the-art technique for some time, it has not yet found its way into motion-picture production equipment. Recent developments such as the standardization of a system by the European Broadcast Union and the development of a numeric edge-numbering system are changing this. These advances are expected to make all computerized editing techniques available to film much more sophisticated than is currently the case with videotape. — Paul Markun, Douglas Film Industries, 10 West Kinzie St., Chicago, IL 60610.

Detroit, 26 Sept. — The meeting was held at Ford Motor Company's facilities in the World Headquarters Building in Dearborn with an attendance of 136 members and guests. Ronald Balousek of Producers Color Service presented

a paper entitled "Laser Color Film Recording," describing the laser color film recording system recently installed at Producers Color Service. His presentation was well illustrated with charts and photographs of the equipment. The consensus of the audience was that the resolution, grain and color saturation were good to excellent. Excerpts from an industrial videotape production — *A Special Power* — which had been converted to 35mm film were shown. Of special interest was a full showing of the recently exhibited television show, *King Tut*, which had been converted to 16mm. The audience was obviously impressed by the suppression of the line raster and the low SNR in both productions. — John D. Mayberry (Secretary-Treasurer), Ford Motor Co., Photomedia Dept., WHQ Bldg., Dearborn, MI 48121.

Florida/Caribbean, 28 Sept. — The meeting was held at the L. D. Pankey Institute for Advanced Dental Education in Miami with an attendance of 22 members and guests. The speaker was Robert J. Kerr of Du Pont Magnetic Products. Kerr, who has had some 30 years experience in the magnetic recording field presented an interesting program on the care and handling of 3/4-in videocassettes. He described, with the aid of slides, eight distinct aspects of the handling of cassettes, explaining how careful adherence to his eight rules would result in the elimination of most of the problems commonly encountered in the use of 3/4-in videocassettes, such as skew, jams, mistracking, etc. He discussed characteristics peculiar to 3/4-in videocassettes and provided some useful general information on helical recording. His talk was followed by a lively and rather lengthy question-and-answer period. Following the talk, Gus Menendez, Director, Bio-Dental Communications, conducted a group of members and guests on a tour of the extensive audiovisual facilities of the L. D. Pankey Institute. — Chris H. Lankester (Secretary-Treasurer), 320 North Luna Court, Hollywood, FL 33021.

Houston, 15 Sept. — The meeting was held at the ACA Recording Studios with an attendance of 35 members and guests. The program was on Sound and Sound Recording. The guest speaker was William D. Holford who provided a complete description and in-depth coverage of sound and sound recording. The program included demonstrations and a tour of the updated facilities of ACA — Frances Berger (Secretary-Treasurer), A*V Corp.; home address: 2601 Bellefontaine, C116 East, Houston, TX 77025.

Nashville, 22 Sept. — The meeting was held at the WTVF studios in Nashville with an attendance of 30 members and guests. The speaker was John C. Wyatt of Harris Electronics, a member of the firm's Fiber Optics and Applications Group. The program centered around the application of fiber optics to analog and digital video and to voice and data transmission. Wyatt discussed the involvement of Harris Electronics in the development of fiber optics. Among other applications of fiber optics, Wyatt described their use in computer-to-computer, satellite instrumentation, telecommunications, and CATV distribution. He described the design considerations of fiber optics and some of the specific equipment used in fiber optics transmission. He discussed also the limitations of fibers and presented his ideas as to the future of fiber optics technology. — S. Lee Whitehurst (Secretary-Treasurer), WSM, Inc., P.O. Box 100, Nashville, TN 37202.

Pacific Northwest, 7 Oct. — The meeting was held at the KATU-TV Annex in Portland, Ore., with an attendance of 35 members and guests. There were three guest speakers — Steve Roth of Tektronix, Allen Anderson of KATU and Stan Bennett of Bennett Engineering. Roth presented a paper entitled "A New Precision TV Demodulator" authored by himself and Charles Rhodes which described the new television demodulator being developed by Tektronix. Roth explained the use of new components including surface acoustic wave filters for ideal wave shaping of television signals. Anderson's presentation was entitled "EEP (Electronic Field Production)." He discussed KATU-TV's use of mini-cameras and portable videotape recorders for field production of promos, TV spots, documentaries, etc. Bennett's presentation was a demonstration of the latest generation Ikegami HL77 camera. He used the new Angenieux 15:1 zoom lens in the camera for the presentation. A question-and-answer session was held after each presentation — C. Eugene Newcomer, Pacific Northwest Bell, 1200 Third Ave., Seattle, WA 98101.

Rocky Mountain, 22 Sept. — The meeting was held at the facilities of Computer Image in Denver with an attendance of 23 members and guests. Lee Harrison, founder of Computer Image, assisted by Ed Tajchman, Vice-President for Engineering, explained the beginnings of Computer Image and the goals of the company. He demonstrated the early work which led to the present generation of electronic animation equipment. The audience was then taken on a conducted tour of the facility where the group could view the equipment at work. The meeting was concluded with a demonstration on videotape of the most recent work being done with the company's two animators, CAESER and Scanimatic. The two systems, designed and built by Computer Image, have been in use for several years and are excellent examples of the state-of-the-art in television electronic animation. — Philip C. Vogel, Jr. (Secretary-Treasurer), Eastman Kodak Co., 5555 S. Trenton B-5, Denver, CO 80110.