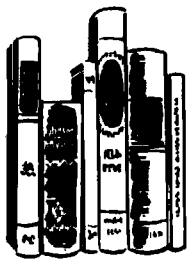


books reviewed

The First Twenty Years: A Segment of Film History

By Kemp R. Niver. Published (1968) by Locare Research Group, Historical Films, Box 46505, Hollywood, Calif. 90046. 176 pp. Illus. 8½ by 11 in. Price $7.50.

Motion-picture historians will find this book intensely interesting and the general reader with some interest in historical films will learn many facts about films by reading the book. It is concerned with the 141 motion pictures selected from more than 3,000 16mm films restored from the Library of Congress paper print collection. Prior to ratification in 1912 of a motion-picture copyright law, it was customary for film producers to deposit with the Library of Congress a paper print (roll) of a completed motion picture as proof of copyright application. Practically all of the original 35mm (nitrate base) films from which the paper prints were made have been destroyed or have disintegrated. The paper prints, therefore, in most cases, represent the only remaining record of these early motion pictures.

Between 1894 and 1914, more than 6,000 paper prints were made from the original negatives and sent from this country and abroad to the Library of Congress for copyright. Until 1952, these prints remained almost unnoticed in the Library files until the Academy of Motion Picture Arts and Sciences started a successful restoration program. By that date, however, only half of the paper prints remained in condition to be restored. The 16mm width was chosen as it provided a film size that could be stored and examined easily for research and educational use.

Two illustrations (page 4) show how some of the paper rolls looked after 50 years of storage and after the restoration. No data are included, unfortunately, on the restoration procedures though this type of information would have enhanced the value of the book.

Throughout the book, enlargements are reproduced (one to six frames) of many of the motion pictures that are described in the text. Besides giving a brief account of the story of each picture, the author has included many interesting comments on camera and direction techniques providing useful historical information. It is probably difficult for the present generation of motion-picture engineers and technicians to visualize the state of the art when motion pictures began to be shown by projection near the close of the last century. The author states (p. 5); "At the start of movement in photography, apparently it never occurred to filmmakers to use the camera for anything other than to record actual incidents or events, and it was not until man learned how to use a camera as a tool to express himself that motion pictures became an art form. Deciding upon a subject for a motion picture was not much of a task in the years between 1890 and 1896 for the only device in which the film could be viewed limited it to about fifty feet in length, with a running time of approximately one minute." And again; "Shortly after motion-picture projection became popular in the late 1890's, the novelty of movement began to wear off. Projection attracted a more sophisticated audience who demanded movies that held their interest not on the basis of movement alone but because something was taking place on the screen with which they could identify. Short lengths of raw stock limited movie makers. Nevertheless, with projection of film a new era of filmmaking began."

Mention is made several times (e.g., p. 14) of the Edison Vitascope, the name by which one of the first motion-picture projectors was known. A quotation from the *New Haven Morning News* for Dec. 4, 1896, contains the statement, "When Edison invented the Vitascope, . . ." This quote incorrectly credits Edison with this invention whereas the Vitascope was invented by Thomas Armat whose U.S. Patents on this device are No. 578,185 and No. 673,992. This error of

credit has been made many times by writers throughout the past 75 years.

The creative work of many early directors and cameramen is described very clearly in this book. Some of their names are now legend in the history of the motion picture, such as Edwin S. Porter, George W. (Billy) Bitzer, F. A. Dobson and D. W. Griffith. Porter was one of the first to use camera panoramic movement, dissolves between scenes and stop motion effects and extreme close-ups. For magical effects in motion pictures, probably no early film producer ever equalled those done by the French filmmaker, Georges Méliès.

A great many of the motion pictures made between 1900 and 1910 were released by the Edison Company, the American Mutoscope & Biograph Company (later American Biograph) as well as by several European companies. An interesting feature of the book is the reproduction of several of the advertising Bulletins used by the American Mutoscope & Biograph Company. Early British film production practices are also described.

The "pirating" of films created a serious problem in those early years and efforts were made by some producers, such as Lubin, to make pictures that could be shown on only one type of projector. The need for standardization was recognized but actually not practised to any extent until 1916 when the SMPE was founded. A doubtful statement appears on page 96: ". . . the Biograph camera perforated its own film. . . ." To the best knowledge of this reviewer, perforation of film was always done independently of the camera with devices known as perforators.

Comedies involving a "chase" were most popular and made the most money but the more creative directors, such as D. W. Griffith, began to produce dramatic stories, happenings such as current events and even operas around 1909-10. For quite a few years producers were reluctant to make motion pictures longer than one reel but the success of several imports of two or more reels encouraged longer American films.

There are three good indexes in the book listing (1) film titles in alphabetic order; (2) film titles in chronological order and (3) names of persons and subjects. The three indexes make the book particularly useful as a reference work.

On the whole, the book is a fascinating account of the trials and tribulations of the early filmmakers and the development of the art and techniques of motion pictures. It deserves a place in every library where film history is appreciated. — *Glenn E. Matthews*, 55 Stoneham Rd., Rochester, NY 14625.

Vocabulaire du Cinema: Film Vocabularly (6th ed.)

Ed. S. I. van Nooten. Published (1968) by the Netherlands Government Information Service, Film Div., 43 Noordeinde, The Hague, Netherlands, under the auspices of The Council for Cultural Cooperation of the Council of Europe. 224 pp. Tables. 4 by 6½ in.

This little book is a very handy companion for the traveling film expert. Not only does it fit very nicely in one's pocket, but it contains, in the short space of only 224 pages, of only 4 by 6½ in, just about nine hundred useful cinema terms in seven languages: French, English, Dutch, Italian, German, Spanish and Danish.

The organization and layout of this little (and very likeable) opuscule are very adequate. Each language section comes on paper with its own distinctive color for fast identification. A numerical list of terms is given, followed by the alphabetic order of the same term in the same language, with their corresponding reference numbers added after each term. The alphabetic list permits the reader to find quickly, in his own particular tongue, the term whose translation is needed. The associated reference number allows the reader to locate rapidly the same term in all the other languages.

The only exception is the first section (French) where numerical and alphabetic orders run parallel. Apparently, French has been selected as the "master language." No explanation for this selection of French as the basic idiom is given, but one can surmise that it is because French is still the language "par excellence" of diplomacy. This is all the more plausible in view of the fact that this valuable work is published under the auspices of the Council for Cultural Cooperation (CCC) of the Council of Europe.

Camera's front view shows compact outline, rear-mounted motor and magazine.

ECLAIR'S GV16: HIGH-SPEED AND PORTABLE

Most high-speed cameras are big and heavy bench instruments. Changing their magazines takes two minutes, sometimes more.

But this one is the Eclair GV16.

The GV16's body weighs 3 lbs., measures 4¼ x 4¼ x 2 inches. Magazine changes take 5 seconds. Loads from 100 to 400 ft. 0 to 250 frames per second. Any lens you want. Very handy.

Very versatile, too. The GV16 comes with an Eclair mount or a C mount, whichever you prefer. And since all GV16 magazines can be removed literally in one second, (even in mid-roll), you can bore sight through the aperture, which is right before your eyes when the magazine snaps off. Or, of course, you can mount a lens with a reflex finder and view as you shoot.

The magazines themselves are versatile. When you run out of film, you simply snap off the old magazine and snap on a new one. No film to thread; no loop to form. That's all done inside the magazine when you load it, before shooting starts. Reloading the magazine is fast and easy, too; and you can do it in daylight if you want to. Both the 400 foot and the 100 foot magazines accept core wound film and daylight loading spools. They both use 16mm film, of course.

The 400 foot magazine measures 17 x 8 x 1½ inches, and weighs 5 pounds. It mounts on the *back* of the GV16's body, which balances the camera and gives it a low profile. The super-compact camera body, (without motor or lens), weighs only 3 pounds and measures 4¼ x 4¼ x 2 inches. The motor weighs another 3 pounds. Stop motion to 250 frames per second with the same gears. 27 volt DC battery operation.

Film movement is rock steady. A double claw engages two perforations at once; an adjustable registration-pin engages the perforation below that. Spring-mounted side pressure-plates guide the film, as well as the one in rear. What else? Pulsing and marking are built in. Numbering is available; and it can be controlled by events, time base or contacting. Tachometer. Heating. Variable shutter. Versatility. GV16.

For a GV16 brochure, write to Eclair at 7262 Melrose Ave., Los Angeles 90046; or at 73 S. Central Ave., Valley Stream, New York 11580

eclair

The Introduction states that "this vocabulary . . . . of cinema terms in common use is designed for those who work in the fields of cultural and educational film and audio-visual education." This purpose is well complied with. Moreover, this small dictionary will be of positive help to one and every motion-picture professional, in whatever field or capacity, who travels on business to any of the seven language areas covered.

About 70% of the book's content can be considered as consisting of technical terms proper, related to all phases of motion-picture production, and this feature makes the book particularly useful for the traveling motion-picture engineer, although, in truth, it must be said that not all the translations given for a specific expression may sound familiar to one's ears. For example, what, according to American use, would be called "Timing" of a negative (318 "etalonnage" in French), appears as "rating, grading," which, of course, is an accepted term in Great Britain; it should be completed as "negative grading." In the Dutch, term 318 appears as "lichtnummering" or "meten the zwarting," which is as much as saying; "to assign light numbers or to measure the density," which is, of course, correct. However the Italian reads number 318 as "verifica" (verification or also determination), which is correct but incomplete. In Carlos Connio Santini's "A List of Motion Picture Technical Terms in Five Languages," *Journal SMPTE*, Feb. 1956, Vol. 65, page 89, this figures as "posa (del negativo)" (or "luce"). The late Carlos Connio Santini, a personal acquaintance and friend of this reviewer, was very well versed in Italian, and the term given by him in his very precise list (which comprises some 250 expressions) comes probably closer to the intended meaning. The German term, given as "lichtbestimmung," is the usual one, whereas the Spanish, given as "comprobación (marcado de luces en laboratorio)," conveys the correct meaning and will be of immediate help to the user, but constitutes, nevertheless, an avoidable circumlocution, in this reviewer's opinion. In Argentina's Spanish speaking laboratories the term used is "clasificación de luces," which is the most concise and to the point Spanish expression that can be found. The Danish, finally, is "justering," which sounds adequate but incomplete to this reviewer, although he must confess that Danish does not figure among the languages he has command of. "Kopilys justering" would, perhaps, be closer to the mark, i.e., printing light adjustment.

This digression on "timing" may serve the purpose of making it clear to the reader that in some cases — not too many — some discernment is needed in order to derive a maximum of benefit from this pocket vocabulary, especially in view of the fact that the introduction states that "in certain cases, a word in one language has no equivalent in the other languages. Where there is so, a short description in the other languages is given." However, "readers are asked to cooperate by drawing attention to any errors and omissions in the present text. Comments should be addressed to: Netherlands Government Information Service, Film Division, 43 Noordeinde, The Hague (Netherlands)." This invitation may make it, perhaps most interesting for professionals working in this field to contribute actively to future improved editions of this valuable book.

While it is true that this book admits of some improvement, it is, nonetheless, most helpful in its present form, and should be in the pocket of anyone who is going to a convention or conference, or making motion pictures abroad, or engaged in engineering activities in distant places. An appendix of conversion tables for emulsion speed numbers, frames projected and time elapsed, temperature scales, weights of film in rolls, and weights and measures in general adds greatly to the usefulness of the book. — *Pablo Weinschenk-Tabernero,* Optical Engineer, Engineering Dept., Movielab Inc.; Home address: 98–17 Horace Harding Expwy., Apt. 12M, Flushing, NY 11368.

CIRCUIT AND CONTROL THEORY

(A group of books reviewed by Pierre Mertz, Consultant, 66 Leamington St., Lido, Long Beach, NY 11561)

A number of books have recently appeared dealing with variable aspects of circuit and control theory. This field is not itself directly involved in that of

motion pictures, television, instrumentation and high-speed photography. Nevertheless it does have some close connections with various parts of these, to the extent that readers of the *Journal* may find a notice of the books uesful, either because the books could help with special problems that they may have, or possibly to widen their knowledge in closely adjacent spheres of interest. A few brief notes are given herewith on each of the books.

Filter Design and Evaluation

By Grant E. Hansell. Published (1969) by Van Nostrand Reinhold Co., 450 W. 33 St., New York, NY 10001. 203 + vii pp. Diagrams. $8^1/_2$ by 11 in. Price $15.00.

This book presents a variety of filter design types, in terms of normalized elements, on the items of attenuation, phase, phase delay, and envelope delay. They are covered in tables and curves. There are also included the procedures for translating from the normalized data to actual data in any given case.

Introduction to Nonlinear Network Theory

By Leon O. Chua. Published (1969) by McGraw-Hill Book Co., 330 W. 42 St., New York, N.Y. 10036. 987 + xvii pp. Diagrams. $6^1/_2$ by 9 in. Price $22.50.

An undergraduate text to cover the theory and techniques for analysis and synthesis of practical large-signal or nonlinear circuits. Covered are gates, voltage regulators, voltage comparators, clippers, modulators, multivibrators, time-base generators, switching circuits, logic circuits, and signal processing circuits. Algorithmic methods for computer solution are also provided.

Network Theory

By Joseph B. Murdoch. Published (1970) by McGraw-Hill Book Co., 330 W. 42 St., New York, NY 10036. 525 + xviii pp. Diagrams. 6 by 9 in. Price $16.00.

A graduate or advanced undergraduate treatment of the fundamentals of linear network theory. The analysis covers free and forced behavior, via complex variable theory, Laplace variables, and convolution. Separate review chapters for the student are provided on complex variables, transforms, matrices, and systems of equations. Modern devices like gyrators and negative impedance converters are also covered.

Linear Systems Analysis

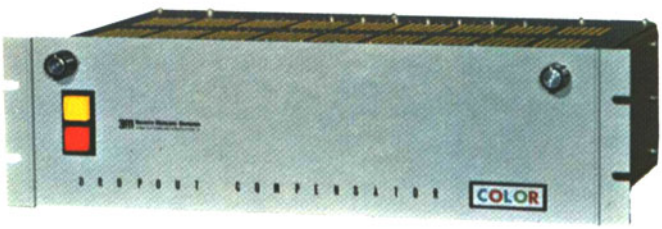
By Laurel J. Lewis, Donald K. Reynolds, F. Robert Bergseth and Frank J. Alexandro, Jr. Published (1969) by McGraw-Hill Book Co., 330 W. 42 St., New York, NY 10036. 489 + xviii pp. Diagrams. 6 by 9 in. Price $16.50.

A program of self-study on mathematical relations in general engineering rather than particular specialties, with an appendix on selected problems.

Theory of Optimal Control and Mathematical Programing

By Michael D. Canon, Clifton D. Cullum, Jr., and Elijah Polak. Published (1970) by McGraw-Hill Book Co., 330 W. 42 St.,

IF YOU'RE GETTING A PICTURE OF ANOTHER ~~COLOR~~, YOU NEED 3M's COLOR DROPOUT COMPENSATOR



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New York, NY 10036. 285 + xii pp. Diagrams. 6 by 9 in. Price $18.50.

The book consists of two parts. The first presents a mathematical procedure for optimizing a multidimensional programing problem. The second gives procedures for the solution of certain discrete optimal control problems.

Theory of Nonlinear Control Systems

By Nicolai Minorsky. Published (1969) by McGraw-Hill Book Co., 330 W. 42 St., New York, NY 10036. 331 + xx pp. Diagrams. 6 by 9 in. Price $16.50.

The book, by a Russian-born pioneer in control theory who has worked for the U.S. Navy as far back as 1923 and is now a professor at Stanford University, covers a stability analysis of nonlinear control systems. The work assumes that the reader is acquainted with the classical (linear) control theory and also with the elements of the theory of differential equations. A brief summary of the mathematical topics required is condensed in Chapter 1.

Digital Simulation of Continuous Systems

By Yaohan Chu. Published (1969) by McGraw-Hill Book Co., 330 W. 42 St., New York, NY 10036. 423 + xvii pp. Diagrams. 6 by 9 in. Price $14.50.

The objective is to show the use of a digital computer in solving systems problems previously solved only with an analog computer. It particularly discusses specific programing languages, i.e., MIMIC, FORTRAN IV and SIMIC, especially for students with little or no programing background.

Circuit Theory: An Introduction to the State Variable Approach

By Ronald A. Rohrer. Published (1970) by McGraw-Hill Book Co., 330 W. 42 St., New York, NY 10036. 314 + xi pp. Diagrams. 6 by 9 in. Price $14.50.

The objective is to place classical network analysis in the framework of modern system theory, to permit the student to understand the literature of current network theory. Future studies of possible interest in the field are indicated at the conclusion.—*Pierre Mertz,* Consultant, 66 Leamington St., Lido, Long Beach, NY 11561.

The Technique of Film and Television Make-Up for Color and Black-and-White (2nd ed.)

By Vincent J-R Kehoe. Published (1969) by Hastings House Publishers, Inc., 10 E. 40 St., New York, NY 10016. 280 pp. Illus. 6½ by 8½ in. Price $16.50.

The second edition of *The Technique of Film and Television,* extensively revised by the author, presents an up-to-date discussion and evaluation of the new make-up materials and techniques that have been developed to meet the stringent requirements of improved films and advanced techniques of cinematography and lighting.

The first edition of this practical and useful book was reviewed in the October 1958 issue of the *Journal* by Wilton R. Holm, who described it as "the most thorough treatment of the methods of make-up that has come to this reviewer's attention." This statement can be applied quite as meaningfully to the second edition.

The book is a meticulously detailed guide for the professional actor or make-up artist and the nonprofessional or beginning filmmaker will find it an invaluable source of basic information and "how to" suggestions.

This is an extremely practical book. Exhaustive lists, tables and charts of make-up materials and techniques provide directions for making up for any cinematic requirement. The reader will learn how to make the young look old, the old look young, how to make monsters out of normal people, how to create witches and devils and how to make an ordinary man or woman into the "double" of some great historic character.

Some of the make-up techniques seem slightly horrendous to the average reader — for example, that of applying latex to a young face to make it look aged or even mummified. However, in spite of all the exotic uses to which they are put, some of the make-up materials and techniques might be useful for street make-up.

The author, who is Director of Research of the Research Council of Make-Up Artists, has been make-up artist for more than 3,000 films. He has been in charge of make-up for many of the stars of stage and screen. — *Edit.*