distinctive for their high theoretical level combined with a clear and simple style understandable to the many readers engaged in all phases of motion-picture techniques as well as to film directors, cinematographers and sound engineers. Many of his books and articles have been translated into foreign languages and distributed abroad.

He had often represented his country as a delegate at various international congresses and conferences where he presented reports. He was an honored President of UNIATEC and had been awarded a Medal and Diploma by the international association Intercamera.

He had received several governmental awards of merit in recognition of his unique and outstanding contributions to Soviet motion pictures.

An eminent scientist of world renown and a man of kind heart, Evsey Michailovich Goldovsky will be sadly missed and will be always remembered by his colleagues and his many friends all over the world and by the many students who have benefitted from his knowledge and wisdom.

Walter J. Spiro

Walter J. Spiro died September 8, 1971, in Dallas, Tex. He was Comptroller and Office Manager of Producers Service, Inc., in Dallas. From 1958 until 1969 he served as Comptroller and Office Manager of Jamieson Film Co. At the time of his death he was a Manager of the Dallas/Fort Worth Section of the SMPTE.

books reviewed

Biograph Bulletins — 1896–1908

Compiled by Kemp R. Niver. Published (1971) by Locare Research Group. Distributed by Historical Films, Box 46505, Los Angeles, CA 90046. 464 pp. Illus. 8½ by 11 in. Price $20.

Students of American film history are greatly indebted to the author of this scholarly and attractive research work, the fourth of his books devoted to chronicling various aspects of the U.S. motion picture industry's past.

His new volume is concerned with what was probably the most important of the early studios, the American Mutoscope & Biograph Company. From a start in the manufacturing of cameras, projectors and the Mutoscope, a flip card viewing device, the firm, known popularly as The Biograph, turned to the production of films. The year was 1896, and in 1902 the company issued a catalog listing close to 2,500 subjects.

Mr. Niver's book is a remarkable collection of the material used by Biograph to advertise its films, which were sold outright to exhibitors. Prices varied. Some pictures fetched $5.00 for a 25-ft length, with 2 lengths being the average. Imported Méliès Star films commanded $12.00 a length, while a "Bargain List of Comedy 'Hit' Subjects" went for 10 cents a foot for pictures averaging 35 ft. By 1908, *The Outlaw*, a 677-ft subject "depicting the deeds of a modern 'Fra Diavolo'" was quoted at 14 cents a foot.

In order to sell to the exhibitors, Biograph issued regularly a number of handbills giving a brief synopsis of the plot, the picture's length and cost, its release date and, quite often, an illustration from the film. No cast or credits were included, since it was felt that it would not help sales. The film medium itself was such a novelty at the time that names of actors or directors—let alone technicians—were not a consideration.

Biograph Bulletins 1896–1908, a large-format volume ably edited by Bebe Bergsten, contains a nearly complete collection of these handbills, with only a dozen missing out of the 1370 issued. In addition, the book reproduces press comments of the period, sales letters and related data. A general index of names is provided. All films are listed separately, with the names of their cameramen, dates of photography and copyright, and their current availability from the publishers. There is also a cross-index of cameramen and their credits.

While no separate listing of directors or actors is included, Mr. Niver's excellent notes and marginal comments disclose such familiar names as D. W. Griffith, and cameramen "Billy" Bitzer, Wallace McCutcheon, Arthur Marvin and others who often doubled as directors. Casts included the Gish sisters, Mary Pickford, Lionel Barrymore and Linda Arvidson, D. W.'s first wife.—*George L. George*, Directors Guild of America, 110 W. 57th St., New York, NY 10019.

The History of the British Film — 1918–1929

By Rachael Low. Published (1971) by George Allen & Unwin Ltd., Park Lane, Hemel Hempstead, Herts., England. 544 pp. Illus. 6 by 9 in. Price £7.35.

After a 20-year lapse, Dr. Low has resumed her authoritative survey of British cinema. The three previous volumes, published between 1946 and 1950, covered the periods 1896–1906, 1906–1914, and 1914–1918. The first two were written in collaboration with Roger Manvell. The earlier works established Dr. Low's reputation as a highly competent researcher familiar with her subject, a reliable analyst and organizer of data, and a writer whose literary style combines lucidity with directness. These qualities make her new book an invaluable and definitive work on the subject.

The period covered in the present volume, 1918 to 1929, takes us from the end of World War I to the arrival of the commercial sound film in England. It touches, in turn, on all aspects of the British film industry — production, distribution, exhibition — and appraises its aesthetic qualities in theory and in practice.

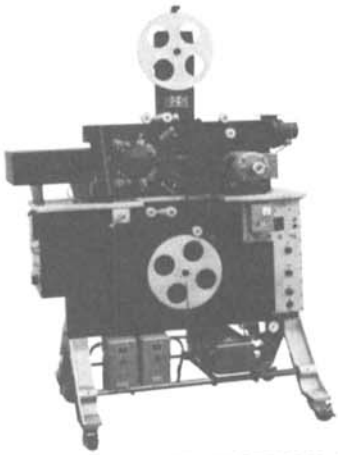
Those were difficult years. In 1920, the Federation of British Industries sponsored a drive for desperately needed Government assistance. It came in 1927, as Parliament passed the Cinematograph Films Act, a protectionist statute that was to remain on the books for 40 years. However it did not prove to be of real help and the industry underwent, in 1929, a stringent reorganization.

Production is discussed in a lengthy section that examines the then prevailing techniques and available facilities. At the end of the war, there were 23 main studios with 87,000 ft² of floor space. During the 20's, some 200,000 ft² were either built or planned. The number of films produced fluctuated beteen a high of 145 in 1920 and a low of 37 in 1926, with an average of 96 a year.

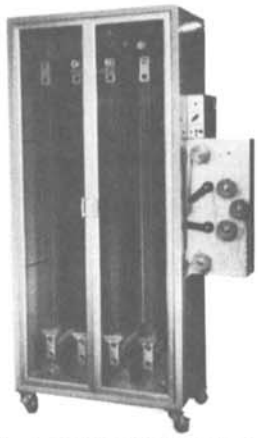
That period also saw the separation between the functions of the producer, interested in the business end, and the director, in charge of all the creative aspects of filming. Thus Michael Balcon is cited as the producer who made possible the early work of director Alfred Hitchcock. Acting, editing, designing and writing were areas in which progress followed industrialization and the emergence of new artistic concepts.

Camera techniques are described, with Bell & Howell, Cinchro, Darling, Debrie, Moy, Pathé, Vinten and Williamson equipments noted as widely used. In 1921, a small electric motor was introduced for studio photography, replacing the time-honored hand-cranking, generally standardized at 60 ft/min. In this context, the book mentions a paper read in 1926 to the Society of Motion Picture Engineers concerning the projection speed of film and suggesting 90 to 95 ft/min for comedy and 80 to 85 ft for drama.

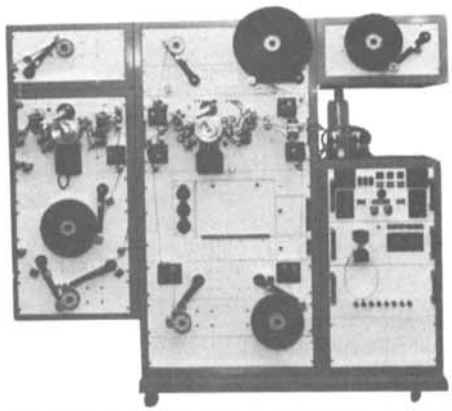
Other sections cover in extended and informative fashion color cinematography, animation, documentaries and newsreels. Throughout the book, the names of personalities who participated in the development of British film are cited and their contributions objectively assessed. Censorship, the educational film and the viewing public are also discussed. The book closes with a comprehensive bibliography, a general index, and a list of some 850 British films of the period and their essential production data.—*George L. George*, Directors Guild of America, 110 W. 57 St., New York, NY 10019.



3.16 TO SUPER 8 REDUCTION PRINTER

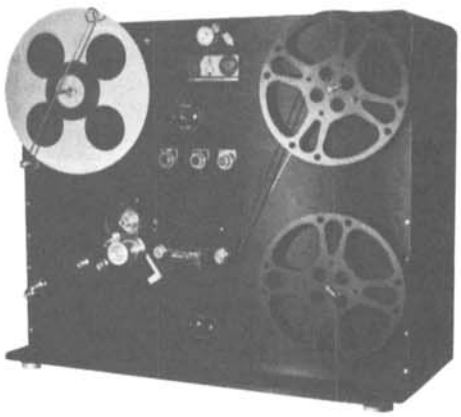


4. LOOP CABINET



5. ADDITIVE COLOR CONTACT PRINTER

6. ME-4 PORTABLE PROCESSORS



7. PRECISION SLITTERS

8. PROCESSING TAPE SPLICERS

for further information please write to:

PROFESSIONAL EQUIPMENT DIVISION
HOLLYWOOD FILM COMPANY
956 NORTH SEWARD STREET / HOLLYWOOD, CALIFORNIA 90038 / AC 213-462-3284 / TELEX 67-3505

The Documentary Tradition: From Nanook to Woodstock

By Lewis Jacobs. Published (1972) by Hopkinson and Blake, 329 Fifth Ave., New York, NY 10016. 530 pp. + Preface, Table of Contents. Illus. 6 by 9 in. Paperbound. Price $5.50. (Clothbound edition, Price $10.00).

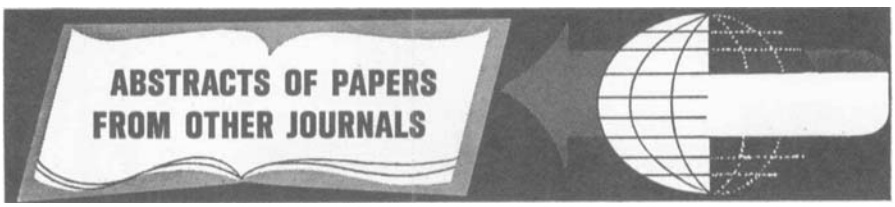
The writings (reviews, essays, selections from books, interviews, program notes and evaluations of 91 directors and critics) have been selected and arranged chronologically by Lewis Jacobs for a remarkable survey of the development of the documentary film. Mr. Lewis has provided a Preface, an introductory essay and an introduction to each of the five sections into which the book is divided. In the introductory essay ("Precursors and Prototypes (1894–1922")) he notes that "The earliest hint of the character of the documentary was evident in the very first motion pictures projected on a screen, W. K. L. Dickson's *Record of a Sneeze* (1894) . . ." Frames of the *Record of a Sneeze* (which is exactly that—the record of the sneeze, from beginning to end, of a mustachioed middle-aged Victorian type, is used a frontispiece. In an odd sort of way it is remindful of some of the Andy Warhol "documentaries."

The five sections of the book and the introductions by Mr. Jacobs are: 1922–1930, "The Feel of a New Genre"; 1930–1940, "From Innovation to Involvement"; 1940–1950, "The Military Experience and After"; 1950–1960, "The Turn Toward Conservatism" and 1960–1970, "Documentary becomes Engaged and Vérité."

The study of the development and influence of the documentary genre depends for its effectiveness (and "vérité") on selection — selection of the reviews and criticisms contemporary with the release of the films under discussion. Each piece of writing in the anthology provides insight not only into the particular film or films under discussion but into a particular culture — a particular time and place in history.

Some of the pieces are as short as three paragraphs (e.g., Judith Crist's review of *To Die in Madrid*) and some as long as 20 pages (e.g., "Thirty Years of Social Inquiry," an interview with Willard Van Dyke (one of America's leading documentary filmmakers) reported by Harrison Engle.)

The selection of these writings to provide a coherent picture of the development of the documentary film and its relation to the cultural and social changes taking place in this country includes a wide range of material, some of it from privately published pamphlets and from little magazines long out of print. A selected list of documentary films made during the particular period is given at the end of each section. A selected Bibliography and a list of principal producers of documentary films are given at the end of the book.—*Edit.*



Abstracts of papers appearing in other journals chosen for their importance and possible value to researchers, as well as those of timely interest, are published in the *Journal* from time to time. Many translations of abstracts from foreign journals, chiefly those of the USSR, are made available to the *Journal* by the Research Laboratories of the Eastman Kodak Company. As a rule, translations are made of the abstracts and not of the papers. The journals in which the papers appear can be consulted at some libraries. Current issues of *Tekhinika kino i Telvidinya* can be consulted at, or borrowed from the Society's Headquarters Office.

Those requiring definitive and thorough searches of current literature and patents are referred to *Abstracts of Photographic Science & Engineering Literature* (*APSE*), produced by the Graphic Arts Research Center, College of Graphic Arts and Photography, Rochester Institute of Technology, Rochester, NY 14623, with the editorial cooperation of the Society of Photographic Sciences & Engineers.

The subject areas are grouped below:

Holography
Light Sources
Optics
Photographic Theory and Materials
Projectors
Sound Recording and Reproduction
Special Applications
Television

HOLOGRAPHY

The influence of the properties of a photographic material on the quality of an image reconstructed from a hologram (in Russian), V. N. Sintsov. *Zh. Nauch. i Prikl. Fotogr. i Kinematogr., 15:* 379–386, No. 5, Sept./Oct. 1970.

A review of the effect of the photographic properties of the recording material on the quality of picture reconstructed from a hologram is based on a survey of the literature. (Bibliography of 63 references.)—S.C.G.

Statistical distribution of irradiance in the creation of a hologram, David Vilkomerson, *Jour. Opt. Soc. Am., 61:* 929–941, July 1971.

The distribution of irradiance on the hologram plane during the creation of holograms of physical objects (toy trains, etc.) is shown to be described by the noncentral chi-squared distribution. The method of calculation of the irradiance distribution from the ratio of reference-beam to object-beam powers is presented, and irradiance distributions for several different beam ratios are shown. From these distributions, the relation between nonlinearity of recording and holographic efficiency can be deduced, given the response characteristics of the hologram-recording material.

LIGHT SOURCES

Apparatus with quartz-halogen lamps for motion-picture lighting (in Russian), V. E. Sokolova, G. A. Golostenov and G. L. Irskiĭ. *Tekh. Kino i Televideniya, 14:* 34–40, Sept. 1970.

The advantages of quartz-halogen (tungsten-halogen) lighting for motion-picture studio work are discussed and an account is given of Soviet-made apparatus using lamps of this type.—S.C.G.

An explosion lamp (in Russian), A. E. Boĭtenko, E. P. Matochkin, and A. F. Fedulov. *Priborȳ i Tekh. Eksp.*, 201–203, No. 2, 1970; *Ref. Zh., Fotokinotekhnika*, Abstract No. 7.46.75, 1970.

A plasma light-source of the explosion type is described. It has a temperature of 2×10^4°K, it illuminates an area of about 300 cm², and the duration of the light is about 40 ms. The working gas is air. The explosion lamp is intended for the high-speed photography of rapid nonluminous processes.—S.C.G. (Translated from *Ref. Zh., Fotokinotekhnika*)

OPTICS

More about optical systems for production of large color separation negatives from small transparencies-optical illumination systems, Wakimoto Zenji. *Asian Printer, 9:* 25–30, No. 3, 1969, *Ref. Zh., Fotokinotekhnika*, Abstract No. 7.46.145, 1970.

Large magnifications from a small original may show objectionable grain. Of the three forms of illumination, condensed, diffuse-condensed, and diffuse, the last gives the least noticeable grain and also reproduces the widest density range. However it requires a larger exposure.—S.C.G. (Abridged from *Ref. Zh., Fotokinotekhnika*

A positive approach to the scratch and dig problem, Nathan T. Wilcox and Arthur F. Woodrow, *Image Technology, 12:* 23–25, Oct./Nov. 1970.

It has become apparent to the optical industry that current methods of scratch and dig evaluation are unsatisfactory. This situation is due, primarily, to (1) the subjectivity of procedures relying on unaided visual comparison and (2) standards that cannot be certified due to instability factors. We have developed a system of testing in which stable, standard reticles are employed. Certification of these reticles is traceable to the National Bureau of Standards. These reticles, as components in a hand comparator, can be utilized in a simple and reliable test.

Optimization of the thickness of the separate glasses of a wide-band correction filter (in Czech), L. Dabergerova. *Jemna Mechanika a optika, 15:* 40–42, No. 2, 1970; *Tekh, Kino i Televideniya, 14:* 78, Aug. 1970.

A least-squares method is described for the calculation of the thicknesses of the separate glasses constituting a correction filter. The method allows a color-correct-