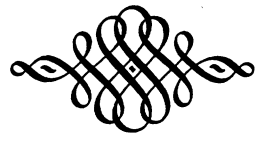
HOLLYWOOD QUARTERLY



Volume I · JANUARY 1946 · *Number 2*

UNIVERSITY OF CALIFORNIA PRESS
BERKELEY AND LOS ANGELES

Contents

NOTES AND COMMUNICATIONS *(Continued)*

BOOK REVIEWS

Why Wait for Posterity?

IRIS BARRY

IRIS BARRY is one of the founders of the London Film Society. She is also one of the founders of the Museum of Modern Art Film Library, where she is now curator. In addition to being a regular reviewer for the New York Herald Tribune *Books*, she is the translator of Bardèche and Brasillach's *History of the Film*, the author of several novels, and has written widely on the motion picture.

SINCE THE cobbler's children are always the worst shod, it is natural enough that Hollywood should be almost the last place in the world where the films of the past are esteemed seriously. Film executives have been known to speak rather grandly now and then about preserving films for posterity, in the spirit, presumably, of those who seal up cans of Spam, phonograph records, and newspapers in the foundations of new buildings. For, though the producing companies all scrupulously preserve their negatives, since in their physical possession and through the copyright act the legal ownership of story rights is thus assured, nothing has ever been done by the industry itself to make it possible to *see* the screen classics of the past. It would probably be absurd to expect it to do so, for several reasons. First, it could not possibly be profitable. Second, the problem of selection might be an embarrassing one. But chiefly such an undertaking would run counter to the main impulse of the film community. The men who finance and produce motion pictures, as well as the men and women who make them, are inevitably and primarily concerned, not with history or the films of the past, but with the films they are planning for tomorrow or making today. It is, likewise, not painters or sculptors who establish museums or become art historians!

Yet the film companies have made one great concession in this direction. To make it possible for outstanding films of the past to be seen and studied they have permitted, under necessarily severe restrictions and for strictly noncommercial purposes, an educational institution to obtain prints of important older films at the cost of making the prints, and to circulate these to other nonprofit organizations. The institution that does this is the Museum of Modern Art in New York. Its exhibitions of painting, sculpture, architecture and housing, primitive and folk art, industrial design and the like are nationally famous. Its exhibitions of films are becoming so, for in the course of a year, at daily showings in the Museum auditorium, a series of sixty-eight American and thirty-six foreign motion picture programs now runs the gamut of international film history from Louis Lumière and Edison's films of 1895 to John Huston's *Maltese Falcon* and Capra's *Why We Fight* series. Extensive series of these same "old" films are also given regularly, among other places, at the Art Institute of Chicago, the Philadelphia Museum of art, the San Francisco Museum, Vassar College, Cornell University, and the University of Texas. The audience is a considerable one, and it is growing.

Founded in 1935, with John Hay Whitney as its president, and financed by subscriptions from patrons of the Museum and a three-year grant from

the Rockefeller Foundation, the Museum of Modern Art Film Library was originally launched auspiciously in Hollywood, and its plans were warmly approved at a party which, with Mary Pickford's permission, the officers of the organization held at Pickfair in August, 1935. Louella Parsons even went to town about it twice that very week! At the party, Will Hays extended his favor to the enterprise before a distinguished group of guests. Sam Goldwyn, Harold Lloyd, and Walt Disney, as well as Miss Pickford herself, promised to contribute to the collection of outstanding films of the past which the Museum planned to amass, "so that the films may be studied and enjoyed as any one of the other arts is studied and enjoyed." Prints of the Lloyd comedies, incidentally, were the first to arrive, which is why the work of that admirable comedian, his ageless *The Freshman* and inimitable *Grandma's Boy,* were the first to be familiar to a whole new generation.

The problem of obtaining prints from the big producer-distributor companies was necessarily more complex. Terms were finally worked out that proved acceptable to the legal departments of Paramount, Loew's, Twentieth Century–Fox, Warner's and Universal, so that early in 1936 the Film Library had actually begun to rent out its first series of programs[1] to colleges, museums, and other nonprofit organizations, which were thus for the first time able to institute a study of the growth, technique, aesthetics, and sociological content of the most popular and liveliest of the arts. Gradually the Museum's collection grew. Between 1936 and 1939 a selection of French, German, Russian, and Swedish pictures was obtained direct from negatives in Europe, so that epochmaking productions such as *The Cabinet of Dr. Caligari* and *Potemkin* could be seen once more in uncut versions. In view of what was to happen shortly afterward in Europe this was particularly fortunate, for much has since been destroyed there. Public-spirited individuals like Mrs. Edwin Knopf, who donated a print of the Eleanore Duse *Cenere* of 1916; Mrs. Philip Manson, who contributed the Asta Nielsen *Hamlet* of 1920; and Messrs. Krimsky and Cochran, from whom *Maedchen in Uniform* was obtained, all added to the muster. In 1939 the late Douglas Fairbanks placed all his own negatives, as well as prints of some of his earlier pictures, in the Film Library's safekeeping. William S. Hart was next to follow suit, and recently Colleen Moore contributed prints of many of the pictures she had starred in. In 1939 all that remained of the old Biograph Company negatives were acquired from R. H. Hammer (and what a problem they constituted, with their single perforations!). In 1940 there was added what remained of the Edison Company's material. Most important and most complex, the post-Biograph films of D. W. Griffith had already been secured.

Since so little of the work of the Film Library is known to the body of filmmakers, it will perhaps be useful to elaborate somewhat upon the many technical and financial obstacles that were encountered.

The Museum of Modern Art, unlike

[1] Entitled "A Short Survey of the Film in America" and including *The Great Train Robbery,* Sarah Bernhardt's *Queen Elizabeth, Sunrise, All Quiet on the Western Front,* and Disney's *Steamboat Willie.*

most other famous museums, has no endowment and is in receipt of no public funds. Established in 1929, exactly nine days after the stock market crash, it has nevertheless developed steadily through depression and war. In 1939 it acquired its own building, and raised the money to pay for it in full. But its ever-increasing annual budget has never been met by its income[2] from a growing attendance, phenomenal sales of publications, rentals of exhibitions and film programs, and the annual dues from memberships, which now exceed 8,000. Nor have the extremely generous contributions of its trustees and supporters always entirely covered the resulting annual deficit. As one of its largest and costliest departments, the Film Library has therefore, save for the first years, also continually been short of funds. No gift of money has ever been made, nor has even one $1,000 life membership ever been subscribed by anyone in films, and in ten years only two contributions have been received from any film organization.

It is hardly necessary to explain how costly a medium celluloid is. The storage and insurance charges for the Film Library's 18,000,000 feet of film are alone a large item. When the American producer-distributors permitted the organization to obtain prints from the negatives which they themselves preserve, it was on condition that the cost of the prints and of print replacements be met by the Museum. Only to *look* at a film costs money when it is necessary to pay to have a print made before even an exploratory look can be given to it! Furthermore, the Museum was faced with the even heavier expense of making duplicate negatives from foreign films of which prints had been obtained abroad, because it was the only way both to insure preservation and to make certain of a supply of further prints as they should be needed in the future.

Beyond these financial problems lay graver ones of a technical nature. We might assume, and almost everyone will agree, that such landmarks of the cinema as *Tol'able David, It Happened One Night, Male and Female, Greed,* and *The Black Pirate*—to take but a few titles almost at random—are among the "musts" in any retrospective of film history. Let us see what even so brief a list has entailed.

To begin with *The Black Pirate:* One technicolor print of this was turned over to the Museum by the actor-producer himself, along with the rest of the Fairbanks material. His estate now owns everything, but the Film Library holds the material and has the right to use it noncommercially. A second print had been acquired, with much else, when the Harvard University Film Foundation transferred its collection to the Museum in 1936. The Harvard print dated from 1926, the print from Fairbanks was by no means new, and Fairbanks had made *The Black Pirate* in two-color technicolor, which has long been obsolete. No new color prints can be made. As there was obviously no advantage in letting the two original prints deteriorate unseen in a vault, they have been occasionally

[2] Income of the Museum of Modern Art for 1943–1944:

Earnings	$284,226.39	
Contributions	280,305.81	
Memberships	61,513.90	
		$626,046.10
Government contracts	394,676.60	
		$1,020,722.70
Expenditures		$1,099,805.45

projected with special care at the Museum, where they have given delight to a few thousand people. But they are now (as they would equally have been had they remained in the vault) at the point of final deterioration. The only way to salvage something of this splendid film, either for living students or for posterity, is therefore to make a duplicate black-and-white negative from which future prints—still in black-and-white, of course—can be made. The Museum's annual appropriation for this kind of work is inadequate to its needs, and there is other and equally vital material that calls for urgent attention. But *The Black Pirate* has been duplicated and will be preserved, even though not, alas, in its original form.

Happily, the films *Male and Female* and *It Happened One Night* presented no difficulties except for an allocation of money for future replacement of existing prints and the obtaining of permission—not yet forthcoming—to circulate the latter. Such permission is often delayed, or subsequently withdrawn temporarily, because a remake is due or because the 16-mm. or 35-mm. rights have been leased to a distributor.

The case of *Tol'able David* was a grave one. The film was remade in 1930, and apparently the original negative no longer exists; certainly it has not been traced. Fortunately, Richard Barthelmess himself had kept a good print in his possession. This he recently presented to the Film Library, and so, now that consent has been obtained from its legal owners, a duplicate negative and positive prints have been made.

The story of *Greed* has always been an unhappy one, as with many of Von Stroheim's films. The Museum obtained both 16-mm. and 35-mm. prints, which were made, of course, by the owner-producer company from its negative, though paid for by the Film Library. No one regrets more than the staff of the Library that these prints are not the equivalent of the film as Von Stroheim finished it; but I am among those who would far rather see the briefer (and magnificent) version that does exist than nothing at all, and it does seem a little odd that the Film Library should be abused, as it has been, because someone else had cut the Von Stroheim picture!

The Film Library has faced another kind of problem with certain early talking pictures. In some, the negative sound track has shrunk, so that even with special laboratory work it is difficult to get satisfactory results. There were also early Vitaphone sound-on-disk subjects, like *The Lights of New York,* which seemed to possess historical interest, so that the Film Library had to have a special re-recording job done, again at the Museum's expense, with Warners' consent. It would be only fair to add here that, friendly and coöperative as all the major companies have been, Warners has from the beginning been the most coöperative of all.

I have already referred to the technical difficulties which the old Biograph negatives presented. Thanks to the wonderful craftsmanship that characterized that firm's work, they were found to be in prime shape although they had been stored in a tumbledown building, with broken windows, which the Fire Department had condemned as a menace. Incidentally, the quality of the original laboratory work on negatives proves to be the most impor-

tant factor in determining the life of any film. Film rushed through the laboratory carelessly and in haste will deteriorate in less than a decade. Careful workmanship has kept other negatives sound for fifty years.

But when the Film Library was founded it was not the Biograph films only that had been lost to view. Most of D. W. Griffith's major productions were inaccessible even to him, for unhappily he had been a creative genius but not a businessman. Some of his most famous pictures were being held against unpaid storage bills; others were afterward included in a receivership sale; and the Film Library made it its first obligation to rescue as much as possible of this material. When recovered, by no means all of it was in good shape. The holding laboratory had already reported some of the negatives in "very bad condition," and not all prints were complete. The negative of *Intolerance,* for example, that was finally obtained measured 10,872 feet, although two positive prints measured approximately 11,000 feet each and one acquired earlier measured 11,446 feet. Footage missing from the negative was consequently duped from the prints and cut in to provide the most complete record of this superb film that it was possible to make. Only lack of adequate funds has prevented the Museum from taking heroic measures with all the Griffith material. I am of the opinion that new dupe negatives of his films should, ideally, have been made up immediately; but the Museum had, even in its first years, spent close upon $10,000 in laboratory work on Griffith pictures alone. Therefore we can only hope to continue this work of restoration gradually, year by year. On the other hand, if D. W.'s memorable contributions to Biograph and thereafter are visible at all, it is due solely to the efforts of the Film Library. And, if the Museum has rather noticeably not been besieged by present-day directors, editors, or cameramen wishing to study the work of Griffith, and of Bitzer, his master cameraman, thousands of students and admirers outside the industry have during the past ten years been able to enjoy it again.

Unfortunately, in many places the programs of the Film Library are shown only through 16-mm. prints. Everyone knows that 16-mm. projection frequently leaves much to be desired, not only because of the smallness of the screen and the length of the throw, but because all too often the prints are of inferior quality. This may be because they have been made up from dupe negatives, themselves made from worn or incomplete prints. As I have said earlier, sometimes *this is all that remains.* In art museums we are forced to content ourselves with casts made from broken sculptures; yet these are esteemed highly. It is also unfortunate that the making of 16-mm. prints, particularly since the war, is often rushed and poor work. Poor visibility on the screen is just as likely, or more likely, to come from poor projection—inadequate illumination, dirty aperture, inaccurate focusing, or sound adjustment. It is a pity, then, that all too many colleges, museums, or film societies where the Museum's film programs are shown are equipped with 16-mm. projectors only. But in view of the high cost of 35-mm. equipment and of employing a licensed operator to run it we must expect this situation to persist. Even in Hollywood, for many years past, *the only showings*

of films from the Museum's collection have been confined to the 16-mm. ones. This, too, is a surprising and regrettable circumstance, which one earnestly hopes that the Guilds will ultimately remedy.

Whatever the cost, the difficulties, and the shortcomings in the presentation of the Film Library's programs, the basic question is whether the project was worth while. What, really, is the point in dragging old films back to light?

First, I believe that it benefits the general esteem and standing of the motion picture industry as a whole; for if the great films of the past are not worth taking seriously and are not worth reëxamination, then presumably neither are the "great films" of today. It would be unthinkable that the only books available to literary men and women should be no more than those published in the past year or so. And what critical judgment could then be exercised? The opportunity to refer again to the more important films of the past must surely serve the same purpose as a library of books serves a writer. Then too, there is of course the simple question of pleasure: films like the brief *Uncle Tom's Cabin* which Edwin S. Porter made in 1903, or Ince's *The Italian* (of which only one 16-mm. print is known to exist), or Flaherty's *Moana,* Dreyer's *Passion of Joan of Arc,* the early Seastrom pictures, *Million Dollar Legs,* or Keaton's *The Navigator* are a delight to look upon, besides being packed with ideas and ingenuity. Do you want to see Billy Sunday or Caruso, the Czar, Pavlova, or Bernhardt? Are you curious to know what the original "vamps," "flappers," or "bright young people" looked like? Only the films of the period—*A Fool There Was, Our Dancing Daughters, Flaming Youth*—can accurately and fully serve as documentation. Finally, there is the value that the older films may have to technicians of today. Was there not something about the cutting of *Intolerance* or *Potemkin* or *Public Enemy,* something about the camerawork in *The Last Laugh* or that romantic early Garbo picture *The Atonement of Gosta Berling,* that it might be profitable to recall?

It is upon the last question that Hollywood as a whole might perhaps most usefully linger. The Museum of Modern Art has collected the material, but, beyond a certain point, only Hollywood can help the Museum to use it fully and profitably. To be specific, one of the next tasks that faces the Museum's Film Library is the preparation and compilation of programs that will illustrate and analyze film technique. There should obviously be available studies of the work of cameramen, and of editors, a comparison of the work of directors in handling similar dramatic situations, an inquiry into the past use of sound and music. This can be best done by a careful selection of sequences and scenes from films, rather than by whole films. It will be a long and complex job, and an expensive one.

Now is the time for Hollywood and its technicians to join with the Film Library in a collaboration that would once and for all give precise information to students everywhere about the styles and innovations, the creative contributions, of the men and women working in motion pictures everywhere in the world for the past fifty years—the achievements that have car-

ried the motion picture from its celebrated infancy to near-maturity and made it indeed an art (as well as an industry) with which one can truly be proud to be connected.

The Atonement of Gösta Berling. (The Story of Gösta Berling.) Svenska-Biograf, 1923. Director, Mauritz Stiller. Novel, Selma Lagerlof. Scenario, Mauritz Stiller and Ragnar Hylten-Cavallius.

The Black Pirate. Allied Artists, 1926. Director, Alfred Parker. Adapted by Jack Cunningham from a story by Elton Thomas (Douglas Fairbanks).

The Cabinet of Doctor Caligari. Decla-Bioscop, 1919. Director, Robert Wiene. Scenario, Carl Mayer and Hans Janowitz.

Cenere. Ambrosio-Caesar-Film, 1916.

Flaming Youth. First Nat'l, 1923. Director, John F. Dillon. Novel, Warner Fabian. Scenario, Harry O. Hoyt.

A Fool There Was. Fox, 1914. Director, Frank Powell. From the play based on Rudyard Kipling's poem *The Vampire.*

The Freshman. Pathé, 1925. Directors, Fred Newmeyer and Sam Taylor. Story, Sam Taylor, John Gray, Ted Wilde, and Tim Whelan.

Grandma's Boy. Pathé, 1922. Director, Fred Newmeyer. Screen play, Hal Roach, Sam Taylor, and Jean Havez.

Greed. MGM, 1923. Director, Erich von Stroheim. Novel, *McTeague,* by Frank Norris. Scenario, Erich von Stroheim.

Hamlet. Art-Film, 1920. Director, Svend Gade. Scenario, Erwin Gepard.

Intolerance. Wark Prod. Corp., 1916. Director, D. W. Griffith.

It Happened One Night. Col., 1934. Director, Frank Capra. Short story, *Night Bus,* by Samuel Hopkins Adams. Screen play, Robert Riskin.

The Italian. 1915. Director, Thomas Ince.

The Lights of New York. WB, 1928. Director, Bryan Foy. Story and scenario, Hugh Herbert and Murray Roth.

Maedchen in Uniform. Deutsche Film, 1931. Director, Leontine Sagan. Play, *Yesterday and Today,* by Christa Winsloe. English text, Donald Freeman.

Male and Female. Par., 1919. Director, C. B. DeMille. Play, Sir James Barrie. Scenario, Jeanie Macpherson.

The Maltese Falcon. WB, 1941. Director, John Huston. Novel, Dashiell Hammett. Screen play, John Huston.

Million-Dollar Legs. Par., 1932. Director, Edward Cline. Adapted by Henry Myers and Nick Barrows from story by Joseph L. Mankiewcz.

Moana. Famous Players–Lasky, 1920. Written and directed by Robert J. Flaherty.

The Navigator. MGM, 1924. Directors, Donald Crisp and Buster Keaton. Story, Jean Havez, Clyde Bruckman, and Jo Mitchell.

Our Dancing Daughters. MGM, 1928. Director, Harry Beaumont. Screen play and story, Josephine Lovett.

The Passion of Jeanne d'Arc. La Société Générale des Films and L'Alliance Cinématographique Européenne. 1928. Director, Carl-Théodore Dreyer. Sources, trial records. Scenario, Carl-Théodore Dreyer, in collaboration with Joseph Delteil.

Potemkin. First Studio of Goskino, Moscow, 1925. Director and writer, S. M. Eisenstein.

Tol'able David. First Nat'l, 1922. Director, Henry King. Screen play, Henry King and Edmund Goulding.

Uncle Tom's Cabin. 1903. Edwin S. Porter.

Why We Fight. U.S. Signal Corps. (All under supervision of Col. Frank Capra.) No. 1: *Prelude to War.* Narration, Maj. Eric Knight and Capt. Anthony Veiller. No. 2: *The Nazis Strike.* Narration, Maj. Eric Knight and Capt. Anthony Veiller. No. 3: *Divide and Conquer.* Narration, Maj. Eric Knight and Capt. Anthony Veiller. No. 4: *The Battle of Britain.* Narration, Capt. Anthony Veiller, Maj. Eric Knight, and S. K. Lauren. No. 5: *The Battle of Russia.* Narration, Capt. Anthony Veiller.

Seeing with the Camera

IRVING PICHEL

IRVING PICHEL has acted on the legitimate stage and in motion pictures; he has written extensively about these two forms; and he has directed on Broadway, in the little theater, and in Hollywood. His two latest pictures are *Tomorrow Is Forever* and *The Bride Wore Boots.*

I

IT IS typical of all forms of spectacle before the motion picture—the theater, the circus, the sports field—that the spectator remains in a fixed position at a determined distance from the action he sees. The spectator at a football game watches the movement of the two teams in relation to their respective goalposts. The goals remain at fixed distances from him. Only the players move. The spectator participates in their movement in so far as he turns his head to follow that movement. His mind participates in that movement as it estimates the distance of the moving players from the goal toward which they move. Knowing the rules of the game, this distance has significance for him. Assuming that he is concerned with the fortunes of one of the opposing teams, the lessening distance between the players and a goal induces excitement which may produce sympathetic movement on his part. He may jump to his feet, wave his arms, shout, cheer, or groan.

A newsreel photographer high above the field might photograph a game with so comprehensive a shot that both goals would be simultaneously visible. For parts of the game, as when the teams run the length of the field, only such a viewpoint is adequate to convey the significance of the play. However, from this distance the players appear so small that details of the action cannot be seen, players cannot be identified, and the ball is invisible. The cameraman, therefore, after a time, moves closer or changes the lens on his camera. More detail can now be seen, but his shot includes only half the field. Since the players are all at that end of the field, approaching one of the goals, this is a much more satisfactory viewpoint. In moving his camera he has, in effect, moved the spectator. When the newsreel is shown in the theater, the first comprehensive shot will be followed by the closer shot. Though the action will be continuous, the viewpoint of the spectator will change instantaneously. Then, as a player runs with the ball toward the far end of the field, the camera viewpoint will shift again to the more distant position so that the larger sweep of play can be seen and the significant relationship of players to distant goal be realized and measurable.

Changing the position of the camera during action to a closer position without any apparent interruption in the continuous flow of the spectacle was the first technical advance that was to make of motion pictures a new and unique form of visual experience. The fixed relationship between spectator and spectacle was broken down. The action could be brought closer or moved away, or, stated conversely, the spectator could have every sensation of moving closer except that of motility.

It will be noted that this instant change of viewpoint to one more ad-

vantageous occurs, in a projected film, not in the action pictured, nor in the actual position of a person watching the film, but in the film itself. This is *movement,* though not action. As the screen play developed, this filmic movement was to take many forms: the abridged movement implied in the cuts from shot to shot—from long shot forward to medium shot, and still nearer to a close shot; the movement of point of view from one character in a group scene to another, and the much greater movements implied in cuts from one locale to another.

The convention which asked an audience to take for granted these instantaneous changes of viewpoint was easy to establish, since, first, it exploited in a larger sense fundamental film characteristics of movement, and, secondly, because it represented not too inaccurately the operation of the spectator's imagination. This structural motion in film objectifies fairly closely the manner in which the eye seeks out of any occurrence or spectacle the most interesting person or action and follows it to the exclusion of other elements presented at the same time. It operates as the mind does when one reads a story, visualizing with the author's account the actions now of one character and now of another, the events now in one place and now in another, the observing of large panoramas and then of minute details. It also objectifies magically, as no other medium can, the wish to be able to come closer, to see more clearly and intimately than life or the earlier forms of theater art have allowed.

Let us return for a moment to our football game. We shall assume that the cameraman is in the closer position, his lens covering only half the field. Through the finder he sees a player start with the ball on a run down the field to the farther goal. He swings his camera, following the runner, exactly as a spectator turns his head to watch the play. Instead of an *instantaneous* move to a viewpoint from which the action can be seen, there is a movement *simultaneous* with the action. The movement, timed with the action, occurs not in the film but in the seeing organ, the eye, the camera.

With the development of screen technique, camera movement has been elaborated. Mounted on wheels, the camera can precede or follow a character. Set on a crane, it can be lifted high above the action. It can recede from a detail to a full shot or, conversely, move from a full shot into a close-up of a single character selected out of the scene. Camera movement, it will be noted, takes place at a much slower tempo than filmic movement and has a different aim. Its rate is related either to that of the spectator's eye, or to that of a moving person or object as the spectator's eye follows that movement in the scene being filmed. Its aim likewise is twofold. It seeks either to imitate the eye movement the spectator would perform if he were present at the scene being photographed, as in most "pan" shots, or it undertakes to convey to the spectator the illusion that he himself shares the movement of the camera.

A person walking has the sense that he approaches a distant landmark which remains rooted at a definite place. The tree grows in one spot although its size and relationship to other objects in that landscape modify as the pedestrian draws nearer. Some part of

his own motility transfers itself to the tree. As he draws nearer, the focus of his eye changes, the tilt of his head is greater as he looks toward the tree's top. His approach causes him to bring into play a different set of muscles; to alter his relation to what he sees. He has the sense that, as he shortens the distance between himself and the tree, it is the tree that alters its aspect. He will say, "The tree grew taller" (as he approached), or "The tree loomed larger."

If he approaches a fixed object in a vehicle, an automobile let us say, in which his own physical effort is eliminated, he is likely to attribute the movement not to the vehicle or to himself, but to his surroundings. He will say, "The country flowed by," or "The house drew nearer."

Something equivalent occurs when the camera is moved while photographing action. The moving character or object is centered in the finder and remains virtually stationary on the screen, and the background becomes fluid. Landscape or buildings flow past and, on the assumption that the spectator identifies himself with the moving character, his relationship to the background is in flux while he himself is actually motionless.

In photographing a character in motion, it must be decided which is more important, the movement or the closeness of the point of view. Obviously, if the camera moves with a moving character, as in dolly shots, movement is negated, since, as has been noted above, the character remains centered on the screen and the background passes by. Comment on this fact will be amplified later in the present discussion (see pages 144–145).

II

Before attempting to make generalizations concerning the use of camera movement it is important to clarify the function of the camera. It is not enough to say that it is the machine by which a screen play is photographed. The chain of instrumentalities which begins with the camera and its negative film and passes through the developing machine and the printing machine, the development of the positive and the projection of the positive print on a screen, is too closely identified with an important human sense to be regarded simply as a mechanism. The camera, by which for brevity we mean the entire mechanism, is an eye. Like the microscope or the telescope or field glasses, it extends the capacity of the human eye. It is an eye that functions in a special way for a special purpose. Whose eye do we conceive the camera to be? And how is it to be used? The answer to the second question will be provided by our answer to the first. Most commonly, since the images photographed by the camera are to be viewed by a spectator, the camera is treated as an extension of the spectator's eye. It sees what the spectator could see if he were himself present at the events photographed. It reports as a newsreel does. It satisfies at each moment the spectator's wish or unconscious need to see now in general and now in particular the places, the people, their faces, their hands, their weapons, their actions toward each other, which compose into an organic dramatic or narrative whole. Through filmic movement it is endowed with selectivity. As a theatergoer with opera glasses will focus them now on one character and now on another, the camera, instantly eliding intervening

motion, goes from person to person, from image to image. Exhausting for the moment the interest of one locale and its characters it can go instantaneously to another group in another place to see how they are faring. It may accompany a character in an automobile or an airplane or go under the sea in a submarine. It may walk with sweethearts and overhear their most intimate conversation. It may accompany a criminal to the gallows. If the camera is used as a substitute for or an extension of the spectator's vision, it is limited only by the obligation to maintain at all times feasible human viewpoints.

If the camera is thought of, however, not as a projection of the spectator's viewpoint, but as the narrator's, it may move with greater freedom and latitude. Like the eye of a novelist, the camera then partakes of the character, personality, and approach of the narrator. It has, like a storyteller, omniscience and omnipresence, or, more exactly, the ability to see only what it wants to see and to be only where it needs to be in order to tell its particular fable. It has selectivity, seeing only those instants in the life of various images which add up to a continuity of time, spatial relationships and causative relationships which the natural eye is incapable of seeing. Conversely, it has the ability to avoid seeing everything in the lives of the fable's characters which is not germane to the telling of the fable. In this use of the camera a complete personality is created who, though not appearing before the audience's eyes, is yet real and definite and as highly personalized as the real storyteller, be he writer or director, who employs it. With this concept of the use of the camera the director can achieve personal style as definite as that of a writer. (The term director is here used generically, as the word camera is used generically. By director we mean the individual who creates or the group of individuals who collaborate in the conception, writing, directing, and editing of a film.) The camera will "see" the story as he sees it and will relate it to an audience through his eyes. It will select shots which for that director have acute expressiveness. Shot will be related to shot in a sequence which has special significance to him. If the camera moves, it will move where he wishes to direct the interest and attention of the spectator.

Attempts have been made also to personify the camera more subjectively by conceiving of it as a character of the story, a narrator using the first person; in other words, as the eyes of a participant in the events it describes. Rouben Mamoulian opened his film of *Dr. Jekyll and Mr. Hyde* with a long introductory sequence in which the camera represented the eyes of Dr. Jekyll. However, since the film play was not a story told by Dr. Jekyll, but a story about him, the device had to be abandoned after a few hundred feet.

In a film directed by the writer a few years ago, called *The Great Commandment,* the camera was used in two sequences in the first person, to represent the eyes of Jesus. Since the Nazarene appeared in only two short episodes, of which He was the focus, and since the story dealt not with Him but with a number of characters who encountered Him, the device accomplished two important results unobtainable in any other way. The first and less important was to avoid attempting to represent a Presence which could not

be visualized satisfactorily for a large proportion of the spectators, and the second, to enable the camera to see intimately and feel the effect of that Presence on the story's principal characters.

Certain limitations become immediately apparent when the camera is used in this manner as an actual participant. The fact that characters speaking to the character represented by the camera must look directly into the lens means that they look directly from the screen into the eyes of the spectator. Thus the spectator is identified with the character assumed by the camera. In the denouement of Hitchcock's *Spellbound* the camera becomes momentarily the eyes of Dr. Murchison. It follows Ingrid Bergman as she crosses the room to the door and hesitates under the camera in the exact center of the screen. Following her as she crosses, we see Murchison's hand holding the revolver. When the door closes behind her, the hand slowly turns the revolver away from the door, pauses, then turns it directly into the lens and shoots—the spectator. Such a twist may defeat the very aim of the device. Further, scenes must be played without cut in continuous action, and the point of view is unalterably that of an individual, and can be moved or changed only at the pace and within the range of the physical mobility of the individual represented by the camera. It is aware only of what he can see and know. Orson Welles had planned as his first picture in Hollywood the production of Joseph Conrad's *The Heart of Darkness,* to be told in the first person with the camera as the eyewitness and narrator, but the plan was defeated by some such considerations as these.

The camera may be used in another way. It is not conceived of as having a personality of its own, but as being simply an instrument in the hands of the director, capable of highly flexible expressiveness, as a violin is when played upon by a virtuoso. In this sense the camera is not so much an extension of the narrator's eye or mind as it is a wholly new kind of sight instrument, as fabulous as radar and free from most of the limitations that hedge about human sight. The director uses the camera, if this is his concept of its function, quite arbitrarily. It goes where no human eye could possibly go. It moves according to laws, if any, which apply not to the human eye or the human consciousness, but to itself. A number of directors use the camera with this virtuosity, achieving extraordinary effects. One recalls Von Sternberg's use of the camera in *The Scarlet Empress,* or that of Orson Welles in *Citizen Kane.* In the most skillful hands, virtuosity of the camera may enhance dramatic effect and produce a work as uniquely conditioned by the fact that it is transmitted through a camera as a violin concerto is conditioned by the fact that it is transmitted by a violin. The dangers attending this use of the camera are easy to define: it offers a constant temptation to place the camera arbitrarily, on the premise that a striking viewpoint or a striking composition is justification in itself, or that camera movement predicated wholly on the capacities of the machine requires no further motivation. To be sure, the end composition will have meaning which in the eyes of the director seems justification enough for the means employed to arrive at that end.

Such a purely cinematic use of the

camera is warranted in semiabstract treatments of nondramatic subjects or moments in dramatic films, as, for example, in the photography of musical or dance numbers. The camera movement may have a real or fancied relationship to the music or choreographic pattern, but often enough it simply employs an arbitrarily selected variety of angles and moves with no other object than constantly to refresh the spectator's interest in what he is seeing.

III

In actual directorial practice no compact is made with the spectator concerning the camera's function. He is not asked to recognize the camera either as his eye or the narrator's eye or that of a participant in the action, nor to identify himself with a participant in that action. Commonly, no principle in the use of the camera is constantly adhered to by the director. He uses the camera at one moment as though it were the spectator, at another to score a point of his own as the storyteller, or again, impersonally, as a tool for the achievement of an "effect." He justifies movement of the camera as the pursuit of "fluidity," or adheres to the idea that frequent change of angle gives "life" to the film or that sustained master scenes have a special value. These may all be warrantable generalizations under certain circumstances, but they ignore the fundamental that the camera acts as a living organ rather than as a tool.

For all that, the camera is governed by laws of optics as the eye is also. In function it partakes far more of the biological and psychological aspects of sight than of the purely mechanical physical aspect. Only a few directors exhibit a clear concept of a continuous understanding between themselves and the spectator concerning the function of the camera. Thus it would seem to the writer that John Ford uses the camera as the spectator's eye. He rarely causes the camera to move, thus permitting the spectator to orient himself in a stable world in which the people and not the landscape or the architecture are animate. There is a minimum use of close-ups, and close shots are achieved more often by causing the characters to approach the camera than by moving the camera closer to the characters. Ford holds that camera movement destroys reality, which is his recognition of the fact that the illusion of movement on the spectator's part cannot be supported by his physical experience as he watches the film. This gives to the rare shots in which he does cause the camera to move an uncommon effectiveness and meaning. In *The Grapes of Wrath* one recalls the wobbling progress of the camera through the Okie settlement when momentarily the camera took the point of view of the Joad family as its truck drove into the camp. Or the shot in *How Green Was My Valley* when, for a moment, Ford became the storyteller and moved the camera away from the faces of Mr. and Mrs. Morgan to the street to the left of them to show the two sons leaving home. It is as though he were content to let the spectator see the story as an eyewitness, with occasional comment from the director—comment so infrequent that it gives pith and validity from the very detachment and objectivity with which the rest of the story is told. In Leo McCarey's *The Bells of St. Mary's* the camera is moved not more than half a

dozen times—only when it is panned, as the spectator might follow with his eyes a character moving purposively from one part of the scene to another.

There are other directors whose camera technique is more fluid because they employ the camera as a storyteller employs words. The point of view is primarily their own. Although it is shared with the spectator, they seem to say, "Let me show you what I saw." They act as gentle guides leading the spectator from place to place, wittily or poignantly pointing to this or that character. Not infrequently their point of view is revealed with an element of surprise. The camera maintains a credible viewpoint but one somewhat superior to and in advance of the spectator's. It knows, although the spectator does not, where it is going and what it is going to reveal. It has a self-evident sense of plan and foresight. It tells a tale in which not even the accidents are accidental. To illustrate, a picture directed by Lubitsch is told consciously as a tale to amuse or to move the spectator, and the question of the reality or the occurrences shown is secondary. The aesthetic goal is not the illusion of immediacy, but the pleasure of an engaging tale.

IV

A skillful craftsman, regardless of his general philosophy concerning the use of the camera, will be governed by one fundamental consideration – that in every shot the content shall be more important than the manner in which it is transmitted. The story comes first, and every shot deals with characters and what they do. If what they do at a given moment is stated in terms of physical action, the camera will set up space for the action and fixed points of reference. If the physical action is casual and secondary to what the character is saying or thinking, the camera will hold the character in the center of the screen whether he is moving or standing still. If his words or the intention that can be read in his face are important and interesting enough, the movement of the camera as it follows him will go unperceived. If, however, the character is stationary and the camera moves toward or away from him, the movement of the camera is bound to be perceived and must then have meaning in itself, saying, in effect, "Watch this man!" or, "We may now leave this person's thoughts and draw back to a place where we can observe his actions." If this preparation through movement or an act of attention on the spectator's part heightens dramatic effect, it is warranted. If it accomplishes merely mechanical readjustment of viewpoint, it draws attention to itself as movement and diminishes the importance of the content of the scene.

With the exception of pan shots which simulate the turn of the spectator's head, camera movement is of two sorts: either (1) the movement of the camera is motivated by and synchronized with the movement of a character or characters, or (2) the movement of the camera is not synchronized with movement on the screen.

It has already been pointed out that camera movement synchronized with physical movement is justified when it is more important to fix audience attention upon the moving character than upon his movement with relation to other characters or the background. Generally speaking, such movement does not change the initial distance re-

lationship between the spectator and the image on the screen.

In camera movement which is not physically motivated, a proper justification can be found only in the imitation or symbolic reproduction of movements taking place in the imagination either of the storyteller or of the spectator. Such movements may be classified roughly as follows: (1) movement from a longer to a closer angle, (2) movement from a closer angle to a longer one, (3) movement from a scene to a detail, (4) movement from a detail to a scene. If such movements have some correspondence with the emotional participation by the spectator in the action, drawing him closer to characters or retracting him to a fuller scene, directing his attention to an inserted detail or drawing his attention from a detail to the characters to whom the detail relates in some significant way, the movement may be justified. It may be observed, however, that these same alterations of viewpoint can be achieved filmically, that is, through direct cuts, more quickly and usually with less awareness of the move itself. Camera movement used in this fashion decreases the pace at which the film moves. The reduction in tempo may have emotional value in itself, though it should be noted that the primary emotional responses of an audience are to the content of the shot, and the enhancement of these responses through the addition of camera movement is achieved, if at all, at the cost of an arbitrary transferral of motion from the scene to the spectator's eye. Whatever value such movement may have in terms of rhythm or imagination, it must be observed that the effect attained depends not upon an imaginative adjustment of the spectator's point of view, as in the direct cut, but upon an adjustment which inevitably relates itself more closely to the spectator's capacity for physical movement. That is to say, the imaginary journey on which the spectator is taken proceeds at a pace of the body, not of the mind. When this is true, such arbitrary movement defeats the end for which it was planned. The tempi of screen action are set up in the scene itself. Filmic movement can accelerate these tempi; synchronous camera movement can retard or negate them. It is an open question whether camera movement not synchronized to physical movement on the screen or to a normal act of spectator attention adds effect to the screen play. Certainly, if the director doubts whether an effect can be better achieved by moving a camera or by letting it stand, he will let it stand.

The Bells of St. Mary's. Rainbow Prod., RKO, 1945. Director and story, Leo McCarey. Screen play, Dudley Nichols.

Citizen Kane. Mercury, RKO, 1940. Orson Welles, Director. Original screen play, Herman J. Mankiewicz and Orson Welles.

Dr. Jekyll and Mr. Hyde. MGM, 1941. Director, Victor Fleming. Novel, Robert Louis Stevenson. Screen play, John Lee Mahin.

The Great Commandment. Cathedral Films, 1939. Director, Irving Pichel. Original story and screen play, Dana Burnet.

How Green Was My Valley. Fox, 1941. Director, John Ford. Novel, Richard Llewellyn. Screen play, Philip Dunne.

The Scarlet Empress. Par., 1934. Director, Josef von Sternberg. Source, Diary of Catharine the Great. Arranged by Michael Komroff.

A Novelist Looks at Hollywood

ROBERT NATHAN

ROBERT NATHAN'S name is closely linked with the short novel, a form he has made peculiarly his own. In 1935 *One More Spring* was made into a motion picture. He is co-author of the screen play *The Clock*, and author of the novel *The Enchanted Cottage*.

WHEN I FIRST came to Hollywood, to work in pictures, I thought that I should have to learn to be a dramatist, that the craft of the novelist would be of no use to me. I was mistaken.

I do not pretend to be a very good screen writer; one does not learn an entire art in a single thrust. But I have learned something about it—enough, for instance, to recognize the screen play or story as a valid form; and enough to feel a profound respect for those master screen writers whose work, never published, usually slighted by the critics, seems to me some of the best writing being done anywhere in the country.

I also learned, to my surprise, that a picture is not at all like a play; that on the contrary, it is like a novel, but a novel to be seen, instead of told.

Of course, seeing is simply another way of telling. But eye and ear are different organs, and to be treated each with courtesy. One of the most difficult lessons I had to learn was never to entice the ear too much, away from the eye. Eye and ear must march together, or else fly apart; the evocation of beauty or its opposite through words, is something to be delicately examined; it must never interfere with the eye which watches.

At the same time, the writer who uses his camera, who makes use of all the elements of the picture itself, can create the same effect of style as in the most excellent paragraph of prose. It may not sound like beauty; it will look like it.

The picture has other characteristics of the novel: it ranges where it pleases, it studies the reactions of single characters, it deals in description and mood, it follows, by means of the camera, the single, unique vision of the writer. You will find, in every novel, the counterparts of long shots and close-ups, trucking shots, and dissolves; but you will find them in words addressed to the ear, instead of in pictures meant for the eye.

It is true that so far, at least, the quiet, contemplative flow of the novel has no counterpart on the screen. Quiet and contemplation are for the singular and lonely reader; when people come together to be entertained, the pace and rhythm of entertainment must be set for them. It must be set to please them all, each singly, and all together; for all together they give back to the screen an emotional response which is as much a part of the picture as the writing or direction. That is why it is difficult to judge a picture in the projection room; and why we have previews. The audience adds its own element to a picture; what emerges is a give-and-take, an intangible (but very real) relationship between the two.

There is something in itself exciting about pace, whether on the screen or the tennis court, the hockey rink, or the podium. It is a pattern of satisfac-

tion; it stirs the pulse; the eye, the ear, the heart moves from suspense to suspense, from climax to climax; it is a kind of inner dance.

In writing for the films, the writer is not altogether master of his pace. For in the end, the rhythm of the picture depends less upon words than upon direction, and cutting. The written dialogue might be as lean as Hemingway's, and yet seem slow, if the director's pulse is slow—or if the cutter fails to use his shears at the right moment. What that right moment may be, no writer can ascertain from the written page; the proof is on the film itself.

There are other disadvantages. The written novel is all; it is the complete work of art. The script is only a part of the final whole; and even in the script, many accents are heard; voices of producer, director, and supervisor. In a sense, they are editors; their eye is on the audience, they imagine for themselves the finished picture, they warn, and advise. And once the picture goes into production, still other editors appear and take over; the camera, the composer, designers, architects, the many technicians, all superb masters of their crafts; and finally, of course, the actors. In the end, the picture belongs to all of them—but first, in the beginning, from the small idea to the finished script, it is the writer's; and with this much, if he wishes, he can do his best.

That disappointment often, discouragement, and even heartbreak await him in Hollywood, I do not deny. There are so many things he cannot write about, so much he cannot say. It is not altogether the fault of the industry; rather, it is the fault of a youthful art, which, like the first miracle plays, or the paintings of the early masters, must appeal to the full congregation.

So much for the cons, and for the pros. There is something to be said on either side; I have tried to suggest here what that may be. I do not believe that to the reading eye the script will ever displace or even seriously dispute the novel, for general satisfaction; or that the novelist will find it altogether a sufficient form. But it *is* a form, and one which I believe presents a challenge to the novelist on his own grounds.

A Change of Pattern?

KENNETH MACGOWAN

KENNETH MACGOWAN, one of the editors of the *Hollywood Quarterly,* is a producer at Paramount, a former critic of plays and films, and the author of a number of books on the theater.

NEW TECHNIQUES and the refinement of old ones are evident enough in seven American films released or still being shown in the last quarter of 1945. In two of them we may note a fresh emphasis on character and atmosphere at the expense of plot. If we study another together with two English pictures of distinction, we may have an excellent comparative view of the faults and virtues of the Hollywood and the English schools of production.

Despite the evidence of nine-tenths of our pictures, the war has not left Hollywood untouched. It has felt the impact of the feature-length documentaries of world struggle made by the Army and the Navy and shown in the commercial theaters as well as in the camps and at the battle fronts. From the tentative beginnings of *At the Front in North Africa* through *Why We Fight* to *The Fighting Lady, San Pietro,* and *The True Glory* these films have shown Hollywood the effectiveness of documentary technique. One studio, Zanuck's ever-enterprising Twentieth Century–Fox, has applied a considerable part of this technique to a spy story in *The House on 92nd Street,* and with gratifying financial success.

Plotwise, *The House on 92nd Street* is no masterpiece; by the very nature of the documentary approach it could not be. It chronicles without a great deal of added artifice the story of the German-American William Siebold, who, in felicitous coöperation with the FBI, accepted an invitation to be trained in a spy factory in Germany and returned to America to unmask the American underground of the Third Reich. We see the methods and devices by which this man and the FBI were able to obtain through motion picture film the necessary evidence against the Germans and their collaborationists. The climax may be a little more theatrical than reality; it is certainly a little less deft than Hollywood. The producer, Louis de Rochemont, for many years the master of the filmic *March of Time,* has set fellow producers and writers to thinking about how documentary technique might be applied to other plots, even unto the story of boy-meets-girl.

Another evidence of the influence of the wartime documentary is to be seen in the picture described as Ernie Pyle's *G. I. Joe,* and in *A Walk in the Sun.* These two pictures are practically girlless and plotless. *G. I. Joe* has one feminine figure, but a minor one. *A Walk in the Sun* has perhaps a faint indication of plot in the suspense derived from the fact that the soldiers of Harry Brown's book start at a beachhead and must end up inside an enemy-defended farmhouse six miles inland. The director, Lewis Milestone, draws the most out of this, but his chief values—and they are fine ones—lie in his translation to the screen, with the aid of screen writer Robert Rossen, of the

character values of Brown's study of men at war. (Milestone is brilliantly aided in the most difficult pinches by the splendid ballads of the lyricist, Millard Langdell, and the composer, Earl Robinson, which bridge action and tell us the thoughts and emotions of the men, polyglot and gathered nationwide, of the Texas Division.) Leopold Atlas, Guy Endore, and Philip Stevenson, translators of Ernie Pyle to the screen, and William Wellman, who has certainly never shown direction as brilliant as this, give us not only vivid vignettes and tortuous and torturing pictures of how Bill Mauldin's "dogfaces" live and have their very vivid being, but also a magnificent picture of Pyle, the compassionate and understanding friend of every foot soldier in our walking army. And Burgess Meredith executes a small miracle in his portrait of the man; even his physical being seems to move from well-fed understanding to gaunt identification.

An adventitious but important element in the reality of *The House on 92nd Street*—the photographing of the sidewalks of New York and the streets that accompany them, along with the plot and plotters—brings us to the question of how far the screen gains by giving us a feeling that we are actually abroad with the people of our film stories, instead of meeting them under the studio conditions of smart use of simulated backgrounds and process shots that give us a two-dimensional screen version of reality behind the actors and their setting. In *The House on 92nd Street* there is no question that Bill Eythe and his fellow players are walking the streets of New York. In *G. I. Joe,* and far more in *A Walk in the Sun,* we get the reality of unaltered nature and sunlight which was one of the few blessings of the silent-picture days—though somehow the recognizable streets of a big city are far more convincing than nature's beaches and deserts. Through just such "location" reality *The Pride of the Marines* wraps up the characters in the drab, endlessly repetitive houses of Philadelphia's middle-class streets and the platforms of the West Philadelphia station of the Pennsylvania Railroad, while *The Lost Weekend* gives us the Third Avenue of its hero's purgatory. In *The Southerner* and, somewhat less completely, in *Our Vines Have Tender Grapes,* we see and feel the reality of farm land and houses worn by nature and not too much by the art department of a studio. (What a pity that the studios have moved from real exteriors to process plates which pose the out-of-doors behind the actors on rephotographed screens, and from there to houses, lawns, grass, cornfields, distant woodlands, and far skies duplicated through the infinite but never completely convincing trickery of settings built and deceptively lighted on the indoor stages of Hollywood!)

Beyond the techniques of documentary photography and any question of real streets or simulated ones lies the meaning of the film itself, the plot that it is trying to tell. In *The Pride of the Marines*—in spite of many clichés of dialogue—it is a very real and very moving story of what the war has done, if not to us, at least to soldiers comparable to this man who for the time being has lost his eyesight. In *The Southerner* we see a reasonable facsimile of living men and women and children who struggle desperately and hopelessly against the hard facts of life as many must live it below the Mason and

Dixon line—hopelessly and yet with inner, and inarticulate, courage. In the Midwestern picture, *Our Vines Have Tender Grapes,* we have still less of plot and still more of the action and interaction of men and women and children as they live out the life of the soil and come to an identity with it and with the whole process of life. Here we find the screen approximating the kind of interpretation of shapeless, inchoate life—unorganized, from the theatrical point of view—which Tchekhoff presented in his plays; certainly a surprising thing for the screen to do. *The Southerner* fumbles, and so does *Our Vines Have Tender Grapes;* they are not as completely perfect assemblies of life as we might ask, but they seem a fresh and important striving toward a truth of character and social relationship which has seldom distinguished our screen in the past. *The Grapes of Wrath* was a rare exception.

There is plenty of character and plenty of social relationship, so far as these are affected by alcoholism, in *The Lost Weekend,* one of the few Hollywood pictures that can stand comparison with *The Ox-Bow Incident* and *The Grapes of Wrath* as bitterly realistic entertainment. Granting the debt of the producer-writer, Charles Brackett, and the director-writer, Billy Wilder, to novelist Charles R. Jackson—like their debt to James Cain for *Double Indemnity,*—these two remarkable collaborators have made a film that is beyond question powerful. Innocent of the documentary touch, it still summons pictorially the reality of Third Avenue, and sets against it an absolutely horrifying sense of the immediacy of the bottle. The happy ending is futile enough—futile as the whole hope of salvation for the man so amazingly played by Ray Milland,—but the rest of the picture is generous with the best kind of significant realism that the screen can give, and rarely does.

Against *The Lost Weekend* and the realistic and documentary films of the quarter we may, and should, set England's technicolor picture, *The Life and Death of Colonel Blimp.* It is no masterpiece, but is has many lessons to show us. Or, rather, one lesson: of pursuing a scene through to its complete exposure of character. *Blimp* is needlessly long. It is unskillful and inept in many ways. But it sets out to tell certain things about various men and women, and it does just that. Its scenes are not neat and sufficient to the plot; they are played in full, so that we know the people and their motives as a novelist would have us know them. We may wonder why a character has to read a note to the War Office, with insert, and then appear at that same War Office and go over the whole thing again. Yet, aside from ineptitudes like this, which any smart Hollywood cutter could correct in a quarter of an English summer afternoon, the film presents a wonderful sweep of character and history through thirty of the world's most exciting and dubious years.

Still more of a challenge to the American film is *Love on the Dole.* It is sordid reality, told with pathos and humor. The slums of an English factory town come alive, and with them the damned that live there. The picture never touches the technical level of our trickeries; but it is finely acted, and it has a script of unusual quality. From the novel of Walter Greenwood, through the play in which Robert Gow

collaborated, it carries, by virtue of the screen play, true and uncompromising values which are seldom even hinted on the American screen. It is a *How Green Is My Valley* stripped down to the grubby, terrible facts of industrial peonage. In casting, as in writing, it never for a moment trafficks in glamour, and yet—acted as it is—it brings us a love story that moves our deepest sympathies.

Of these pictures I have been discussing, only *The House on 92nd Street* and *Colonel Blimp* are true products of the movies, stories written for and by the practitioners of this art. The rest are novels or volumes of war impressions first presented within covers and then accepted by the screen as material worthy of transposition. Therein lies a serious criticism of the movies. Almost invariably the films that grow out of original work in Hollywood are trash—we may except *Going My Way* and very few others,—and the films that are satisfying to a mature mind and mature emotions are translations to the screen from the field of the novel or the play. Such are *The Lost Weekend, Love on the Dole, G. I. Joe, A Walk in the Sun, The Pride of the Marines* (which comes from a biography, if not a work of fiction), *The Southerner* (retitled, for some unknown reason, from *Hold Autumn in Your Hand*), and *Our Vines Have Tender Grapes.*

It is regrettable that for as long as the movies have existed the really important and satisfying pictures have been drawn from another field of fiction. Even *The Birth of a Nation* owed its origin, weak as it was, to Thomas Dixon's *The Clansman,* and *Broken Blossoms* stemmed from a Thomas Burke story. Examine the most successful or distinguished films of the past fifteen years, and you will find that almost all of them come from novels or plays. Even among the pictures, both silent and with sound, that have piled up the biggest gross returns, eight out of the first ten drew their stories from novels or plays. The same holds true if we think of films we have liked best, whether or not they were inordinately successful: *The Ox-Bow Incident, Double Indemnity, Watch on the Rhine, Pygmalion, The Lost Weekend,* or even *It Happened One Night,* which, like so many others of Hollywood's best comedies—*My Man Godfrey, Here Comes Mr. Jordan,* for example,—came from another medium. If you look through Gassner's and Nichols' volumes which assemble the best screen plays of the passing years, you will find that a large proportion stem from some book or play. Each year, some five hundred critics choose the ten best films; for the past six years, five to seven of the ten have been based on published or acted fiction.

The point I wish to make is that the studios will only traffic in first-rate fictional material when it has had the blessing of success on the stage or in the bookshops. The success need not be so very great—just enough to enable publicity and sales departments to make public and exhibitors believe that they are privileged to purchase superior wares and must therefore enjoy them. The prestige of the best seller is, indeed, so great that novels like *How Green Is My Valley* and *A Tree Grows in Brooklyn* have been successfully presented without first-rate stars, and *Keys of the Kingdom* and *Bernadette* made stars of their chief players. No studio would risk such studies of humble life

as the first two, or such religious tracts as the others—with or without stars,—if they had been written by even the highest-paid in its stable of writers. No free-lance writer of what we insult the rest of literature by calling "originals" would dare to try peddling such characters and plots. Imagine the theme or the plot of *The Lost Weekend* presented to a story department—let alone the public—without the blessing of the bookshelf. And, if it had somehow got itself made without this blessing, I wonder whether even the excellent writing, the brilliant direction, and Milland's consummate performance would have made the picture a success with an audience which runs to a hundred million around the globe, and which includes almost all ages and almost all degrees of intelligence, culture, and sensitivity.

The disturbing thought arises that the studios may be right—so long as they cannot make a picture cheaply enough to live by satisfying its own proper audiences.

PICTURES REVIEWED

The House on 92nd Street. Fox, 1945. Director, Henry Hatthaway. Original story, Charles G. Booth. Screen play, Barre Lyndon.

The Life and Death of Colonel Blimp. Archers, 1944. Written and directed by Michael Powell and Emeric Pressburger.

The Lost Weekend. Par., 1945. Director, Billy Wilder. Based on Charles R. Jackson's novel. Screen play, Charles Brackett and Billy Wilder.

Love on the Dole. National Studios, Elstrey, London. Director, John Baxter. Novel, Walter Greenwood. Stage play, Ronald Gow.

Our Vines Have Tender Grapes. MGM, 1945. Director, Roy Rowland. Novel, George Victor Martin. Screen play, Dalton Trumbo.

The Southerner. UA, 1945. Director, Jean Renoir. Novel, *Hold Autumn in Your Hand,* George Sessions. Screen play, Jean Renoir.

The Story of G.I. Joe. Cowan-UA, 1945. Director, William Wellman. Based on Ernie Pyle's sketches. Screen play, Leopold Atlas, Guy Endore, and Philip Stevenson.

A Walk in the Sun. Fox, 1945–1946. Director, Lewis Milestone. Novel, Harry Brown. Screen play, Robert Rossen.

ALSO MENTIONED

The Birth of a Nation. Epoch, 1915. Director, D. W. Griffith. Novel, *The Clansman,* with supplementary material from *The Leopard's Spots,* by the Rev. Thomas Dixon, Jr. Screen play, D. W. Griffith and Frank Woods.

Broken Blossoms. D. W. Griffith Prod., 1919. Director, D. W. Griffith. Story, *The Chink and the Child,* by Thomas Burke.

Double Indemnity. Par., 1943. Director, Billy Wilder. Novel, *Three of a Kind,* by James H. Cain. Screen play, Billy Wilder and Raymond Chandler.

The Grapes of Wrath. Fox, 1939. Director, John Ford. Novel by John Steinbeck. Screen play, Nunnally Johnson.

Here Comes Mr. Jordan. Col., 1941. Director, Alexander Hall. From unpublished story by Harry Segall. Screen play, Sidney Buchman and Seton I. Miller.

How Green Was My Valley. Fox, 1941. Director, John Ford. Adapted from novel by Richard Llewellyn. Screen play, Philip Dunne.

It Happened One Night. Col., 1934. Director, Frank Capra. From short story by Samuel Hopkins Adams. Screen play, Robert Riskin.

The Keys of the Kingdom. Fox, 1944. Director, John M. Stahl. Novel, A. J. Cronin. Screen play, Joseph Mankiewicz and Nunnally Johnson.

My Man Godfrey. Univ., 1936. Director, Gregory LaCava. Novel, Eric Hatch. Screen play, Morrie Ryskind and Eric Hatch.

The Ox-Bow Incident. Fox, 1942. Director, William A. Wellman. Novel, Walter Van Tilburg Clark. Screen play, Lamar Trotti

Pygmalion. MGM (British), 1939. Directors, Anthony Asquith and Leslie Howard. Play, George Bernard Shaw. Screen play, George Bernard Shaw.

San Pietro. U.S.A. Signal Corps Campaign Report, 1945. Narration, Maj. John Huston.

The Song of Bernadette. Fox, 1943. Director, Henry King. Novel, Franz Werfel. Screen play, George Seaton.

A Tree Grows in Brooklyn. Fox, 1944. Director, Elia Kazan. Novel, Betty Smith. Screen play, Tess Slesinger and Frank Davis.

The True Glory. Col. OWI-WAC, 1945. Joint Anglo-American Film Planning Com. Directors, Capt. Garson Kanin and Capt. Carol Reed. Writers, S/Sgt. Guy Trosper, Pvt. Harry Brown, Sgt. Saul Levitt, U.S.A.; and Lt.-Col. Eric Maschwitz, Pvt. Peter Ustinov, Capt. Frank Harvey, British Army; commentary written by Gerald Kersh.

Watch on the Rhine. WB, 1942. Director, Hermin Shumlin. Play, Lillian Hellman. Screen play, Dashiell Hammett.

Why We Fight. (All under supervision of Col. Frank Capra.) No. 1: *Prelude to War.* Narration, Maj. Eric Knight and Capt. Anthony Veiller. No. 2: *The Nazis Strike.* Narration, Maj. Eric Knight and Capt. Anthony Veiller. No. 3: *Divide and Conquer.* Narration, Maj. Eric Knight and Capt. Anthony Veiller. No. 4: *The Battle of Britain.* Narration, Capt. Anthony Veiller, Maj. Eric Knight and S. K. Lauren. No. 5: *The Battle of Russia.* Capt. Anthony Veiller.

The Screen Discovers Psychiatry

FRANKLIN FEARING

FRANKLIN FEARING is Professor of Psychology in the University of California, Los Angeles campus, First Vice-Chairman of the Hollywood Writers' Mobilization, and one of the editors of the *Hollywood Quarterly*. He has published many articles and is a frequent reviewer in psychological journals.

MORBIDITY statistics are not available, but it is my guess that amnesia is a condition which actually occurs in clinical practice with considerable less frequency than, say, hydrocephalus, trichiniasis, or even smallpox. The current rash of films centering around the subject suggests, however, that it occurs about as often as toothache.

Parenthetically, and for the benefit of the small, unenlightened minority whose education in the field of psychopathology has been neglected, it should be said that amnesia is a condition in which there is loss of memory for a group of experiences centering around a particular event or occasion, or covering a particular span of time. The cause may be organic or functional. That is, the amnesia may be a result of brain injury, or it may be related to any group of emotionally toned experiences in which it functions, as much forgetting undoubtedly does, to protect the individual from painful memories.

The attitude of the layman toward these and other forms of abnormal behavior is a curious mixture of fascination and horror which seems to increase in inverse ratio with the actual frequency of occurrence of these conditions. The reasons for this are interesting but obscure and need not detain us here. But it does create a situation which is ideal for those plot mechanicians with a liking for the bizarre and in need of a gimmick.

Before discussing the current films it would seem to be in order to make some remarks regarding the uses of psychology and psychiatry in the writing and directing crafts, and the proper place of the phenomena of psychopathology in the plot structure of films. Those inappropriate forms of behavior which, when concentrated in a particular person at a particular time or place, are conventionally called abnormal, may be profitably studied by the professional student of human nature as well as all others who are concerned with human character. It has become trite to say that the difference between the abnormal and the normal individual is shadowy. But it cannot be too often emphasized that it is a difference in degree rather than in kind. The use of this material in melodrama, mystery thriller, character study, or any other fictional form requires a sound, almost professional insight into the phenomena themselves. There is no other type of material which puts the skill and subtlety of the writer and director to so severe a test. He uses it at his own risk, and he may not escape responsibility by employing the services of an expert. The expert may be useful and professionally unimpeachable, but someone must know how to utilize the data which the expert provides.

As I see it, there is but one primary legitimate use for these data. They are used not because they are concerned

with amnesia or some other variety of clinical pathology, but because they are an intrinsic part of the dramatic situation and illumine human character and motivations in that situation. Their use is justifiable just because the abnormal differs in degree, not in kind, from the normal. The observer will then be aware of them not as titillating bits of pathology, but as a segment of reality which images himself.

Without a thorough grounding in psychology and allied social sciences as well as a mastery of the medium in which he works, the writer or director will almost certainly present this material as merely spectacular or as a device which enables him to escape from an impasse in the plot. There are doubtless a variety of ways in which people who really want to can acquire a professional understanding of human nature. Many people who think they know all about it—the "practical psychologists"—obviously don't. Psychology is a science and, like all science, has a body of tentative and quite unspectacular generalizations based on certain techniques of observation and experimentation. Most of them seem pretty abstract to the eager searcher after the "secrets of the mind." For the writer, the chief value of their systematic study lies not so much in a body of specific facts about people which he might acquire as in the perspective they would give him on the forces which make a human being out of a biological organism. Certainly the systematic study of social psychology, anthropology, and allied social sciences wouldn't hurt Hollywood writers and directors, and it might make them a bit surer of their judgments as to what was psychologically "right." They might then be in a position to make, on occasion, more discriminating use of psychopathological material for justifiable aesthetic, social or educational ends, and, at the same time create sound artful entertainment. The Hollywood studio spends much money to be certain that the paving stones in the medieval courtyard or the costume of the heroine are historically correct. Surely authenticity with respect to the structure of human personality and human motivations is as important as authenticity of settings. Human character is at least as complicated as an atomic bomb, and one does not acquire a fundamental understanding of either through inner revelation, intuition, "practical" experience, or astrology.

There is, perhaps, another reason for presenting human psychopathology on the screen. In spite of educational programs of mental hygiene societies, courses in psychology in colleges and universities, and many other elaborate attempts at public education, the average layman, even the educated layman, still regards all forms of mental disorder with superstition and horror. For him any kind of mental disorder, whether it is called "insanity" or "psychoneurosis," simply can't be viewed in the same manner as pneumonia or backache. These attitudes greatly retard ameliorative and preventive measures. In a society in which all forms of personality disturbances are likely to increase rather than decrease, these attitudes constitute as serious a problem as the disturbances themselves. Films—good, sound, entertaining, films—might be made which would show the delicate balance of forces in the individual and his social environment which ultimately shape him in the direction of

"normality" or "abnormality." "Abnormality" would become intelligible and less horrible. Something of this sort was done in the film *Blind Alley*. Although it boggled at times, this film gave us a reasonably accurate picture of the forces which made a gangster a gangster, and, incidentally, an "abnormal" person. The worst boggle was an utterly unconvincing "professor of abnormal psychology" who was superimposed on the plot and who behaved with that godlike detachment which professors practically never have, apparently for the purpose of assisting the audience in disentangling the gangster's complexes. I should add that the film was also exciting melodrama.

Two current examples of the screen's preoccupation with psychopathology are *Spellbound* and *Love Letters*. The former is not only concerned with psychopathology; its scene is a mental hospital, and its principal characters are psychiatrists, psychopaths, or both. There is an interesting parallelism in these two films. The theme of both is amnesia. In both, the amnesia is of the so-called functional type. That is, it is precipitated by emotional shock and the forgotten material deals with experiences which, if remembered, would cause the subject unbearable pain and anxiety. In both, the forgotten experiences were concerned with a crime which the subject did not commit but in which he was implicated. In both, it becomes the object of a lover to aid the loved one to recall the forgotten experiences in order that he or she may be cleared of the crime. In each film the chief dramatic suspense develops around the unraveling and reconstruction of the forgotten material. In both, a secondary character who has much the best lines in the script advises and pungently satirizes the lover in his or her frantic search for clues. It is a minor difference that the sex of the amnesic victim is different in the two stories.

There is, however, a fundamental and striking difference between the films. In *Spellbound* the lover, who frantically searches for clues in the tangled corridors of the victim's mind in order to establish his innocence of crime, is at one and the same time a professional psychiatrist, a beautiful woman, a psychoanalyst, and an amateur detective of no mean attainments. In *Love Letters* the amnesic's problem is solved without benefit of psychiatry; nor, I am informed, were the services of a professional consultant used in the preparation of the picture.

Stripped of its psychiatric overlay, I should say that *Spellbound* is a good B-plus mystery thriller. For this reviewer it has some beautifully directed scenes. In particular, the last scene, in which Murchison is forced by the Beautiful Psychiatrist to admit his guilt, and she by a shrewd play on his vanity and intelligence, prevents him from shooting her with the revolver that he gently caresses as she slowly walks from the room, is hair-raising. This scene is one of the few in the picture in which the psychiatrist behaves like a psychiatrist who really understood human character mechanisms. The layman will undoubtedly say she "used psychology," and the layman will be right. It is important to add that I liked the musical score. But the film is concerned with psychiatry as much as it is with murder; indeed, as much as it is with amnesia. It is not only psychiatry, but the Freudian variant of psychiatric theory, which furnishes the basic framework for the

plot. An introductory statement, in fact, informs us that modern science—that is, psychoanalysis—has discovered the keys whereby the problems of the unhinged mind may be solved.

Since the film is thus formally committed to a particular psychological theory, one is tempted to evaluate it solely in the light of that theory. That theory is highly controversial. Many psychologists and some psychiatrists reject Freudian theory in toto or in part. This is not, incidentally, because they don't "believe in" it, but because some, though by no means all, of its basic hypotheses have been subject to rigorous tests, and not all of those so tested have been verified. In other words, the Freudian hypotheses are not necessarily true because Freud advanced them, or because people suffering from mental disturbances have been "cured" or improved by psychoanalytic therapy, or because some psychiatrists use this method. It is misleading, or at least confusing, to imply, as the preliminary statement in the film does, that Freudian psychoanalysis has been validated by "modern science."

I should not evaluate the film on the grounds that it rests on a questionable, or at least controversial, theory of human nature. At least it has that consistency of viewpoint which adherence to any theory confers. Nor am I primarily concerned because the film seems a little more occupied with psychiatry and psychiatrists than with human beings. The professional psychiatrist whose services are acknowledged in the screen credits (probably for the first time in history) was unquestionably competent. Hence, I am certain she must have cringed a little when the script called for the psychoanalyst to fall in love with her patient,[1] and she could not have approved of the quite unscientific distinction so beloved by the layman, made several times in the film, between "mind" (read: intelligence) and "heart"—even psychosomatic medicine endeavors to avoid that trap,—particularly in the climactic scene in which the Beautiful Psychiatrist insists that her lover is innocent because her "heart" tells her he is. And it is perhaps kinder not to discuss a psychoanalysis which contains no reference to the patient's sex life.

These are niggling and esoteric criticisms. As an attempt to present certain phases of human psychopathology the film fails—in my opinion—mainly because it has not used this material for its proper psychological and dramatic values. The psychopathological material is not organically related to the total situation in a manner to illuminate and interpret human character, nor is it presented so that an intelligent understanding may be had of the basis and development of the abnormal material itself. Rather, this material seems to be exploited for its spectacular and bizarre character, as something superimposed on the plot. This is enhanced by the Dali dream sequences—incidentally, the dream material in *Blind Alley* was pictorially more satisfactory—and by the labored adherence to psychoanalytic mechanisms. The effect is rather like that made by a story written for a sensational tabloid by a reporter who had had a course in psychoanalysis. It would seem pretty exciting, but one couldn't

[1] That she did so *before* he was a patient does not make it less a violation of psychoanalytic procedure. The point is, she was analyzing a patient with whom she was in love.

quite imagine actually knowing such people inhabiting such a place as "Green Manors."

Perhaps the most serious psychological omission is the failure to show the social backgrounds and the characterological structure of the kind of individual who develops amnesia. Why should this particular person have developed this strange disorder? He had a shock in childhood. He developed a guilt complex as a result. An additional series of stresses in adult life precipitated the amnesia. But many people have shocks in childhood, and many persons are subjected to stress in adult life, but do not develop amnesia.

The fact is, of course, that these rare types of hysterical phenomena such as amnesia and related forms of dissociation appear in individuals with a particular type of personality structure and with characteristic life histories. This is not shown in the picture. The impression is made that, given a childhood shock, one might expect amnesia to develop in almost anybody.

From this point of view it seems to me that *Love Letters,* in spite of its poorer direction and general mawkishness, is psychologically an honester and more believable picture. It is done without the pseudo-scientific validation of psychiatry and psychoanalysis, and it presents a sounder picture of how and why amnesia develops in a particular personality. Comparisons are odious, as everyone knows, but to this psychologist the clinical picture of the amnesia in *Love Letters* was as accurate as that in *Spellbound,* and *Love Letters* presented a pretty convincing argument that amnesia could be cleared up without a psychiatrist, beautiful or otherwise.[2]

Neither of these pictures realizes the full values of the uses of psychopathological forms of behavior. Neither film, in the opinion of this reviewer, even approximates the subtlety in the use of such material that was demonstrated, for example, in such films as *The Lodger* or *Hangover Square.* It may be questioned, of course, whether there can ever be sound reasons for making a film *about* amnesia except for specific educational purposes. Films in which amnesia occurs as an organic part of character or plot is another matter.

It is a pity that when psychiatry came to Hollywood with panoply and fanfare there was not added a feeling for human character, its organic relation to life, and its unique dependence on human social organization. It is human beings with whom we are concerned, not psychiatrists or psychiatry.

FILMS REVIEWED

Love Letters. Hal Wallis Prod., Par., 1944. Director, William Dieterle. Novel, Chris Massie. Screen play, Ayn Rand.

Spellbound. Vanguard, UA, 1944. Director, Alfred Hitchcock. Novel, *The House of Dr. Edwardes,* by Hilary St. George Saunders and John Palmer ("Francis Beeding"). Screen play, Ben Hecht.

FILMS MENTIONED

Blind Alley. Col., 1939. Director, Charles Vidor. Play, James Warwick. Screen play, Philip MacDonald, Michael Blankfort, and Albert Duffy.

Hangover Square. Fox, 1944. Director, John Brahm. Novel, Patrick Hamilton. Screen play, Barre Lyndon.

The Lodger. Fox, 1943. Director, John Brahm. Novel, Mrs. Marie Belloc Lowndes. Screen play, Barre Lyndon.

[2] It could be that this verisimilitude was quite accidental. As a matter of fact, of all psychopathological phenomena, amnesia is perhaps the simplest to present in its superficial aspects. This may account for its popularity in Hollywood films.

Postwar Patterns

JOHN GRIERSON

THE NAME of John Grierson is practically synonymous with the documentary film. He has been associated in the formation of the Empire Marketing Board Film Unit, the Empire Film Library, the Film Center, and British Documentary Film Center, and is a member of the Cinematograph Films Council. He has written many articles and essays on painting, educational theory, and the cinema. During the war he was General Manager of the Canadian Government Film Services and Government Films Commissioner.

THE POSSIBILITIES of the documentary film have been defined and speculated upon a thousand times over, for years past. I am not going over the old ground, and for a very simple reason. The documentary must be considered in relation to the realities it tries to describe and illumine and dramatize. More than any other kind of film, it is most truly to be described in terms of what it does and of the themes with which it is preoccupied. Its interests today are necessarily different from those which shaped its manner and style in the 'thirties.

Perhaps I am assuming too much knowledge of this aspect of film work, on the part of my readers? Let me say then, briefly, that the documentary is the branch of film production which goes to the actual, and photographs it and edits it and shapes it. It attempts to give form and pattern to the complex of direct observation. Intimacy with the fact of the matter is therefore the distinguishing mark of the documentary; and it is not greatly important how this is achieved. Although *Grapes of Wrath* was a studio picture, some of us would not object to its being called a documentary picture, because in the reënactment little of Steinbeck's original and direct observation was lost. The studios did not, as they so often do, erect a barrier between the spectator and the actual. This time, their filter was permissive rather than preventive of reality.

In contrast, one might say that many films shot on location and face to face with the actual are much less documentary in the true sense than *Grapes of Wrath*. For we can come directly at life and miss its significance and its reality by a mile. On a building at the Paris Exposition there was an inscription that said, in effect, "If you come with empty hands we can give you nothing, but if you come with gifts we will enrich you greatly." It is like that with documentary films. The presence of the actual does not make a documentary film, because what one does with the actual can be as meretricious and synthetic and phony as Hollywood at its worst. One has only to bring a silly eye to the actual and pick the wrong things to shoot. One has only to ask the wrong questions to photograph the wrong answers.

"Vision without understanding is empty," said Kant; and understanding without vision is blind. One may well take this as a special guide for one's approach to the documentary film. No branch of art has ever more deliberately tried to combine research with interpretation, or laid so much emphasis on the intellectual background of art. I represent, I suppose, the very strongest view in this regard. Certainly, so far as my own operations are con-

cerned, I am convinced that the surest way to apprenticeship in documentary is a good degree in political science or economics. I have often been taken to task for this. I have been told that artists do not come out of libraries, and that, all too often, academic abilities are analytical, and exclusive of the aesthetic or creative powers. I answer that if you do not know what you are looking for you will not find it. It is true that there is no exercise of the imagination unless there is eagerness of heart, and no art unless there is affection. But I would say that eagerness of heart and warmth of affection will, by themselves, be only the poorest guides to the vast and difficult complex of realities in which we live today; that if they are not supported by understanding, they must inevitably break down in sentimentalism, pessimism, cynicism, and at last in nihilism, and that, in fact, we are seeing this self-destruction in every school of art that does not face up to the hard aesthetic law of Plato and later of Bergson: that it is only when the work has been analyzed and thought about and greatly labored over that the flame shoots up and the light kindles.

How warmth and affection and beauty may come to inhabit the edifices of truth, I hope I shall be able to indicate. I shall be content for the moment to assert that it is a basic tenet of documentary theory that the primary search is not for beauty, but for the fact of the matter, and that in the fact of the matter is the only path to beauty that will not soon wear down. I can best illustrate this distinction with all its many consequences in art and education by telling you about Robert Flaherty. The history of the documentary film so far as I personally have been concerned with it has derived in part from my own theoretical deviation from Flaherty; but I ought also to add that we have been the closest of friends for twenty years and that no difference of opinion has affected our complete dependence on each other. In the profoundest kind of way we live and prosper, each of us, by denouncing the other.

Flaherty's approach to documentary in *Nanook* and *Moana* in the early 'twenties was a naturalist's approach. He was in revolt against the synthetic dramas of Hollywood. He believed that the film camera was denying its destiny in shutting itself up inside the studios; that its destiny was to get about on the earth, and be the means of opening the end wall of the theater on the whole wide world. He added that we would find the truest film drama—that is to say, the drama truest to the film medium—not by imposing synthetic stories on fake or even real backgrounds, but by drawing real drama from real backgrounds. Thus his tale of the fight for food among Eskimos, and his tale of the tattoo as a test of manhood in the South Sea Islands. He added that the film was at its best when fronting the phenomena of nature; that there were no movements so fine in front of the camera as the movements and expressions that were spontaneous, or had been formed in affection for a craft, or worn smooth by tradition and ceremony. All this, of course, was very sensible and exercised an enormous influence on those of us who were thinking our way to the film of reality.

The influence of Flaherty's outlook was the greater because of the highly refined personal talent he brought to his observation. No eye was clearer, nor, for that matter, more innocent. He was

by nature a poet in the manner of W. H. Davies. He could see things with great simplicity, and everything he touched found added grace at his hands. So far so good. In any estimate, Flaherty has been one of the greatest film teachers of our day, and not one of us but has been enriched by his example—and I shall add, but has been even more greatly enriched by failing to follow it.

I have said that Flaherty was innocent. He was all too innocent. His revolt was not just against the synthetics of Hollywood; there was at the same time a revolt more dangerous: against the very terms of our actual and present civilization. Flaherty's choice of themes was significant. It was primitive man in Labrador or primitive man in Samoa or primitive man in the Aran Islands, or primitive man in industry, or primitive man, in the significant person of romantic youth, taming elephants in India. Flaherty would be shocked all over again to hear me say so; for he would maintain, with his usual great distinction, that the beauties they enact are age-old beauties and therefore classical. I merely make the point that his people and his themes are noticeably distant from those which preoccupy the minds of mankind today, and that if they were not so notably distant Flaherty would make them so.

But there is a problem of the Eskimo that is all too close to our own problems, as our technological civilization marches northward in Asia and America and takes him in: His hunting grounds today are scientifically observed, and his economy is progressively planned. He is subjected to the white man's religion and the white man's justice and the white man's misunderstanding of polygamy. His clothes and his blankets most often come from Manchester, supplied by a department store in Winnipeg, which, incidentally, has the public health of the Eskimo on its conscience. Some hunt by motor boats, and some travel by air. They listen to fur prices over the radio, and are subjected to the fast operations of commercial opportunists flying in from New York. They operate tractors and bulldozers, and increasingly the northern lands, and with them the Eskimos who inhabit them, become part of our global concern.

Our contrary approach to documentary has been so different as to appear sometimes all too practical and all too materialistic and, in the sense of plain sailing, all too plain. We have not denied the fine first principles of Flaherty's, though, but rather have given them a different application. We have struck out, against every temptation, and not without a grim measure of self-discipline, against the attraction of both romance and commerce, to the here and now of our own society. We have sought not the residuum of the ancient beauties, but the beginnings of new ones in the somewhat unlikely milieu of the chaotic present. We have believed with persistence that the first and last place to find the drama of reality is in what men today are doing and thinking and planning and fighting for. We have indeed found our field of observation and the rough patterns of our work in the clash of forces inside our own metropolitan community.

I am speaking of the vast majority of documentary film makers: of the English school and the Canadian school, of creative workers in the United States like Lorens and Van Dyke, Jacoby, Steiner, Strand, Ivens, Ferno, Huston,

Kline, Hackensmidt, Van Dongen, Rodakiewics, and of sponsors of great enlightenment like Arthur Mayer and Osgood Field. We are all of us, first and foremost, observers of our time; students of the political and social realities, and artists only in that regard. It may be that we exaggerate the political and social duty of documentary observation; we are often accused of doing so. There is certainly nothing in our theory to demand an avoidance of the play of natural phenomena: of day and night, of the seasons of the year, of people in their more personal relationships, of every *damnum fatale,* which, like fire, storm, and flood, cut across even the best-ordered pattern of social thought. If we avoid them, as we tend to do, it is, I am sure, lest weakness set in, and the social and political duty tend to be forgotten. I, for one, regret sometimes the hard disciplines we have set ourselves. On the other hand, documentary would not have been the great and growing force that it is today if we had not imposed them.

Most of us are working with governments. As I write this article, Joris Ivens is Film Officer for the Dutch East Indies, operating with a team drawn from the Canadian government. Jean Painlevé is Film Officer of the new French government. Basil Wright is head of the British government's film unit, and Arthur Elton is supervisor of the British government's production schedule. Stuart Legg is producing the *World in Action* for Canada, and I myself am its Film Commissioner. Harry Watt is operating for the Australian government. Van Dyke, Jacoby, and many of the other American documentary people are serving with the O.W.I. or the armed forces. This is not simply as a result of the war, because, in fact, nearly all documentary production in the past fifteen years has been sponsored either by government or by industries. The excursions into freedom from this relationship have been rare indeed, and the reason is simple. Our theory of approach has, from the first, been related to the needs of governments and peoples. On the one hand, we wanted to find the patterns of the social processes; on the other hand, governments wanted these patterns found and described and illumined and presented. So, too, with the national associations and public utilities. They were interested in showing what they did in the world, interested in the fine complex of their technological or economic or social stewardship. In each was an opportunity for the documentary film to see and sort out one pattern or another in the social whole. Never, perhaps, did an aesthetic urge find so logical or ready a sponsorship.

The line of development of the British documentary school will illustrate this as well as any other. It was initiated and encouraged by a British government which wanted to use the film as a means of communication between the various parts of the British Commonwealth. It wanted to describe how the various people lived, what they did, what they produced, and how well they produced it. They were soon interested in men's skills, and interested in men's researches and the results of them. We led them, step by step, deeper and deeper, to the subject matter of public import; to the web of modern communications, to the web of trade relationships, to the patterns of labor and organization in the technological society which they governed. There fol-

lowed consideration of problems of public health, slum clearance, and town planning, of the improvement of educational and nutritional standards, of the development of local governments.

At every stage there were films to make—though this is to put it all too simply. Themes like these are not easy to handle, but mean first an understanding of how things work and who works them. At every turn we were concerned with the brave but difficult discovery of our own time. There is no wonder, therefore, that many of our first efforts with the new materials of observation were halting and confused. The surfaces were often apparently ugly and the system of their relationships difficult to discern. On the other hand, we had the assurance that in the film, with all its powers of juxtaposition, we had in our hands the only aesthetic instrument that could bring into relationship and order the complexes of a coöperative world. It was our promise that however difficult the theme might be, it could, through film, be brought to order and significance and therefore to beauty. It might not be the same kind of beauty as is to be found in lyric and idyl and epic, but perhaps another kind of beauty altogether, as different from the aesthetic patterns of the past as the patterns of Braque from those of Bellini. We took the view that we might be creating a visual order as radically different from the old as the mental order now being created by political and economic events. We felt that we might be reflecting the deep alteration in the categories of thought which a progressively coöperative society was establishing. In any case, we went step by step with the need on the part of governments for an explanation and understanding of what was going on in the world, and we found therein the source of both our economy and our aesthetic.

During the war we necessarily tended to preoccupy ourselves with the reporting of the armed forces, and some fine films have resulted, as, for example, *Memphis Belle* and *Target for Tonight*. But to the purist among us this has been a diversion only, necessary but not of final importance in the development of the documentary film. The war's largest significance has been in the searchlight it has directed upon the social structure, and in the constructive service it has prompted with respect to the social structure. The panoplies of war are of only passing significance and have, I think, no ultimate import except in the sight they give of the bravery of men. As before, all the best documentary work has been done on the deeper, more lasting levels of human effort. What remains, now that the war is over, is what we have done to describe the nature and the aspirations of the United Nations to each other, what has been done to describe the new spirit of unity at home and of international cooperation abroad. Our economic and political horizons have stretched remarkably, and our imaginations have been enriched past all computation during the five years of war. In many respects the documentary film has kept pace with this development, and it may even have done something to shed light on the process. In Canada, in the planning of our production, the recording of war has occupied only one department of our work. We have been concerned, like the citizens of other countries, with rehabilitation and reconstruction and the part we have to

play in the comity of nations; with our duty to Bretton Woods and Dumbarton Oaks, UNRRA, ILO, and the other agencies of international coöperation. We, too, are under an obligation to replan our agriculture and our fisheries; we have to articulate anew our trade relationships. We are all too conscious that we have abundant material resources to discover and develop. We have the same deep sociological programs as other countries: the equalization of our economy to effect; new standards of nutrition and health to establish and maintain; new breaks to establish for education and the child; new measures of amenity to introduce to the industrial and the rural community alike.

You will understand me, therefore, when I say that we makers of documentary do not think so much of making films as of town planning and regional planning, community centers, country libraries, day nurseries, and larger school areas. Such are the subjects which our film makers think about; and they would regard it as the measure of their creative work that they should have done something to illumine the problems of their concern, and contributed something to their solution. I hope you are not disappointed if this all seems too mundane, and a far cry from the beauties of documentary which Flaherty envisaged. The film makers I know would be apt to say that there is nothing mundane or unbeautiful about the giving of beauty where little today exists. They would be apt to quote the slogan of the early American lumberjacks, and say that there is nothing more inspiring than letting light into the swamp; and they would be astonished if it were suggested that this is not a true basis of aesthetic. For myself, I will only say that I cannot think of any reality more pleasant, or better worth discovering. If you are concerned with service to your time, there is opportunity and to spare in such a conception of documentary. If you are concerned with education, there is surely no better way to serve it than to bring alive to the citizen the terms of the world in which he lives. He knows the better, then, the far reaches of his social self, however local it may immediately appear. He understands how common to all the world are his problems of housing and health and food and the rearing of children. He has in the film the seeing eye of his active and creative citizenship, firing his imagination where best it should be fired, in the terms of his basic and real interests.

I mentioned at the beginning that documentary could only be understood in its relation to the materials of reality which it brings into focus. Today the materials for its observation are extended enormously and in direct proportion to the increase in man's will to bring society to a state of order. We are facing a period of great changes in society, and a first prerequisite of these changes must be a deeper study of society's nature and society's problems, and a closer relationship and understanding between governments and peoples, peoples and governments. In both these developments the documentary film has the power to play an enormous part.

I hardly think you need worry too much about how the artist will come out in the process. I am constantly being told by sentimentalists and romanticists that art in the public service must

inevitably lose its freedom. I have been told this for sixteen years, and can only register the fact that I have now been concerned with many hundreds of films and have never made them in any other way than the way I wanted them made. I am told that I have built up a coöperative approach to art which denies personal expression and therefore art itself, and I am told that where so much expert knowledge is involved there must inevitably be experts and that the artist's soul must stifle in contact with the academician and the bureaucrat. I can only say that no man, the artist least of all, can be free from the reality in which he lives, or avoid the duty of bringing it to such order as is within his power and his talents. Only at his peril will he try to escape from it, for he cannot easily take creative root elsewhere, in the isolation of the distant, or the isolation of the past, or the isolation of his own fancy. So far as documentary films go, the reality I have sketched is the only one I know and the only one in which an artist can find honest work to do. I have no complaint if some think they see greener pastures on the high hills, but I have never known any that found them. I am a cold and Calvinistic observer who believes that they do not exist.

By the very conditions of that reality, we are concerned not with a personal work, but with a public work. We are not concerned with personal expression in the old, private sense: we are concerned, each man, with whatever contribution can be made to a difficult and complex work for which many varieties of talent are needed. It is, of very necessity, coöperative, and no one, technician or creative worker so-called, is more important than his neighbor. I believe that the individual is not less rich in his life and his expression for entering such a coöperative, but vastly richer. I believe it simply as Plato believed it. In the last resort, I would point to the fact that our theory of documentary has worked. It has trained and inspired hundreds of creative workers, and very few who have once adopted it have abandoned it. The doctrine has spread to many countries, and wherever it has gone it has, by some inner alchemy, commanded the loyalty of young and eager men, and entered into the service of the common people and the progress of mankind. It has been responsible now for thousands of films. They have together and cumulatively set their mark on education; they have inspired the public service and the service of the public; they have put an instrument of progressive understanding and progressive citizenship into the hands of labor and management alike. Few of the films have been great, perhaps, and not all have been notable, but, again, by some inner law of documentary itself, they have almost always been authentic and honest. It would be a wonder if, in the presence of the living forces of our time, and the drama of man's needs, sacrifices, efforts, and achievements, they had not sometimes found the materials of beauty. I am sure they have.

The Documentary and Hollywood

PHILIP DUNNE

DURING the war Philip Dunne was Chief of Production of the Motion Picture Bureau, OWI, Overseas Branch. He is at present a member of the Executive Board of the Screen Writers' Guild, and a member of the Board of Governors, Academy of Motion Picture Arts and Sciences. Author of *How Green Was My Valley*, he is now working on *The Late George Apley*.

ALMOST everything that needs to be said about the documentary per se, analytically or historically, has already been said by such well-qualified professionals as John Grierson, Raymond Spottiswoode, and Paul Rotha (three Britishers; none of the able American documentarians has yet taken time out to write the book that needs to be written about the American documentary). Indeed, an able analysis of the documentary by Mr. Grierson appears elsewhere in this issue. However, I do feel that I may be permitted to describe the appearance of the documentary to a fairly typical Hollywood picturemaker thrown suddenly into the field and into close association with professionals in the medium. This association, a creature of the war, is one I profoundly hope will continue into the peace. Hollywood picturemakers have much to learn from the documentarians, and vice versa. Both groups have suffered from inbreeding.

I learned about documentaries the hard way: in the process of directing the production activities of Robert Riskin's OWI Overseas Motion Picture Bureau. My associates, and teachers, were all veterans of the American documentary movement, such men as Willard van Dyke, Irving Lerner, Alexander Hackenschmied, Sidney Meyers, Irving Jacoby, Roger Barlow, and Henwar Rodakiewicz.

I should guess that most of these names are unknown to a majority of Hollywood picturemakers. They will continue to be unknown as long as some in Hollywood persist in looking on the documentary as a poor relation of "The Industry"; as long as so many in that "Industry" continue to consider the typical documentarian a long-haired crank, his mind cluttered with impracticalities.

So far from being impractical, most established documentarians can take a camera apart, cut their own negative, and perform a hundred other useful little chores which would flabbergast the average Hollywood writer, director, or producer. All documentarians are unit managers in the Hollywood sense, and nothing could be more practical than that. They manage their own crews in the field, forage for their production materials, and bring in exposed film at a cost per foot which would appear visionary to a Gower Street independent.

Why, then, the allegation of impracticality? I venture to think it is because the documentarian insists that his film must nurture an idea. We have recently listened on the radio to various influential Hollywood personalities to whom ideas seem to be anathema. I believe that it is in these quarters that we are most likely to find contempt for the documentary; and precisely in these quarters that we will find the kind of thinking, and the kind of picturemak-

ing, which instill a reciprocal contempt for "The Industry" in the mind of the average documentarian.

The gap between the two media is not so wide that it cannot be bridged.

It is difficult to set down in category the salient features of the documentary as opposed to what we may as well call the entertainment film. (I use the phrase with the warning that the reader should not infer that a documentary is by definition not entertaining.) The documentarian, like his fellow craftsman in the entertainment field, is not bound by iron regulation or custom. By its very nature the documentary is experimental and inventive. Contrary to the general impression, it may even employ actors. It may deal in fantasy or fact. It may or may not possess a plot. But most documentaries have one thing in common: each springs from a definite need; each is conceived as an idea-weapon to strike a blow for whatever cause the originator has in mind. In the broadest sense the documentary is almost always, therefore, an instrument of propaganda. And in this we can make the first major distinction between the documentary and entertainment media.

Every film we made for the Overseas Branch of the OWI was built round a central idea: to make friends for America. Pare Lorentz made *The River* to awaken the people to the dangers of industrial and agricultural negligence, and to point to the antidotes. Kline and Hackenschmied's *Crisis* was a powerful protest against the assassination of Czechoslovakia's independence. On the other side, Leni Riefenstahl's *Triumph of the Will,* so valuable a source of Nazi material to all the American war-film agencies, was produced expressly to reunite the Party behind Hitler after his murder of Ernst Roehm and associates on the "Night of the Long Knives."

At this point, I should like to make a distinction between the two types of documentary: the "factual film," and what we might call the "true documentary."

The factual film is a legitimate descendant of the newsreel, often with a strong strain of the old-fashioned travelogue in its ancestry. But the factual film is not, like the newsreel, limited to mere reportorial coverage of a particular event at a particular time. It is, like all documentaries, built round an idea, a point which the producer tries to make. To make this point, he uses old newsreels, animations, reënacted scenes, blending all, by careful construction and tempo, into a homogeneous document. The needs of war stimulated the growth of the factual film as in a hothouse. In 1942 such films began to appear in feature length. That factual films can be both instructive and gripping (entertaining, in the broad sense) has been amply proved by the justly admired series produced by Colonel Frank Capra's unit. The Capra films are classics of their kind.

But the factual film is not the realm of the true documentarian, although many individuals with documentary experience have contributed to its development. The technique of the factual film in this country has been dictated largely by the needs of war. The producers of such films, recruited mostly from Hollywood studios and the newsreels, learned their techniques as they worked, shaped their product to the needs of the times, and gave them the mood dictated by the emotions of a world at war. Most of these men will

return to their normal occupations with the coming of peace. It is extremely doubtful if the form they created—the emotional propaganda film—will survive in theatrical feature length the times which gave it birth. But there is no question that it has played an important and significant role in the winning of the war.

There remains the "true documentary," a permanent fixture in the film world, and potentially of as great importance as the purely entertainment film. In the hands of a hardy and devoted few the documentary flourished in Europe and, more obscurely, in America before the war. During the war it was subjected to the same sort of forcing process as that experienced by the factual film, but not to the same degree. In these postwar times, as nontheatrical outlets for distribution increase, and as theater audiences begin to demand—as I am sure they will—programs on a higher intellectual level, the documentary should retain its wartime growth and become an important factor in the education and entertainment of the public. Its influence on the entertainment film may well become profound.

The true documentary is usually limited in pictorial scope, though the idea it espouses may be as large as the idea of democracy itself. To express its idea, it will make use of a convenient microcosm, a homogeneous setting and cast of characters through which the idea can be advanced.

The true documentary, unlike the factual film, makes little use of stock material. It strives for uniformity in quality and mood and, like the entertainment film, achieves it by shooting original material to express its central idea. Since budgets perforce are meager, production planning is not impressive from the Hollywood point of view.

The simplicity of production arrangements marks the second essential difference between the documentary and entertainment films. The typical documentary is filmed in a natural setting, exterior and interior, and uses actual personalities selected on the scene to play its parts. A comparatively small crew, by Hollywood standards, handles the shooting. In our OWI operation, the standard crew consisted of eight men: director, cameraman, unit manager, two assistant cameramen, electrician and assistant, and a driver-helper. Standard equipment was a station wagon and a light truck, a moderate number of lights, a Mitchell camera, and an Eyemo. At our operational peak in the summer of 1944, we had five such units in the field. In three years of operation OWI shot film in more than thirty of the forty-eight states.

The mechanics of field production of this sort dictate sharp variations from typical Hollywood techniques. Nine documentaries out of ten are location pictures. All shooting is done in the field, sometimes thousands of miles from home; retakes after a preview are therefore almost always out of the question. To maintain good quality under constantly varying atmospheric conditions requires much time and patience.

Working with nonprofessional performers also consumes much time. It is his ability to work with such performers that distinguishes the documentary director. He must be able to "cast," from among an average group of villagers or steelworkers or students, the exact type called for in the script—or to

change the script if he finds a better type. Acting ability cannot be assumed; indeed, the opposite is true. He must be careful not to select the born ham, the man or woman who once played in local amateur theatricals (and who is certain to push himself forward). He must possess a monumental patience; the ability to wait till the farmer's self-consciousness passes, for the golden moment when the child forgets the camera and grows really interested in the nesting bird. He must be both psychologist and politician. He cannot, like his Hollywood confrere, fall back on a combination of good acting and good writing. His responsibility—and his opportunity—are as great as that of the Hollywood director before the advent of sound forced him to follow his script, not to lead it. And, like that vanished genius of the early Hollywood scene, the documentary director should be above all a writer, wielding the camera instead of the pen.

The conditions under which documentaries are shot dictate other variations from Hollywood techniques. The best documentary photography is sharper, more realistic, less glossy and high-lighted than the Hollywood article. Make-up is almost unknown. The film editor has a great deal more freedom than in Hollywood. He is less concerned with the careful "geography" of the typical Hollywood scene, more concerned with making a story point by an adroit cut. A documentary editor thinks nothing of moving actors in time or space by direct cuts instead of by the traditional Hollywood dissolve. (In this, the heritage of the newsreel is evident.) In general, editors in this field, working with what is usually silent film, have more freedom than their Hollywood confreres. In documentary practice a film editor is also in effect a writer, using a moviola instead of a typewriter. Give a good documentary editor an idea and he will express it for you in film: pictorial image, mood, and tempo. His function is more often creative than editorial.

As a quid pro quo, the documentary writer has an important semieditorial function: the writing of the narration, a common feature of documentary films, though somewhat rarer in Hollywood. Its importance to the documentary, particularly to the silent film, cannot be overestimated. Many a weak documentary has been given a semblance of life by an inspired commentary; many a strong one has been marred by wooden or insipid words. Narration should add something to the image, not merely explain it. If the image needs explanation, the writer and director have not done their work properly (and this is also a good working rule in Hollywood). The best narration is simple, sparse, often poetic. Its tempo should be in close synchronization with the tempo of the film. In the best documentary practice, the writer of the narration is encouraged to suggest changes in the editing of the film. Words and image can thus be dovetailed and emerge, not as a mere illustrated lecture, nor as a reel of film with spoken comments, but as an artistic entity.

Similarly with the music. The composer of a documentary score is not required, as is too often the Hollywood practice, to lay out so many feet of music against so many feet of film. He is encouraged to participate, to become a part of the editorial team. Documentaries are often recut and rewritten to meet the requirements of the composer.

His ideas are always heard with respect. It is thus no accident that many of the best American composers have done some of their most striking work for the documentary.

This brings us to another significant difference between the documetary and the entertainment film. In Hollywood, the contribution of each craftsman to a given picture is fairly well understood. We can assume that the writer wrote the script, that the director shot it with usually minor alterations, and that the editor put the film together, all supervised by the producer. There is a sharp differentiation of function between the various crafts. Only in comparatively rare instances do we find individuals who combine two or more of these functions. Very rarely is there any serious overstepping of craft lines. At its best, this differentiation leads to that happy collaboration of all crafts which makes for fine pictures; at its worst, it leads to the sort of assembly-line production once in vogue at several major studios, though now, happily, on its way to the ash heap.

Such differentiation is the exception rather than the rule in the documentary field. Writer-directors, editor-directors, writer-editors, and individuals who can write, direct, and edit their own films are common. There is also a constant interchange of functions. It is nothing unusual to find a writer filling in at the camera, a director cutting film, or an editor writing scripts.

Documentary films are usually far more flexible than the typical Hollywood product. In part, of course, this arises from the fact that most documentaries are shot silent. (Recutting was the rule rather than the exception in Hollywood's silent days.) But this quality is also inherent in the uncertain nature of the documentary, based, as it often is, on things still happening. Our film on the San Francisco Conference had to be revised from day to day. A Navy camera crew went out on the new *Yorktown* to shoot the "life and death of a carrier." After two years she was still afloat, and thus, happily, *The Fighting Lady* was deprived of its original ending. Also happily, the first Battle of the Philippine Sea provided a more than satisfactory substitute. There are admittedly extreme cases, but many documentaries must be turned inside out, either while still in production or in the cutting room.

For this and other reasons, documentary scripts are usually simple affairs, allowing the director plenty of leeway for substitution or invention in the field. They are notably devoid of "situations," melodrama, or suspense developed from plot devices, or from intricate interrelations between characters.

In the first place, such situations are usually beyond the abilities of nonprofessional performers. In the second place, they are not consonant with the characteristic goal of the documentary: to drive across an idea. This does not mean that the documentary need lack suspense, or even the "menace" for which the fabled producer so plaintively cried. The documentary "menace" is there, but he doesn't wear striped pants or whiskers, or carry a whip. He is the unseen enemy in John Huston's *San Pietro;* in *Fighting Lady,* the pink tracers floating up from the hostile atoll; he is the starboard engine sputtering and the ground fog in Britain's magnificent *Target for Tonight;*

he may be as intangible as the gray loneliness of the English housewife in *They Also Serve,* as tangible as the dreadful specter of flood and erosion in *Valley of the Tennessee.*

For the same rules hold true for documentary as for entertainment films: the audience must be *for* one thing, *against* something else. The documentary must have a "pulling" interest. The script, simple as it usually is, strives to enhance this interest. Thus the best documentary, like the best entertainment film, has suspense, light and shade, honest dramatic motivation throughout.

As I have said above, it is the fashion in some Hollywood quarters to deride the documentary as pedantic, undramatic, and "arty." I have even heard the documentarians accused by one producer (who should know better) of trying to drive audiences out of the theaters.

The charge of "artiness" cannot be wholly denied, but it should be leveled not against the medium per se but only against those few producers who have so indulged their aestheticism. The other charges are more serious since they imply that no film dealing in truth can ever hope to win public acceptance; and this, of course, is a matter of the very first importance to the producer of entertainment films.

Yet many of Hollywood's finest pictures have dealt with material usually considered to be purely documentary. The menace in *Fury* was not the cruelty of individuals, but the psychotic hatred of a mob; *The Grapes of Wrath* pointed out the evils of selfishness and economic troglodytism: the theme of *Citizen Kane* was the well-worn aphorism that absolute power corrupts absolutely; and in *Wilson* we saw a great man destroyed, not by one whiskered senator, but by the ignorance and indifference of a nation. This fine film also pleaded powerfully for its cause in the best documentary tradition. *Zola* and *Juarez,* among many others, also had something very definite to say.

Several producers of Hollywood pictures have begun to grasp the enormous responsibility and the opportunity facing the industry in the critical years ahead. Their ideas are winning acceptance. The trend is obviously toward greater realism, toward a more frequent selection of factual American themes, toward the theory that motion pictures should not only entertain and make money, but should also give expression to the American and democratic ideals: to "the truth" as we, the citizens of democracy, accept it. The industry is preparing to do its part in the fight for human freedom, tolerance, and dignity. This preparation should be not only spiritual but technical. Hollywood can and should prove to its own satisfaction that truth is not only stranger, but stronger, than fiction. It can do this best by closely observing the methods, and sometimes absorbing the personnel, of the documentary field. After all, the words, "truthful" and "documentary" are nearly synonymous.

Citizen Kane. RKO Radio, 1940. Director, Orson Welles. Original screen play, Herman J. Mankiewicz and Orson Welles.

Crisis. Mayer-Burstyn, 1939. Director, Herbert Kline. Commentary, Vincent Sheean.

The Fighting Lady. Fox, 1944. Director, S. Sylvan Simon. Narration, John S. Martin and Eugene Ling.

Fury. MGM, 1936. Director, Fritz Lang. Original story, Norman Krasna. Screen play, Bartlett Cormack and Fritz Lang.

The Grapes of Wrath. Fox, 1939. Director, John Ford. Novel, John Steinbeck. Screen play, Nunnally Johnson.

Juarez. WB, First Nat'l, 1939. Director, William Dieterle. Adapted from play *Juarez and Maximilian* by Franz Werfel and novel *The Phantom Crown* by Bertita Harding. Screen play, John Huston, Aeneas MacKenzie, and Wolfgang Reinhardt.

San Pietro. U.S.A. Signal Corps Campaign Report, 1945. Narration, Maj. John Huston.

The Life of Emile Zola. WB, First Nat'l, 1937. Director, William Dieterle. Original screen story, Heinz Herald and Geza Herczeg. Screen play, Norman Reilly Raine, Heinz Herald, and Geza Herczeg.

The River. U.S. Govt, 1937. Written and directed by Pare Lorentz.

Target for Tonight. Crown Film Unit, B.M.I., 1941. Director and supervisor of narrative, Henry Watt.

They Also Serve. B.M.O.I., 1942. Producer, Ruby Grierson.

Wilson. Fox, 1944. Director, Henry King. Original screen play, Lamar Trotti.

Valley of the Tennessee. O.W.I., Overseas, 1945. Director, Alexander Hackenschmied. Writer, May Sarton.

Death and Mathematics: A Film on the Meaning of Science*

BEN MADDOW

IN COLLABORATION WITH IRVING LERNER

Until recently Ben Maddow was a sergeant in the First Motion Picture Unit, Army Air Forces. Before the war he was a writer for documentary films, including *The Silent War* and *The Bridge.*

The main objects of science are the freedom and the happiness of men.—THOMAS JEFFERSON.

SEQUENCE 1: EXPLOSION IN THE MIND

Set very close, dramatically, at the right of the frame—the back of a man, from the shoulders up. The collar of his tweed coat is half turned up. In the foreground we can see only the back of his head: he wears no hat; his thick hair has an oblique line of separation through it, as if there were a cord around his head. He is apparently seated at the top of a flight of steps, for above his shoulders and beyond his head are the trees and walks of the campus of an American university.

After a moment, a book open in his left hand is moved up as if to catch the afternoon light. It blocks out the view of the campus. In the text of the left-hand page is printed an equation. The equation is Einstein's: the equivalence of mass and energy: $E = mc^2$. His voice repeats the equation, translates it into words: "Energy equals mass times the speed of light, squared."

Then, over an extreme close-up of the equation, a tremendous, rocking explosion. The camera moves back, slowly. Nothing has changed. Two girls are at the foot of the tower steps, talking and laughing. A leaf falls down, covers the page of his book. He holds it there. Now the girls are looking up at him:

"Mr. Robinson! Mr. Robinson!"

He closes the book. They wave to him.

"Mr. Robinson! Does your class begin this Monday?"

His hand comes up in the frame, to gesture with the closed book.

"Yes—Monday!"

"What? Can't hear you, Mr. Robinson!"

"Monday! Monday! Yes!"

The girl smiles again, nodding. Then she is pulled away by her companion, and out of the frame. Now we hear Robinson's voice narrating:

On Monday, he's to begin to teach the course in nuclear physics. Physics is his subject, one in which he's been trained, to which he's returned after serving in the War. He needs only to tell what he knows: the laws, the mathematics inside the atom, and the enormous energies locked inside the atom. Yes, the enormous, the dreadful, the terrifying energies! Perhaps he should say no more than that: present the facts, the equations, and no more.

* This film was originally prepared for production by the Motion Picture Bureau, Overseas Branch of the O.W.I. So many of the problems with which the film was concerned were under security that production was impossible during the war.

Italicized passages are sketches for the final commentary, which would have to be written at a later point in the film's production.

Suddenly, above his head, the bell in the bell tower rings out, extremely, startlingly loud. His head twists around to look at it. For the first time we see his face. His right eye is covered with a black patch where the eye used to be. His lapel holds the war veteran's pin.

The Camera follows him as he leaves the tower, crosses the campus, passes the science buildings with their frieze of names: Aristotle, Lucretius, Descartes, Newton.

The question—this necessary question—will rise before him as he faces the class. But he cannot answer it: these enormous, dreadful, terrifying energies—who will control them?

He goes to the door of the cyclotron control building, unlocks it, goes in. He takes a notebook from a shelf above his desk, opens it, enters a date in one of the columns.

The smell of this closed room, the sharp, definite odor of the reagents on the shelves, once meant hours of difficult, absorbing, deeply satisfying work. Now, there's another smell here, that rises out of his memory, the odor of burnt flesh, the odor of skin, brain, and muscle decaying in an open field.

He turns on the main power control for the cyclotron. The camera gives us a series of dials, where the needles jump and quiver into place, or slowly build up to the maximum. Then a series of details of the cyclotron itself. Matched with each cut, a mounting series of sounds, half explosion, half music. Finally, matched with the luminous stream emerging from the cyclotron, the roar of Robinson's own voice, amplified and distorted, reading Einstein's equation. It echoes and reëchoes.

The stream from the cyclotron slowly dissolves, becomes the glare of a lamp in a surgical tent, straight into the camera; the glare on his face, lying on a stretcher, a thick bandage over his right eye. A hand comes in to cut away the bandage with scissors. As the gauze is pulled away, a shot of the surgeon, sweating, looking down at him. The surgeon nods. An assistant brings an ether mask, which moves down into the camera, brings the scene back into darkness.

Out of the darkness, the light of a radar screen, a moving pencil of luminescence. Robinson's own voice gives the electronic equation. In answer (stock footage) a fighter plane splits and flames, a man falls out, his legs apart, turning over and over, falling to his death.

Now men in special helmets, in oxygen masks, in arctic headgear, at the complex sights of AA guns, bombsights, periscopes. Twin 50's on a plane swing around, a heavy AA gun is elevated, the camera pans over the nose of a B-25: five machine guns and a 75-mm. cannon. A 16-in. shell is delivered to the gun in a battleship. Two men in the fire-control room are making the calculations. Silk bags of powder are thrown in, the breach is closed. The triplet of guns is lifting slowly into place. Sound: Robinson's voice speaks the mathematical equation governing the trajectory of the shell. The guns fire.

Here is science in the twentieth century, the liberator of forces more precise and destructive than man has ever imagined before. But who will be the master of these forces?

The moving dials, the cross hairs of a bomb sight. Clusters of enormous bombs fall straight down from the camera.

Abstract theory proved in exploding steel, the advance of chemistry into the field of systemic poison, electronics perfected till it kills at a distance, brilliant researches into how to stop breathing!

Instead of the explosion of the bombs, we hear the sharp click of metal on glass. A glass cage is being closed. Inside is a live rat, watched by a woman assistant wearing a fantastic new gas mask. She opens a pinchcock in a tube leading to the cage, starts her stopwatch. The rat claws frantically at the glass. The sweep second hand marks off three seconds, four, five. The watch is stopped. She opens the cage and with forceps lifts out the dead rat, close. She puts the rat down on a glass plate or in a porcelain pan, and slits it open with a scalpel.

The slit rat dissolves, becomes Robinson's face, with its black eye shield. It is as if only a few seconds had passed since he turned on the power.

The most evil, the most malevolent forces in the world have also used the tools of science, and naturally they have used them to destroy men. The worst crime of fascism has been that it has forced democracy, too, to pervert science to the mathematics of war—where X *equals death.*

Robinson turns off the power. The needles go back to zero. His notebook page, except for the date, is still empty. He tears the page out, and writes:

"Dr. Lawrence: I am leaving . . ." His pen pauses. ". . . for a few days. Got some problems to work out for the Monday class.—Robinson."

SEQUENCE 2: THE QUESTION IN THE SEA

Mist coming in over the sea. The camera pans over, past rocks and spray, to the pinnacle of rock on which Robinson is standing.

Perhaps it would be better if there were no science, or if man had never evolved. Or perhaps, if life itself had never begun.

Sound of seals barking, on little islands invisible in the mist. Far to his right, below, is a stretch of white beach. Tiny figures of children at play down there. A dog, very small and black, attacking the ocean as it recedes, retreating from it as it strikes back. The camera pans slowly back to the mist coming in over the water. Robinson, with the black patch on his face, looks back at the slow, heavy sea.

Here, in a place like this, life began. Here the first cluster of carbon, oxygen, hydrogen, took nourishment out of rock, air, water, and made more clusters in its own form, and multiplied itself. Here the long adventure began.

A flock of cormorants flap slowly across the movement of the ocean.

Robinson climbs down across the eroded rock formations, reaches the bottom, kneels, and puts his hand in a small pool of the sea. He pulls out a small crustacean, a kind of sea snail. We see its slimy foot under the shell, searching blindly for a place to cling. He throws it back among the rocks. Frightened, swarms of crabs scuttle back into crevices in the rock. He captures one, holds it up to look at the grasping front claws, then drops it into the water. The sea comes foaming up toward the camera, and recedes, and rushes up again between the rocks.

Here in the foam live the billions of microörganisms, full of blind hunger, blind fear, scavengers and cannibals, without memory or conscience, the ancestors of man. Man, himself the apex

of the blind adventure of life toward greater and greater complexity, has embarked on a further adventure—with the instruments of science.

Robinson watches the sea. We see him from below, the movement of the water changing the light across his face. Then he turns his head as he hears a shrill, high-pitched whistle.

It's a two-fingered whistle, and from a surprisingly small boy. He's found some wonderful object, way down below there on the beach. Children on the beach look up toward him, he keeps waving. Two children leave the unfinished battlements of their castle. A very small boy, unwilling to leave his collection of two shells, a starfish, and a piece of tubular seaweed thirty feet long, gathers them hastily together, and runs through the edge of the water, splashing as hard as he can. The black dog comes, too, in worried pursuit of a child who doesn't know what's happening, except that it's bound to be exciting.

Once the children get there, though, the conference is serious. They stand in a ring around a transparent, gelatinous mass on the beach. The boy who found it is explaining.

"It's a whale."

"No, it's not a whale."

"Well, it's part of a whale."

"That's right, it's probably the whale's brain."

They're poking it with a piece of driftwood.

Robinson breaks into this circle. They tell him what it is. The boy with the shells, the starfish, and the thirty feet of seaweed tells him he doesn't think it's a whale's brain. He's seen a brain in his father's book and it doesn't look like this at all. Robinson agrees, tells them it's a jelly fish, washed up from the sea. He draws in the sand, showing them its original form, and makes motions in the air, to show how it feeds and swims. It lives out there, he says, pointing back to the sea. The children look out at the sea. The very small boy with the starfish looks out at the sea, too.

The very small child with the starfish turns back to Robinson and asks, pointing at the jellyfish with his foot:

"But what is it made of?"

Robinson begins to explain, draws the structure of a single cell on the wet sand. The sea rushes up to alter the drawing. The children watch him as he explains.

Now we see a paramecium magnified in a drop under a microscope, beating and twisting with its cilia. Then other microörganisms. (Blown-glass models available in museums are used, but the camera is kept in motion constantly.)

But see how far man has gone! What wonders he's seen, what truths he's discovered!

Animation: A model cell, with details of cell wall, protoplasm, nucleus. The camera moves in as the animation becomes more complex. It reveals the parts of the nucleus, the chromosomes, the hundreds of genes strung on them like beads on a twisted string.

Man found the rules that govern heredity. We reached in with chemicals and X-rays to alter the body by altering the germ cell. He has taken a hand in the creation of new and sometimes monstrous species.

Animation: Camera still moves, probing still deeper, past the genes to the arrangement of the molecules and into the molecule to show the arrangement of atoms.

Man has learned the inner structure of organic compounds, their chains, rings, interconnections. He has learned how to take them apart and how to create them again.

Animation: Camera still probes, past the molecule and inside an atom, depicting diagrammatically the positions of the electrons in their orbits, and the tighter structure inside the nucleus itself.

And in this century, man has broken upon the atom and has found inside of it new worlds and the source of immense energies. Nor has he reached the limits of his dangerous adventure.

Animation: The nucleus breaks apart and explodes particles of which it is made. Dissolve to diagram of the nebulae that are themselves galaxies of stars beyond our own galactic universe.

While man has gone so far and so deep into the almost infinitely small, he has also stretched his intelligence till it touches and examines the almost infinitely large.

Animation: The camera searches among these universes, among the drift and debris of outer space, till it comes upon our own disk-shaped galaxy of stars.

Man has photographed the nebulae, has named the elements in stars whose light takes on the order of a billion light-years to reach the photographic plate. And in this century, for the first time, he has begun to work out the mathematics of the universe as a whole.

Animation: Camera thrusts down through the stars of the Milky Way, toward the medium-sized star that is our sun. It moves into the solar system, past the outer planets, past Saturn with its rings and satellites, brushes close by the craters of our moon, and moves toward the mass of the planet Earth, lit on one side and mottled with clouds.

Man cannot move these bodies, nor even travel in these spaces, yet. But in this century his science has made him master of this one planet, for good or evil.

Animation: Dissolves into actual aerial shot of moving through clouds, and in turn this dissolves, with shocking clarity, into the smoking ruins of a city.

Here is the evil that science can do, in the hands of evil men and evil movements. Man's death—is there where the adventure of men must end?

Stock footage: Orderly graves, white crosses in a military cemetery. Then rough crosses, hasty graves. Then a burial pit, not closed, men and women thrown into it, left naked and decayed. There are men and women at the edge of the pit, too—alive, weeping because they cannot yet believe what they see. Close-up of a weeping woman, hysterical, clumsy in her heavy Ukrainian clothing.

A terrible force struck here—at this city, and at this woman,—the force of man's accumulated knowledge, used by evil men. Who's to control these forces so they're not misused again, so that the unbelievable energies of the atom, for example, do not strike this woman's children a few years from now?

Smoke rising from ruins. Charred, indistinguishable, anonymous remains.

Dissolve back to the circle of children, listening to Robinson. A boy, about eight, says proudly:

"*I'm* going to make a natom-bomb that's going to kill everybody—everybody in the whole world!"

Robinson looks at him, laughs. The

children, including the boy, take their cue from him, and laugh, too. But the smallest boy, the one with the starfish, tugs at Robinson's trousers.

"Will it kill everybody, everybody in the whole world?"

Robinson assures him, no, it will not. But he is not as sure of the truth of his answer as the child is. He gives Robinson the starfish. (After all, he has the thirty-foot piece of seaweed and six shells.)

"Do you want me to have it?"

The child nods, then asks again, as if he needed reassurance:

"Will it kill everybody?"

Close-up of the child, and sand and the sea behind him.

Science alone cannot answer this question. It is a political, a social question. Someone must control the terrible potentials of science, but who shall it be? Or would it be better, indeed, if the adventure of science were to stop? if man were wholly destroyed, and life with him, leaving nothing but the mineral kindness of earth and water?

The camera pans off the child to the rocks, the rushing sea, the empty, blind mist over the sea.

Sequence 3: The Three Answers

The sea dissolves, becomes a slope of bare autumn fields, with a stubble of corn blackened by repeated frost. The pan continues, comes to rest on the face of the farmer.

The farmer has a question, too. It is, in a way, as urgent as the child's question.

The farmer is standing with seeds in his hand, six or seven seeds of wheat of different sizes or shapes. He is talking over the wooden fence to a county agent, whose car is parked on the road just opposite. The farmer's tractor—he has just been doing the fall plowing—is behind him in the field. The furrows are still smoking with dust from the disks of the plow. The farmer looks at the seeds in his hand. Which shall he plant this year?

A big close-up of the seeds in his hand becomes the center of a full dinner table. There's a smoking, shining roast, a glass pitcher of milk, bowls of potatoes in jackets with the frost of salt on them, heaps of vegetables, and an enormous salad. It's a big family at the table, too. Mother is giving the baby spoonfuls of mashed carrots. There's a little girl with long blond hair: she has a big plate of food, but she's not eating. She sits quite still while the others eat and laugh. Finally, without looking up, she says, "Ma . . ."

Her mother comes over, puts a hand on her daughter's forehead. She frowns.

She pulls the girl's chair back, leads the girl apart from the family, seats her near the wall, and puts a thermometer in her mouth.

The family goes on eating, looking up once in a while to look at the girl on the chair. The girl's face is white, her arms limp. Rather slowly she slides off the chair, fainting, the thermometer still in her mouth. The family, her mother in the foreground, stand up and come toward her. We see the mother's face as she bends over her daughter, lifts her up.

And the mother, too, has a question: "What is wrong with my girl? Is she very sick? Is she going to die?" Science must answer the mother's question, too, as well as the child's question about the atom and the farmer's question about the seeds.

Black thunderheads among the

clouds, seen as if from a moving plane. A great Constellation with its triple tail is flying steadily toward the coming storm. On the faces of pilot and co-pilot, on the faces of the dozing passengers, we see the faint flash and repeat of distant lightning. The plane begins to rock, to fall suddenly, to rise in a stormy updraft among the clouds. The passengers begin to wake up, look out at the rain rushing along the wing.

The pilot radios for information. What is the weather at Yuma?

The farmer is mounting his tractor again, looking out over his fields.

The mother is watching a doctor inject the contents of a syringe into her girl's arm. Her face flinches as the needle goes in. The child is delirious, her fingers clawing over and over the blanket. The camera pans over to an alarm clock on the dresser near the bed.

A child at the seashore, a farmer, a pilot, a mother, have asked simple yet terrifying and profound questions. They involve the secrets of the atom, the gene, the sun, and the living cell. It takes a long time, and a long way, to answer them. What is the universe like? And what immense laws govern it? These questions a two-footed, small-jawed mammal on an obscure, rather cold satellite of a medium-sized star has dared to ask—and to answer!

The pouring at the optical factory of the disk for the 200-inch telescope. The disk is transported across the United States. Pan from the doorway of the observatory for this telescope, to the moving dome. A similar dome, moving in the moonlight. This is the 100-inch telescope at Mount Wilson. It's cold, the astronomers at work inside wear heavy sheepskin jackets. Montage of the mechanism of the telescope as it is swung toward the moon or toward Saturn (whichever will appear most spectacular photographically). The lights inside the observatory go out. We look through the objective, see the craters in the moon, or see Saturn with its strange concentric rings. The face of an astronomer, the light from the telescope objective very faintly illuming his face.

These are ordinary people, these scientists. They have been specially trained, and their special talents increased. They are the need-fillers and the question-answerers. But all their skill and ingenuity are qualities found in ordinary people, too.

A Negro like Carver is a scientist; a woman like Ruth Benedict, a refugee like Einstein. Carver answered the need to make much out of common things—out of the sweet potato and the peanut. Benedict answered the need to understand our own ancestors, by looking at primitive people who yet remain. We see each for a moment—not serious, but relaxed, animated, even laughing. Shapley, Urey, Cannon, Ernest Lawrence inside the building erected to house his cyclotron at the University at Berkeley.

This old man, putting on a double pair of glasses (or maybe a set of false teeth!) is Professor McCollum, the nutrition scientist, a Kansas farmer's son. He walks with us in his laboratory, looking at the cages of animals being fed foods of various kinds. He puts his hand in a cage, draws out a white rat, fondles it.

A rat—even a rat—is a scientific tool, not horrible if not in the wrong hands.

We see other scientists: two men recording brain waves, to discover the

secrets of epilepsy and perhaps some forms of insanity. Here is a man who has synthesized life, in these white crystals at the bottom of a vacuum flask. Here is a whole row of students at microscopes: they are searching slides made of cancerous tissue; they are part of the army—too small yet, it's true—fighting a war against cancer.

Ordinary people who have become scientists—no special breed.

A man who looks like a workman—a scientist in grimy overalls. He has a piece of transparent plastic, about the size and shape of a window. He leans it against a wall, smashes at it with a hammer. It doesn't break. He grins with pride.

Men at work among the fantastic coils and tubes of television. Dissolve from a great close-up of a tube with many complex grids to Lena Horne, singing.

Out of the equations and the contraptions of science, not only efficient death, but the fullness, the throat-tightening sweetness of life itself.

Science does answer the people.

A stopwatch in a scientist's hand. He turns a switch, goes to the electron microscope. The camera tilts from top to bottom of the instrument, high as the room. The scientist draws a photographic plate from the apparatus. The dark plate in his hand becomes the photograph of a virus, preferably of a disease already conquered: yellow fever, for example. The letters YELLOW FEVER animate in. Letters and photograph smear and wipe off as a syringe (animation) is used. Other diseases are similarly conquered: diphtheria, smallpox, gas gangrene, yellow fever, typhoid, cholera, spinal meningitis, gonorrhea, syphilis, the symbol of a syringe (animation) wipes off each one, until the screen is clear, and once again we can see the alarm clock. Six hours have passed. The camera tilts back again to the child in bed. She's pale, calm, smiling a little. The doctor is closing his bag. Her father, in work clothes, brings her a little ice cream. He tastes some of it, too. The mother smiles.

The mother has her answer. There are others who will answer the pilot and the farmer.

The face of T. H. Morgan, looking through a magnifying glass at a fruit fly. We see what he sees: a lopsided fly, one wing smaller than the other, half male, half female. The camera moves from Morgan to a chart on the wall, a complex chart like the one giving the gene map of the chromosomes in the salivary glands of this fly. We don't need to know the details of this map; that's the specialist's job. The chart dissolves, becomes a simplified diagram of which strains of wheat are best for which parts of the world—wet, or cold, or dry, or hot,—for spring or winter planting.

Seeds in the farmer's hands; all one kind, now. He drops them back into the sack, climbs into his tractor. He's drawing a seeder, now, and he looks back at the covered furrows already sown behind him.

Science has increased this farm's productivity 400 per cent since it was first farmed in 1789. The farmer's question is answered. What about the pilot's?

A weather balloon ascends into the sky. A scientist in shorts and a sun helmet and dark glasses takes readings of its speed of movement, through a special instrument. Dissolve to (stock footage) another scientist, in furs, in the

Arctic or Antarctic, taking weather observations in a polar blizzard.

A tremendous, stormy sea. A scientist makes notes, unbuttoning his slicker just far enough to keep the notebook dry. A cliff of ice in the Alaskan region: immence pinnacles topple from it with a deafening, reverberating noise. Dissolve to a scientist drawing contours on a weather map. It is night over an airport. Rain streams down on the runway, in the glare of a beam. There's a ground radar installation, the nets of the antenna swinging and turning against the sky, searching for the plane. The radar screen shows the slip of the incoming plane. One of the operators talks the plane in, making corrections in an even, cheerful voice.

At last the plane lands, sudden and shocking, out of the darkness.

Face of the pilot as he walks out into the rain. Face of the farmer as he moves, smoking his pipe, down an aisle of corn fully twice his height. The face of the girl, as her mother ties a wide ribbon around her fine blond hair.

And then the face of the child at the seashore, repeating his complaint: "Will it really kill everybody?"

The scientists alone cannot answer this question.

Sequence 4: The Choice on the Blackboard

Robinson is crossing the campus once more. Once more the bell in the tower is ringing ten o'clock. His class will begin in two minutes. Students turn around to stare curiously, because he has a starfish in his hand. He smiles to himself, offers no explanation.

He passes the frieze of names again, goes into the building, down the hall, enters the classroom. Almost without pausing, he writes on the blackboard the single word: Einstein. He puts the starfish on the table before him.

Then he writes under Einstein's name: $E = mc^2$.

The students watch him as he works out the product of a single pound of matter converted into energy: billions of kilowatts.

Who will control this power?

Here is an equation that will change the history of mankind, perhaps even the history of this planet. For the terrible power that it implies can be used in two ways. It can be used for war: it can be released suddenly into the explosion of cities, the disintegration of continents, and the destruction of humanity. Or this equation on a blackboard can warm and feed us and release us from uncreative labor. From this equation comes either death or life.

Camera pans around the classroom, and then pan dissolves into another pan, in the same direction, of an immense American crowd, and then into a Russian crowd, a Chinese crowd, still panning, so that we have the impression of all humanity listening and watching.

Here's the answer to the child's question, and to Robinson's question, too. Only the people can control science. Only the common people—one billion or more of them—have the right to power such as science can give in this, the twentieth century.

Close-up on the blind side of Robinson's face. Camera swings slowly around him to the side that has not been marred.

The choice is this century's, this decade's, this year's.

The choice is ours.

DIRECTOR'S NOTES

IRVING LERNER

DURING the war Irving Lerner was chief editor and a producer at the OWI Overseas Film Branch, where he produced, among many documentary films, *Northwest, U.S.A.*, *The Pale Horseman*, and *Cummington Story*.

THIS IS a film about science. More than that, it is about abstract science. And if that were not full of complicated problems for the filmmaker, the film's hero is a young man who teaches nuclear physics. The atomic bomb has somewhat "popularized" that branch of physics for us. In a recent broadcast Professor Harold C. Urey said, "Since the explosion of the atom bomb over Hiroshima and Nagasaki it has been easier to talk about isotopes." In addition, the press has printed voluminous words about atoms, nuclei, fission, cyclotron, deuterons, beta rays, and Einstein's theory of relativity. In that respect the problems of the producer have been made a little easier. But only a very little.

A film that tries to show the interrelation of various sciences to one another, and the relation of those sciences to everyday life, and, finally, the relation of seemingly unrelated incidents and these sciences to our hero, introduces a few complex ploblems.

The over-all production problem requires the translation into visual and emotional forms of the extremely personal and subjective treatment of the hero, Robinson. Casting this part (and the children on the beach in Sequence 2) is of paramount importance. And since this first sequence is so personalized, the major technical consideration here is photographic. Everything is seen from Robinson's point of view. He is undergoing a tremendous psychological experience. Every shot has to be photographed and lighted to emphasize this state of mind. The smallest object has terrific photographic significance. The director and the cameraman must attack these problems with great discretion and taste or the entire sequence will become unreal.

Sequence 2, where the children on the beach ask Robinson the questions which he cannot readily answer, is a documentary director's dream. Here is the opportunity for lyrical photography in a stunning "set." The writing here is truly inspirational. But then we come to the scientific aspects of Robinson's thoughts which must be explained through animation. But what kind? Must it be diagrammatic? Or three-dimensional? Because it is obviously impossible to take a camera into outer space or into the invisible world of the atom, the choice of animation must be very carefully explored. It is important not only to explain the mechanics of what we are showing, but just as important to impart the proper psychological feeling.

As I have stated above, the attempt to show the relation of abstract science to everyday life introduces the problems of the transference of intellectual content into visual form. In this script these problems center around the cyclotron.

I spent one day at the Crocker Radiation Laboratory at the University of California, Berkeley. After a great deal of persuasion I was allowed to take a peek at the 60-inch cyclotron. It was common knowledge at that time, of course, that almost all the scientists connected with nuclear physics were engaged in secret military research. President Truman revealed the nature

of that research on August 1, 1945! But to get back to the 60-incher. I was allowed my peek because this very unphotogenic machine was being overhauled. But what excited me most about the cyclotron in relation to the film was not the experiments with the bombarding of atoms with atomic bullets of millions of electron-volts of energy, but the fact that nuclear physics—a so-called abstract science, if there ever was one!—was closely connected with some of the problems of the life sciences. The cyclotron was being used in the search for a more precise control of certain forms of cancer; for experiments in plant photosynthesis; for a possible cure for leukemia; for research in certain problems in hyperthyroidism, etc. In short, the MEDICAL CYCLOTRON!

I was very much concerned over how we would show the operation of the cyclotron on the screen. Essentially everything that happens is inside the machine. Even if you remove the concrete tanks which contain water and completely surround the cyclotron, and protect the working scientists from its lethal radiation, you could not be able to photograph anything that you could see on the screen. Undoubtedly certain liberties would have to be taken with this sequence. Maddow has suggested an extremely interesting approach which will require the film editor to display his imagination. The cutting, combined with the proper use of music and sounds, will go far in explaining the function of this machine. This device would be the most direct way of transferring intellectual content into visual form.

In Sequence 3, The People ask questions of the scientist. This section comes closest to the traditional documentary form. The script must by necessity remain flexible so that the director will be able to "improvise" his shooting on the basis of what he sees in the various locations. Here, too, he is brought up against the problem of unrehearsed dialogue. For example, it would have been important to shoot the sessions of the recent United Nations Educators, Scientists, and Cultural Workers' Organization in London. The major problem of this sequence is one of integration through the cutting room.

Sequence 4 takes us into the present. It poses Einstein's formula, $E = mc^2$. Is this too technical to explain to an audience? Here the abstract formula must be translated into human equivalents. It becomes a problem of acting; of reading the lines with great conviction and clarity. The production problems here are no more unusual than those posed by any dramatic film.

In *Death and Mathematics* Ben Maddow has combined many conventional ideas of the documentary film with many new ideas and problems. The script represents a conflict between an intense personal feeling and an attempt to set forth a very broad argument for a scientific society. The atomic bomb has made the public very conscious of a group of their fellow citizens who were until now removed from the society of the common man—the scientists. And, conversely, the atomic bomb, the product of the scientists' theoretical research and spectacular industry, has made them realize that they can no longer survive either individually or collectively in their laboratories set apart from the world.

The problem in this film is to make

the hero's conflicts the conflicts of the audience and of other scientists. It is important to make it simple and understandable and emotional. In this film it will be necessary to utilize the methods of straight reporting, and even of the teaching film in which the scientist talks directly to the audience or explains an animation sequence in an off-screen voice (the standard form of narration). A large portion of the film will consist of emotional and lyrical passages in which highly imaginative music will play a great part. All this will be connected and related to the one central idea and personalized plot structure.

In the development of the atomic bomb there never was a more graphic illustration of the complete mobilization of science for war. If only this mobilization could continue to work for peace, if it could only work for the people, there would be no need for fright or any concern over the coming atomic age!

"The Case of David Smith"*

ABRAHAM POLONSKY

BEFORE coming to Hollywood, Abraham Polonsky lived in New York, where he taught English at the College of the City of New York and wrote for the radio. He is now a writer at Paramount, where he has been working on *The Paris Story.*

INTRODUCTORY NOTE

SAM MOORE

SAM MOORE has been writing for radio since 1931, and is currently writing *The Great Gildersleeve* in collaboration with John Whedon. He is president of the Radio Writers' Guild.

THE PROJECT which eventually became the radio program *Reunion U.S.A.* resulted from a series of seminars conducted by the Hollywood Writers Mobilization, in 1944, on the general problems of adjustment which would have to be faced by soldiers and civilians alike when the process of demobilization should begin on a mass scale. Discussions led by psychologists, psychiatrists, social workers, army officers and enlisted men, with participation from radio and screen writers and directors, led to the conclusion that these problems were so complex and of such importance as to warrant an attempt to present them, or at least some phases of them, to the civilian population. Radio seemed the logical medium to use in this attempt, because it could reach a mass audience quickly and conveniently, avoiding the necessary production delays (and expense) of a comprehensive film program.

This educational project was the more urgent because of the wide publicity given, late in the war, to the special problems of the psychoneurotic soldier. The dramatic possibilities of a returned soldier suffering from deeply buried fears, guilt feelings, and so on, appealed to writers of fiction whose only solution of the difficulty, all too often, was the love and "understanding" of a pretty girl. That formula was so popular, indeed, that the entire nation was receiving the impression that most of our returning soldiers would not be psychologically "normal."

The Mobilization's series of seminars brought out the true facts, and demonstrated the danger of this overemphasis on the question of the psychoneurotic. The general conclusions of the seminars, broadly stated, were that the mere fact of spatial and temporal separation between the two enormous groups of civilians and soldiers would necessarily bring about psychological changes in both, but most soldiers would return to their homes completely normal, though often much more mature than before their army experience, and with a changed point of view toward many questions of individual and social behavior. The writers for these programs were committed to write within this framework.

A prospectus for a radio program presenting this point of view in a series of dramatic stories was drawn up in the spring of 1945 and submitted to the War Department, the O.W.I., the Vet-

* This script, for one of the series of programs entitled *Reunion U.S.A.*, was broadcast, November 5, 1945, over the network of the American Broadcasting Company (originating at Station KECA, Los Angeles, 7:30 to 8:00 P.M. P.S.T.). The music for the entire series of *Reunion U.S.A.* was composed and directed by Basil Adlam.

erans Administration, and various radio networks. The project was vigorously approved by all the government agencies, and network time was obtained from the American Broadcasting Company.

Reunion U.S.A. represents a technical experiment in radio education in that the documentary form developed by Norman Corwin and others was rejected in favor of the traditional radio dramatic form. Following the presentation of each play there was a two- or three-minute commentary by an expert, usually a psychologist, in which the major point of the story was stated in simple terms. In the eighteen plays presented, all the stories concerned ordinary people, faced with problems which, if not exactly "ordinary," were rapidly becoming statistically probable. I believe that the success of the series, as determined by its audience popularity, proves the correctness of this decision on the question of form.

The program had the benefit of very little publicity, almost no advertising, and also lacked another useful adjunct to the quick building of a large radio audience—a continuing "name" star. In spite of these obstacles, *Reunion U.S.A.* quickly gathered a listening audience of some ten million people, and was at one time among the five most popular programs on the entire American network.

Among the specific problems treated were the veteran's paramount anxiety about a job, his desire to continue his education, his adjustment to a wife unwilling to give up her employment and return to the drudgery of the kitchen, his changed attitude toward political and social questions, his awareness of the world and America's position in it, and his wish, resulting from that awareness, to participate in community activities as an adult citizen. The plays varied widely in content and treatment: some of them were closely packed with social and philosophical implications; others were relatively superficial in their handling of simpler themes. There was no observable correlation between the complexity of treatment and the size of the listening audience, which steadily increased.

One is tempted to the conclusion that, contrary to the general supposition, there is a large audience which is anxious to hear dramatic programs in which an attempt is made to deal with problems having a real basis in the life of America today. Perhaps the radio audience is not a horde of twelve-year-old mentalities breathlessly awaiting the wolf jokes, the childish love stories of adapted movies, the slow-motion "problem" dramas presented by the soap manufacturers. *Reunion U.S.A.* had something to say. The program's only asset was the fact of its serious mission to reach millions with information and a small quantity of very tentative advice. But the millions, struggling against the difficulties and dislocations of war, and seeing clearly the approaching dangers of the peace, listened eagerly. The lesson should be clear to writers, network program directors, and advertisers.

THE SCRIPT

CAST

WRANGLE.....Bill Johnstone
MYERS.....John Lund
LAPHAM.....Paul McVey
FLECK.....Howard Duff

MINERVA ..... Peg La Centra
MAN ..... Paul McVey
WOMAN ..... Lynn Whitney
DAVID ..... Paul Theodore
NURSE ..... Lynn Whitney
FATHER ..... Eddie Walker
DOG ..... Earl Keen
HUMBER ..... Ken Peters
VOICE ..... Howard Duff
TANA ..... Sidney

ANNOUNCER: (*On dead air*) Thousands of men are being discharged from the Armed Forces of the United States every month . . . and they are coming home!
MUSIC: *Intro to main title theme. . . . Fade for:*
ANNOUNCER: Reunion U.S.A.
MUSIC: *Theme—main title*
ANNOUNCER: 'Reunion U.S.A.' is a series of half-hour dramas on the theme of the soldier's return from war, presented by the American Broadcasting Company in coöperation with the Hollywood Writers Mobilization.
MUSIC: *Up and fade for:*
ANNOUNCER: Tonight's play stars John Lund. It is written by Abraham Polonsky and directed by Cal Kuhl. The title, 'The Case of David Smith.'
MUSIC: *Up and segue to theme for story*

* * *

MUSIC: *Drums and trumpets to an unresolved rhythm and chord, and out*
WRANGLE: Captain Myers?
MYERS: Sir?
WRANGLE: You may be seated.
MYERS: Thank you, sir. (*Narrative voice, introspective: designated by brackets*). [So this is Wrangle, Colonel Wrangle, and his two assistants. I admit the situation with my neat obedience. My briefcase rests upon my knees, my shoes are shined, my uniform pressed. Yes, my face and attitude are careful with respect for rank and authority.]
WRANGLE: Ready, gentlemen?
LAPHAM: Yes, Colonel Wrangle.
SOUND: *Pencil tapping on desk*
LAPHAM: I'm sure I had lead in this pencil.
FLECK: Here's a pencil, Lapham.
LAPHAM: Thanks, Fleck.
SOUND: *Tapping of pencil*
LAPHAM: It can't have just disappeared.
WRANGLE: Are these files duplicates, Captain Myers?
MYERS: Yes, sir.
SOUND: *The little rigmarole of papers, files, and ash trays as the men make ready while Myers continues to speak*
MYERS: [This is Wrangle, a beefy man with restless eyes: Wrangle, who completed his classification of the human race in 1924 and regards all subsequent history as unmitigated gall. To his left is Major Lapham, not a practicing psychiatrist like Wrangle, but a popularizer. You've seen his books advertised in Sunday book supplements, and on the back covers of pulp magazines: 'The Psychiatry of Everyday Life,' and then a splash of red letters shrieking: ARE YOU INSANE? (*Pause*) The futility of making them understand is apparent.]
WRANGLE: Captain Myers?
MYERS: Sir?
WRANGLE: We're sitting as an informal board on the Smith case. Frankly, I have no strong opinions. And I'm sure Majors Lapham and Fleck are in the same boat.
MYERS: [I smile again to show my eagerness to coöperate. I know Wrangle wants this curious Smith case closed: Let's have no new reasons for new disasters! I smile at Lapham. He examines

his mechanical pencil while he thinks of book sales on drug counters and in department stores. Now for Major Fleck, whoever he is. I want him to think I'm intelligent but not forward. We are colleagues but not equals. This smile is familiar among professionals, more subtle than that of the Mona Lisa. (*Pause*) No. This is a different kind of man. Fleck? Fleck? Who is Fleck? I suddenly remember a few papers in obscure journals, some careful studies, a handful of insights. Fleck. Perhaps Fleck can understand the whole horror of this Smith case. This man may listen, think. I unlock my briefcase

SOUND: *Unlocking briefcase*

and take out my personal file on Smith, leaving the letter in its gray envelope safe in the leather pocket. Perhaps the letter can be read, if Fleck is anything at all. But later.] I'll be glad to tell you anything you want to know, gentlemen.

WRANGLE: Thank you, captain. It seems from a first glance that we have an extreme but typical melancholia.

MYERS: [His restless black eyes dart aimless, typical glances, looking through life for typical patterns. The man is hopeless.] There is evidence to that effect, sir.

WRANGLE: What do you think, Lapham?

LAPHAM: I agree. I agree completely. A very sad case, one of those dreary prices for victory. Very. The three years Lieutenant Smith spent in the Japanese prison camps definitely unhinged him. But definitely.

WRANGLE: Undoubtedly, but there must be probable genetic patterns. What do you think, Fleck?

MYERS: [I look at Fleck, who blinks his heavy-lidded eyes most innocently. Does he care to know? Will he try?]

FLECK: I should like to hear Captain Myers' observations. (*Pause*) Perhaps there's something we can learn.

MYERS: [This is a man.]

WRANGLE: You may proceed, Captain Myers.

MYERS: [I slowly open the file of the strange case of Lt. David Smith, Army of the United States. Whatever hopelessness I carried into the room is still with me. The affair is so complex, the need to understand so grave. Fleck is my man. I shall talk to him, and to him alone. The other two have buried the corpse.] Lieutenant David Smith, admitted October 12—0500. Weight, 152, ten pounds below normal. Pulse, 72; blood pressure, 126. Basal metabolism, minus 3. Walked stiffly, obeyed instructions, apparently unable to speak. Generally apathetic . . . depressed. I examined him quite carefully. His body bore healed scars from outrageous acts of violence inflicted on him during his three years' captivity. The left hand, for instance, though healed, was completely crushed and useless, the bones having been broken in the wrists and fingers, the nerves atrophied. As I learned later, the Japanese had done this with a light hammer after tying Smith's hand to a wooden block and beating it repeatedly.

LAPHAM: (*Involuntarily*) The savages.

MYERS: Smith appeared to be in the first stages of some enormous psychological shock.

WRANGLE: Delayed, no doubt. A mass recall.

LAPHAM: A sudden realization of all he had gone through.

WRANGLE: It's quite common.

(*Pause: painful*)

FLECK: Will you continue, Captain?

MYERS: Thank you. I had Smith put to bed, sent for his records, and interviewed his wife on the following morning. You have the summary of our remarks there before you.

WRANGLE: Mrs. Minerva Smith?

SOUND: *Rustling of papers*

MYERS: Yes, sir. [I remember that interview with Mrs. Minerva Smith most distinctly. It was the first sign of the deeper meaning in her husband's case. She sat in the barred sunlight that came through the Venetian blinds.]

SOUND: *A lawn mower off, by spells*

MYERS: [Someone was mowing the grass outside. She was pretty, placid, pained, a middle-class matron at twenty-two. She wore white washable gloves, carried a black purse that matched her dress, black and appropriate for the sad occasion. Her legs were modestly quiet and uncrossed, her hat just so on her upswept hair. But she felt hurt; let down, I suppose.]

MINERVA: The way I feel, doctor... (*a false half laugh*)... or should I call you Captain? It doesn't seem right. I've been waiting so long.

MYERS: I realize that. How did your husband act when he first came home?

MINERVA: That's just it. He seemed so ready to be happy.

MYERS: Affectionate?

MINERVA: (*primly*) Pardon?

MYERS: I mean just generally.

MINERVA: Oh, yes. David is an affectionate man. I'm an affectionate woman myself.

MYERS: [Here she smiled at me, inviting my deep sympathy. I was deeply sympathetic.] When did he first begin to act strangely?

MINERVA: From the very first, in a way. He wanted to read all the papers and magazines of the last three years. He listened to news broadcasts all the time. I mean, doctor, after all... here we were, reunited, after so long. You'd think he'd be sick of the whole past. And then, he didn't seem particularly anxious to meet our friends again, people who had worried day and night over his safety for years.

MYERS: Did he tell you why?

MINERVA: No, Doctor, although after his visit to his father I finally did arrange a party.

SOUND: *Party noises fading in. Glasses, voices, etc.*

MAN: David, you know the Japs better than we do. Do you think they'll want to pull a Pearl Harbor first chance they get?

MINERVA: Oh, please... We can't be living in the past the rest of our lives.

WOMAN: Minerva's right. Let's *not* talk politics. We can leave that to the government. Tell us, David, how did your first ice cream soda taste? Here in town, I mean.

DAVID: You really want to know?

WOMAN: (*Loudly*) Everybody quiet. Quiet!

SOUND: *Party noises down*

WOMAN: David is going to make his first public statement on his first ice cream soda in town.

SOUND: *Laughter, silence*

WOMAN: How *did* it taste?

DAVID: Bitter.

SOUND: *Voices up cross-fade to Minerva*

MINERVA: People just stared, Doctor. We felt... I felt... that he hated us.

MYERS: [Her smooth cheeks shook. The whole thing was so uncomfortable.] Tell me, Mrs. Smith, was there anything in your husband's past, any frustration, any unhealthy attitude towards people or life—anything you remember that might help us?

MINERVA: No. No. David was quite normal—except, of course, you know he was studying to be an anthropologist. He wanted to go off and live with primitive peoples, stuff like that. I used to think it was so romantic . . .

MYERS: Anything else?

MINERVA: Nothing really . . . perhaps . . . well, when he was in college he used to belong to an organization—I forget its name, but it was antiwar. He hated war. He comes from a family of Quakers. But it wasn't very serious because, when war came, he volunteered. You know that? He's a volunteer.

MYERS: Yes, I know. (*Pause*) Would you like to see your husband now?

MINERVA: (*Pause*) Is he the same?

MYERS: I'm afraid so.

MINERVA: Well . . . (*hesitates*) . . . no, I think not. It's all so unfair. I've waited so long. (*Pause*) I'm like all the other normal people in the world. I say let the dead past bury its dead.

MYERS: [She stood there, hesitating, not daring to say what she meant—that she wished he were dead. And I politely showed her out and went to see my patient. Signs, portents, meanings already floated above his martyred head.] No change, nurse?

NURSE: No, Doctor. I raised him to a sitting position about ten minutes ago and he hasn't moved once.

MYERS: [Smith faced the wall, resting limply in his bed against the pillows. His eyes were closed. Twenty-six years old, but he looked fifty, his hair gray, his temples hollow, the ache of creeping death upon him.] Smith! Smith, can you hear me? [His eyelids slowly opened and glazed eyes stared ahead. The glance was inward on the unfathomable horror which he alone knew, which he, alone of us all, possessed.] Smith! Smith! [His eyes closed again. That was all.] What do the tests show, Nurse?

NURSE: Nothing, sir. Absolutely nothing.

MYERS: [I knew then as I know now that the inner need of this man could be touched only through the mind. I simply had to get to him, to Smith, the human being aware of himself. This body, this dying vegetable in the bed, had no meaning for him any more. We could feed it.]

NURSE: By tube, sir. He took some nourishment.

MYERS: [We could wash it, watch it, measure it. But we couldn't release it from some deep vision, some deep abstraction which the mind possessed. *This* was living death, a renunciation. (*Pause*) I tried to get to everyone who had known him.]

WRANGLE: I see the reports here, Captain.

MYERS: Yes, sir. But, as you can see, no one seemed to mean anything to Smith, not even his father.

WRANGLE: Stephen Smith?

MYERS: Yes, sir. [I'm being so careful with these men. Perhaps the violent significance of Smith's case will echo in their ears. Wrangle palps the papers. Lapham draws girls with curly hair. Fleck looks at me. Very well, let us stare at each other, Major Fleck. If you wish to recognize the guilt, you must share it.]

WRANGLE: The father was Mr. Stephen Smith, a retired farmer from Linville.

MYERS: Yes, sir. He came to the hospital. You have the gist of our remarks in the report before you. [The gist, yes. The father was an old man, for David had been a late son. The father seemed remote from life, wifeless and now to

be childless.] You say he came to visit you, Mr. Smith?

FATHER: Why, yes, Doctor. It was supposed to be for a week, but David only stayed one night. We didn't seem to have much to say to each other.

MYERS: Why do you think he came?

FATHER: Filial duty, I suppose. He was always a good boy. But in the morning he was up and on his way.

MYERS: Yes?

FATHER: We hadn't really said anything to each other, Doctor. I don't know what it was he expected of me. I'm old and I'm tired. David was always queer. He wanted to be a missionary in China like his grandfather, but he soon got over that when he grew up. I don't believe in running all over the earth changing things. What does it matter, anyway?

MYERS: Did he say anything that I should know?

FATHER: Well, in a way. It was about seven and he was dressed to leave.

SOUND: *Dog barking, off*

FATHER: The dog kept barking outside, remembering him. . . . Going, David?

DAVID: Yes.

FATHER: I thought you were going to stay a few days.

DAVID: What for? What's the use of it? (*Pause*) What's the use of you?

SOUND: *Steps going to door. Door opens. Dog barking in, loudly. Door slams*

FATHER: You hear, Doctor. He said that to me. What's the use of me? What did he want?

MYERS: [And then at last we stood in David's hospital room, the father, the nurse, and myself. David was stretched out flat on the bed, breathing lightly, wasting away.]

FATHER: Looks bad. Some tropical disease?

MYERS: No. Something mental, I think.

FATHER: Well, that's it. He used to be a fine young man, and now look at him, older than me. Do you think it was worth while—for him, I mean,—all the war and the prison camp, and such?

MYERS: Was it worth while for you?

FATHER: I don't know.

MYERS: [He stood there, the father. And then he walked over to the bed, gently bent down, and kissed his son's forehead.]

FATHER: (*Clears throat*) I keep wondering, Doctor, if we're not entitled to another Flood . . .

MYERS: [It got so I used to spend hours in Smith's room, just looking at him, wondering. The thing grew on me until I began to feel that this wasn't a 'case'; this was myself, my own responsibility. It was a nightmare—to be burdened and overwhelmed with the sense that somehow the meaning of my own life was bound into the apathetic hulk upon the bed, that wasting flesh, those cheeks sinking beneath the bone.] Smith! David! Can you hear me? Open your eyes! [But by now they no longer opened, and we all knew this was the dying. I felt it was my duty—it had become my sole duty—to make this man open his lips again, to speak, to say the thing that tormented him, for it was an unspeakable torment that had magnetized his brain into silence. Nothing of the world outside, not the wind at morning, nor the faces of men, mattered. He was alone with himself. (*Pause*) I wonder do these men before me seek to understand. They turn the pages of the file. They glance at one another. And Fleck . . . does he find a glimmer? He dreams away behind half-closed lids. Wrangle coughs upon his ignorance.]

SOUND: *Wrangle coughs*

WRANGLE: There are mysteries, Captain Myers. You did your best. Is there anything else you want to say?

MYERS: [Anything else I want to say? Shall I shout it at you? Must the dead spring from their graves with banners and trumpets?] There was, sir, the interview I had with the rescuing officer—

WRANGLE: John Humber, Lieutenant Senior Grade, United States Naval Reserve?

MYERS: Yes, sir. [Humber popped in on me. He was brisk and in his middle thirties, an affable advertising man turned warrior.]

HUMBER: How do you do, Captain? I received your note.

MYERS: Sorry to bother you.

HUMBER: Not at all. Not at all. How's Smith?

MYERS: Would you like to see him? [Humber gave me a quick, suspicious look. Was this a responsibility? Then his blue eyes found golden glints. He smiled.]

HUMBER: Why not? I brought him back into the world; a kind of second birth, you know . . .

MYERS: Yes. This way, please. [Humber looked at me as if I had breached an inviolate law of social decency when he stared at the human skeleton in the bed.]

HUMBER: (*In wonder*) But that's the way he looked when I first saw him. You know we rushed the camp, and Smith was lying in the dirt, a bloody bruise on his cheek where some Jap animal had just kicked him. What's wrong?

MYERS: We don't know. That's why I asked you over. I thought perhaps you might know. It's psychological.

HUMBER: Poor chap. He had the devil of a time. Three years of it, and the worst, the very worst.

MYERS: Did you talk to him?

HUMBER: A little. I found him lying in the dirt in the hot sun. The Japs wouldn't let any of the other prisoners go near him or help. This Smith was a devil. He never gave up for a moment, the other prisoners told me. He knew . . .

MYERS: He knew what?

HUMBER: I don't know how to say it exactly . . . but . . . he felt, he knew, that to live on, to endure, to defy them guaranteed the faith and honor of those back at home. He was a man of honor. (*Pause*) Anyway . . . There was a little shooting . . .

SOUND: *A burst of shots, off. A few lone ones*

HUMBER: This way, men. Lively!

SOUND: *Feet on dirt, etc.*

HUMBER: Who's this?

VOICE: Smith, sir. Lieutenant Smith.

HUMBER: Is he dead?

VOICE: No, sir.

HUMBER: Smith! Hello there, Smith! You're free! We're here! We've returned!

SMITH: (*Weakly*) Hello.

HUMBER: Take it easy, old man. (*Calls*) Stretcher here!

SMITH: I'm all right.

HUMBER: You'll be all right.

SOUND: *Stretcher bearers, etc.*

HUMBER: Easy there, men. In with him.

SMITH: Lieutenant?

HUMBER: Just take it easy, old man. You'll be eating ice cream sodas in your own town before long. It's over.

SMITH: Have you got a gun?

HUMBER: None of that, old man. You'll make it.

SMITH: I just want to feel a gun again.

SOUND: *Voices up briefly, and out*

HUMBER: Well, I handed him my forty-five. I don't know why. He asked for it. This skeleton, this devilish living scarecrow of a man. You could see the blood pumping through his veins, he was so thin . . . covered with sores . . . a sight . . . a blasted revolting sight! Imagine, Captain, an American, and they had treated him this way! And off the stretcher went, and Smith sitting up in it, fondling the gun. The Jap commandant was standing there, stiffly, with his men all lined up, damned proper and full of protocol all of a sudden. The stretcher stopped in front of him; and Smith, he sat there. Then he pointed the gun . . .

SOUND: *Two shots. Pause. Three shots. Two shots. A long pause. A final shot*

MYERS: He killed him?

HUMBER: God, yes. Smashed him up and dropped the gun and began to cry. And look at him! This man had guts, Captain. What is it?

MYERS: I don't know. I don't think we'll have time to find out.

HUMBER: Dying?

MYERS: Yes.

HUMBER: Well, it's too bad. (*Sighs*) After living through three years of prison camp. (*Pause*) I have to be going.

MYERS: Thanks a lot.

HUMBER: Nothing at all.

MYERS: [He turned back for a last look, shook his short-cropped blond head.]

HUMBER: Anyway, he got back at them. He got one. You know, this is strictly off the record, Captain. It's not *comme il faut*.

MYERS: I know. [In a way, I do. A symbolic act, the punishment of the guilty. Not so much revenge as justice. I wanted Smith to talk, to say a word. What had suddenly overwhelmed him back here in the United States, suddenly found a focus and invited this living death on a hospital bed? (*Pause*) I look at the advisory board—Wrangle, Lapham, and Fleck. Fleck's eyes are on me.]

FLECK: Tell me, Captain Myers . . .

MYERS: Yes, Major Fleck?

FLECK: I know we can't actually separate causes, but, essentially, do you think it was the experience of the war or the experience of the peace that shocked him?

MYERS: [This is crucial. I have the letter in my briefcase. Wrangle's quick eyes scurry like mice. Lapham yawns.] All I know, sir, is what Smith finally said.

WRANGLE: You mean he spoke?

MYERS: Finally, Colonel Wrangle. It was after I interviewed Sergeant Tana, the man who infiltrated the enemy territory with Lieutenant Smith. You know their mission was to go in behind the lines to raise and organize guerrilla bands against the Japanese, Smith being a little familiar with the language, an anthropologist of sorts. Tana was a Filipino, educated here, a fine man. He came in to see me the day Smith spoke. [Fleck is watching me closely. I think he begins to understand, because I can see that same film of sickness in his eyes. He begins to see the whole point of the case of David Smith.] The way Tana put it was simple.

TANA: You understand, Captain, we went in to get these people to fight. But people don't fight for nothing. And Smith, my lieutenant, was an honest man. I don't know what his orders were, his authority to speak, but he told them: You fight to be free. I'm an American. And you'll be free. My government sent me. That's what my lieutenant said to them.

MYERS: They believed him?

TANA: Yes, even though for a native to be caught by the Japanese meant not easy death. There are certain tortures I need not describe. Your manhood goes quickly. The nerves have no conscience, no idealistic slogans. They shatter. But all the natives knew the meaning. You see, this was their jungle. I mean the natives, as we Americans call them. It was theirs to have, to keep, to be their very own. So my lieutenant said it. He said it again and again and again. Then he was captured. We fought on with some success until the war was over. Then the colony was reestablished, all with due order and a little shooting. I have myself a certain sense of guilt; but then, I'm a native myself. Here is the letter from Smith.

MYERS: What letter?

TANA: He mailed it to me a month ago. I picked it up at my home in San Francisco. I'm a native. I don't have very great expectations. But then, Smith made the promises, he being the officer, not me. If my lieutenant reaches consciousness, tell him for me, I forgive. Of course, I forgive! I have more faith in history. We cannot be defeated forever. One must have the experience of the disaster in such affairs. Good-bye.

MYERS: Good-bye. [He was out with a quick step, a brown little man, wiry and tough. That night I spoke to Smith, and Smith answered. It was close to midnight, and the nurse and I sat there looking at our patient. He was pretty much gone, breathing heavily. I took his hand and bent close to his ear.] Smith... David... (*whispering*) David. Can you hear me? I just spoke to Sergeant Tana. [A profound shudder moved through his body.]

NURSE: Doctor, his pulse is faster.

MYERS: [I took my stethescope and listened.]

SOUND: *The clink of the earpieces. Then the beating of the heart on mike. This will grow faster as it continues under.*

MYERS: David, (*excitement grows*) listen to me! I spoke to Tana. Tana! You hear? Tana! He says he forgives. Tana! Tana!

SOUND: *The heartbeat is faster, and now the tympani will take up the beat most delicately*

NURSE: (*agitated.*) Doctor!

MYERS: [Smith's body began to tremble. His breath came faster.]

SOUND: *Smith breathing heavily*

MYERS: [My ears seemed to be at the end of long antennae probing into the tremors of Smith's mind. There were earthquakes of consciousness stirring within that body.] Smith! Tana! He was here. He said he forgives! [It was like someone rising from the dead; as if the tiny almost extinguished light of sensibility had begun to burn again; as if warmth were seeping into the brain. His body twitched, the muscles loose and dissolute with energy. The habits of conscious living had been dormant so long. Sweat broke out on his brow.] David, can you hear me? David. Tana. Listen to me. Tana. He forgives! [And then his eyes opened . . . a glaze fixed light. He seemed to struggle to sit up.] Help him, Nurse.

NURSE: I am. [She raised him slowly, and those eyes stared and stared.]

MYERS: David, Tana was here. He forgives.

SOUND: *Heart and music, now! The rhythm coming up*

MYERS: [I could sense the long shift, the immense focus of his mind. He seemed to come out of the fog. He fought his way into the daylight world

again, and then consciousness fluttered in his eyes. He looked at me . . . at the room. Realization blazed, darkened with sin and horror, with immense guilt. He shrieked.]

DAVID: I want . . . I want . . .

MYERS: David!

DAVID: I want simple justice!

SOUND: *A crescendo of beat continues for a few seconds. Then profound silence—pause*

MYERS: [Then he quite simply died.]

WRANGLE: (Pause) Most extraordinary. That was all?

MYERS: Yes, sir.

LAPHAM: "I want simple justice," he said.

MYERS: Yes, Major Lapham.

WRANGLE: Extraordinary. Most extraordinary. A peculiar fixation.

MYERS: Yes, sir.

WRANGLE: That was all?

MYERS: Yes, sir.

WRANGLE: You have the letter?

MYERS: (*Pause*) [I look at Fleck. His eyes are closed. He opens them and slowly nods, with contempt almost. I open the briefcase and take out the letter.] Shall I read it, sir?

WRANGLE: Yes, of course. Does it throw any light on the case?

MYERS: This is it, sir. [I unfold the letter.]

SOUND: *Paper*

MYERS: [Fleck wants it. Very well. Let him live with the meaning, too. These others won't understand.] Dear Tana,— I believed in the promise I made them, the promise of freedom. Who is going to keep it, and when? Please forgive me. David Smith.

WRANGLE: That's all?

MYERS: That's all, Colonel Wrangle.

WRANGLE: Extraordinary. Well, Captain, you did your best.

MYERS: Thank you, sir.

WRANGLE: Gentlemen, what do you say? Can we consider the case closed?

SOUND: *Resolve here the unresolved chord.*

* * *

ANNOUNCER: And now, for a comment on tonight's play, we present Franklin Fearing, Professor of Psychology in the University of California, Los Angeles. Doctor Fearing.

COMMENTARY*

FEARING: This is not a story of a soldier who became psychoneurotic because of experiences in the war. Let us be clear on this point. It is a story of what happens when a soldier returns and looks at civilian life and tries, as he must, to find some meaning in the world that he now confronts. He has endured pain, anxiety, and fatigue. He may have been injured physically. He has discovered that he could face death and inflict it. These unimagined and unimaginable experiences have left their mark. They have not necessarily impaired his capacity to live happily and participate effectively in a world at peace. But he cannot possibly see that world as he saw it before he went to war. He now seeks some evidence that the world of civilians in which he finds himself understands, if only faintly, the reasons for which the war was fought and the price which must be paid for peace. If, instead, he finds a complacent willingness to return to the past or glib talk about our enemies in the next war, he will retreat in horror and revulsion. The mental sickness of David Smith was not caused by the war. It occurred

* This commentary was specially written for the broadcast by Professor Fearing, who also served as psychological consultant for the series.

when he was unable to find the answers to his simple questions. It was caused by what he found in the peace.

DIRECTOR'S NOTES

CAL KUHL

CAL KUHL has been producing and directing commercial radio programs for the past fifteen years.

THE FOUR officers, Wrangle, Lapham, Fleck, and Myers, meet to dispose of the Smith case. What they actually say to each other totals less than one-tenth of what we hear, and is made up of short snatches of dialogue spotted throughout the other nine-tenths of the dialogue, action, narration, and introspection. Nevertheless, the unity, conflict, and climax of the play are lost unless throughout the play the listener is constantly aware of these four men facing each other, disposing of the Smith case. In the production, therefore, some auditory means of stamping this picture on the mind of the listener was a special requirement. The employment of any of the obvious mechanical devices such as music, a filter, or an echo chamber, whenever the four were speaking, to make them and the scene immediately identifiable and memorable, would, aside from being unworthy of the script, destroy the realism the play demanded and deserved. Instead, when these four spoke to one another, their positions relative to the microphone were slightly distant as compared with normal, and the lines were slightly projected in delivery, more nearly as if the actors were on the stage of a small theater. To heighten the resulting effect, the reading of the lines by these four was purposely stylized, markedly deliberate, brusque, military, formal. This acoustical perspective and dimension, this convention of the Wrangle-Lapham-Fleck-Myers scenes, was of course reserved for them alone. Whatever the means, it is obvious that some convention must be established so that this set scene in the play stays with the listener, either in the foreground or the background, and stays there despite the demands made upon the listener by the story itself as told by Myers.

Myers, aside from what he says to his colleagues, has three main functions. He unfolds the story, sometimes in straight narration, sometimes in narration leading into and out of a flashback; he is introspective in recall, as when he reports to the listener what he thought and felt at the time when the incident he is describing took place; and he is introspective in the present, as when he describes and analyzes the psychic score of Wrangle, Lapham, Fleck, and himself, sitting informally on the Smith case.

It is evident that if the listener is to be given a reasonable chance of orienting himself to Myers in each of these three functions, a convention must be established with respect to Myers when he is not talking with his colleagues. It is equally evident that this convention must be as unrestricted as possible if the actor is to have a reasonable chance of playing the part. He needs all the latitude possible, short of confusing the listener, to do a good job as Myers. The situation could be described as shifting back and forth between two locations.

In the scenes involving the board (Wrangle, Lapham, Fleck, and Myers) the listener is in the room overhearing the conversation; the other nine-tenths of the time the listener is in Myers' mind. In the board scenes the microphone is on the table; the rest of the

time, the microphone is in Myers' head between his ears. The problem is how to make this clear to the listener in such a way that there is a minimum loss of realism and a maximum awareness of where we are at a given moment. Here, again, any use of filters, or the like, is ruled out for the same reasons as given above with respect to the board scenes. The convention for Myers was a decidedly closer than normal distance whenever he was interviewing someone—Smith's wife, Smith's father, and the others. Myers' closer than normal position necessitated not only the absence of any projection in delivery of the lines, but markedly less volume and inflection than in normal living-room conversation. Otherwise the delivery was completely informal, in contrast to the stylized Wrangle-Lapham-Fleck-Myers delivery. The sharpness of the contrast between Myers when talking to his colleagues and Myers when talking about them was heightened by a generally rapid tempo on his part whenever he was introspective in the present. Otherwise his tempo in the closer than normal position was the one called for by the lines and situations themselves. In the scenes where Myers is interviewing someone who knew Smith, the distance from the microphone, the voice volume, the tempo were normal. Thus, in general, the various levels (of the board, of Myers narrating, Myers introspective in recall, Myers introspective in the present) which are implicit in the script call for a similar auditory characterization in terms of acoustic perspective and dimension. These conventions or auditory characterizations are entirely aside from the "characterization" in the usual sense, given by the actor.

There remains yet one more over-all consideration. Once these conventions are established and the play develops, the listener becomes aware of the parallel struggles of Myers: one, the jockeying with his colleagues, the desperation of his unspoken appeal to Fleck; and the other, the realization of the answer to the Smith case in Myers' own mind and the kinetic compulsion within him to wrest the articulation of that answer from the speechless Smith. By the time Myers (and the listener) gets through with the interview with Tana, the conventions are established, the tension is approaching the maximum, and all that remains is the fearsome indictment or question from Smith himself, who until now, in Myers' personal experience, has been only spoken of, but has never spoken. How, with the four auditory conventions already established, and the tension of the drama itself at practically peak level, is the subject of the previous twenty-five minutes of build-up to be introduced? Nor merely be introduced, but made equal to the build-up?

Any musical portrayal of the heartbeat and the labored breathing would not only be false, but would present a mechanical difficulty in terms of dynamics. (If the heartbeat music tops Myers as the heartbeat should, the climax that Myers has been building up to ever since the play began is ruined, irrespective of the kind of music.) The breathing, suiting itself to Myers' words, can be synchronized with the normal minute hiatuses of Myers' lines, and the shifting that Myers has to do from analyses and description to exhorting Smith, and back again. In dynamic level it can be on a par with Myers. But the heartbeat must dominate, and in

perspective it must be unique. If the microphone in this scene is in Myers' head, the heart must be *in* the microphone! Tympani clearly could not have this presence in perspective, and aside from other considerations a contact microphone on a willing chest would still leave unsolved the necessity of gradually increasing the tempo of the heartbeat. A mechanical heartbeat, courtesy of the sound technician, alone can dominate the scene without detracting from Myers' climax and Smith's last utterance. The few moments the heart continues to beat after Smith's final word make possible the amplification of the beat to the maximum volume permitted by broadcasting standards. The abrupt and profound silence sets the stage for the final scene.

Reunion, U.S.A.: American Broadcasting Company, Monday, 7:30–8:00 P.M., P.W.T. Written and produced by the Hollywood Writers Mobilization. Writers: Abraham L. Polonsky; Pauline and Leo Townsend; John Whedon; Ranald MacDougall and Sam Moore; Jerome Epstein; Leon Meadow; Milton Merlin; Carlton Moss and Sylvia Richards; Aaron Reuben; Louis Solomon and Harold Buchman; Dwight Hauser; Janet and Philip Stevenson; David Hertz.

Forms of Censorship

ROBERT SHAW

ROBERT SHAW is an editorial and magazine writer. As a member of the Emergency Committee on KFI and the National Committee for Radio Freedom he made a study of the radio censorship situation and incorporated some of the results in a recently published brochure. He is a member of the Screen Publicists Guild, and at present is working with the Hollywood Writers Mobilization.

PAUL PORTER, Chairman of the Federal Communications Commission, remarked recently: "Unquestionably, radio is here to stay. The question now is, Are the listeners here to stay?"[1]

This is a somewhat wry and exaggerated commentary on the present radio situation by one of the most forthright defenders of the American system of broadcasting. It is another indication of a deepening awareness, both within and without the radio industry, of the abuses of that system.

These abuses seem to be inherent in the development of radio both as a big business and as the most effective agency of mass communication. As the economic and political stakes in radio increase, there is also an inevitable increase in the effort to control radio, to use this public medium for private purposes or to make it serve specialized political or economic ends.

This tendency toward commercial and political restriction is a departure from the basic American concept of radio broadcasting. A few weeks ago the radio industry in the United States celebrated its twenty-fifth anniversary. The bright promises of the early days were recalled. Lip service, perhaps mixed with a little genuine nostalgia, was paid to the ideal of radio as a national forum, untarnished by obtrusive commercialism, free from censorship, and democratically devoted to the entertainment and enlightenment of the American people. It was a beautiful ideal. It still exists on paper. It was written into the Radio Act of 1927 and the Federal Communications Act of 1934.

It is an ideal not yet wholly vitiated. Radio has lived up to at least part of its potentialities. It can live up to them fully and splendidly whenever the intent of our fundamental radio laws is made the guiding policy of broadcasting. Those laws were written with wisdom and foresight. They recognize the far-reaching public importance of radio. They are designed to safeguard it from private or public misuse. They establish radio broadcasting as a business apart from other business. They make it a public trust, with unusual obligations and responsibilities assumed in return for the privilege of using a public air channel.

They insist on the right of free speech on the air. They are sedulous in guarding against private censorship—the tendency of those with immediate access to radio to promote one set of ideas and to exclude other ideas that may conflict with their interests. And they guard against public or political censorship: "No regulation or condition shall be promulgated or fixed by the [Federal Communications] Com-

[1] Quoted in *Radio Daily*, October 26, 1945, from a speech by Paul Porter at the Fifth Regional Conference of the Cleveland Radio Council.

mission which shall interfere with the right of free speech by radio communication."[2]

It is the purpose of this article to examine as objectively as possible some recent trends toward radio censorship and restriction. Pressures are increasing against the legal safeguards of radio freedom. They are endangering the integrity of the radio sections of the Federal Communications Act. This danger is recognized by members of the Federal Communications Commission, by strong forces in Congress, and by many intelligent leaders of the radio industry. The threat to the free American system of broadcasting will be met effectively only when it is also recognized by an alerted American public and countered by the pressure of an informed public opinion.

This problem of radio censorship has been cumulative for many years. Now, on the eve of frequency modulation and the great expansion of electronic communications, and in the face of the mightiest political and social challenges in the history of our planet, the problem seems to be approaching a crisis stage.

Restrictive pressures in radio fall into certain fairly well-defined patterns. First, there is the political type of censorship—the effort to use political power to invalidate existing radio laws. Second, there is the type of censorship originating in the stations and networks, and aimed at keeping off the air certain kinds of programs that may not agree with the opinions or tastes of those in direct control of broadcasting. Third, there is the type of censorship exercised with the specific intent of influencing the selection or interpretation of news. Fourth, and probably most important and pervasive, there is a masked censorship which operates on a basis of commercial selectivity to clutter the air with nonsense and to exclude from the air many excellent programs in favor of inferior programs that are more profitable but that in no way serve the public interest and necessity which holders of radio broadcasting licenses pledged themselves to serve.

There is also a kind of public censorship of radio, operating beneficently, salutary in its effect, and increasing in importance. It will be touched upon briefly after the more disturbing types of radio censorship have been examined.

I

Perhaps the most effective example of the political type of censorship of radio broadcasting can be seen in some of the recent actions of the so-called Rankin committee on un-American activities.

Last October this Congressional committee called for the scripts of a number of well-known radio commentators, among them Raymond Swing, Johannes Steel, William Gailmor, Hans Jacob, J. Raymond Walsh, and Sidney Walton. Members of this group had built large radio audiences on their news analysis broadcasts distinguished by varying degrees of liberalism.

Both in and out of Congress this action brought immediate protest. Representative Emanuel Celler of New York, author of the pending radio "bill of rights" measure to strengthen existing safeguards for the freedom of the air, arose on the floor of the House to protest the "irresponsible and gratuitous actions of the Rankin committee." He said: "This committee is seeking to

[2] 1934 Federal Communications Act, Sec. 326.

out-Dies the original Dies committee. Unfortunately, even if its hunted and hounded victims emerge vindicated, people will not be properly informed and the truth will not catch up with the lies."[3]

In his reply, in which he referred to Representative Celler as "that Jewish gentleman from New York," Representative Rankin indicated that scripts of other commentators, presumably of differing political viewpoints, would be examined. When pressed for names, however, the committee spokesman mentioned Drew Pearson and Walter Winchell.

It developed in the House floor debate that the Rankin committee had also demanded from the Columbia Broadcasting System the script for the Phil Baker *Take It or Leave It* show for September 30, 1945. On that program, in answer to a question about what sort of unity is good for the American people, a young serviceman replied that real unity would be achieved when all Americans, regardless of race, creed, or color, would work together with mutual good will and tolerance toward a common goal of lasting peace and prosperity. He added that in his opinion theories of the superiority of one race and the inferiority of another race created disunity and were un-American.

Representative Hugh DeLacy of Washington, commenting on the action of the Rankin committee in requesting the Phil Baker script, said: "This man was setting forth the basic American teaching of the equal rights of citizens of this nation.... The committee is setting itself up as a Congressional radio 'thought police.' Here is how the fear-smear technique works. Simply asking the radio stations for scripts spreads fear. Advising the press of the request spreads the smear. The commentators whose scripts are sent for are plainly warned that they are under Government surveillance, that their thoughts are under house arrest, that in the future they had better lean toward the thoughts of those controlling the un-American activities committee. The radio stations and the sponsors of programs, who are in business to make money, are thus put on warning that if they wish to stay out of the center of a smear controversy, they had better get other commentators."[4]

This radio censorship action of the Rankin committee aroused other protests throughout the nation. In New York a committee representing the Independent Citizens' Committee of the Arts, Sciences, and Professions and headed by Norman Corwin, radio writer-producer, issued this statement: "The action of the House committee on un-American activities, in relation to radio commentators, constitutes censorship of a particularly insidious nature, inasmuch as the committee's weapons are not legal and proper, but secret and tendentious. A request of this nature in the radio industry is tantamount to formal charges. Already this unprincipled campaign has had serious personal results for at least two of the commentators involved.[5] The committee on un-American activities, established among other things to insure continuance of civil liberties, is in fact undermining those liberties."[6]

[3] *Congressional Record*, October 24, 1945.

[4] *Ibid.*

[5] Hans Jacob of WOV and William Gailmor of WJZ were dismissed by these stations shortly after Rankin committee action.

[6] October 14, 1945.

Closely following this action of the Rankin committee in exposing radio commentators to suspicion without preliminary investigation came the introduction[7] of a radio commentator bill by Representative John S. Wood of Georgia, chairman of the committee. This bill calls on radio stations to precede each news or news analysis broadcast with a statement defining it as "straight news" or "personal opinion and propaganda." It would require stations to "identify with full and proper announcements every person broadcasting opinions and propaganda," and to maintain for public inspection a statement setting forth the name, place of birth, nationality, political affiliation, and other personal data concerning newscasters and analysts. The bill proposes to file with the Federal Communications Commission a set of rules governing "opiniated broadcasts."[8]

This proposed measure was at once called "the Rankin thought-control bill" by articulate opponents in Congress. Representative Clarence F. Lea of California, chairman of the House interstate and foreign commerce committee, said the bill seemed to be clearly contrary to the Federal Communications Act. Representative Ellis Patterson of California said of the commentator-control bill when he heard the Rankin committee had framed it and the chairman would introduce it: "When you begin controlling the airwaves as to what is truth and opinion and set up some inquisitorial body to determine whether it's truth or opinion, the next step is to control the newspapers, and the suppression of all free speech. If there is any need for a change in the radio laws, let the proper committee—the interstate and foreign commerce committee—do it. Not a witch-hunting committee."[9]

Three of the four big broadcasting networks acted at once in opposition to this bill. They were the American Broadcasting Company, the Columbia Broadcasting System, and Mutual. NBC deferred the matter for later action.

Mark Woods, president of ABC, advised the Rankin committee: "The American Broadcasting Company is opposed to any attempt by the Congress to restrict the freedom of expression of news commentators, whether on our own network, other networks, or individual stations."

Julius F. Brauner, general attorney for CBS, issued this statement: "The field of news reporting and analysis is peculiarly not adapted to legislative rules. It seems almost impossible to devise statutory language which would not, on the one hand, suffer from ineffectiveness and, on the other hand, result in strangulation of good operation."

Mutual issued a statement pointing out that the proposed legislation would violate the first amendment to the Constitution, and adding: "Such legislation can only serve to straitjacket the broadcaster and to interfere with freedom of speech and this, in our opinion, would be deplorable in view of the excellent record of broadcasters and the steps they have taken to police their own activities."[10]

[7] H. R. 4775, introduced November 21, 1945.

[8] John W. Vandercook, official of the Commentators' Association, pointed out on December 3, 1945, that the Wood Bill, while proposing a set of rules to govern "opinionated broadcasts," fails to specify these rules.

[9] *Broadcasting* (November 19, 1945), p. 100.

[10] *Broadcasting* (November 12, 1945), pp. 20, 86.

This action by the Rankin committee is probably the most open political attack yet made on American radio freedom. The reaction to it on the part of the public, of forceful elements in Congress and of the radio industry, is encouraging to the hope that freedom of the air will continue to be recognized as one of the most precious of our liberties.[11]

II

The second type of radio censorship, exercised by the broadcasting companies themselves, goes beyond the legitimate task of keeping off the air profane and salacious material, obvious crackpots, and lottery promotions. Station management and program directors are required by law to bar such broadcasts. A United States Supreme Court decision affirms their right and obligation to use this kind of discretionary judgment.

But many stations have stretched this legal obligation to the breaking point, and beyond. They have torn from the context decisions upholding the basic Radio Act of 1927, which, while excluding patently objectionable material from the air, at the same time insists on the democratic use of radio broadcasting facilities and the right of free speech by radio communication.

The files of the Federal Communications Commission are cluttered with cases relating to stations that are trying to use their limited discretionary power in an unlimited way to bar from the air opinions not in agreement with the station owners and the advertisers who support them.

Commentators representing minority opinions or opinions at variance with those commonly held by the National Association of Broadcasters have suffered most from this kind of censorship. For every case of an Upton Close[12] being dismissed from the air for upholding the cause of a man convicted of disclosing United Nations secrets to Germany in wartime, there are literally dozens of such cases as that of the late Alexander Woollcott, who went off the air a few years ago when his sponsors objected to his sharp criticism of two characters named Adolf Hitler and Benito Mussolini.

To rationalize its rather capricious exercise of extralegal censorship powers, the NAB has evolved a curious system of totems and taboos. Many members of this association have a special abhorrence of what they call "controversial issues." They limit the conditions under which controversial subjects can be treated, forgetting that controversy and debate are vital in a functioning democracy. But just as frequently they make a totem of a controversial issue if the weight of opinion expressed happens to be in accord with their own viewpoint.

A recent illustration is the stand taken by the NAB that labor problems themselves are controversial and that discussions of them from a labor point of view should be excluded from the air. This kind of censorship was formally challenged by the United Automobile Workers organization in the summer of 1944, when charges were filed before the Federal Communications Commission against Station

[11] The American Federation of Radio Artists, with 19,000 members, has filed a vigorous protest against the Wood Bill. On November 27, 1945, twenty national organizations—civic, labor, farm, and scholastic—held a mass meeting in Washington, D.C., to plan a campaign against the bill.

[12] Dixon Wecter, "Hearing Is Believing," *Atlantic Monthly* (August, 1945), pp. 55–60.

WHKC of Columbus, Ohio. The FCC held an open hearing, and the importance of the case was widely recognized.

The UAW charged, and WHKC admitted, that Richard Frankensteen, UAW leader, had been interfered with by the station in his effort to discuss on the air problems arising in providing emergency housing for war industry workers. His scripts were mutilated by station censors; he was eventually refused the right to buy time on the WHKC air. At the same time Fulton Lewis, Jr. was broadcasting regularly over that station in opposition to the policies of the War Housing Administration. The station owner testified at the hearing that Mr. Lewis was "one hundred per cent neutral," and maintained that Mr. Frankensteen was not neutral.

The decision as finally rendered by the Federal Communications Commission was a complete victory for the UAW and the principle of freedom of speech on the air.[13] As a result of this decision, the National Association of Broadcasters revised its code and removed labor discussions from its list of undesirable controversial material. The effect of the decision was seen in the case of Station WWJ in Detroit last November. The station, owned by the *Detroit Evening News,* refused Richard Frankensteen the right to broadcast in behalf of his candidacy for mayor. The newspaper owning the station was supporting the candidacy of Edward Jeffries. On the eve of the election, under the pressure of the precedent set in the WHKC case, Station WWJ reversed its legally untenable stand.

There is an almost constant recurrence of cases of commentators restricted or dismissed because station management does not like their opinions. All these cases cannot be paraded before the FCC. Public opinion is the real arbiter. And public opinion is frequently apathetic. In a recent case a famous foreign correspondent and analyst went off the air because the sponsor was dubious concerning his opinions and failed to renew the contract. The analyst wrote to a friend in Hollywood: "I know . . . people liked my program, and depended on it for specialized information. They told me so. But they never took the trouble to write. When the showdown on my contract came, it was a hairline decision. I am sure if the sponsor had received a few hundred letters, even a few dozen, from people saying they liked the program, the contract would have been renewed."[14] Public inertia, the taking of good programs for granted and failing to give them positive support, constitutes in itself a kind of negative radio censorship.

III

The third type of censorship, involving direct efforts to control the broadcasting of news and news analysis, is probably best exemplified in the current KFI case which originated in Los Angeles and is now assuming the proportions of a national issue.

On February 10, 1945, KFI, Los Angeles, owned and operated by Earle C. Anthony, Inc., announced that on the first of the following month the station would inaugurate a new policy requiring all newscasters and news analysts, regardless of outside sponsorship, to be employees of KFI.

[13] Decision handed down June 26, 1945.

[14] Quoted from a personal letter to a member of the National Commission for Radio Freedom. The writer wishes his name withheld.

The implications in this announcement were plain. It was recognized at once that this new policy, once established, would set a precedent. It would mean that a station owner would have direct economic control over persons broadcasting news and opinion-forming programs.

Public reaction was immediate. The new KFI policy was widely interpreted as a move against free speech. The Emergency Committee on KFI was formed. In its formative days Mary McCall, Jr., novelist and screen writer, and Dr. Frederick Roman, educator and regent of the University of California, headed the committee. The Hon. Thomas Ford, for many years a leader in Congress, is now chairman. The committee is carrying the KFI case to the Federal Communications Commission. It is expanding into a National Committee for Radio Freedom, and carrying on an effective campaign of public education for the enforcement and strengthening of radio law.

This KFI case limiting the free expression of opinion on the air has probably had a greater impact on public opinion than any other specific case involving radio censorship. In California the state legislature took official notice of it, and in a strongly worded joint resolution condemned KFI's assumption of exclusive power over news and news-analysis broadcasting.[15] In Washington the implications of the KFI action were discussed on the floor of the House of Representatives, and a statement pointing out its inherent danger was incorporated into the *Congressional Record*.[16] Representative Celler of New York has given special attention to the case, and has amended his radio bill to meet the specific issue.

A legal brief is being prepared for presentation to the FCC opposing the granting of a renewal of the KFI license. There will be a public hearing in Washington when the case comes up this year. Proponents of the doctrine of freedom of opinion on the air take hope from the statements of leading FCC members concerning the need for protecting democratic foundations of American radio, and from the FCC decision in the case of the Mayflower Broadcasting Corporation, in which the following ruling was made: "Under the American system of broadcasting it is clear that responsibility for the conduct of a broadcasting station must rest initially with the broadcaster. It is equally clear that with the limitation in frequencies inherent in the nature of radio, the public interest can never be served by a dedication of any broadcast facility to the support of his partisan ends. Radio can serve as an instrument of democracy only when devoted to the communication of information and the exchange of ideas fairly and objectively presented. A truly free radio cannot be used to advocate the causes of the licensee. Freedom of speech on the air must be broad enough to provide full and equal opportunity for the presentation to the public of all sides of public issues. . . . The public interest, not the private, is paramount."[17]

IV

The fourth type of censorship is so common that its restrictive influence is not always recognized. But it is censorship in reality, operating in the manner of Gresham's Law, with the bad programs driving out the good.

[15] April 16, 1945. [16] March 28, 1945.
[17] 8-FCC-333 (January 17, 1941).

It is a censorship that functions by filling the air to the saturation point with programs designed to foster the sale of goods and tending also through economic pressures to exclude from the air programs fostering more enlightened forms of entertainment, appreciation of fine music, better citizenship, or more awareness of the international issues which must be settled now and settled intelligently if we and our children are to have much of a chance to live out our lives in reasonable safety in this increasingly dangerous world.

This does not mean that many of the nationally sponsored mass-audience programs that drive less profitable but superior programs off the air are intrinsically bad. They are frequently amusing, and they have a most definite place on radio schedules. It is a question of a balanced radio diet. Too many soap opera and wisecrack programs make for mental obesity just as surely as too many ice cream sundaes make for an expanded waistline.

This type of radio restriction is a part of the generic pattern of the overcommercialization of the air. And this overloading of radio with programs that are conceived and produced by the advertisers is in large part the outgrowth of the increasing concentration of ownership or control of broadcasting facilities.

This trend is not in accord with the original concept of American radio broadcasting. Eighteen years ago legal safeguards assuring diversification of control were set up. But they have become obsolescent in the face of swift technical advances, the intricacies of holding companies and interlocking directorates, and the dominance of the four great networks and the advertising agencies over most of the local standard broadcast stations.

Important now are the range and power rather than the number of stations under concentrated control. The ten 50,000-watt clear-channel stations controlled by the membership of the National Association of Manufacturers, or even the seven 50,000-watt stations owned by CBS, far outrange in the radio spectrum all 444 of the local standard stations now broadcasting.

In the broadcasting business these are bonanza days. Within the last few years radio has struck it rich. The gold rush is on. As radio has become big business, bigger money has been attracted to it. The bull market in radio stations is reminiscent of Transamerica or Goldman-Sachs in 1929. In this upsurging market, stations with tangible assets of $50,000 or $100,000 are sold for ten times these figures. The Crosley chain was sold recently to Aviation Corporation in a $22,000,000 deal—and Mr. Victor Emanuel, financial genius of AVCO, in answering a few FCC questions admitted that he had not the slightest idea of what a sustaining program, a soap opera, or a radio station's public responsibility might be. But he did know there was money in radio. And he was right. Stations making a profit of four or five hundred per cent on their depreciated valuation in one year are not rare.

In 1927, the year the Radio Act was passed, the total time sales of all networks and stations amounted to less than $5,000,000. In 1944 the total radio time sales amounted to $391,000,000. The increase in seventeen years was 8,000 per cent. The FCC estimates that this represents a return before federal income taxes of 150 per cent on the de-

preciated value of all tangible broadcasting assets.[18]

With such returns in prospect, it is small wonder that big money flows into the broadcasting business. As both the investment stake and the opportunities for rich rewards increase, the emphasis on commercialization also increases. Bigger dividends must be earned to keep pace with the expanded capital structures. The radio advertising goose that lays such golden eggs must be stimulated to even more prodigious efforts. Station managers under pressure from boards of directors must look with increasing circumspection on sustaining public-service programs and must give more and more preference to the big-budget advertising programs that already overbalance the schedule.

A concentration of advertising money exerts a singularly powerful control over the operation of the American system of broadcasting. In 1944, CBS reported that 26 per cent of its business came from four advertisers, and that four advertising agencies handled 38 per cent of its business. That is fairly typical. Of the $190,677,076 gross-time sales reported by the four networks for 1944, the drugs and toilet-goods business and the prepared-foods business contributed more than half. One soap company, spending $22,000,000 on radio advertising in 1944, boasts that it never offended a single listener—a startling achievement, but one that hardly connotes a vigorous, independent, challenging radio operation.

What has all this to do with radio censorship? Unfortunately, a lot.

The vaulting rewards to be made out of exploiting commercially the public air channels have tended to drive public service stations out of existence. Twenty years ago there were 121 school and college standard broadcast stations. Today there are less than 20. And motivated by a gold-rush psychology to clean up the rich diggings before the claim jumpers arrive, too many stations have deteriorated into little more than platter players and advertising media. The solemn public responsibilities they incurred when they sought and were given a federal radio license are forgotten.

An FCC survey last year of three typical stations showed that one powerful station was devoting 96.9 per cent of the time during the best listening hours to commercial programs. From 2 P.M. to 11 P.M. Monday through Friday it was 100 per cent commercial. Every public service program had been driven off the air. Its weekly spot announcement score was 329 commercial plugs to 6 public service announcements. It yielded a return of 265 per cent on the depreciated value of its entire investment in one year. A medium-power station gave 10 per cent of its time to sustaining programs, and less than 1 per cent to sustaining programs of local origin. During good listening hours, from 10 A.M. to midnight, it was solidly commercial. It earned 142 per cent on its total investment and surplus.[19]

A small local 250-watt station, which had obtained its license by outlining to the FCC elaborate plans for the development of local talent, devoted 88.4 per cent of its broadcast time during a sample week to playing platters. Less

[18] From an analysis by Commissioner Clifford J. Durr of the FCC, 1944 report.

[19] Clifford J. Durr (Commissioner, FCC), *Consumer Reports* (July, 1945), p. 187.

than 3.3 per cent of its time was even remotely connected wtih local talent. Of 1,042 spot announcements interrupting programs during the week, 1,034 were commercial and 8 were public service. Its net profit after paying all income taxes was 200 per cent of its total investment.[20]

Gresham's Law in radio works this way: The high-cost, low-level programs are sponsored and actually provided by advertisers through the agencies. (A parallel situation would exist if the editorial copy as well as the advertising in newspapers were prepared and paid for by the advertisers). These commercial programs represent heavy revenue for the station owners giving them preferred time. So a high-class sustaining program is shunted to a time when it gets few listeners, or goes off the air altogether. In this way such excellent features as the *Farm and Home Hour, Hello Americans,* and dozens of others have faded and disappeared. Admittedly some of the commercial programs are good. But more of them are trivialities and treacle.

The networks make available to their outlets a number of good sustaining public service programs. But the stations are under no compulsion to take them. If they can sell the same time for a sponsored program, the temptation to do it is great. The station management, called upon to choose between a nonprofit intelligent program and a profitable moronic program, could argue plausibly that it was its duty to stockholders to take the profit and let the credit go.

This pervasive form of censorship was found by the FCC during a recent sample week to keep the best sustaining programs off a majority of stations to which they were available. The CBS *Invitation to Learning* program, offered to 136 stations, was accepted by 39; and this about represents what happens to other good sustainers. The stations can simply make more money out of sponsored programs. And sponsored programs, designed for mass impact, contrived with an obsessive desire not to offend and to avoid controversy, and affected by the persistent underestimation of mass intelligence, are on the average below the quality of the sustaining programs.

The question may be asked: Well, what's wrong with making money out of radio? Radio broadcasting is a business, and the idea of a business is to make money, isn't it?

Radio broadcasting is a very important business, and it certainly deserves to make a reasonable return on its investment. However, it is not a business just like any other business. It does not own or even control its chief asset, the air. The station is given a license to use an air channel owned in perpetuity by the people of the United States, and to use it only on the understanding that the public interest will be served. Conceivably it is not serving public interest, convenience, and necessity to let cheap programs cancel out quality programs, to let fabulous profits crowd out public obligations, to let singing commercials frazzle the nerves of millions of Americans—81 per cent of whom object to all commercials, according to a survey by the Columbia University Office of Radio Research.[21]

Twenty years ago one distinguished American, considering the meaning of

[20] *Ibid.*, p. 189.

[21] From a speech by Congressman Cellar, October 7, 1945.

the radio miracle for the people of this nation, said: "The ether is a public medium, and its use must be for public benefit.... It is inconceivable that we should allow so great a possibility for service, for news, for entertainment, for education and for vital commercial purposes to be drowned out in a sea of advertising chatter."

This was not said by an impractical idealist or a crackpot reformer. It was said by Herbert Hoover, then Secretary of Commerce.

But in 1945 we find the following statement being uttered by the president of a major radio network: "We are selling time for one specific reason, and that is to sell goods manufactured by American manufacturers to the public."[22]

In these opposing conceptions is one of the basic clashes of our time. A free radio untrammeled by oppressive political or commercial censorship, a genuine instrument for education and entertainment for our American democracy; or a restricted radio, inhibited by a politically imposed "dangerous thoughts" philosophy, and vulgarized by overcommercialization into a distorted travesty of what it could and should be—the decision is up to us. We own the air channels. We have only to make our wishes known. The chairman of the FCC, Paul Porter, recently begged the American public to let the stations, the networks, and the FCC know what it thinks about this entire issue of radio.[23]

V

There is a fifth and very powerful kind of radio restriction that simply consists in public reaction to the overloading of the air with cheap programs and the more offensive commercial plugs. It undoubtedly results in a decrease in the radio audience. More intelligently managed radio stations are becoming aware of this listener resistance, and are trying to cut down the number and the blatancy of the plugs. An example is Station KSD in St. Louis, Missouri, which has banned all commercials that break into the middle of news programs. It has issued a statement refusing to sell time to advertisers who deal in "palliatives for bodily aches and pains, stomach acidity and gas, body odors, enlarged pores, bad breath and other equally personal or revolting subjects."

Porter urges the development of such self-discipline on the part of broadcasting stations. He points to a strengthening revolt on the part of the American public against commercial bad taste on the air, and cites the reaction of American soldiers returning from Britain to the flood of hypochondriacal chatter deluging the American air.[24] It is not a favorable reaction; the indications are that the vulgarization of the air frequencies is running into the law of diminishing returns.

A 1945 survey by the Association of National Advertisers showed that a fairly large and economically important section of the American public listened to radio less frequently because of offensive commercials, and 15 per cent of the persons interviewed stated they would prefer the British plan of government-controlled broadcasting,

[22] Clifford J. Durr, in an address to the Conference of the Independent Citizens' Committee of the Arts, Sciences and Professions at the Waldorf-Astoria Hotel, New York City, June 23, 1945.

[23] Talk, "Postwar Radio Horizons"; reprinted elsewhere in this issue.

[24] Paul A. Porter, "Radio Must Grow Up," *American Magazine* (October, 1945), pp. 24–25.

with a tax on receiving sets, rather than endure the uncontrolled commercialism of American radio.[25]

The struggle to protect radio freedom has been and will be long and hard. But that is true of every form of human liberty everywhere. There is need for increased vigilance. But there is no cause for discouragement. Rather, there is reason for hope. Constructive and patriotic forces are at work in support of free speech on the air and the integrity of radio as a public service medium. The National Committee for Radio Freedom is gaining ground rapidly. The Celler bill, reaffirming basic public ownership of the air frequencies, setting limits to the overloading of radio programs with advertising, requiring broadcasting companies to issue regular financial statements, and strengthening FCC power to prevent radio monopoly, is attracting broad support. And intelligent forces within the radio broadcasting industry are recognizing the cumulative danger of some of the present radio abuses, and are working to correct them.

[25] Report by Paul Ellison, Vice-President of the Association of National Advertisers, to Association of Canadian Advertisers in Toronto, November 6, 1945.

Postwar Radio Horizons*

PAUL PORTER

PAUL PORTER, Chairman of the Federal Communications Commission, needs no introduction to the readers of the *Hollywood Quarterly*.

THIS IS really a privileged platform for anyone who has a message. Those of you who are devotees of the great music which the Columbia Broadcasting System makes available to millions of listeners on Sunday afternoons are citizens of demonstrated discrimination. Anyone in a position of public responsibility should welcome the opportunity to claim your attention. I must confess, however, I speak to you with a sense of fear and trepidation. I am convinced that you could as readily detect a false note in the remarks of an intermission orator as you could in a distorted interpretation of the eternal symphonies which are presented to us each Sunday afternoon over these facilities. I am convinced, therefore, that I am talking to individuals who place a high premium on integrity. And I want to discuss briefly a problem concerning which you, an articulate and cultivated group, have an especial responsibility.

During the Summer recess, this network has continued the presentation of this great music. Here is proof of the finest in our democratic system of broadcasting. I do not know the audience rating of this particular program, nor do I care. I do know that there are many Americans who schedule their Sunday afternoons with this program in mind. And perhaps there are other times when you search in vain over your dial for that which will satisfy your particular taste. I know that this is so because as Chairman of the Federal Communications Commission I have heard from some of you. You have expressed the desire or the hope that your radio bill of fare was the exclusive problem of your government. This is not so, nor should it be. I would not want the Commission of which I happen at the moment to be a member prescribing any specific programs or pontificating on what particular thing the American Public should hear. While I am quite certain that the present Commission could, if it had the legal authority, develop a plan which would be superb, I shudder, as a listener, over the job which my successors might do.

Therefore, I want to put to you a simple inquiry. How many of you who constitute the Sunday afternoon audience of this particular program have ever taken the trouble to make known the fact that you appreciate the opportunity to hear this grand music? I am not suggesting that, in humble abnegation, you should timidly make known your gratitude.

The channels of the ether by which these programs reach you are yours. They don't belong to the network, the stations, or the FCC. They belong to you. What I am saying is that you should make known what you want, and those who are the licensees and

* This talk was given on September 2, 1945, and is reprinted through the courtesy of the Columbia Broadcasting System, over whose facilities it was broadcast.

have custody of public franchises of the ether will be responsive to your desires. I do not want to be in the position of violating the hospitality of those who have invited me to give the artists a rest, but I think the management of our broadcasting systems will agree that by and large the public receives over the air not necessarily what it wants but what it doesn't complain about. To put it another way, if you like this symphony program, don't write your Congressman, or the FCC, but tell your local station and the network and the sponsor, and if there is a program you don't like, do likewise.

The American system of broadcasting is a democratic system. And a democratic system presupposes certain free choices. Our licensing procedure doesn't provide for a quadrennial election. There is no method by which you can enforce a change, as you do in government. But you can, if you take the trouble, give voice to confidence or disapproval of what you like or don't like.

Stations always get a renewal of their franchise unless somebody complains about them with great vigor, and then they usually get it anyway. It is the theory of the American system that the people are the arbiters and final judges. I doubt, as far as our radio services are concerned, whether this has worked in practice. When, as has been the case recently, the Commission has made inquiry about the over-all performance of a particular station, we have been charged with attempting to usurp power which belongs to the listeners. I wonder just how effectively listeners have exercised this power which your station owners claim you have. I suspect that indifference has characterized the attitude of most listeners, many of whom may feel that they have legitimate grounds for complaint.

We at the Commission want to encourage various groups and individuals to express their views about the services which you receive through your radio. The democratic way is to stimulate such discussion, including both criticism and approbation. I personally feel that the broadcasting system of this country has a great record of achievement during the war and before.

Of course there are imperfections. We would all be suspicious of perfection in a democratic society, even if we could recognize it. I think that one of the things we have been fighting for is the right of criticism—criticism of your government, our broadcasting system, the taxicabs, the corner grocer, and the top sergeant. My principal concern is whether this freedom to criticize has been effectively exercised in radio. It will be a healthy thing for this to be done.

During the past two Sundays you have heard how science has reached new frontiers. A system of frequency-modulation broadcasting is about to get under way. I share the views of those who predict a nation-wide system of television, in the development of which this network has pioneered and made important contributions. The tremendous skills and resources of this great country have advanced the science of electronics many generations during the war. Now that victory is in our hands, technology offers a tremendous challenge. The engineers have shown us how to do many new things in all fields, and communications and broadcasting are in the forefront of these developments.

The important question, to my mind, is whether we can match the ingenuity of the scientists and explore and develop new techniques which will make effective use of that which they have created. In short, can our social, our political systems and the art of human relationships keep pace with the new technology, television, FM—and, yes, the atomic bomb—which have made that question supreme in our time.

"Three Strangers"

ADOLPH DEUTSCH

ADOLPH DEUTSCH is the composer of more than fifty motion picture scores. In addition to the recently completed film, *Three Strangers*, his music has been heard in *The Maltese Falcon, Action in the North Atlantic,* and *The Mask of Dimitrios.* He has contributed papers on screen writer–composer collaboration to *The Writers' Congress,* 1943, and *The Musicians' Congress,* 1944. Mr. Deutsch is a member of the board on music of The Academy of Motion Picture Arts and Sciences and is Vice-President of The Screen Composers' Association.

THREE STRANGERS is a perfect example of my pet theory that there ought to be much more writer-composer collaboration in films, so I might as well start from the beginning and describe exactly what happened—and generally happens—in the scoring of a motion picture. The telephone rings; it is Miss Samson of the Warner Brothers music department. I am notified that the rough cut of *Three Strangers* will be run in Projection Room 6 at ten o'clock tomorrow morning. Arriving a few minutes early, I wait outside of Room 6 to enjoy the morning sun, remembering that for the next two and a half hours I shall be breathing air conditioned by yesterday's cigars and cigarettes. A small group of people arrive: I recognize Jean Negulesco, the director; Wolfgang Reinhardt, the supervising producer; and George Amy, the cutter. Greetings are exchanged, and I am introduced to Howard Koch, one of the two writers of the screen play. I am surprised to learn that his collaborator is Major John Huston, who, at the time, is away on official business for the U.S. Signal Corps. Mention of his name brings to my mind the stimulating experience I had in composing the musical score for *The Maltese Falcon,* which he adapted for the screen and also directed.

Promptly at ten, Leo Forbstein, the music department head, arrives and we file into the dimly lit projection room. It resembles a small theater and seats about fifty. Halfway forward is a long desk upon which are telephones, a volume regulator to control the sound, a buzzer signal, and an intercommunication phone that connects with the projectionist's booth. There is an air of expectancy as we await the two buzzes which is Eddie's "ready" signal. Eddie Higgins is our projectionist (operator, in studio language), and he is an expert at handling work prints so that they don't come apart at the splices or tear at the sprocket holes. As the small group settles itself in the divan-like chairs it occurs to me that this is the first time any of us will have seen the entire picture in continuity. It is the end toward which writer, director, producer, actors, and technicians have been working for several months.

I reflect upon their intimate knowledge of each scene and compare it with the few meager hints I had gleaned from reading the script, wondering if some day I would be invited to sit in at a story conference or the preparation of a shooting script. The phone at Mr. Forbstein's elbow rings. He is called away. Awaiting his return, we discuss the immediate musical problems of the picture. I am told that *Three Strangers* is a story that picks up the lives of three

persons unknown to each other and follows each separately to a tragic denouement. One is a woman inclined toward Oriental mysticism and superstition; the second, a lawyer who is the trustee for several large estates; and the third, a down-at-heel but literate young man who plays classical piano pieces, quotes fragments of poetry, and contemplates life through an alcoholic haze. From George Amy, the cutter, I learn that in the process of editing the film he transposed several sequences to clarify the story line which wove in and and out of the lives of the three people, and that more recutting may be necessary.

"The music," Jean Negulesco says, "will be a big help in identifying the main characters"—"What do you think," interjects Mr. Reinhardt, "of having three distinct themes?" "Excellent," I agree, recalling how well the leitmotif device served the operatic composers—a quaint old Wagnerian custom. At this point Mr. Forbstein returns, signals the operator with two buzzes, and we're off.

As the lights dim we focus our eyes on the screen, where the first atmospheric shot of Piccadilly Circus fades in. My mind automatically registers: music must reflect cosmopolitan London, around 1938; that's easy, I was born there. The camera wanders through the crowd and picks out Geraldine Fitzgerald (the most prepossessing of the three strangers). I concentrate on her characterization, seeking clues for an appropriate theme. Even though she has spoken no words, I am influenced by her appearance, her bearing, and her facial expressions. All these must be reflected in the music. The second stranger looms out of the crowd; he is Sydney Greenstreet, "the Fat Man." The camera lingers on him as his eyes follow Miss Fitzgerald appraisingly. I ask myself, "What kind of music does one write for a susceptible barrister?" The question remains unanswered as the film progresses unfalteringly to the first meeting of the three strangers. The third stranger is an old projection-room friend of mine, he of the soft-boiled eyes, Peter Lorre.

It is not long before the narrative, in the hands of such capable performers, absorbs my interest to the total exclusion of musical considerations. This is a healthy sign and I don't resist it. Music has no place in this scene, I register subconsciously. Hold on! Here's that Chinese image, Kwan Yin, the "Goddess of Mercy"—here a symbol of mysticism and superstition. Big Ben starts tolling. The wind whips the curtains. A candle goes out. "Make a light!—The matches!" Miss Fitzgerald cries. Aha! I think . . . looks like a music cue. George Amy volunteers some information. "The chimes ought to last longer." Nobody answers. It is a point for later discussion.

The first episode, the meeting of the three strangers, comes to an end and we watch the unwinding and interweaving of the three separate story threads. This is a uniquely daring essay in screen craftsmanship. It is no easy task to tell part of a story, part of a second story, part of a third story; pick up the first story again, the second and the third where they left off, and finally merge the three in a gripping climax. To be sure, there were some sections where the meanings became obscured, but they were not too opaque to be cleared up by recutting and by the proper handling of music and sound

effects. One has to imagine the finished print with these elements added.

The final reel is before us and the three strangers, propelled by an evil fate, are brought together. I see Miss Fitzgerald seated near a radio, listening transfixed and oblivious to the ranting of Sydney Greenstreet and the piano playing of Peter Lorre. This being the work print, the sound of the piano is indicated for only a measure or two; the complete piece will be added in the re-recording process. The same applies to the radio announcer who is presumed to be describing the Grand National Steeplechase. Inexorably the emotional stress of the scene increases; I have a momentary flash of the musical problems to be solved, but the threat of impending violence again commands my attention to the exclusion of technical problems. The film fades out on a bizarre note; the lights flash on, and we look at each other. To the question marks which I see in the eyes of the Messrs. Reinhardt and Negulesco I give an honest nod of approval. The looks give way to conversation. We voice our opinions in generally favorable terms, meanwhile standing and stretching. Once these preliminaries are out of the way, we settle down to a review of the picture in relation to musical treatment. The odds are very one-sided. Nine reels of picture (roughly ninety minutes of screen play) are not quickly assimilated. The writer, the director, and the producer have lived with the picture from its beginnings, whereas I am basing my opinions on the superficial impressions of a single screening. My only advantages are a fresh perspective and my past experience in scoring dramatic films.

Thus begins a belated and makeshift collaboration. The music I am about to write is expected to become an integral part of the screen play, heighten the emotional appeal, be so deftly a part of the drama that it has its effect upon an audience without their being conscious of it. "Unobtrusive" is the gold standard for a dramatic score. In the weeks of preparation of the script and with the knowledge that music was going to play an important part in their film the writers did not discuss this basic component with the composer. The problem for me is now one of adapting music to the tempi of acting, the spaces between spoken lines, fade-ins and fade-outs, gestures, reactions, and a dozen other conditions arbitrarily crystallized on the film. My job has become one of conforming rather than of collaborating.

We begin with Mr. Reinhardt's suggestion of identifying each stranger with a distinctive theme. I add to the idea by naming specific instruments to characterize them further. Negulesco would like a violin for Miss Fitzgerald. I do not quarrel with the idea; a violin can express the kind of femininity portrayed by Miss Fitzgerald. In her more violent moods I can harden the string quality with a muted trumpet. We are debating the proper place at which to introduce these individual themes (a decision that should have been made before the picture started shooting). "If you would precede the main title with individual close-ups of the three principals and give each one footage enough, I could introduce their themes effectively before the story begins." There is some hesitancy over my suggestion, because it will involve a radical change in the format of the title.

The idea appeals to all present, however, and we decide to use it if the "front office" authorizes the change.

The discussion moves on to the sequence with the chimes in it; it is an involved one. Preceding the chimes there is a period of dramatic silence, the lights are switched out, Miss Fitzgerald lights some candles and the group intently watches the image of Kwan Yin. The script, I recall, directs that the first chime be heard as the picture cuts to a "BIG HEAD CLOSE-UP OF KWAN YIN," and the last chime, just before Mr. Greenstreet strikes a match. The picture wasn't shot to the accurate length of twelve chimes, and we are obliged to consider ways of stretching the chimes so that they begin and end in the right places. This, we decide, will be a job of manipulating the spacing of the music, and of the chimes, and some discreet cutting of the film. Messrs. Reinhardt and Negulesco are content to leave this in our hands.

Our next point is the very important one of finding a suitable device to punctuate the beginnings and endings of the three stories that interweave throughout the play. The audience must see and, if possible, hear where one story is interrupted and another is begun. The visual problem can be solved by using any one of a variety of optical distortions; it is the oil dissolve that is chosen. To the audience it will appear as a series of ripples across the screen that blur the images as they melt from one to the other. In matching this oil dissolve I must devise an unusual sound as if the music were being blurred by the same ripple. My inner ear suggests a small combination of instruments, some electric, that will produce an oily sound contrasting sharply with the legitimate instrumentation preceding it. Two vibraphones, two harps, marimba, and cymbal, recorded with a fluctuating volume control, will do the trick. The audience will see and hear the ripples, I assure my collaborators.

The final scene now receives some attention. Here again the screen action dictates the handling of the accompanying sounds. We know that a radio announcer is describing the Grand National and that at a certain point in the sequence the screen characters react to his shout of "They're off." We see Lorre start and stop playing the piano, and we will record a suitable length of piano music to match his actions. The scene presents a rare problem in dynamic levels of sound. Our theater audience must hear the spoken lines of the cast, so these will have to be rerecorded at the top range of audibility. At a slightly lower level the piano must be heard; still lower, the radio announcer, and behind his voice the murmurs and exclamations of the crowd at the race. "The idea," Reinhardt says, "is to play Greenstreet's lines against a confusion of sound that seems intent on frustrating his desire to be heard. He is competing with the radio and the piano for the attention of the other two persons in the room." It is the kind of drama that is ideally suited to the film medium, where one has complete control over the elements of sound. "I'll work with George and Alex (a sound engineer) on this. It won't be easy, but I think we'll give you the effect." Having seen examples of sound wizardry in other pictures of ours, Reinhardt, Negulesco, and Koch are content to leave the scene to us.

The ending of the picture presents

no further problems and so our little group in Projection Room 6 begins to melt away. After a screening of this sort there is always some reluctance to break up a meeting before double-checking with each other to be sure that we all understand what was agreed upon during the running. Howard Koch, the writer, moves off. He is glad to have met me. "So am I," I answer (fervently), considering myself fortunate to have had even one casual meeting with him. Mr. Reinhardt and Mr. Negulesco say their goodbyes fully confident that the music department will do a good job. Mr. Forbstein assures them that they will be happy with the music and suggests that, in view of a tentative preview date, we had better get right on the first three reels.

"Getting right on the first three reels" means that we will run each one through several times, analyzing them carefully for music cues. Upon deciding which sequences are to be underscored, we look for the exact spot, within the fraction of a second, to begin and end the music. Each musical entrance must coincide with some significant event on the screen. Sometimes it comes in on a change of facial expression, the sharp reaction of a character, a threatening gesture, a walk, a change of scene, a sudden cut from long shot to close-up or vice versa, a meaningful remark, an off-screen noise, a letter, or a weapon, violent physical action, or some other dramatic reason.

During this crucial stage of what really amounts to dramatic construction, my inventiveness is circumscribed and dominated by the preëstablished pace of direction and camera movement crystallized on the film now before me. Collaboration with the writer and director is no longer possible. The cutter will coöperate as far as he possibly can, but he, too, works within these limitations. For example, if a musical phrase cannot be uttered without undue distortion of tempo, either fast or slow, it might be possible for the cutter to cheat a foot of film to accommodate the music. The word "cheat" is used literally here because the cutter, in making changes after the reels have been approved by the producer, runs the risk of being called to task for making unauthorized changes. It is a significant commentary on standardized film production that so much composer-cutter collaboration is carried on furtively, like the Underground.

When the reels have been analyzed, the actual task of composing music begins. To supplement the mental images formed in my mind I will have typewritten cue sheets. Every spoken word, action, camera movement, and cut is written down and measured; the timings are given both in footage and in fractions of seconds. The mysterious process by which composers create music has never been fathomed. Add to this mystery the self-control, the discipline of subordinating one's inspiration to a cue sheet, and further complicate the procedure with a delivery deadline, and you gain some idea of the conditions under which I shall write approximately one hour's worth of music (the equivalent, in length, to one act of *Tristan*) in four weeks.

The composer is not worth his salt who assumes that his obligations as a collaborator end after the music is written. A new and vital phase of mutual effort begins, on the sound-recording stage. My next collaborator is the

recording engineer, David Forrest, whose handling of the sensitive microphones and volume controls on the music-recording stage is termed "mixing." The responsibility of getting the best possible music recording is placed squarely upon the mixer's shoulders by his department head. Left to his own judgment, Dave, who reads an orchestral score in addition to his volume indicators, will capture a picture of my music on the sound track that meets the required standards of the studio. He will not, however, plumb the inner dramatic meanings of the score unless I make them clear to him first. By exploiting the acoustic flexibilities of film recording I can invest my music with qualities that will complement the mystic atmosphere of *Three Strangers*. Parts of the score must be recorded with clarity, others with a diffused quality; some must sound intimate, others distant; here and there I take "stage liberty" and ask for excessive reverberation in one section of the orchestra, combined with natural presence in the others.

The microphone is a camera that records sound, and, like the cameraman, the mixer will direct the placement of the microphones to obtain the quality of recording I have asked for. Many times during the playing of a piece of music the microphone becomes a mobile unit, swinging in to pick up at close range, then returning to a normal placement. If necessary, Dave will employ several microphones at varying distances from the source of sound. There is nothing static about a recording stage. Instruments are at times moved and regrouped for special results; in fact, the very walls of the room are mounted on hinged sections that can be adjusted to alter acoustic characteristics. Equipped with all these devices, the mixer is an important factor in contemporary film technique and certainly a collaborator to be accepted by every writer as well as composer if screen plays are to possess a multidimensional aural quality rather than a flat single plane of sound.

Three Strangers presented many opportunities for the manipulation of recording qualities. Right in the introduction, for instance, where the close-ups of the principals were used, we decided to match the photographic proximity with a corresponding close pickup of the solo instruments. The image on the screen was big and the tone of the instrument was big. Following the title came the London atmosphere, Piccadilly Circus at night, traffic and crowd noise. The music I had written attempted to sound British and at the same time to give the feeling of a lot of things going on simultaneously. Dave and I agreed that we should attempt to get as much clarity of recording as possible, to bring out the counterrhythms and contrapuntal lines in the orchestra. Later on in the picture we had a scene on the bank of the Thames, a night shot, damp and foggy. The orchestration reflected this mood, which we further enhanced by using a very reverberant pickup. The result was a diffused shimmer of sound like the distant murmur of a metropolis, a perfect accompaniment for the occasion. For the image of Kwan Yin I wanted a detached quality as if the Oriental strain, played by seven instruments, were coming from a great distance. This was accomplished by performing the music softly and picking it up at twice the normal distance.

In one of the final sequences there was a frightening shot of Sydney Greenstreet walking into the camera, his huge hulk filling the screen. The full orchestra was used, but to heighten further the feeling of the demoniac characterization we "miked" the bass section of the orchestra to get a massive sound that became louder as the actor came closer. The result was a gripping combination of sight and sound.

The deliberate distortion of musical balance and perspective is thus an important adjunct to film technique. The uses of this device should be fully exploited, not only by the composer working in collaboration with the mixer, but also by the screen writer in collaboration with the composer. A shooting script may very well incorporate notations on aural perspective to supplement the camera angle and all the descriptive material considered necessary to achieve a well-integrated and artistic result.

Once all the music for *Three Strangers* is recorded on film, the negative goes to the laboratory to be developed. Usually this is an overnight job. The positive prints of the music tracks are sent to the Dupe Building to be cut into their respective reels.

Let me take you to the Dupe Room where Jerry Alexander is dubbing the first reel of *Three Strangers*. Jerry and his assistant sit at a sound-control panel facing the screen. Each knob on the panel controls a different sound track, and the number of knobs required depends upon the complexity of the sound pattern in the reel. The speech of the principals, the shuffling of feet on the pavement, traffic sounds, crowd sounds, the tap-tap of a steel-ferruled cane, the chimes of Big Ben, a wind effect, and the musical score comprise the setup of the sound pattern for the first reel. Detailed cue sheets serve as a guide to indicate the exact footage at which the sounds and music will occur.

Jerry signals his projectionist, the room is darkened, and we watch the illuminated footage meter at the right of the screen, which is synchronized with the projection machine. The meter serves as a warning guide for incoming and outgoing sounds, also as a quick check if any imperfection of quality or bad synchronization of sound with the picture is apparent. "This is only a rough rehearsal, so don't expect too much," Jerry always says when the composer is present, usually to forestall a request for more music—louder, louder. The rehearsal is rough; some effects are too loud, some too soft; music entrances are faded in too slowly and the whole reel seems a confused jumble. "Rewind," Jerry signals, "and we'll run it again." The second rehearsal is smoother and the pattern of sound begins to make more sense. While the reel is being rewound for a third rehearsal I talk over the musical dynamics with Jerry. "Hold it down a little so that the tapping of Greenstreet's cane comes over." "Fade in sooner when they sign their names." "Blend it with the wind effect and increase the volume as the candle goes out." "Hold the Kwan Yin theme down." The next rehearsal gets under way and my suggestions are tried; they all work out except the cane tapping; that is out of balance. Jerry is now becoming familiar with the sound content of the reel, and each successive rehearsal shows a marked improvement. A few more adjustments and we are ready for

a final take. Overhead a red light indicates that this run is a take; there will be no conversation in the room to distract the two dubbers from their sensitive task. The picture fades in, the title music starts, and we know that downstairs the light valve is recording on a strip of film one-tenth of an inch wide a pattern of modulations that will reproduce the speech, music, and noises in exactly the same relative proportions as those in which Jerry is mixing them. The reel is over, the lights brighten. "How do you like it?" "O.K. for me," I reply, and the first thousand feet of *Three Strangers* is ready to print. "Lunch," announces Jerry. It has taken three hours to rehearse and record ten minutes of sound.

Returning from lunch, I notice the NO ADMITTANCE sign on the door of the Dupe Building and ask Jerry whether that includes writers and directors. "It sure does; departmental rule," he replies. "Hum," is my guarded comment, as I ponder the wisdom of keeping these talents ignorant of this important phase of film making.

The dubbing of the next seven reels moves along smoothly. We have occasion to add an echo to the sounds in two places: one is a scene under Battersea Bridge; the other, a corridor in a jail. We work out an interesting transition from a train effect underscored with music to a cracked phonograph record repeating a phrase monotonously. We exaggerate an orchestral crescendo and punctuate it with the impact of a weapon hitting the floor—pure cinematic liberty to shock an audience.

The final reel containing the critical scene of the Grand National coming over the radio, the tense dialogue in the room, and Lorre's piano playing, commands our attention for the better part of a day. We are occupied, for the most part, with finding the proper dynamic levels, playing them higher or lower as the camera follows the action from one side of the room to the other, and never once losing the intelligibility of the on-screen dialogue. It is fascinating to watch the hands of Jerry and his assistant as they play the multiple controls during this scene. Satisfied with our last rehearsal, we decide to try our luck. We have notified Leo Forbstein and George Amy that reel 9 is ready for a take and they are in the room as the reel starts. Our audience is augmented by some sound cutters and technicians, since word has reached them that reel 9 of *Three Strangers* is up; they watch with critical attention. The take is made, but proves unsatisfactory. We ask for reactions and get them. Some discussion follows. It is decided to cheat the piano out sooner and play up the dramatic scoring in one spot. This time the take is good and our dubbing job is done.

The completed sound track now goes to the laboratory to be developed, printed, and combined with the picture in a master negative. A positive print will be made as quickly as possible because our sneak preview deadline is two days away. The exact time and place of the sneak is a studio secret, known only to a few department heads. On the evening of the event, a favored few of us will receive two hours' advance notice, naming an outlying theater and an approximate starting time. "Eight-thirty tonight at the Cascade Theater." At eight-thirty we submit our work to the public. By ten o'clock we shall have its verdict, not in writing but

through an intangible series of telepathic signals—"audience reaction."

Outside the Cascade Theater the same group which four weeks ago met in Room 6 greet each other. Awaiting the arrival of Jack Warner and his associates, we make conversation, carefully avoiding the topic uppermost in our minds. My eye wanders over the line of cash customers—our jury. I am counting the infants in arms and the popcorn bags, wondering if their cacophony will obliterate the subtle nuances of our play.

The arrival of the Jack Warner party is our signal to file into the theater. As the last newsreel clip thunders from the screen, we settle ourselves in the section reserved for us. Recorded several decibels higher than feature pictures, all newsreels leave the ears tingling. A normal recording following the news sounds puny, and if the proscenium curtains are closed the effect is that of an underwater performance.

"Ladies and gentlemen, we present a Warner Brothers feature preview," the voice from behind the closed curtains announces, with an air of confidence not shared by us. A murmur of anticipation fills the house and as the close-up of Geraldine Fitzgerald fades in the murmur surges into exclamations of approval. Another surge as the patrons recognize Sydney Greenstreet and his co-artist Peter Lorre. The musical themes of identification are lost in the shuffle, but I am not too concerned, knowing that the element of surprise will not be present in a regularly advertised performance. As the title fades out and the picture begins, we concentrate on the screen as though we had never seen *Three Strangers* before. This is not entirely because an audience is present; much of the unfamiliarity stems from the fact that the screen play has acquired a new aural dimension since it was run in Room 6.

The background of music and sound against which the actors perform and speak their lines is at this time doubly conspicuous to the writer, the director, and the producer. Accustomed as they are to the simple picture-and-word form of the work print, these added sounds must seem obtrusive. More than once during the preview I glance in Howard Koch's direction as a piece of musical underscoring begins while his lines are being spoken. As we did not collaborate on the script, I am sure he is having many surprises. It is a disquieting thought.

As the picture nears its end the cumulative result of the nine reels run in continuity before an audience manifests itself in a number of ways. We see our work in true perspective and all the details merged into a whole. Our senses of self-appraisal and criticism are sharpened; the glow of accomplishment is tempered by the sobering knowledge that some places might have been better. As for the score, I am acutely aware of some irritating musical mutilations and incoherences that could have been avoided if I had been able to work with Howard Koch, John Huston, and Jean Negulesco *before* the picture was shot. It is incongruous that two such vital ingredients as the music and sound effects should receive so little consideration in the plotting of the script. The musical score of this film was heard during two-thirds of the running time, more than 60 per cent of its total footage—by no means an inconsequential contribution. Is music the leavening in the loaf of bread, or

merely the gaudy icing hastily poured over a cake to conceal some doubtful ingredients? Surely, it's the leavening.

The curtain closes, the audience applauds, but long before this we are aware of its favorable verdict.

Our group files out of the theater and assembles in the manager's office for the usual confab and review of notes made during the running. This time, the notes are few and the changes are slight. Jack Warner nods his approval to the circle of inquiring faces and, as if to confirm his feelings, offers Reinhardt a cigar. The tension eases, there are some pleasantries, and we gather our hats and coats. Reinhardt smiles from behind his Havana perfecto.

In the lobby Howard Koch approaches me. Is he thinking that I have smothered some of his best lines? My momentary suspense is relieved by his smile. "The music helped a lot," he remarks quietly. Jean Negulesco joins us as we walk to the parking lot. "Beautiful score, Adolph"—his enthusiasm is sincere. "Thanks, Jean! Maybe on our next picture we won't have to work like *Three Strangers.*"

From Score to Screen

DAVID FORREST

DAVID FORREST has been in the sound department of Warner Brothers since 1928, and has been a music mixer there since 1936. In 1928 he mixed the first United Artists talking picture, *Coquette*. Two recent pictures with which he has been associated are *Rhapsody in Blue* and *Three Strangers*.

THE VOICE of the movies that one hears in the theater is usually not, as most of my readers doubtless know without being reminded, an original recording from either the set where the actors speak or the scoring stage where the musicians play and sing. High over the moviegoer's head, in the projection booth, a few inches from the brilliant arc that illuminates the screen far below, a small incandescent lamp scans a narrow sound track printed photographically on the margin of the picture film. This sound track is as long as the picture, 6,000 to 14,000 or 15,000 feet or more, but only one-tenth of an inch wide. It translates photography into electricity—into a current that pours out of electronic amplifiers and into a large set of loud-speakers that stand or hang behind the screen. Deep and resonant, or high and shrill, it sometimes shouts with the bombast of battle, sometimes sighs with the sweet, soft parlance of love.

The film that one views and hears in the theater has printed upon it both the picture and the sound track, and this one track has within its infinite striations all the sonority of music, the drama of dialogue, and the life of the world's sounds. This was not always so. During the long period of editing, the picture film was handled separately as one entity, and the synchronous sound came from a family of sound tracks. First, there was the dialogue track containing the voices of the actors and the natural sounds that originate on the set. Then, gradually, other tracks came into being: the music track of the songs and dances, and the one of the background music and the dramatic music that often says as much as dialogue, or more, and the sound-effect tracks that breathe life into scenes or sequences, make trains convincing, battles terrifying, football games exciting.

Each reel of picture, then, engenders many accompanying reels of sound, which are cut, edited, perfected, and rehearsed in that new and sacred temple of our art, the Dupe Room. Finally they are re-recorded, all on one track. The final re-recording represents a delicate adjustment of the three major elements of dialogue, music, and sound effects. In it the personnel of the Dupe Room has determined the proper relative balance of each element with the other two. The relationship is fixed, crystallized forever—or at least until after the preview. Parenthetically, the term Dupe Room, instead of the more prevalent Dubbing Room, is used here as a genuflection to the custom still observed in the first studio to make sound pictures. In the first days of sound, just as now, the process of duplicating films and adding new elements was called "duping" by the picturemakers, and sound men adopted the expression into their own terminology. But whether one calls this holy of holies a Dupe Room or a Dubbing Room or a Re-

Recording Room, it is a place of vital interest and incalculable importance.

The Dupe Room is the birthplace, then, of this new kind of voice, born of many voices. The first one to be heard comes from the music track, during the main and credit titles. How clearly it establishes the themes of the picture to follow, how well it predicts the character and color of the story in the allotted time and footage, are problems shared in large part by the composer of the film's music and in a small way by the music mixer who does the recording. The second track in sequence to assume the important position in the final re-recorded sound originates from the dialogue tracks. These are usually edited by the picture editor and are recordings of the voices of the actors made at the time the corresponding scenes were photographed. Third is the sound-effects track, sometimes held down to a background position, sometimes stepped up to dominate the entire screen.

After the main title, as the picture progresses, the music assumes a more subtle role. If the final form of the picture may be compared to opera, then it may be pointed out that the way the orchestra should sound calls for the closest collaboration between the composer and the music mixer. If the composer conceives the final result as contrapuntal, with the voices of the actors heard about equally with the voices in the orchestra, he will write with transparency and restraint so that the actors can be clearly heard and understood. He will reserve his full and sonorous tuttis for those happy cessations of dialogue that occasionally blossom like a benediction in a babel of talk.

Usually, the composer's ideas of how the melody or melodies should be balanced against the countermelody or countermelodies have first been indicated to the orchestral arranger, and the arranger has orchestrated the composer's material with this balance in mind. It then becomes the responsibility of the music mixer to achieve that balance in the music track, either by a carefully prepared pickup, or by the trial-and-error method of recording and listening to playback records, or both. By pickup is meant the arrangement of the acoustical picture as presented to the modulating unit of the film recording machine. It is achieved by placing the musicians in the most suitable position in the best available room and properly placing the microphone or microphones, and by the control of the output of the microphone or microphones. Within the limits of that tenth of an inch of sound track referred to before—limits which are finite and not to be overstrained—the acoustical picture must be framed and presented to the satisfaction of everyone concerned. The music mixer's guides in the recording of this acoustical picture are twofold: mechanical and photographic limits are indicated by meters; but more important are his listening powers, which he exercises through a monitor system of loud-speakers that is practically a duplicate of the loud-speaker system used in theaters. The sound that he hears in these monitor speakers is the sound that will be recorded on the music sound track, and the kind of sound that he sends to the modulating unit is determined by the performance of the artists, the acoustical character of the room, the placement and kind of micro-

phones, the amount of signal from each microphone — since these amounts, when balanced together, compose the over-all music picture,—and the faithfulness of the amplifiers and laboratory processing that result in the final track.

Playback records are sometimes made on disk records at the same time as the film recording and from the same circuit. These, played back into a speaker system for the conductor and musicians to hear, indicate the results to be expected from the finished job. Such disks have no physical connection with the picture as presented in the theater. After being played back they are discarded, or, if of a prescore, are played back on the set as a guide for the picturemakers. Nearly all songs and dances, incidentally, are made in this way. This integration of responsibility results in a music job that is forced to make no technical concessions to picture, and a picture job that is forced to make no concessions to the difficulties and mechanics of recording music. The procedure has a happy and rare bivalence: it is both economical and artistically ideal.

Either with or without the use of playbacks, it is of great help to the music mixer when the composer gives him a complete description of the way he wants his music to sound with respect both to inside balance and to over-all quality. One decision that must be made by the sound man is whether the over-all quality should be reverberant or what is known as "dead," and whether it should sound close or distant, or somewhere in between. In making up his mind on these points, he will, with few exceptions, I believe, welcome the opinions and views of the music director. The final criterion in any case is the picture itself as experience indicates that it will sound in the theater. If, for instance, the scene in question has rather low, soft, dialogue and the music has natural presence, the music may stand forth so lifelike that the attention of the audience will be alienated from the story. The music may actually compete for the audience's attention, instead of forming an alliance to advance the progress of the plot. A re-recording mixer has then but one alternative—to hold the music track unnaturally low or boost the dialogue track higher than it should be.

It is at such times that the composer in the theater is in an unfortunate position as he tries to listen for the inner voices of his score, or, for that matter, to the outer voices either. When, on the contrary, the style of music and recording is rounder, and when the aural illusion is such that the music seems to come from a three-dimensional space rather than from the plane of the screen, the chances are much increased that the dialogue will stand out clearly, even when the level of the music track is held quite high in the re-recording balance.

It is of course true that all film music is not conceived with the thought that the dialogue and sound effects will become fellow singers in the final ensemble. Much of it is written to parallel the emotional profile of the film, somewhat in the nature of picture scores as played by live orchestras in the pits of "silent" picture theaters. This presents an entirely different technical problem to the music mixer. Should the composer wish to develop a theme in what might be called a musically formal fashion that builds up to an emotional climax, the one concession that he is al-

most sure to make is that the climax in the music will coincide with the climax of the scene. In terms of re-recording the final track, this means that the composer's carefully constructed climax has to be held down so that the dialogue may be heard. This being so, the early part of the number becomes completely inaudible. The technique that results in smoothing out this difficulty requires the music mixer to do a good deal more volume changing than is usual. He is forced to bring up the low passages so that they will not be lost when the music is finally balanced against dialogue, and he must strive to make the full passages sound well when reproduced at a fraction of their natural level.

It is of interest to both the composer and the sound man that music reproduced at subnormal levels, such as music behind dialogue, does not have the same inner balance as music played at a natural, lifelike level. In general it may be said that in this soft, subterranean underworld of music the most noticeable differences are that the bass is relatively less strong and that instruments having a tone quality characterized by a predominance of odd harmonics, such as the double-reed instruments or sharply muted brass, are changed and affected the least.

Like their confreres in radio and records, the motion picture musician and the motion picture sound man are most fortunate when the character of the music is matched by the character of the scoring stage. This would mean large and reverberant halls for symphonic works, down to progressively smaller and less reverberant rooms for progressively smaller combinations. A great deal can be done by the use of changeable shutters that alter the nature of the walls of the recording studio and, consequently, its reverberation time. Different kinds of microphones and a properly selected pickup can be of further help. Here again, the ultimate ideal, as defined by the nature of the picture, must be outlined like a target for the sound man to shoot at. As in radio, it may be necessary to use one microphone or many, depending on the aim and the ammunition. In radio, the pickup of a symphony orchestra in a large hall like Carnegie Hall in New York or Symphony Hall in Boston can be accomplished most satisfactorily with one microphone. Here the intrinsic balance of the orchestra is of great importance, the strings being sufficiently numerous and therefore sufficiently sonorous to balance the brass, woodwinds, and percussion at all times, in even the fullest passages. On the other hand, the broadcasting of the Metropolitan opera requires many microphones and unusual combinations of microphones, with magnificent results which include extraordinary intelligibility from the singers, detail in the orchestra, and an over-all grandeur that is most impressive.

One difference in the reproduction of music in radio and in pictures is that in listening to his radio each man is his own arbiter of the volume coming out of his loud-speakers, whereas in the picture theater an entire audience is dependent on the theater management for its listening level. In both the home radio and the theater reproducing system, the power of the amplifier is the determining factor in the loudness equation, rather than any inherent loudness or softness in the source, within well-defined technical limita-

tions that need not be elaborated upon here. However, it may be said that the carrier wave of radio and the sound track of motion pictures can stand just so much modulation without becoming overloaded and consequently most unpleasantly distorted. Should the technical limits be strained, the unpleasantness is greatly increased when a large amount of the power available in the reproducing amplifiers is utilized.

Given a well-modulated original, the amplifiers of a radio receiver or a theater sound system can be turned as high or as low as desired, with good quality and agreeable listening in either case. Most studios modulate their final theater composite sound tracks in such a way that the theater projectionist can place his volume control on one setting at the beginning of the picture and leave it there until the end. Without further attention the desired result is that, for instance, a scene of an opera house will sound full enough to give a good illusion of soloist, chorus, and orchestra, and at the same time another sequence with perhaps low, intimate dialogue will sound soft and natural, yet sufficiently audible. In this connection, too strong a plea cannot be addressed to the theater manager. He must see to it (or hear to it) that the normal volume-control setting is high enough for the crowded evening shows, when more people provide more sound absorption and more incidental noise, and must take care that the volume setting is not too high for the less crowded performances. His judgment should assist in a good projection of the picture and a good playing of the sound track. He has an opportunity to exercise his intimate knowledge of local conditions such as the acoustic peculiarities of the theater, ventilator and air-conditioning machine noises, and outside traffic noises, and to work constructively toward improving the listening pleasure of his audience.

In the not too distant future we may perhaps make great progress in the way our music sounds in the theater. A single set of speakers concentrated at the visual source is necessary and proper for reproducing the voice of the screen figure, but it has many disadvantages as a reproducer of music on the grand scale. Mr. Disney's *Fantasia* made a fine beginning that will doubtless be followed up and even perhaps improved upon when the artistic creators of pictures provide the necessary kind of material and incentive. The first-run showings of *Fantasia* employed multiple sound tracks playing into multiple speaker systems so that the entire theater was flooded with music. For example, the string section of the orchestra played from one side of the stage, the brass from another, angelic voices came from high above the balcony, and the fetish of concentrating the sound at one point was effectively broken.

As a rather offhand example, suppose for instance that a picture like *Midsummer Night's Dream* were to be remade in a more advanced way. It would be quite practical for the sound of the orchestra to come from speakers in the theater's actual orchestra pit, the soloists' and actors' voices from the present speakers behind the screen, and the chorus voices from banks of speakers on either side of the screen, in the balcony, or backstage. Then the almost monotonously prophetic Bard would accurately have put the situa-

tion into words, in that passage in which he has Bottom apply for a part as an actor: "Let me play the lion too: I will roar, that it will do any man's heart good to hear me"; and the protest from frightened Quince that they'll be hung for it, and Bottom's "I grant you, friends, if that you should fright the ladies out of their wits, they would have no more discretion but to hang us: but I will aggravate my voice so that I will roar you as gently as any sucking dove; I will roar you an 'twere any nightingale." Bottom would seem to have been one of the first to anticipate the problems of today's sound men.

Fantasia. RKO Radio, 1941. Story direction by Joe Grant and Dick Huemer.

A Midsummer Night's Dream. WB, 1941. Directors, Max Reinhardt and William Dieterle. Play, William Shakespeare. Arranged for the screen by Charles Kenyon and Mary C. McCall, Jr.

Notes and Communications

MR. OBOLER DISSENTS

GENTLEMEN: William Matthews' "Radio Plays as Literature" in the first issue of *Hollywood Quarterly* was a welcome sight; radio had had a very small measure of mature-minded evaluation.

Unfortunately, Mr. Matthews' entire evaluation of my work, as literature, is concerned with a book titled *Fourteen Radio Plays*—which happens to be only the *first* of six published works and which, above all, contains fourteen of the very *first* radio plays I had written. For better or worse, the aspiring artist grows up and into his medium; surely it is not fair to base a serious evaluation of the writer's work only on that which he has done in his artistic nativity.

I believe your readers will agree that Mr. Matthews should have omitted me from his article until such time as he had read the progression of my published plays. His critical appraisal might have remained exactly the same, but at least it would have been a fair, complete one. Cordially,

ARCH OBOLER

PROFESSOR MATTHEWS REPLIES

GENTLEMEN: Although I know of no obligation on a critic to read the whole of an author's work before making a judgment, had I known of the existence of Mr. Oboler's other published plays I should certainly have read them, both for completeness and because I am not unaware that a writer changes in methods, quality, and outlook with the changing years. I had hoped to read the *Oboler Omnibus,* the only other book of his of which I had heard, but it was not published in time. It was clearly stated in my article that the judgment was based on only one book, and as clearly indicated that Mr. Oboler's work might have changed since. As a critical practice, I usually look in first books for promise and potentiality as much as for achievement. I did not take this attitude to Mr. Oboler's first book for one good reason; that it was an anthology, presented as the best work of an experienced, prolific, mature, and very successful radio playwright. The egregious *Catwife,* for example, was stated to have been one of more than a hundred horror plays that Mr. Oboler had written, and it was to be assumed that he thought it his best.

Mr. Oboler has published five anthologies of his plays: *Fourteen Radio Plays, Ivory Tower and Other Radio Plays, This Freedom, Plays for Americans,* and *Oboler Omnibus*—the last set in an autobiographical commentary on his radio career. He also contributed five plays to *Free World Theatre.* There are some repetitions in these books; but they constitute a representative selection of his work up to 1944, exclusive of certain types of "commercial" writing.

I do not propose to write a new evaluation of Mr. Oboler's work here; it would be better for someone else to do that. My judgment of the first book is unchanged. But I may briefly indicate some of the modifications that might

Notes and Communications

MR. OBOLER DISSENTS

GENTLEMEN: William Matthews' "Radio Plays as Literature" in the first issue of *Hollywood Quarterly* was a welcome sight; radio had had a very small measure of mature-minded evaluation.

Unfortunately, Mr. Matthews' entire evaluation of my work, as literature, is concerned with a book titled *Fourteen Radio Plays*—which happens to be only the *first* of six published works and which, above all, contains fourteen of the very *first* radio plays I had written. For better or worse, the aspiring artist grows up and into his medium; surely it is not fair to base a serious evaluation of the writer's work only on that which he has done in his artistic nativity.

I believe your readers will agree that Mr. Matthews should have omitted me from his article until such time as he had read the progression of my published plays. His critical appraisal might have remained exactly the same, but at least it would have been a fair, complete one. Cordially,

ARCH OBOLER

PROFESSOR MATTHEWS REPLIES

GENTLEMEN: Although I know of no obligation on a critic to read the whole of an author's work before making a judgment, had I known of the existence of Mr. Oboler's other published plays I should certainly have read them, both for completeness and because I am not unaware that a writer changes in methods, quality, and outlook with the changing years. I had hoped to read the *Oboler Omnibus,* the only other book of his of which I had heard, but it was not published in time. It was clearly stated in my article that the judgment was based on only one book, and as clearly indicated that Mr. Oboler's work might have changed since. As a critical practice, I usually look in first books for promise and potentiality as much as for achievement. I did not take this attitude to Mr. Oboler's first book for one good reason; that it was an anthology, presented as the best work of an experienced, prolific, mature, and very successful radio playwright. The egregious *Catwife,* for example, was stated to have been one of more than a hundred horror plays that Mr. Oboler had written, and it was to be assumed that he thought it his best.

Mr. Oboler has published five anthologies of his plays: *Fourteen Radio Plays, Ivory Tower and Other Radio Plays, This Freedom, Plays for Americans,* and *Oboler Omnibus*—the last set in an autobiographical commentary on his radio career. He also contributed five plays to *Free World Theatre.* There are some repetitions in these books; but they constitute a representative selection of his work up to 1944, exclusive of certain types of "commercial" writing.

I do not propose to write a new evaluation of Mr. Oboler's work here; it would be better for someone else to do that. My judgment of the first book is unchanged. But I may briefly indicate some of the modifications that might

have been made in my original critique had I then read more of his plays.

First, the sentimentality and superficiality that I deplored in the first book would not have seemed so strong a characteristic; those qualities are evident enough in the later work, but not nearly so frequently. Secondly, the secondhandedness I noted in the first volume would have seemed a minor characteristic; very few of the later plays are obviously derivative, and his interest in paleontology, psychoanalysis, and the moral problems of war sometimes stimulates him into unhackneyed and effective dramatic situations. Thirdly, it would have been apparent that Mr. Oboler can at times write unusual and effective horror and supernatural plays: *The Immortal Gentleman* and *Visitor from Hades* have excellent nightmarish qualities, and *Execution* has some of the qualities of a good medieval legend Fourthly, Mr. Oboler's social outlook in the first volume would have appeared historically as a condition typical of the confused liberalism of prewar days. A large proportion of his later plays are firm-minded propaganda for democratic values and the rights of minorities and common men, and against nazism abroad and at home; others are part of his contribution to the war effort, and doubtless did a good job in stressing such important matters as giving blood and staying on the job. Some of these war plays seem to me artistically mechanical and conventional; but there are a few, such as *Hate, Execution,* and *Ivory Tower,* which combine strong feeling about democratic values with effective characterization, dramatic situation, and climax, and are the best of the Oboler plays I have read.

I do not think Mr. Oboler a very distinguished playwright, but at his best he is a far better one than his first volume shows. Sincerely,

WILLIAM MATTHEWS

HOLLYWOOD—ILLUSION AND REALITY

HOLLYWOOD is consistently, relentlessly publicized; yet most of the people who know the motion picture industry as their means of livelihood and the focus of their lives will agree that the general public is uninformed, or blatantly misinformed, even by well-intentioned commentators, concerning the realities of motion picture production, the problems that face the craftsmen in the industry, and the community in which they live. I am not referring primarily to the expensive foolishness about the stars that fills the fan magazines—a comparatively unimportant by-product of the system of stereotypes and illusions which creates a false perspective concerning everything pertaining to the production of pictures.

Let us consider, as an example, an article by Raymond Chandler on "Writers in Hollywood" in the November *Atlantic.* Chandler has much that is pertinent, and indeed imperative, to say about the importance of the script as the key to the process of picturemaking, the failure to make effective use of writing talent, and the straitjacketing of creative freedom under the present studio system. But Chandler's useful comments on the underestimation of the writer are invalidated by his own underestimation of everything that concerns Hollywood. He begins by observing that "Hollywood is easy to hate, easy to sneer at, easy to lampoon." He notes the danger of exaggeration, cit-

have been made in my original critique had I then read more of his plays.

First, the sentimentality and superficiality that I deplored in the first book would not have seemed so strong a characteristic; those qualities are evident enough in the later work, but not nearly so frequently. Secondly, the secondhandedness I noted in the first volume would have seemed a minor characteristic; very few of the later plays are obviously derivative, and his interest in paleontology, psychoanalysis, and the moral problems of war sometimes stimulates him into unhackneyed and effective dramatic situations. Thirdly, it would have been apparent that Mr. Oboler can at times write unusual and effective horror and supernatural plays: *The Immortal Gentleman* and *Visitor from Hades* have excellent nightmarish qualities, and *Execution* has some of the qualities of a good medieval legend Fourthly, Mr. Oboler's social outlook in the first volume would have appeared historically as a condition typical of the confused liberalism of prewar days. A large proportion of his later plays are firm-minded propaganda for democratic values and the rights of minorities and common men, and against nazism abroad and at home; others are part of his contribution to the war effort, and doubtless did a good job in stressing such important matters as giving blood and staying on the job. Some of these war plays seem to me artistically mechanical and conventional; but there are a few, such as *Hate, Execution,* and *Ivory Tower,* which combine strong feeling about democratic values with effective characterization, dramatic situation, and climax, and are the best of the Oboler plays I have read.

I do not think Mr. Oboler a very distinguished playwright, but at his best he is a far better one than his first volume shows. Sincerely,

WILLIAM MATTHEWS

HOLLYWOOD—ILLUSION AND REALITY

HOLLYWOOD is consistently, relentlessly publicized; yet most of the people who know the motion picture industry as their means of livelihood and the focus of their lives will agree that the general public is uninformed, or blatantly misinformed, even by well-intentioned commentators, concerning the realities of motion picture production, the problems that face the craftsmen in the industry, and the community in which they live. I am not referring primarily to the expensive foolishness about the stars that fills the fan magazines—a comparatively unimportant by-product of the system of stereotypes and illusions which creates a false perspective concerning everything pertaining to the production of pictures.

Let us consider, as an example, an article by Raymond Chandler on "Writers in Hollywood" in the November *Atlantic.* Chandler has much that is pertinent, and indeed imperative, to say about the importance of the script as the key to the process of picturemaking, the failure to make effective use of writing talent, and the straitjacketing of creative freedom under the present studio system. But Chandler's useful comments on the underestimation of the writer are invalidated by his own underestimation of everything that concerns Hollywood. He begins by observing that "Hollywood is easy to hate, easy to sneer at, easy to lampoon." He notes the danger of exaggeration, cit-

ing a critic's casual reference to "run-of-the-mill $3,000-a-week writers." He very properly stresses the fact that "50 per cent of the screen writers of Hollywood made less than $10,000 last year."

Having set himself the task of describing the real Hollywood, the author finds himself drawn irresistibly within the gates of the illusory Hollywood, the never-never-land of spendthrift zanies and comical incompetents. Having warned against the danger of economic exaggeration, he proceeds to walk into the trap: "There are writers in Hollywood making two thousand a week who never had an idea in their lives, who have never written a photographable scene, who could not make two cents a word in the pulp market if their lives depended on it." The actors are also easy to lampoon. Hollywood makes "historical epics in which the male actors look like female impersonators, and the lovely feminine star looks just a little too starry-eyed for a babe who has spent half her life swapping husbands." As for the producers, "Some are able and humane men and some are low-grade individuals with the morals of a goat, the artistic integrity of a slot machine, and the manners of a floorwalker with delusions of grandeur."

It is not my purpose to argue about these characterizations. Every community has its quota of frivolous, ill-mannered and evil persons. The point I wish to make relates to the repetition of clichés; Chandler even uses the old one that "nearly every sleeve conceals a knife"; the repetition creates a cumulative distortion. Since screen writers are "a pretty dreary lot of hacks," and since they are content to live in an "atmosphere of intellectual squalor," it seems fatuous to suggest that they be granted greater artistic freedom. There is no indication that they would know how to use this freedom if they had it.

Writers may derive some comfort from the fact that they are becoming increasingly prominent in the strange hierarchy that is supposed to inhabit the Hollywood wonderland. Emil Ludwig describes the makers of screen plays in a recent issue of a French newspaper; the article is translated from the German, but it may be permissible to quote a passage as it appears in French, in order to preserve its Gallic flavor. The writers, according to the eminent historian, "ont la taille svelte, portent volontiers des chandails bariolés, changent de maîtresses plus souvent encore que de studios." Perhaps none of us in Hollywood have seen these "svelte" writers, wearing their gaudy sweaters and changing mistresses more frequently than they change studios, but we can welcome them without rancor as additions to the interminable gallery of fictitious Hollywood portraits.

The Hollywood stereotype, like other stereotypes, has not been manufactured accidentally. It is a significant social phenomenon. Those who perpetuate the myth may have diverse purposes and viewpoints. But the cliché retains its power, whether it appears as an unabashed harlequinade of the *Once in a Lifetime* sort, or under the guise of sober "scientific" investigation with appropriate statistical tables as in Leo Rosten's *Hollywood,* or in the subtleties of Christopher Isherwood's *Prater Violet.* The net result is the building of an ungainly Rube-Goldberg-cartoon edifice, which stands between the serious craftsmen who are the majority of the industry's workers and the audience they seek to serve. It is probable that

most of the members of that audience—which covers the world—know nothing of the problems of the industry or of the social awareness and invigorating concern with the creative potentialities of the medium that are characteristic of the real Hollywood.

An analysis of the mythology that has grown up around the American picture industry would involve a difficult research job, but it is to be hoped that some scholar will undertake the task. It would be an invaluable contribution to our understanding of social attitudes toward the motion picture. It might also reveal the underlying forces and pressures that shape these attitudes. At a time when the freedom of the screen is under attack by powerful political and economic interests, it may not be amiss to note that mockery and illusion can cushion the attack and divert attention from the issues of public policy that are involved. As long as the average citizen thinks of Hollywood as a glamorous funnyhouse, he cannot think of it as a place where a public trust is fulfilled, and where the most sacred of our traditional liberties—freedom of thought and freedom of communication—must be preserved.

JOHN HOWARD LAWSON

AN EXPERIMENT IN RADIO EDUCATION

AN EXPERIMENT in the use of radio in education is now being carried on in San Luis Obispo, two hundred miles north of Los Angeles. It is based on the premise that all citizens in a democracy should know how to use its tools. If students acquire the active art of broadcasting, they'll naturally lend a lot more discernment to the passive act of *listening* to broadcasting.

The experiment at San Luis Obispo involves the use of education *with* radio. This is not education *by* radio, as in an eastern city where regular courses in the college curriculum are conducted over the air. Neither is it education *for* radio, as in many schools and colleges which offer courses, or hobby classes, in the various phases of radio broadcasting. Nor is it education *from* radio, whereby classes sit and listen to radio broadcasts.

Rather, it is the use of radio as a device similar to the textbook, the blackboard, and the class recitation. Here's how it works:

An arrangement has been made with KVEC, the Mutual outlet in San Luis Obispo, for a weekly remote broadcast from the Junior High School every Thursday morning from 9:45 to 10:00.

This time falls within the second period at the school, and every second-period class is charged with the job of putting on a broadcast at least once a semester. Since all six hundred students at the school are enrolled in a class during this period, each of them will have an opportunity to participate in a radio program in the course of the school year.

The nature of the programs varies with each producing class. Spelling classes put on spelling bees. Journalism classes offer news commentaries. Shop classes discuss safety. Social studies classes present history and current events.

In spite of the fact that no one at the school has had professional radio experience, the programs are all handled fairly well from a production standpoint. They are entertaining and are extensively listened to by parents and friends in the community.

most of the members of that audience—which covers the world—know nothing of the problems of the industry or of the social awareness and invigorating concern with the creative potentialities of the medium that are characteristic of the real Hollywood.

An analysis of the mythology that has grown up around the American picture industry would involve a difficult research job, but it is to be hoped that some scholar will undertake the task. It would be an invaluable contribution to our understanding of social attitudes toward the motion picture. It might also reveal the underlying forces and pressures that shape these attitudes. At a time when the freedom of the screen is under attack by powerful political and economic interests, it may not be amiss to note that mockery and illusion can cushion the attack and divert attention from the issues of public policy that are involved. As long as the average citizen thinks of Hollywood as a glamorous funnyhouse, he cannot think of it as a place where a public trust is fulfilled, and where the most sacred of our traditional liberties—freedom of thought and freedom of communication—must be preserved.

JOHN HOWARD LAWSON

AN EXPERIMENT IN RADIO EDUCATION

AN EXPERIMENT in the use of radio in education is now being carried on in San Luis Obispo, two hundred miles north of Los Angeles. It is based on the premise that all citizens in a democracy should know how to use its tools. If students acquire the active art of broadcasting, they'll naturally lend a lot more discernment to the passive act of *listening* to broadcasting.

The experiment at San Luis Obispo involves the use of education *with* radio. This is not education *by* radio, as in an eastern city where regular courses in the college curriculum are conducted over the air. Neither is it education *for* radio, as in many schools and colleges which offer courses, or hobby classes, in the various phases of radio broadcasting. Nor is it education *from* radio, whereby classes sit and listen to radio broadcasts.

Rather, it is the use of radio as a device similar to the textbook, the blackboard, and the class recitation. Here's how it works:

An arrangement has been made with KVEC, the Mutual outlet in San Luis Obispo, for a weekly remote broadcast from the Junior High School every Thursday morning from 9:45 to 10:00.

This time falls within the second period at the school, and every second-period class is charged with the job of putting on a broadcast at least once a semester. Since all six hundred students at the school are enrolled in a class during this period, each of them will have an opportunity to participate in a radio program in the course of the school year.

The nature of the programs varies with each producing class. Spelling classes put on spelling bees. Journalism classes offer news commentaries. Shop classes discuss safety. Social studies classes present history and current events.

In spite of the fact that no one at the school has had professional radio experience, the programs are all handled fairly well from a production standpoint. They are entertaining and are extensively listened to by parents and friends in the community.

The project has many values to recommend it. Students spend several weeks preparing for their broadcasts, and learn as much as possible about professional radio in that time. Their regular classwork has improved, even though of necessity less time is given to it. (Grades in some classes have jumped 10 to 15 per cent.) When the project expands and classes are able to go on the air more often, this incentive motive will extend over the entire year.

Through the project the school has been provided with a much-desired form of press agentry. Most parents can't be badgered into coming anywhere near the school. Yet democracy demands coöperation between parents and teachers. Since the use of radio at San Luis Obispo was begun, there has been a measurable increase in parental interest in the affairs of the school.

Though as yet not extensively publicized, the project has been noticed in other schools and will probably be repeated elsewhere. One nationally known educator characterized the experiment as "the hottest educational idea in a decade."

If it does spread—and the advent of FM will make it much easier—radio will truly become an educational medium. Radio will belong not alone to the entertainers, but also to the educators. And since there's so much air in the air, it's only fair that it be shared.

JACK STANLEY
EVERETT BROWN

NEGRO STEREOTYPES ON THE SCREEN

TYPE CASTING is a common curse in Hollywood. Possibly the most unjust example of this practice is the persistent typing of the entire Negro race as menials and buffoons, a tradition that has been followed ever since the establishment of the American film industry. Now, after many years, a protest is beginning to be heard. The change in attitude is traceable to the growing social consciousness that has developed in this country in the last few years. Nowhere has this increased awareness become more noticeable than among Negroes themselves.

The most forceful protests have come from Negro servicemen who have served overseas. These men have seen the astonishment of people in Asia, Africa, and Europe at discovering that the average American Negro soldier is a normally intelligent and self-assured individual rather than the ignorant and illiterate buffoon habitually portrayed in our films.

Among the civilian population, too, there have been objections to this stereotype. Negro newspapers, civic and political organizations, and ministers and teachers are opposing this harmful distortion. As succinct proof that the Afro-American group is not composed exclusively of illiterate menials, they point to the 1940 Bureau of Census statistics. These figures show that at that time there were in this country some 3,524 Negro physicians and surgeons; 2,339 college presidents and professors; 1,052 lawyers and judges; 132,110 craftsmen and foremen in industries; and 6,801 trained nurses.[1]

[1] The Census further indicates how widely Negroes are represented among the professions and skilled trades. There are 17,102 clergymen; 1,463 dentists; 6,943 musicians and music teachers; 63,697 school teachers; 1,231 electricians; 20,798 carpenters; 3,965 tailors and furriers; 11,000 dressmakers and seamstresses; 28,229 barbers, beauticians, and manicurists; 5,000 stenographers and secretaries; more than 100,000 clerical workers; 1,210 real-estate bro-

The project has many values to recommend it. Students spend several weeks preparing for their broadcasts, and learn as much as possible about professional radio in that time. Their regular classwork has improved, even though of necessity less time is given to it. (Grades in some classes have jumped 10 to 15 per cent.) When the project expands and classes are able to go on the air more often, this incentive motive will extend over the entire year.

Through the project the school has been provided with a much-desired form of press agentry. Most parents can't be badgered into coming anywhere near the school. Yet democracy demands coöperation between parents and teachers. Since the use of radio at San Luis Obispo was begun, there has been a measurable increase in parental interest in the affairs of the school.

Though as yet not extensively publicized, the project has been noticed in other schools and will probably be repeated elsewhere. One nationally known educator characterized the experiment as "the hottest educational idea in a decade."

If it does spread—and the advent of FM will make it much easier—radio will truly become an educational medium. Radio will belong not alone to the entertainers, but also to the educators. And since there's so much air in the air, it's only fair that it be shared.

JACK STANLEY
EVERETT BROWN

NEGRO STEREOTYPES ON THE SCREEN

TYPE CASTING is a common curse in Hollywood. Possibly the most unjust example of this practice is the persistent typing of the entire Negro race as menials and buffoons, a tradition that has been followed ever since the establishment of the American film industry. Now, after many years, a protest is beginning to be heard. The change in attitude is traceable to the growing social consciousness that has developed in this country in the last few years. Nowhere has this increased awareness become more noticeable than among Negroes themselves.

The most forceful protests have come from Negro servicemen who have served overseas. These men have seen the astonishment of people in Asia, Africa, and Europe at discovering that the average American Negro soldier is a normally intelligent and self-assured individual rather than the ignorant and illiterate buffoon habitually portrayed in our films.

Among the civilian population, too, there have been objections to this stereotype. Negro newspapers, civic and political organizations, and ministers and teachers are opposing this harmful distortion. As succinct proof that the Afro-American group is not composed exclusively of illiterate menials, they point to the 1940 Bureau of Census statistics. These figures show that at that time there were in this country some 3,524 Negro physicians and surgeons; 2,339 college presidents and professors; 1,052 lawyers and judges; 132,110 craftsmen and foremen in industries; and 6,801 trained nurses.[1]

[1] The Census further indicates how widely Negroes are represented among the professions and skilled trades. There are 17,102 clergymen; 1,463 dentists; 6,943 musicians and music teachers; 63,697 school teachers; 1,231 electricians; 20,798 carpenters; 3,965 tailors and furriers; 11,000 dressmakers and seamstresses; 28,229 barbers, beauticians, and manicurists; 5,000 stenographers and secretaries; more than 100,000 clerical workers; 1,210 real-estate bro-

What has been the colored American's relationship to the film industry in all these years? Negroes entered Hollywood motion pictures as early as 1915 as "atmosphere" and "extra" players. Among the most popular of the early actors was Noble Johnson, who played innumerable non-Negroid feature roles. Perhaps the earliest protests from colored moviegoers was lodged against D. W. Griffith's *Birth of a Nation,* on the grounds that the picture harmed good race relations by depicting Negroes as rapists and slaves.

About fifteen years ago Clarence Brooks portrayed the role of an educated West Indian doctor in *Arrowsmith,* in which Ronald Colman was starred. In 1932, Hazel Jones played a beautiful Burmese siren whose wiles ensnared the late Lon Chaney in *West of Singapore.* About the same time, Etta Moten was cast as a South American singer in *Flying Down to Rio.* These performances, however, were never very loudly acclaimed because the parts represented groups other than American Negroes.

From 1941 to 1944 there was a decided improvement in Hollywood's treatment of the American of color. The emphasis on morale-building entertainment as part of the war effort resulted in an increased employment of Negro players. They took part in entertaining members of the armed forces at various camps and recreational centers and in bond-selling drives and other war-related activities.

During the same period the Negro public displayed a growing interest in colored players and in the types of roles assigned to them. Most of the studios answered affirmatively the demand for better and more dignified roles for colored artists. Ernest Anderson played the ambitious youth in *In This Our Life,* in which Bette Davis was starred. Kenneth Spencer appeared as a Negro war hero in *Bataan.* Rex Ingram played an important role in *Sahara.* Ben Carter was seen in a dignified part in *Crash Dive.* Dooley Wilson received much favorable comment for his work in *Casablanca.*

Three years ago, two all-colored films opened new avenues. The cast of *Stormy Weather* included Lena Horne, Bill Robinson, Cab Calloway, and many other Negro artists. *Cabin in the Sky* featured Ethel Waters, Rochester, and Lena Horne. The latter picture was criticized for its stereotyped theme of the Negro's conception of God.

In the past year or so there has been a decided drop in the employment of Negro actors and actresses. It is said that orders have been given to "write out" Negro characterizations in story scripts, for fear of giving offense. But Negro leaders contend that the fight against the stereotype cannot be solved by the expedient of eliminating the Negro from pictures. They say that the problem of readjustment of values between the makers of motion pictures and the Negro public involves the creation of more understanding and a clearer conception of issues. A recognition of these factors will bring about a change in racial conception as interpreted in our domestic movies.

I have already pointed out that the war has brought about a deep sense of racial consciousness within the Afro-

---

kers; and 48,614 college students. Moreover, there are six Negro-owned and operated banks with aggregate deposits of $9,914,290; and approximately 200 Negro-controlled insurance companies.

American group. Indeed, the Negro recognizes that he has a large stake in the current struggle to highlight the importance of the social responsibility of motion pictures in the creation of new patterns of universal understanding and interracial adjustment.

Arrowsmith. Goldwyn-UA, 1931. Director, John Ford. Novel, Sinclair Lewis. Screen play, Sidney Howard.

Bataan. MGM-Loews, 1943. Director, Tay Garnett. Original screen play, Robert D. Andrews.

The Birth of a Nation. (See p. 152.)

Cabin in the Sky. MGM, 1942. Director, Vincente Minelli. Musical play book, Lynn Root. Screen play, Joseph Schrank.

Casablanca. WB, 1942. Director, Michael Curtiz. Play, *Everybody Comes to Ricks,* by Murray Burnett and Joan Alison. Screen play, Julius T. Epstein, Philip G. Epstein, and Howard Koch.

Crash Dive. Fox, 1943. Director, Archie Mayo. Original screen story, W. R. Burnett. Screen play, Jo Swerling.

Flying Down to Rio. RKO, 1933. Director, Thornton Freelance. Story, Louis Brock.

In This Our Life. WB–First Nat'l, 1941. Director, John Huston. Novel, Ellen Glasgow. Screen play, Howard Koch.

Sahara. Col., 1943. Director, Zoltan Korda. Story, Philip MacDonald. Screen play, John Howard Lawson and Zoltan Korda.

Stormy Weather. Fox, 1943. Director, Andrew Stone. Unpublished story, Jerry Horwin and Seymour E. Robinson. Screen play, Frederick Jackson and Ted Koehler.

West of Singapore. Mono., 1933. Director, Al Ray. Author, Huston Branch. Adaptation, Adele Buffington.

LEON H. HARDWICK

FILM BRIEFING OF AIR CREWS

THE USE of film to brief air crews on targets was begun before the low-level attack on the Rumanian oil fields at Ploesti. Because of its effectiveness, it was decided later to employ films including far more detailed information to brief the 20th Air Force crews for the bombing of Japanese targets.

In the beginning, aerial reconnaissance photos of Japan were not available, and topographical maps, street guides, and other research material and intelligence reports had to be relied on. Hollywood experts in uniform at the AAF Motion Picture Unit in Culver City began the work of translating this information into large-scale miniatures of Japan. Aerial photographs of terrain and industrial plants in California found to be similar to those of Japan were used as visual checks. Various textures and materials, including everything from paperboard and plaster to piano wire and Airfoam, were tested for photographic resemblance to real oceans, railroads, factories, and forests as they appeared from the air. Two large sound stages were given over exclusively to this miniature work.

Meanwhile, special camera devices and motor drives were developed which would simulate exactly the relative speed and altitude of a B-29 to accord with the scale of the miniature. The miniature, scaled at one foot to the mile, measured 60 by 90 feet and included 2,700 square miles of Japan. Working against time, since the briefing film had to be ready in time to fit into the strategic plans of the whole Pacific war effort, the job was carried through at record speed. The film was flown by special B-29 to Saipan, and the Nakajima Aircraft plant at Ota was bombed on schedule.

It was also necessary to simulate the presentation which radar operators would see on their scopes. A special unit was invented to duplicate radar presentations and to photograph them

American group. Indeed, the Negro recognizes that he has a large stake in the current struggle to highlight the importance of the social responsibility of motion pictures in the creation of new patterns of universal understanding and interracial adjustment.

Arrowsmith. Goldwyn-UA, 1931. Director, John Ford. Novel, Sinclair Lewis. Screen play, Sidney Howard.

Bataan. MGM-Loews, 1943. Director, Tay Garnett. Original screen play, Robert D. Andrews.

The Birth of a Nation. (See p. 152.)

Cabin in the Sky. MGM, 1942. Director, Vincente Minelli. Musical play book, Lynn Root. Screen play, Joseph Schrank.

Casablanca. WB, 1942. Director, Michael Curtiz. Play, *Everybody Comes to Ricks,* by Murray Burnett and Joan Alison. Screen play, Julius T. Epstein, Philip G. Epstein, and Howard Koch.

Crash Dive. Fox, 1943. Director, Archie Mayo. Original screen story, W. R. Burnett. Screen play, Jo Swerling.

Flying Down to Rio. RKO, 1933. Director, Thornton Freelance. Story, Louis Brock.

In This Our Life. WB–First Nat'l, 1941. Director, John Huston. Novel, Ellen Glasgow. Screen play, Howard Koch.

Sahara. Col., 1943. Director, Zoltan Korda. Story, Philip MacDonald. Screen play, John Howard Lawson and Zoltan Korda.

Stormy Weather. Fox, 1943. Director, Andrew Stone. Unpublished story, Jerry Horwin and Seymour E. Robinson. Screen play, Frederick Jackson and Ted Koehler.

West of Singapore. Mono., 1933. Director, Al Ray. Author, Huston Branch. Adaptation, Adele Buffington.

LEON H. HARDWICK

FILM BRIEFING OF AIR CREWS

THE USE of film to brief air crews on targets was begun before the low-level attack on the Rumanian oil fields at Ploesti. Because of its effectiveness, it was decided later to employ films including far more detailed information to brief the 20th Air Force crews for the bombing of Japanese targets.

In the beginning, aerial reconnaissance photos of Japan were not available, and topographical maps, street guides, and other research material and intelligence reports had to be relied on. Hollywood experts in uniform at the AAF Motion Picture Unit in Culver City began the work of translating this information into large-scale miniatures of Japan. Aerial photographs of terrain and industrial plants in California found to be similar to those of Japan were used as visual checks. Various textures and materials, including everything from paperboard and plaster to piano wire and Airfoam, were tested for photographic resemblance to real oceans, railroads, factories, and forests as they appeared from the air. Two large sound stages were given over exclusively to this miniature work.

Meanwhile, special camera devices and motor drives were developed which would simulate exactly the relative speed and altitude of a B-29 to accord with the scale of the miniature. The miniature, scaled at one foot to the mile, measured 60 by 90 feet and included 2,700 square miles of Japan. Working against time, since the briefing film had to be ready in time to fit into the strategic plans of the whole Pacific war effort, the job was carried through at record speed. The film was flown by special B-29 to Saipan, and the Nakajima Aircraft plant at Ota was bombed on schedule.

It was also necessary to simulate the presentation which radar operators would see on their scopes. A special unit was invented to duplicate radar presentations and to photograph them

with movement and proper distortion. This technique was also used to make training films which accelerated the radar training programs by months.

Eventually, as flights over Japan became possible, both visual and radar reconnaissance photos became available and the production of additional briefing films became simpler. The result was that, for the first time in air warfare, crews went on missions with a clear and precise picture of what they would see when moving at the required speed and altitude over the course on which they were briefed. What they saw in their projection rooms at their home base was the closest possible copy of what they were going to see in flight. In still another way films had gone to war.

The application of these processes to commercial film production will expand the knowledge and techniques of making and photographing miniatures; and will also make possible the use of radar in films about the age of flight, because the radar presentations can be simulated by relatively simple and inexpensive means.

CARL BEIER, JR.

THREE-DIMENSIONAL MOVIES

IN THE PAST, three-dimensional motion pictures have been achieved by the simultaneous projection of two images on the screen, and the use by the spectator of spectacles which permitted each eye to see but a single image. Stereoscopic projection in full color was adequately demonstrated some eight or ten years ago by the Polaroid Company, which used two 16-mm. Kodachrome films and gelatin Polaroid lenses mounted in pasteboard frames.

A method of achieving three dimensions without the use of spectacles has recently been developed in the Soviet Union. The following description of the process comes from a State Department representative in Moscow and has been supplied to the *Hollywood Quarterly* through the kindness of Nathan D. Golden, Chief of the Motion Picture Unit in the Department of Commerce:

"Moscow, U.S.S.R.
"November 10, 1944

"An officer of the Embassy has recently seen a demonstration of this invention by Alexander Andrievsky and S. Ivanov of the All-Union Soviet Film Committee.

"The development consists of two principal parts. The first part is a new-type projection screen made of glass, about three-quarters of an inch thick. The present model is three feet by five feet, though there is no reason why there should be any limitation of size. The back of the screen is engraved with closely spaced lines, perpendicular, but tending to fan out right and left from the center line as they move from top to bottom. The lines in the original model were black, but the color has been omitted from the screen now used.

"The second change has been made in the camera and the projector. The camera, instead of facing the subject, is at right angles to it, and the image is reflected into the lens by a mirror which is at a 45° angle to both lens and subject. The mirror is actually two mirrors separated by a vertical gap.

"The lens is bisected vertically by a narrow bar which coincides with the break between the mirrors. Hence the film bears two parallel images of each photograph, which are identical except for the slight change of perspective

with movement and proper distortion. This technique was also used to make training films which accelerated the radar training programs by months.

Eventually, as flights over Japan became possible, both visual and radar reconnaissance photos became available and the production of additional briefing films became simpler. The result was that, for the first time in air warfare, crews went on missions with a clear and precise picture of what they would see when moving at the required speed and altitude over the course on which they were briefed. What they saw in their projection rooms at their home base was the closest possible copy of what they were going to see in flight. In still another way films had gone to war.

The application of these processes to commercial film production will expand the knowledge and techniques of making and photographing miniatures; and will also make possible the use of radar in films about the age of flight, because the radar presentations can be simulated by relatively simple and inexpensive means.

CARL BEIER, JR.

THREE-DIMENSIONAL MOVIES

IN THE PAST, three-dimensional motion pictures have been achieved by the simultaneous projection of two images on the screen, and the use by the spectator of spectacles which permitted each eye to see but a single image. Stereoscopic projection in full color was adequately demonstrated some eight or ten years ago by the Polaroid Company, which used two 16-mm. Kodachrome films and gelatin Polaroid lenses mounted in pasteboard frames.

A method of achieving three dimensions without the use of spectacles has recently been developed in the Soviet Union. The following description of the process comes from a State Department representative in Moscow and has been supplied to the *Hollywood Quarterly* through the kindness of Nathan D. Golden, Chief of the Motion Picture Unit in the Department of Commerce:

"Moscow, U.S.S.R.
"November 10, 1944

"An officer of the Embassy has recently seen a demonstration of this invention by Alexander Andrievsky and S. Ivanov of the All-Union Soviet Film Committee.

"The development consists of two principal parts. The first part is a new-type projection screen made of glass, about three-quarters of an inch thick. The present model is three feet by five feet, though there is no reason why there should be any limitation of size. The back of the screen is engraved with closely spaced lines, perpendicular, but tending to fan out right and left from the center line as they move from top to bottom. The lines in the original model were black, but the color has been omitted from the screen now used.

"The second change has been made in the camera and the projector. The camera, instead of facing the subject, is at right angles to it, and the image is reflected into the lens by a mirror which is at a 45° angle to both lens and subject. The mirror is actually two mirrors separated by a vertical gap.

"The lens is bisected vertically by a narrow bar which coincides with the break between the mirrors. Hence the film bears two parallel images of each photograph, which are identical except for the slight change of perspective

caused by the two mirrors. Similarly the projector has the same bar-and-mirror arrangement as the camera, and the image is reflected from the mirrors to the screen. The reflection of the double image off the lines on the back of the screen produces the three-dimensional effect whereby birds fly around the room, bushes grow on either side of the spectator, and people walk up to shake hands.

"The illusion produced is complete and the focus perfect in any one of some six different positions while sitting in any given chair. In between these positions the image becomes blurred and the third-dimensional effect disappears. Andrievsky believes that he can secure the desired effect for any position by increasing the number of mirrors to twelve, with corresponding crossbars on the lens and twelve almost identical images of each photograph on the film. The theory is that this number of quasi-identical images reflected from the lines on the screen will cover the entire field of vision. This increase, according to Andrievsky, will require a different size and type of raw stock. He furthermore believes that as soon as it is perfected it will become standard for all motion pictures, and to prove his point he is shortly to start work on a feature film version of *Robinson Crusoe*."

K. M.

EDUCATIONAL FILMS IN SPORTS

A SELECTED LIST of films consisting of (*a*) instructional motion picture films (including content and appraisal of each), (*b*) instructional films in process of production, and (*c*) Promotional films has been prepared by the Chairman of the Visual Aids Committee, National Section on Women's Athletics, and published by the American Film Center, Rockefeller Plaza, New York. The Educational Film Library Association of New York is coöperating in this project. Orders for this catalogue may be addressed either to E.F.L.A., 45 Rockefeller Plaza, New York 20, N. Y., or to N.S.W.A., 1201 Sixteenth Street, N.W., Washington 6, D.C. Fifty cents will procure the new catalogue and supplements for the next five years.

A. M. H.

THE PHI BETA KAPPA INSTITUTE

ON DECEMBER 7 and 8, 1945, the alumni of Phi Beta Kappa in southern California, together with Eta chapter of Phi Beta Kappa and the Sigma Xi Society—both at the University of California, Los Angeles—conducted a conference on American-Soviet cultural exchange. Among the many subjects considered in panel discussions were medicine and public health, education and techniques of communication, industrial and technological collaboration, the literature and drama of Russia, and motion pictures, specifically the treatment of the historical-biographical film.

Scholars, scientists, and men of letters participated in the sessions, among them Dr. Robert Millikan, Dr. Clarence Dykstra, Dr. Thomas Mann, Dr. Harlow Shapley, and Mr. Stepan Apresian, Vice-Consul of the U.S.S.R. at San Francisco, in charge of cultural relations. Papers of scientific and educational interest were presented in each of the panels by specialists in the respective fields. In the panel on medicine, for example, Dr. Reuben Straus read a paper on "The ACS Serum of

caused by the two mirrors. Similarly the projector has the same bar-and-mirror arrangement as the camera, and the image is reflected from the mirrors to the screen. The reflection of the double image off the lines on the back of the screen produces the three-dimensional effect whereby birds fly around the room, bushes grow on either side of the spectator, and people walk up to shake hands.

"The illusion produced is complete and the focus perfect in any one of some six different positions while sitting in any given chair. In between these positions the image becomes blurred and the third-dimensional effect disappears. Andrievsky believes that he can secure the desired effect for any position by increasing the number of mirrors to twelve, with corresponding crossbars on the lens and twelve almost identical images of each photograph on the film. The theory is that this number of quasi-identical images reflected from the lines on the screen will cover the entire field of vision. This increase, according to Andrievsky, will require a different size and type of raw stock. He furthermore believes that as soon as it is perfected it will become standard for all motion pictures, and to prove his point he is shortly to start work on a feature film version of *Robinson Crusoe*."

K. M.

EDUCATIONAL FILMS IN SPORTS

A SELECTED LIST of films consisting of (*a*) instructional motion picture films (including content and appraisal of each), (*b*) instructional films in process of production, and (*c*) Promotional films has been prepared by the Chairman of the Visual Aids Committee, National Section on Women's Athletics, and published by the American Film Center, Rockefeller Plaza, New York. The Educational Film Library Association of New York is coöperating in this project. Orders for this catalogue may be addressed either to E.F.L.A., 45 Rockefeller Plaza, New York 20, N. Y., or to N.S.W.A., 1201 Sixteenth Street, N.W., Washington 6, D.C. Fifty cents will procure the new catalogue and supplements for the next five years.

A. M. H.

THE PHI BETA KAPPA INSTITUTE

ON DECEMBER 7 and 8, 1945, the alumni of Phi Beta Kappa in southern California, together with Eta chapter of Phi Beta Kappa and the Sigma Xi Society—both at the University of California, Los Angeles—conducted a conference on American-Soviet cultural exchange. Among the many subjects considered in panel discussions were medicine and public health, education and techniques of communication, industrial and technological collaboration, the literature and drama of Russia, and motion pictures, specifically the treatment of the historical-biographical film.

Scholars, scientists, and men of letters participated in the sessions, among them Dr. Robert Millikan, Dr. Clarence Dykstra, Dr. Thomas Mann, Dr. Harlow Shapley, and Mr. Stepan Apresian, Vice-Consul of the U.S.S.R. at San Francisco, in charge of cultural relations. Papers of scientific and educational interest were presented in each of the panels by specialists in the respective fields. In the panel on medicine, for example, Dr. Reuben Straus read a paper on "The ACS Serum of

caused by the two mirrors. Similarly the projector has the same bar-and-mirror arrangement as the camera, and the image is reflected from the mirrors to the screen. The reflection of the double image off the lines on the back of the screen produces the three-dimensional effect whereby birds fly around the room, bushes grow on either side of the spectator, and people walk up to shake hands.

"The illusion produced is complete and the focus perfect in any one of some six different positions while sitting in any given chair. In between these positions the image becomes blurred and the third-dimensional effect disappears. Andrievsky believes that he can secure the desired effect for any position by increasing the number of mirrors to twelve, with corresponding crossbars on the lens and twelve almost identical images of each photograph on the film. The theory is that this number of quasi-identical images reflected from the lines on the screen will cover the entire field of vision. This increase, according to Andrievsky, will require a different size and type of raw stock. He furthermore believes that as soon as it is perfected it will become standard for all motion pictures, and to prove his point he is shortly to start work on a feature film version of *Robinson Crusoe*."

K. M.

EDUCATIONAL FILMS IN SPORTS

A SELECTED LIST of films consisting of (*a*) instructional motion picture films (including content and appraisal of each), (*b*) instructional films in process of production, and (*c*) Promotional films has been prepared by the Chairman of the Visual Aids Committee, National Section on Women's Athletics, and published by the American Film Center, Rockefeller Plaza, New York. The Educational Film Library Association of New York is coöperating in this project. Orders for this catalogue may be addressed either to E.F.L.A., 45 Rockefeller Plaza, New York 20, N. Y., or to N.S.W.A., 1201 Sixteenth Street, N.W., Washington 6, D.C. Fifty cents will procure the new catalogue and supplements for the next five years.

A. M. H.

THE PHI BETA KAPPA INSTITUTE

ON DECEMBER 7 and 8, 1945, the alumni of Phi Beta Kappa in southern California, together with Eta chapter of Phi Beta Kappa and the Sigma Xi Society—both at the University of California, Los Angeles—conducted a conference on American-Soviet cultural exchange. Among the many subjects considered in panel discussions were medicine and public health, education and techniques of communication, industrial and technological collaboration, the literature and drama of Russia, and motion pictures, specifically the treatment of the historical-biographical film.

Scholars, scientists, and men of letters participated in the sessions, among them Dr. Robert Millikan, Dr. Clarence Dykstra, Dr. Thomas Mann, Dr. Harlow Shapley, and Mr. Stepan Apresian, Vice-Consul of the U.S.S.R. at San Francisco, in charge of cultural relations. Papers of scientific and educational interest were presented in each of the panels by specialists in the respective fields. In the panel on medicine, for example, Dr. Reuben Straus read a paper on "The ACS Serum of

Professor Bogomoletz: Experiments and Findings of American Doctors," and from the Soviet Union came a paper by Professor A. R. Lurie on "Rehabilitation of the Nervous System in War Trauma."

Of special interest, perhaps, to readers of the *Hollywood Quarterly* were the panels on education, literature, and motion pictures. Among the participants were Miss Althea Warren, Los Angeles City Librarian; Mr. Irving Pichel, film director; Dr. Mildred Struble, Professor of Literature in the University of Southern California; Mr. Albert Maltz, playwright and novelist; and Mr. Alexander Knox, film actor.

All sessions of the conference were open to the public. It is to be hoped that some of the papers and discussions at the conference may be made available to the editors of the *Quarterly,* so that excerpts therefrom may be published.

PAUL TRIVERS

Book Reviews

THE FRENCH CINEMA

Images du cinéma français. By NICOLE VEDRÉS; preface by Paul Eluard. Paris: Editions du Chêne. 1945.

"ONCE upon a time there was a swan arched enough to see black through the rainbow of Leda. For the voyage, there was a black and white road, and on this road seasonable shadows raised in turn clouds of dust, puffs of heat, stacks of laughs, tons of feathers, floods of tears, long, long robes of charm. There was also a very beautiful priestess of love who did not age, but who *passed by*. . . . The fragments of animated images here brought together prove that the cinema has discovered a new world, like poetry, within reach of every imagination. Even when it wished to imitate the old world, nature (or the theater), it produced fantasms. Copying the earth, it showed a star. The appearance of the talking film disturbed the kindly spirits. But soon they had to admit that in confronting *seeing* with *hearing,* in adding to the moving vision that which loses or perpetuates itself in language, the talking film could give its full meaning to this fine alphabet of gestures and grimaces which made up that superior Invalid, the silent film."

So begins and ends the preface of Paul Eluard, poet of today, to this newly arrived history of the French cinema. The editor, Nicole Vedrés, is influenced, in the choice of images she has brought together, by the parallel advance of other arts—music, painting, literature—during the past generation in France, as the cinema itself has been. In no other country has the unity and relationship of all the arts been so consistently maintained throughout their many innovations.

The book deals with the different aspects that the French cinema has assumed in the past forty years, starting from the original tentatives in burlesque and comedy and proceeding to the most esoteric realizations of the "avant-garde." There are scenes from terror films, films of adventure, historical films, and human-interest films. Emphasis is on the personality of the popular actor in his various roles, and on the influences of America and Europe on each other, and pervading the whole is the human factor. A constant desire seems to have animated all the directors, like the alchemist, to make gold out of dross, whatever the subject and method employed. And that gold is the poetry of the image. As in the American film tradition, the appeal is to the simple mind, but it is not, as in this country, to the childish mind. There is a core of sophistication in the most willfully artless scenes. Even in the presentation of an apparent idiot or moron there is a protective covering of cunning and cleverness that rouses the spectator's sympathy—not simply because he feels for the underdog. Even an underdog must possess a quality: he must defend himself against hypocritical superiority, like the Mexican Cantiflas. This critical approach is perhaps most peculiar to the Latin races, and less appreciated in other

countries. It explains the popularity of a Chaplin and a W. C. Fields in France.

How often has one desired to stop the film at a given image that has a particular appeal! The human eye that reflects (with the help of the mind), in spite of the accelerated tempo of modern life, has not yet been completely converted to the moving image. It still needs and desires the static picture around which the eye can rove and the mind perform its own acrobatics. We need, from time to time, a pause that refreshes the memory and the imagination, that gives us the opportunity to make our own poetry out of the subject. We are not always satisfied with the role of the passive spectator. Here is a book that satisfies this desire; and it is a miracle from, and a credit to, a country only so recently completely paralyzed.

MAN RAY

COBB AND HOLLYWOOD

My Wayward Parent. A Book about Irvin S. Cobb. By ELISABETH COBB. Indianapolis: Bobbs-Merrill. 1945. $2.50

THE FACT that part of this book is devoted to impressions of Los Angeles and Hollywood will serve as a justification for reviewing it here. Like most of its predecessors it gives a lopsided and distorted view, but a view drawn with a certain naïve honesty which might render it plausible to the uninformed. Such misguided accounts are so frequent and familiar as to invite a warning. The truth is that Hollywood is a large and cosmopolitan center in which you can find virtually anything you are looking for. If you have the soul of Peeping Tom, you will eventually discover the right keyhole. One of the peculiar manifestations of Hollywood magic is that people who enter the community soon find themselves in the midst of individuals very much like themselves. The magenta spirits are surrounded with flamboyance, and the fools with folly; and soon they conclude that nothing else exists. In the meanwhile the great numbers of skilled technicians, of accomplished artists, of sober or witty, honest, hardworking men and women go about their business and their play, unnoticed in the passing show. If the average observer of Hollywood owned a share of candor and humility, he would preface his matter by saying, "The following account is a mirror of my own interests and prejudices, and a reflection of my own limitations."

On the whole, *My Wayward Parent* is an odd mixture of biography, "funny" stories (some of them anecdotes about Negroes, flavored with the condescension of the professional-Southerner raconteur), reminiscence, selections from Cobb's writings, and slightly bewildered apology, done in a breezy journalese. Much of it is trivial, but two features will concern the intelligent reader. In the first place, Cobb was brought to Hollywood to do work in radio and motion pictures *after* his period of creativity had passed, *after* the well had run dry—a fact which scarcely redounds to the credit of the men who induced him to come. In the second place, the book is unconsciously a social document: the account, only half told, of how a sensitive, generous, and energetic youth became in his later years a very different sort of man; the shadowing forth of an individual whose genuine personal virtues became so wholly identified with the *mores* of

countries. It explains the popularity of a Chaplin and a W. C. Fields in France.

How often has one desired to stop the film at a given image that has a particular appeal! The human eye that reflects (with the help of the mind), in spite of the accelerated tempo of modern life, has not yet been completely converted to the moving image. It still needs and desires the static picture around which the eye can rove and the mind perform its own acrobatics. We need, from time to time, a pause that refreshes the memory and the imagination, that gives us the opportunity to make our own poetry out of the subject. We are not always satisfied with the role of the passive spectator. Here is a book that satisfies this desire; and it is a miracle from, and a credit to, a country only so recently completely paralyzed.

MAN RAY

COBB AND HOLLYWOOD

My Wayward Parent. A Book about Irvin S. Cobb. By ELISABETH COBB. Indianapolis: Bobbs-Merrill. 1945. $2.50

THE FACT that part of this book is devoted to impressions of Los Angeles and Hollywood will serve as a justification for reviewing it here. Like most of its predecessors it gives a lopsided and distorted view, but a view drawn with a certain naïve honesty which might render it plausible to the uninformed. Such misguided accounts are so frequent and familiar as to invite a warning. The truth is that Hollywood is a large and cosmopolitan center in which you can find virtually anything you are looking for. If you have the soul of Peeping Tom, you will eventually discover the right keyhole. One of the peculiar manifestations of Hollywood magic is that people who enter the community soon find themselves in the midst of individuals very much like themselves. The magenta spirits are surrounded with flamboyance, and the fools with folly; and soon they conclude that nothing else exists. In the meanwhile the great numbers of skilled technicians, of accomplished artists, of sober or witty, honest, hardworking men and women go about their business and their play, unnoticed in the passing show. If the average observer of Hollywood owned a share of candor and humility, he would preface his matter by saying, "The following account is a mirror of my own interests and prejudices, and a reflection of my own limitations."

On the whole, *My Wayward Parent* is an odd mixture of biography, "funny" stories (some of them anecdotes about Negroes, flavored with the condescension of the professional-Southerner raconteur), reminiscence, selections from Cobb's writings, and slightly bewildered apology, done in a breezy journalese. Much of it is trivial, but two features will concern the intelligent reader. In the first place, Cobb was brought to Hollywood to do work in radio and motion pictures *after* his period of creativity had passed, *after* the well had run dry—a fact which scarcely redounds to the credit of the men who induced him to come. In the second place, the book is unconsciously a social document: the account, only half told, of how a sensitive, generous, and energetic youth became in his later years a very different sort of man; the shadowing forth of an individual whose genuine personal virtues became so wholly identified with the *mores* of

the Harding-Coolidge period that upon the crash in 1929 nearly all incentive to living appears to have left him. At that moment the milk of human kindness turned to gall, and at that moment the power of creating stories died in him. In this way the book serves as a melancholy illustration of an unhappy bygone era.

E. N. HOOKER

CONTROL OF RADIO

The International Control of Radio-Communications. By JOHN D. TOMLINSON, Ann Arbor, Mich.: J. W. Edwards. 1945. $2.50

THE LITERATURE on the international regulatory aspects of radio communications is surprisingly small, despite the more than thirty years of international control. Mr. Tomlinson's scholarly dissertation is a welcome contribution to the subject.

He collates for the first time the more important substantive regulations governing the control of international radio communications. There is a twofold need for some sort of international control: communications among foreign countries, whether commercial or relating to safety of life at sea, require minimum ground rules; and, more important, the physical characteristics of electromagnetic or radio waves do not respect national frontiers and must be controlled through international agreement. Since the demand for channels of communication far exceeds the limited number of frequencies available, it has been necessary to have some sort of international allocation of frequencies. The present allocation, which is a fairly recent development, was preceded by standards that sought to achieve uniformity in the type of transmitting apparatus in use, amount of power used, type of wave used, and similar matters.

Mr. Tomlinson has set forth the causes of the emergence and expansion of international radio legislation. He offers an excellent summary of the various international conferences on radio, beginning with the Berlin Conference of 1903 and concluding with the Cairo Conference of 1938. His third chapter, on "International Regulations concerning Traffic and Operation of Services," relates to such subjects as classification of services, secrecy of communications, allocation of call letters, service documents, and the like. These essentially service regulations implement the legislation governing technical control of stations; they are "not genuinely restrictive or prohibitive in character."

The meat of the book will be found in the fourth to sixth chapters, which discuss international interference, allocation of frequencies, and regulation of broadcasting. The author has penetrated the façade of the technical regulations and set forth their conflicting economic and political backgrounds. It would be impossible to enumerate here the various controversies before the various conventions. One example will suffice. Radio Luxembourg operated with a power of 200 kilowatts, beaming commercial programs to Great Britain and France. This station was operated by French interests, which paid a certain fixed sum to Radio Luxembourg plus 30 per cent of the profits. The Duchy of Luxembourg is a small country; its interests can be adequately serviced by a station with less power. Great Britain opposed Radio Luxembourg because of the "use of English for advertising directed to the British public." The use of this frequency,

the Harding-Coolidge period that upon the crash in 1929 nearly all incentive to living appears to have left him. At that moment the milk of human kindness turned to gall, and at that moment the power of creating stories died in him. In this way the book serves as a melancholy illustration of an unhappy bygone era.

E. N. HOOKER

CONTROL OF RADIO

The International Control of Radio-Communications. By JOHN D. TOMLINSON, Ann Arbor, Mich.: J. W. Edwards. 1945. $2.50

THE LITERATURE on the international regulatory aspects of radio communications is surprisingly small, despite the more than thirty years of international control. Mr. Tomlinson's scholarly dissertation is a welcome contribution to the subject.

He collates for the first time the more important substantive regulations governing the control of international radio communications. There is a twofold need for some sort of international control: communications among foreign countries, whether commercial or relating to safety of life at sea, require minimum ground rules; and, more important, the physical characteristics of electromagnetic or radio waves do not respect national frontiers and must be controlled through international agreement. Since the demand for channels of communication far exceeds the limited number of frequencies available, it has been necessary to have some sort of international allocation of frequencies. The present allocation, which is a fairly recent development, was preceded by standards that sought to achieve uniformity in the type of transmitting apparatus in use, amount of power used, type of wave used, and similar matters.

Mr. Tomlinson has set forth the causes of the emergence and expansion of international radio legislation. He offers an excellent summary of the various international conferences on radio, beginning with the Berlin Conference of 1903 and concluding with the Cairo Conference of 1938. His third chapter, on "International Regulations concerning Traffic and Operation of Services," relates to such subjects as classification of services, secrecy of communications, allocation of call letters, service documents, and the like. These essentially service regulations implement the legislation governing technical control of stations; they are "not genuinely restrictive or prohibitive in character."

The meat of the book will be found in the fourth to sixth chapters, which discuss international interference, allocation of frequencies, and regulation of broadcasting. The author has penetrated the façade of the technical regulations and set forth their conflicting economic and political backgrounds. It would be impossible to enumerate here the various controversies before the various conventions. One example will suffice. Radio Luxembourg operated with a power of 200 kilowatts, beaming commercial programs to Great Britain and France. This station was operated by French interests, which paid a certain fixed sum to Radio Luxembourg plus 30 per cent of the profits. The Duchy of Luxembourg is a small country; its interests can be adequately serviced by a station with less power. Great Britain opposed Radio Luxembourg because of the "use of English for advertising directed to the British public." The use of this frequency,

with the power utilized, reduced by one the frequencies available for allocation, so that some other country, which for purely technical reasons might have a genuine claim, went without. Furthermore, both Poland and Denmark suffered electrical interference from the operation of this station.

It is impossible, also, to detail the conflicting interests of nations in the short-wave band, and the demands of broadcasting, maritime, and aviation interests for additional frequencies. This is the substance of these chapters, which well repay reading. Mr. Tomlinson discusses the regional broadcasting agreements, namely, the North and South American Agreements, the Lucerne Conference, African Telecommunication Union, and others. These subsidiary agreements provide a regional allocation of frequencies and supplement the international conventions previously referred to.

There is a chapter on the legislative, administrative, and judicial machinery utilized by the conferences. Another discusses the influence of private companies and international organizations. The latter have played an important role in the international conferences.

The subject matter of the international regulations governing radio communications is necessarily technical, and the author has done an excellent job in translating the idiomatic jargon of radio into lay language. Comprehension of radio terminology is a prerequisite to an understanding of the international structure of radio, if only because the scientific facts and principles underlying radio are the basis for international legislation. The appendix which defines technical terms needs no additional comment or justification.

The author's conclusions with respect to international law and government open up new fields of study. He poses a neat problem when he inquires whether the radio regulations that have been approved constitute a form of international government.

This book will undoubtedly be a primer in the field of international radio communications: It is "must" reading for students of both international law and radio.

HARRY P. WARNER

THE DAYTIME SERIAL

Radio's Daytime Serial. By FRANCES FARMER WILDER. New York; Columbia Broadcasting System. 1945. [Apply]

IF PAST records are any indication of present intent, one may suppose that CBS entered upon a study of serials with a sincere desire to learn all it could about the subject. Unfortunately, the vast expenditure of time and talent concerned in the effort results only in an attempt to whitewash one of radio's greatest ills.

Frances Farmer Wilder presents a report of the entire study. Her pamphlet will be of interest and of some value to all those in the industry who are associated with daytime serials. I feel, however, that for the most part Mrs. Wilder does an admirable job of saying nothing beautifully. It seems logical to suppose that when such an enterprise as this is undertaken, it is done with the hope of discovering some manner in which the subject of the study may be improved. Frankly, the net result of this study does nothing of the sort.

We learn that the average serial is heard 2.5 times per week by the average

with the power utilized, reduced by one the frequencies available for allocation, so that some other country, which for purely technical reasons might have a genuine claim, went without. Furthermore, both Poland and Denmark suffered electrical interference from the operation of this station.

It is impossible, also, to detail the conflicting interests of nations in the short-wave band, and the demands of broadcasting, maritime, and aviation interests for additional frequencies. This is the substance of these chapters, which well repay reading. Mr. Tomlinson discusses the regional broadcasting agreements, namely, the North and South American Agreements, the Lucerne Conference, African Telecommunication Union, and others. These subsidiary agreements provide a regional allocation of frequencies and supplement the international conventions previously referred to.

There is a chapter on the legislative, administrative, and judicial machinery utilized by the conferences. Another discusses the influence of private companies and international organizations. The latter have played an important role in the international conferences.

The subject matter of the international regulations governing radio communications is necessarily technical, and the author has done an excellent job in translating the idiomatic jargon of radio into lay language. Comprehension of radio terminology is a prerequisite to an understanding of the international structure of radio, if only because the scientific facts and principles underlying radio are the basis for international legislation. The appendix which defines technical terms needs no additional comment or justification.

The author's conclusions with respect to international law and government open up new fields of study. He poses a neat problem when he inquires whether the radio regulations that have been approved constitute a form of international government.

This book will undoubtedly be a primer in the field of international radio communications: It is "must" reading for students of both international law and radio.

HARRY P. WARNER

THE DAYTIME SERIAL

Radio's Daytime Serial. By FRANCES FARMER WILDER. New York; Columbia Broadcasting System. 1945. [Apply]

IF PAST records are any indication of present intent, one may suppose that CBS entered upon a study of serials with a sincere desire to learn all it could about the subject. Unfortunately, the vast expenditure of time and talent concerned in the effort results only in an attempt to whitewash one of radio's greatest ills.

Frances Farmer Wilder presents a report of the entire study. Her pamphlet will be of interest and of some value to all those in the industry who are associated with daytime serials. I feel, however, that for the most part Mrs. Wilder does an admirable job of saying nothing beautifully. It seems logical to suppose that when such an enterprise as this is undertaken, it is done with the hope of discovering some manner in which the subject of the study may be improved. Frankly, the net result of this study does nothing of the sort.

We learn that the average serial is heard 2.5 times per week by the average

listener. This fact is no doubt true. But the pamphlet then goes on to use this "skip listening" as an excuse for repetition in plot and thematic material. The fact is true, but the conclusion drawn from the fact is an opinion. I know of at least one serial (I was the author) that consistently lost rating when "higher executives" insisted that the plot be slowed down. In this case, following instructions, the plot was built along these lines as follows. On Monday, let some little thing happen between the two leads. On Tuesday, one of the leads tells it to a third party. On Wednesday, the third party tells it to a fourth party. On Thursday, the third and fourth parties decide what they should do about it. On Friday, they do it. The whole matter is cleared up and the scene is left fresh for another trite development the following Monday. I cannot accept the conclusion, based on "skip listening," that the American public wants such drivel. No study on earth, no matter how exhaustive, can justify the low literary level of the average daytime radio serial.

The pamphlet makes much of such letters as, "I always listen while I'm ironing. It makes me forget I'm ironing." The question is, Should entertainment be designed on the basis of how completely it can make a housewife forget her ironing, or upon how good it can be? Personally, I think the modern serial holds very little hope for the housewife to be entertained or to get her ironing done well.

The main point of the entire study seems to be the conclusion that there is essentially no difference, intellectually, socially, or economically, between listeners to daytime radio serials and nonlisteners, and the study seems to point to this circumstance with pride, as though in itself this was an accomplishment. Well, maybe there are no differences between listeners and nonlisteners. BUT THERE SHOULD BE! Any institution as widespread, or should we say as rampant, as the radio serial should have some effect on its listeners. If it makes them no different from anyone else, it has missed the boat. The serial is simply filling space with nothing. And incidentally, though the networks rent it, that space belongs to the American people, and they deserve to have it filled with something other than trivia. If you carry the premise to its ultimate end, as based upon the conclusion that there is no difference between a listener and a nonlistener, you might well arrive at a formula for radio presentation which says, "Design programs which accomplish nothing, and nobody will object." If *no* impression is made, it is sure to be innocuous. But should it be? The study ignores this most important question and cries in the wind with intricate details and explanations of method, in an effort to justify what is admittedly a horrible example of "mass production" art!

The fact that people listen to serials is not evidence of top quality. People drive cars, too; but the automotive manufacturers strive, just the same, to improve their products. Artistically the radio serial is, on the whole, in the same cradle where it lay ten years ago. This condition may be partly due to the inadequate salaries paid its writers. With few exceptions (and I exclude the few top-name serial writers who get author credit but whose serials are ghost written), the serial writer's salary is usually well under $150 a week. This

is payment for dialogue enough to fill at least half a full-length movie. Is it any wonder the quality is low?

It occurs to me that, rather than undertake such a work as *Radio's Daytime Serial,* CBS might well have used the money to improve the incentive for strip-show writers. Since CBS hasn't, and since the pamphlet is available, I suggest that anyone interested in strip shows read it, if only to see how hard the perpetrators of them will go to justify low quality.

DWIGHT HAUSER

EDUCATION ON THE AIR

Radio and English Teaching: Experiences, Problems, and Procedures. Edited by MAX J. HERZBERG. New York: Appleton-Century. 1941

Teaching through Radio. By WILLIAM B. LEVENSON. New York: Farrar & Rinehart. 1945. $3.00

"THE TROUBLE with educational radio is that the programs are no good." This crack, attributed to President Robert M. Hutchins of the University of Chicago, sums up neatly the essence of the problem of educational broadcasting. In fact, it really states the plight in which all those concerned with utilization of any of the mass media of communication for educational purposes find themselves.

It is paradoxical that it required a war to turn the vast educational potential of the great mass media into reality. The use of radio and especially motion pictures for every variety of educational purpose by the Armed Services has forced the whole matter upon the attention of the educational profession. That that attention had lagged, so far as radio was concerned, is indicated by the fact that the number of university- and college-controlled broadcasting stations has dropped from approximately 100 in 1927 to less than 30 in 1945. Many factors, of course, other than the interests of the educators, contributed to this, but the fact remains that radio and motion pictures, up to 1941, had failed to become an integral part of the educational program.

The war has changed this. There are rumblings, still at the subterranean levels, which indicate that professional educators are beginning to see that radio and films may be regarded as something more than audiovisual "aids." But President Hutchins' crack still stands. The crude fact is that we don't know the most effective way to use radio for educational purposes, and we don't know enough about the kinds of programs which are suitable to different types of school material and the different age levels. Professional writers and directors in the radio field have, with certain brilliant exceptions, been indifferent to or ignorant of the educational and classroom problems, and educators too frequently have been unable to shake off the feeling, which for some amounts almost to a superstition, that there is something dangerous, even debasing, about radio and motion pictures. And, of course, there is always that ole debbil propaganda to scare teachers, school boards, and administrators.

This is why the two books under review are important. Although *Radio and English Teaching* was published in 1941, the essays it contains are so relevant to the current scene in radio and the emerging possibilities in television and FM, that it is worth bringing to the attention of *Hollywood Quarterly* readers, particularly in conjunction

is payment for dialogue enough to fill at least half a full-length movie. Is it any wonder the quality is low?

It occurs to me that, rather than undertake such a work as *Radio's Daytime Serial,* CBS might well have used the money to improve the incentive for strip-show writers. Since CBS hasn't, and since the pamphlet is available, I suggest that anyone interested in strip shows read it, if only to see how hard the perpetrators of them will go to justify low quality.

DWIGHT HAUSER

EDUCATION ON THE AIR

Radio and English Teaching: Experiences, Problems, and Procedures. Edited by MAX J. HERZBERG. New York: Appleton-Century. 1941

Teaching through Radio. By WILLIAM B. LEVENSON. New York: Farrar & Rinehart. 1945. $3.00

"THE TROUBLE with educational radio is that the programs are no good." This crack, attributed to President Robert M. Hutchins of the University of Chicago, sums up neatly the essence of the problem of educational broadcasting. In fact, it really states the plight in which all those concerned with utilization of any of the mass media of communication for educational purposes find themselves.

It is paradoxical that it required a war to turn the vast educational potential of the great mass media into reality. The use of radio and especially motion pictures for every variety of educational purpose by the Armed Services has forced the whole matter upon the attention of the educational profession. That that attention had lagged, so far as radio was concerned, is indicated by the fact that the number of university- and college-controlled broadcasting stations has dropped from approximately 100 in 1927 to less than 30 in 1945. Many factors, of course, other than the interests of the educators, contributed to this, but the fact remains that radio and motion pictures, up to 1941, had failed to become an integral part of the educational program.

The war has changed this. There are rumblings, still at the subterranean levels, which indicate that professional educators are beginning to see that radio and films may be regarded as something more than audiovisual "aids." But President Hutchins' crack still stands. The crude fact is that we don't know the most effective way to use radio for educational purposes, and we don't know enough about the kinds of programs which are suitable to different types of school material and the different age levels. Professional writers and directors in the radio field have, with certain brilliant exceptions, been indifferent to or ignorant of the educational and classroom problems, and educators too frequently have been unable to shake off the feeling, which for some amounts almost to a superstition, that there is something dangerous, even debasing, about radio and motion pictures. And, of course, there is always that ole debbil propaganda to scare teachers, school boards, and administrators.

This is why the two books under review are important. Although *Radio and English Teaching* was published in 1941, the essays it contains are so relevant to the current scene in radio and the emerging possibilities in television and FM, that it is worth bringing to the attention of *Hollywood Quarterly* readers, particularly in conjunction

with *Teaching through Radio*. Together these books form an exciting introduction to the theoretical and practical aspects of the subject.

The National Council of the Teachers of English has long had a constructive interest in the problems of the educational utilization of radio and motion pictures. *Radio and English Teaching* is one of a series of publications in these fields. It consists of essays written by such authorities as Edgar Dale, Gilbert Seldes, Max Wylie, Sidonie Gruenberg, Norman Corwin, Sterling Fisher, A. Murray Dyer, and William Boutwell. Some idea of the breadth of subject matter covered is indicated by the topics of the various chapters. These include "Propaganda Analysis" (Edgar Dale), "Television" (Gilbert Seldes), "Writing for Educational Radio" (B. H. Darrow), "Children's Programs" (Sidonie Gruenberg), "English via the Air Waves" (Bernice Orndorff), "Broadcasting Books" (Louis Reid), "Classroom Radio" (B. H. Darrow) and "Program Effectiveness through Evaluation" (Tracy F. Tyler). As Max Herzberg points out in his editorial introduction, "It is necessary to remember two things. In the first place, radio will not displace the teacher, and in the second place, whatever radio may do in the classroom, out-of-school listening will probably be more important than classroom listening."

The last seems particularly important. It means that the word "education" must have an extended meaning as applied to the use of radio and motion pictures. It also means that the level of the commercial broadcasts for children must be improved and that at the same time the level of showmanship of educational broadcasts must be at least as good as the commercial program. This, of course, implies difficulties, since good showmanship is a quality which is suspect in conventional educational circles, particularly in the field of the controversial, where, through dramatic devices, radio may be expected to be especially effective. This critical problem is not given as much attention as it deserves in the various essays, although Mr. Dyer, a script writer, points out that what makes a broadcast live is not its educational content, "but the skill with which that educational content is clothed with emotion, proper and legitimate emotion, of course, but still emotion. And this precisely because radio is an emotional medium." And Edgar Dale in his chapter on propaganda analysis points out that the spirit of critical inquiry does not operate in a vacuum, and that it is impossible as well as undesirable to eliminate emotion from thinking.

If *Radio and English Teaching* presents the more theoretical aspects of these problems—and don't let that scare any reader away,—Levenson's *Teaching through Radio* is almost a practical working manual. Dr. Levenson is Directing Supervisor of Radio for the Board of Education of Cleveland, Ohio. His book is written with the schoolteacher and administrator, as well as the writer and director of nonschool radio, in mind. It is based on the writer's experience in the classroom use of radio and in directing the operations of Station WBOE, which is owned and operated by the Cleveland Board of Education. The twelve chapters of the book cover practically every aspect of the public school use of radio. The preparation of the program, its pres-

entation, the measurement of results, recordings, and the development of broadcasting in American schools, and public relations broadcasting, are some of the chapter topics.

To this reviewer the chapter on preparing the educational program was particularly illuminating. After a detailed discussion of the various script forms—of which, this reviewer was interested to learn, there are ten,—the author reproduces three scripts. These are a talk, *The Aeroplane and Its Navigation,* and two dramatic scripts. The latter are especially interesting. One, for intermediate and upper grades, entitled *The King Is Not Master,* deals with the historical origins of the Bill of Rights. The second, called *Fun from the Dictionary,* was broadcast over WBOE for high school students, and deals excitingly with word meanings.

Both of these books have apparently omitted discussion of the ways in which educational radio might be used for the presentation of material on "race," racial stereotypes, and as a means of combating race prejudice. We have heard much about the importance of developing sounder attitudes toward ethnic minorities, particularly in children, and radio would seem to be ideal for this purpose. As someone has said, it is not so much a matter of what is *on* the air as of what is *not* on the air. The absence of programs dealing in positive terms with minority group problems seems to me to be much more alarming than the presence of programs portraying crime and criminals. Although there is no evidence that so-called crime dramas cause juvenile delinquency, this is a favorite subject for viewing-with-alarm by women's clubs and police chiefs.

In spite of these omissions, both of these books are important. Both of them should be on the desks of radio writers and producers, not to mention teachers and public school administrators.

FRANKLIN FEARING

TWO NEW JOURNALS

Film News, Vol. I, No. 1 (October, 1945; published monthly by the American Film Center, Inc., New York City). $2.00 a year

See and Hear, Vol. I, No. 1 (September, 1945); published each month of the school year by *See and Hear,* Eau Claire, Wis.). $3.00 a year

THE EDITORS of the *Hollywood Quarterly* salute two new film journals that have recently begun publication. *Film News* is not, strictly speaking, a new magazine. Still edited by Thomas Baird, it is really the old and invaluable *Film News,* expanded to thirty pages in length and its field of interest broadened to include developments in the documentary and the educational film. The first issue is well balanced, and varied in subject matter. In addition to news of American developments, there are letters from Australia, China, and Moscow. Recent noteworthy films are discussed, pertinent books are noted, and there is a review of "The Film of the Month." Of great interest to this reviewer is a discussion of six outstanding films chosen from the large number of war films dealing with health and medicine.

See and Hear is entirely concerned with the ever-growing field of audio-visual education, particularly with the film. It does a professional job that will prove invaluable to all teachers who use audiovisual methods. The first

entation, the measurement of results, recordings, and the development of broadcasting in American schools, and public relations broadcasting, are some of the chapter topics.

To this reviewer the chapter on preparing the educational program was particularly illuminating. After a detailed discussion of the various script forms—of which, this reviewer was interested to learn, there are ten,—the author reproduces three scripts. These are a talk, *The Aeroplane and Its Navigation,* and two dramatic scripts. The latter are especially interesting. One, for intermediate and upper grades, entitled *The King Is Not Master,* deals with the historical origins of the Bill of Rights. The second, called *Fun from the Dictionary,* was broadcast over WBOE for high school students, and deals excitingly with word meanings.

Both of these books have apparently omitted discussion of the ways in which educational radio might be used for the presentation of material on "race," racial stereotypes, and as a means of combating race prejudice. We have heard much about the importance of developing sounder attitudes toward ethnic minorities, particularly in children, and radio would seem to be ideal for this purpose. As someone has said, it is not so much a matter of what is *on* the air as of what is *not* on the air. The absence of programs dealing in positive terms with minority group problems seems to me to be much more alarming than the presence of programs portraying crime and criminals. Although there is no evidence that so-called crime dramas cause juvenile delinquency, this is a favorite subject for viewing-with-alarm by women's clubs and police chiefs.

In spite of these omissions, both of these books are important. Both of them should be on the desks of radio writers and producers, not to mention teachers and public school administrators.

FRANKLIN FEARING

TWO NEW JOURNALS

Film News, Vol. I, No. 1 (October, 1945; published monthly by the American Film Center, Inc., New York City). $2.00 a year

See and Hear, Vol. I, No. 1 (September, 1945); published each month of the school year by *See and Hear,* Eau Claire, Wis.). $3.00 a year

THE EDITORS of the *Hollywood Quarterly* salute two new film journals that have recently begun publication. *Film News* is not, strictly speaking, a new magazine. Still edited by Thomas Baird, it is really the old and invaluable *Film News,* expanded to thirty pages in length and its field of interest broadened to include developments in the documentary and the educational film. The first issue is well balanced, and varied in subject matter. In addition to news of American developments, there are letters from Australia, China, and Moscow. Recent noteworthy films are discussed, pertinent books are noted, and there is a review of "The Film of the Month." Of great interest to this reviewer is a discussion of six outstanding films chosen from the large number of war films dealing with health and medicine.

See and Hear is entirely concerned with the ever-growing field of audio-visual education, particularly with the film. It does a professional job that will prove invaluable to all teachers who use audiovisual methods. The first

number includes articles dealing with actual classroom projects in which student activity has centered around instruction by film. Two illustrations of this practical method are described in Raymond Gibson's "Beginning Geography" and in Miss Bertha Crilley's "The Documentary Enters the English Classroom," a description of how a study of South America was based on Ben Maddow's *The Bridge*. The contents of *See and Hear* amply demonstrate the vivid potentialities of this new means of teaching, which with the development of three-dimensional films will undoubtedly make many of our present methods obsolete.

H. M. H.