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## FILM IN TELEVISION

*Summary.*—The 2 following papers and subsequent discussion took place at a meeting of the Atlantic Coast Section of the Society in New York on March 22, 1944. The subject was limited to the use of film in television programs broadcast for reception in homes, as an alternative to the production of programs of this type directly from live talent. Discussion was directed along 3 lines, i. e., the effect on technical phases of picture quality such as definition and focus, possibilities in artistic effects, and economic aspects. It was emphasized that the views expressed were personal opinions and did not necessarily represent the policies of any company or organization. Discussion section follows the second paper—page 85.

### TELEVISION PRODUCTION AS VIEWED BY A MOTION PICTURE PRODUCER

WYLLIS COOPER\*

I first want to qualify myself. I do not want to appear as a television expert. I have had a good deal of experience in radio, some experience in television, and considerable experience in motion pictures. I am going to talk to you for a few moments about the possible or probable use of motion picture film in television broadcasting. I want to emphasize again that what I am going to talk about are my own ideas and may not be shared by the people I work for.

There is not any argument at all on the merits of motion picture film in television. The live type of television broadcasting may have its place and will have its place, and certainly there will be an enormous place for the use of film. The *Wall Street Journal* recently said, quoting some unknown Hollywood producer, that "Television is nothing more than a talking picture and talking pictures are our business." I have a slight quarrel with that statement. Certainly motion pictures are Hollywood's business, but the other half of the

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statement, that television is nothing more than a talking picture, is not adequate. Television is considerably more than a talking picture for a number of reasons, and we will try to go into those as we go along.

In the development of any art medium, we must take into consideration the things that have gone before. Every development in any of the art mediums has been influenced by the work of the people who went before. Michael Angelo painted pictures. They were still pictures. They were fine in color and so forth. Somebody else discovered photography—Niepce, Daguerre and Fox-Talbot, and the rest of them—but each of the mediums as it was developed, had a considerable influence upon the development of the medium that followed. That is what is going to happen to television. Motion pictures came ahead of television. Motion pictures will definitely have some influence, great or small, upon the development of television, and television will undoubtedly have a great effect on whatever follows it.

In my opinion, the important point in the consideration of motion pictures in television is this: Television, to be acceptable apart from its novelty feature, must conform to certain standards of quality, the establishment of which the television industry had nothing at all to do with. The people who began radio had a great deal to do with the establishment of conventions and of standards. Although the radio industry will probably do the major portion of television broadcasting, they must conform to standards that have previously been set.

Let us consider the standards of present-day theater films. The use of dissolves, fades, close-ups, and other cinematic devices is universally understood. The technical quality of film is taken for granted by the audience. No matter how poor the story quality, or how bad the acting in a Hollywood film, the technical quality of the film is almost always above reproach. If there are deviations from the standard high quality of Hollywood films, lighting, photography, and so forth, they stick out pretty badly, and they are very obvious to everyone who sees them. It is equally obvious, then, if television is going to compete in the home with the motion picture—and it is quite likely that to a limited degree it will—it is necessary to accept the standards of present-day film production and to measure up to them.

As another example of the conventions, those of editing entertain-

ment motion pictures are thoroughly understood by the audience probably because they are based on very sound psychological concepts. Any deviation, any use of makeshifts in editing, or in other phases of cinematics, becomes immediately apparent, and the audience does not like it. For example, I mentioned the use of lighting. When you come in for a close-up from a medium shot, the lighting is always changed, of course, so that the 2 scenes will match. It is sometimes impractical to do that in television which is transmitted from a live pickup, because it is not always possible to use the same camera for a close-up and a wider angle shot. Usually there is not time to change the lighting, and an immediate change in the character of the scene being photographed results. It takes attention away from the story and does something to the psychological reactions of the persons viewing it.

Pudovkin, who is generally considered one of the best authorities on cinematics, says "the essence of the film is editing. Editing in time and space is vital to the production of a good entertainment picture, or, for that matter, of almost any other kind of picture." The use of film obviously gives you the opportunity to use all the technique of editing in time and space that you have in film for theater projection. Inserts, the use of stock shots of all types, matching close-ups, the general cinematic flow of the picture, are all functions of the film, and I use the term "film" in its generic sense and not an actual strip of celluloid with a silver emulsion. It is not always possible to make the best use of the various cinematic devices when one must depend upon instantaneous decisions in a studio to overcome the limitations of space, sets, characters, and so forth.

There are many faults in present-day television. Many of them, of course, are due to equipment limitations and the war situation, but it goes without saying that these things will be licked within a few years following the end of the war. There are many other faults due to production. We hope that they, too, will be remedied. A film can be used for most television programs in the future. Understand, I say it *can* be used. Whether it *will* be used or not, I do not know. I do not think anybody knows at present.

There are certain objections to the use of film. These can be broken down into 2 main objections: first, the cost of film production. A great many people think that to use film for television implies the use of film in the Hollywood manner, which certainly costs a lot of money. The equipment necessary for producing film

for television is another element that must be taken into consideration.

The second principal objection is the question of time—the time required for processing the film, and the lack of what some television people call immediacy, which is the quality of knowing that what you see is happening at the time you see it.

In present-day television there is a great deal of talk about this immediacy. I, for one, feel that that concept is considerably over-rated. Some people in television have gone so far as to use the word instantaneity. That is a philological handspring the like of which I have never seen or heard before. The fact that the singer is opening his mouth at the precise moment you see him on your home television set, is something I am afraid will not keep you awake nights. However, if you want to have him open his mouth and sing, and know that he is doing so at the exact moment you see him grimace as he reaches for a high one, it is all right with me. The flexibility that can be had by prescoring, and then having the singer mouth his lines with a pleasant smile, I think more than compensates for the stop-watch attitude you may have if you know he is doing it *now*.

I want to talk for a moment about how to use film for television. As I said before, it is perfectly obvious that we cannot use the Hollywood style, because the cost would be completely out of line. It would be impossible to spend the amount of money for television broadcasts—which are fairly shortlived, like radio broadcasts—as is spent in Hollywood. There must be a considerable change and some more economical way in approaching the subject of using film.

We have to observe the analogy of television with radio. Television is coming into the home just as radio does. The programs will have to be of approximately the same length as radio programs, although nobody knows for certain what they will be. And in each case, whether we are using television for education, for entertainment or for news, we have these arbitrary standards already in existence. We cannot in any way foist inferior standards on a public that is conditioned by standards which have been a part of its life for many years.

In radio, we do not find it necessary to set up a physical theater with a stage and sets and curtains and so forth in order to do a play. By a number of clever devices and by the use of conventions, we avoid expense and time. By now, in radio's second or third decade, people have become pretty well conditioned to the conventions of radio,

and they understand it as well as they do the conventions of the theatrical motion picture. We can do the same thing in television by the use of motion pictures. I mean, we can use shortcuts, and we can use a number of devices, but these must always be devices with which the audience is familiar and which they understand.

Of course, we will have to borrow from Hollywood what we need. A great many things will have to be simplified, and owing to the technical limitations of the medium, we will have to do a number of things that are not necessary in theater films. The point I am trying to make, somewhat laboriously, is that the perfection of a theatrical film is not a vital part of a film made for television. Just as we have shortcuts in radio when we do a play, there will also be the same shortcuts in a television film when we are making that film specifically for television. We will be able to use the over-all general technique of the cinema, but we will synthesize a new technique with the production of television films, and it will be definitely television technique.

In the actual production of films for television, I want to point out what I think is a simple way. Starting with the script, it will have to be more carefully written than the average entertainment film script. We will borrow, as I said, from Hollywood, but we will have to keep in mind the fact that we are not making a picture which will be shown on an enormous screen to a large number of people at once. We will have to tell the story rather simply. For one reason, the television film will very likely be much shorter than even the average motion picture short. On the breakdown for production, it probably will be necessary to arrange the breakdown so that, as far as possible, the film can be shot in sequence. We cannot always do that, of course, but with some care and some insistence upon this as a vital part of television production, we can arrive at a situation in which much of each film will be shot in sequence.

The actual production of the film presents some other difficulties. We will have to do a lot of cutting in the camera. We will have to keep down the number of takes as far as possible, because we will not have time to make numerous takes and, again, we are not seeking the perfection that we would have to have for large screen projection.

The rushes should be made available as you continue shooting. You can make a rough cut as you go along. That may sound hard to do in view of present-day production methods in Hollywood and elsewhere, but I have a suggestion about that. If these pictures are made on 16-mm reversal film, it is quite possible to have on the set,

with the camera crew and the director—the director, incidentally, should be a combination cutter and director—a portable processing unit that can keep right along with the camera crew. As soon as the scene is shot, the magazine is handed to the man at the processing unit, and in a comparatively short length of time you have a positive print ready for projection.

At the present time I am under the impression that it takes about 15 min from the time you thread a developing machine until the film comes out at the other end, polished and ready to project. That time can be cut down appreciably, possibly not under existing conditions, but there are ways of speeding up the development of the reversal process. In that way, you have a rough cut of the film going right along with you.

So far as the sound is concerned, you make that with a double system sound, process it at the same time, but the sound track is never printed on the picture print. It is cut along with the picture, rough cut as you are shooting, and by the end of your shooting schedule, you have a rough cut. With one or 2 hr more for the final cut, both of the sound track and the picture, you are ready for the actual broadcast. It is perfectly simple to set up the projection arrangements so that you project from separate sound and picture films. It is going to be possible; it has been done and is perfectly simple to do.

Special effects, if you want them, can be added. You can do prescoring to add sound effects or music at the same time you are shooting the main part of the picture. It is a definitely specialized technique with which no one has had much experience, of course, but it is perfectly simple to use and can be used.

There is a great need, of course, for experimenting with this technique. Nobody is going to be able to produce that kind of film day after tomorrow. The equipment for the most part is available, or could be "haywired" together so that people could experiment with it as soon as they want to. The same technique can be applied to almost any kind of broadcasting. I am talking particularly about dramatic broadcasts, but musical programs can be done the same way. You prescore exactly the same as for Hollywood pictures, and then you avoid the appearance of tonsils and false teeth, and the pained expression when the singer tries to hit a high note.

The stock shots, almost anything you want, can be intercut as long as your sound track runs straight through the way you want it to. You then have a film that looks as professional as a Hollywood enter-

tainment film, and is certainly up to the previously established standards.

You can see that the cost of making a picture for television, if we use the method I have just proposed, need not be measured in Hollywood figures. The equipment, of course, is expensive, but most television broadcasters have lights and cameras and other equipment already, and the total over-all cost to establish a modest film production setup for television of this type—well, some equipment people might like to figure that one out.

There is one other advantage of film for the picture that goes on the tube and that is, when it is photographed you have a record which you can keep and refer to, and cry over your failures.

In network broadcasting, of course, the problem of supplying television broadcasts to distant stations is not of such importance, but certainly independent television broadcasters will make a great deal of use of film for this purpose. Any station with any transmitting equipment at all can use film, whether they can use the other type of pickup or not.

I have tried to give you a rough outline of how film can be used in television. Experience and experiment will give the final answer, and the final answer will be the kind of picture you get on your home television receiver.

### TELEVISION PRODUCTION AS VIEWED BY A RADIO BROADCASTER

WORTHINGTON C. MINER\*

I have been assured by your Chairman that this is strictly an off-the-record gathering in which honesty is to be the keynote. That seems to put it up to me to clarify one point right away. Your advance publicity indicated that I was to discuss—and presumably with some authority—the problem of “Film in Television, as Viewed by a Radio Broadcaster.”

Just so that you may know how much credence to give to whatever I say from here on, I want to state my qualifications as an

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