

The New Visual Idiom

By Nat Sobel

One of the most important components of good motion picture production as it exists today is the utilization of special effects and their proper planning. To accomplish the purpose of the advertiser, producer or exhibitor, necessary optical stresses must be carefully planned in television or motion picture work. To that end, we have attempted to set forth reasons why certain effects are used in various ways. The following statements should suggest rather than set the rule for what we think is proper according to the experience which the writer has had.

HOW MANY OF US ever withdraw from our daily preoccupations long enough to view this art and science of motion pictures and television in a general and objective light?

I have to confess my own shortcomings in this for, after a quarter of a century in film production, much of it in the jungles of negatives and positives, and in the press of everyday technical problems and deadlines, somehow I seem to have missed seeing the picture on account of the footage. And so I shall attempt to assay my first love, my friend and foe alike of many years—the optical or special effect. Perhaps a review of opticals as we know them today will bring us some understanding of why they are now universally accepted as a mature medium of visual communication.

What a vexing problem the optical effect can often be. Yet so firmly is it

established in modern production, so expanded, so refined, that I'm sure we can think of it, without qualification, as a new visual idiom.

Classification

This new idiom may be classified into four specific categories: the fade, the dissolve, the wipe, and what is known by that rather nebulous and somewhat catchall term, the montage.

This new idiom provides coherence and continuity to a film story. It opens and closes a sequence, it punctuates the narrative, it permits a graceful transition from sequence to sequence, even from scene to scene.

The Visual Idiom

The idiom, as associated with language, is the product of natural growth. It originates to supplant an existing form, or to fill a need. And gradually, because of its convenience, its effectiveness, its superiority, the new form gains broadened usage until it is fully integrated and accepted as part of the language.

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Such has been the history of the optical effect. The dissolve, for example, since its invention by the French cinema pioneer, George Méliès, has risen from a singular display of genius to an integral pattern woven into the fabric of every worth-while film production. And, similarly, since the days of D. W. Griffith and the fabulous "Billy" Bitzer, it has been standard practice to begin a film with a fade-in and end it with a fade-out. We do this with an authority equal to the one that tells us to begin a sentence with a capital letter and to end it with a period.

Not too many years ago opticals were regarded as anything but an accepted idiom. They were viewed more or less as a spectacular vernacular. And yet we have only to analyze one of today's professional films to realize how thoroughly opticals have been integrated into the language of the cinema and of television, particularly in the commercials, where opticals are now a mainstay.

Today it is the rule—not the exception—that every film designed to alert and hold the attention of an audience must be laced together with intelligently planned and professionally rendered special effects or opticals. While the average viewer is rarely conscious of the actual techniques, he nevertheless feels their presence—or absence—without identifying them.

The Fade (Fig. 1)

The granddaddy of all optical effects is, presumably, the fade. In essence, it is a device used to represent a pause in the pictorial flow of the narrative. The fade means either "cessation of action" or "inauguration of action." Properly used, the fade is to a screen play what the curtain is to the theater. The fade-in raises the curtain, the fade-out lowers it. The fade supplies intrasequence transition.

Technically, the best fade is the most even fade. There are two ways to execute fades. One is to use a gradual re-

duction or increase of light, controlled by a rheostat. The other is accomplished by closing or opening the camera shutter from 0° to 170°. Although both methods are effective, our personal preference is the latter. Especially is this true in shooting color, since light controlled by resistance tends to affect the color temperature of the light source, resulting in a not too faithful reproduction of the original.

The Dissolve (Fig. 1)

The dissolve is a device that effects transition *within* the framework of a sequence, or *between* sequences, when there is to be no pause in the flow of the film.

For instance, suppose we want to show the progress of a young chap from the time he is inducted into the army until the time he goes into battle. We have, let us say, scenes of our protagonist enlisting, being examined, receiving his uniform, in training, embarking, landing, marching to the front, and finally in battle. Assuming that none of these scenes are ends in themselves, we could link them together with dissolves for transitional purposes and thus maintain a definite and uninterrupted pace. The battle scene, on the other hand, would probably be an end in itself and so we would end it with a fade.

The dissolve has been called—and with ample reason—the most significant of all cinematic and televisual discoveries. It has myriad uses, many of them basic to the production of a convincing picture. Its extreme value is worthy of illustration by another hypothesis.

Let's assume we have a man—we'll call him "Lefty"—approaching a building and that we wish to move him inside and show him at work robbing a safe. Suppose there were no such thing as a dissolve. We would have two alternatives. One, we might expend the time and footage to bring Lefty into the building, up the elevator, along the corridor and into an office. The alternative



Fade

Dissolve

Wipe

Figure 1

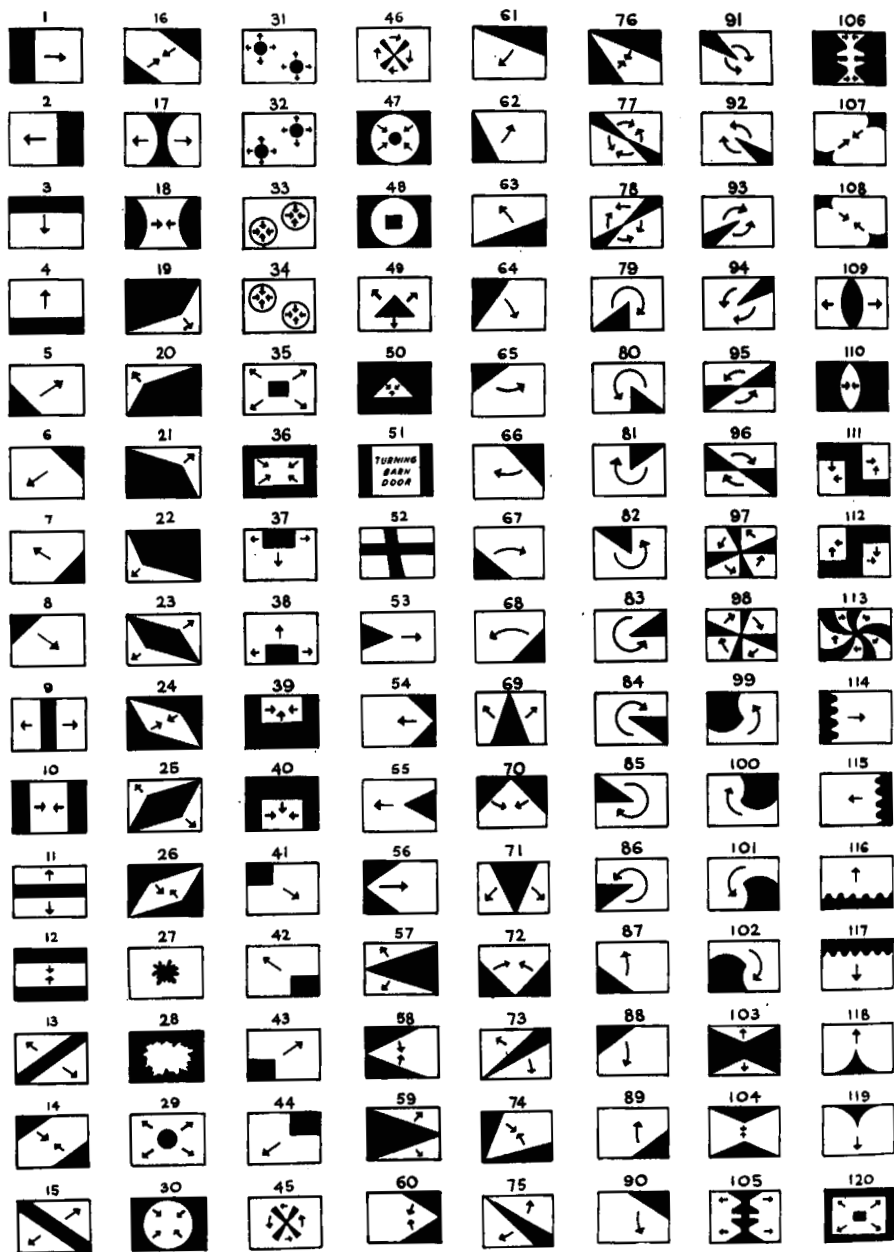


Fig. 2. Graphic outline of a variety of optical wipe effects, reproduced from a chart made by Cineffects, Inc.



96

79

6

Fig. 3. Trailer and television wipes.



9

29

1

Fig. 4. Feature, or production, wipes.

would be to straight-cut from exterior to interior, and thereby give the audience the impression that they are watching a jet-propelled Superman.

Of course, the proper way to make the transition is to use the dissolve.

A dissolve is nothing more than a combination of a fade-out and a fade-in. The measure of a good dissolve is the equilibrium of density, and of highlight and shadow, between the two shots used. Experience teaches us that the best dissolves are achieved when we do not use the same length of shot on both sides of the optical center. Flush dissolves, which call for the opening and closing of the shutter to a full mathematical 170° during the time of the effect, are practical only when the dissolve is made between two shots that have identical backgrounds.

The Wipe (Fig. 1)

Figure 2 shows graphically the many types of wipes which are generally used. The wipes illustrated in Figs. 3 and 4 are correlated by number with those on the chart (Fig. 2).

The wipe is an optical device used to represent simultaneous action.

Here we have Michael playing golf, and we wipe to a scene of his wife Jacqueline at a tea party. By this action we infer, visually, that Jacqueline is having tea while Michael is playing golf. The dissolve usually infers succeeding action, whereas the wipe infers contemporary action.

The psychology behind the use of many wipes in trailers and television spots is apparent when we consider that the purpose is to show that there are distinct advantages in seeing the film or buying the product being advertised, because of the number of exciting and interesting situations happening in the film or a number of superiorities in the advertised product, situations or advantages which the patron can't afford to miss. The wipe is used to heighten this impression, to plant the idea that

all these wonderful things are simply bursting through the sprocket holes, occurring almost simultaneously.

Wipes are executed by means of film or metal mattes. In our optical department we have developed more than 120 types, each one of which is capable of producing an unusual and individual type of effect. Trailers and television spots usually employ the more bizarre wipes, usually with sharp edges, which are calculated to give impact. In features, however, the principal types used are soft, the common types being right to left, left to right, diagonal and vertical. (See Figs. 3 and 4.)

The Montage

The montage offers the most fascinating possibilities in this new visual idiom. And, although superimposition, split screens and similar techniques have enlivened some pictures which would otherwise have creaked through, montages themselves have often mounted pictures to such powerful climaxes that no ordinary narrative could hope to keep abreast of them.

An accurate definition of a montage is difficult. It has come to mean almost everything from superimposed scenes, double exposures of various kinds, and split screens, to a series of short shots dissolving into one another.

The most fascinating aspect of the montage is the ability to burst the bonds of time and space (Figs. 5A and 5B), and even reason, and still to remain entirely credible. When we see the picture of a bullet superimposed over a shot of a turning globe which may even be combined with that of a ship at sea with the waves breaking over its bow, we do not pause to question this violation of time and space. The appeal of the montage is wholly emotional. We feel that the montage—this magnificent, yet almost entirely unexploited device—offers to producers an effective transition and to television advertisers a brand new cinematic dimension. (See Figs. 5A and 5B.)

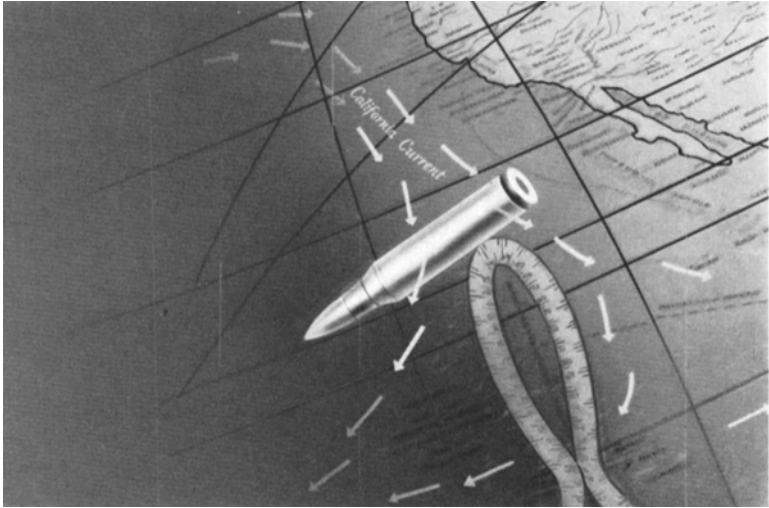


Figure 5A

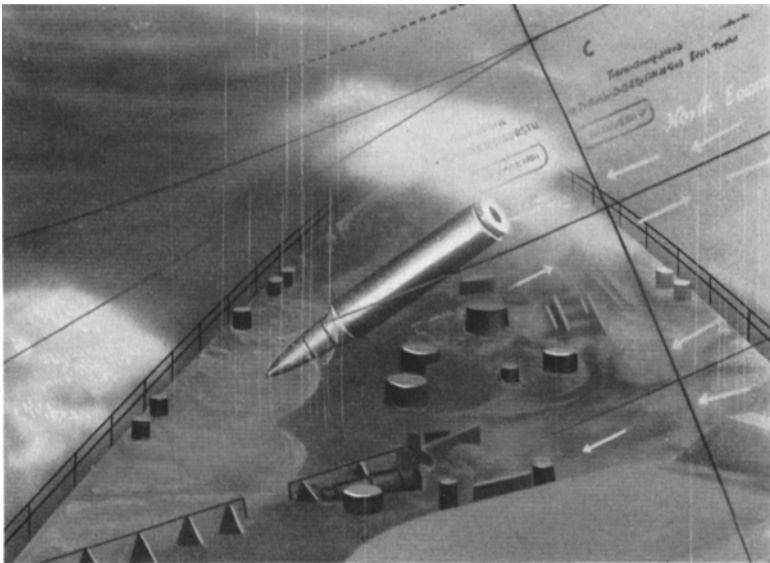


Figure 5B

Time-lapse montage illustrating superimposition over split screen.

Planning

It is our belief that the motion picture in television is an accepted medium of expression and that a major reason for its acceptance is the new visual idiom. The maturity of the optical techniques brings an additional element of responsibility, particularly with respect to the care and forethought the producer should put into planning them. The time for planning is *before* photography is started.

A typical instance where proper forethought spelled success in the end occurred in a production where the script called for bullets emerging from a machine gun in action. Even tracer bullets, we know, are barely visible in daytime, so that a special technique had to be worked out in advance of shooting.

We worked out the following procedure: The machine gun was anchored and photographed in action during the daytime. Then, the same gun was photographed in action at night, using tracer bullets which were visible as they emerged from the barrel in the darkness.

It was possible then to literally matte out the superfluous exposure in the second shot, and superimpose it over the daylight shot, at the same time dodging out the superfluous exposure of the sky in the first take. The net result was visible bullets emerging from the machine gun (Fig. 6).

Advanced planning cannot be over-emphasized. There are good shots for wipes and dissolves, and bad shots. The best dissolves are made in the mind, not in the camera. The day is past when a producer gathers an assortment of shots and bundles them off for "suitable" opticals.

Titles

The average movie or television fan has come to expect that a picture will open with smart titles over an interesting background. He senses that the main title fades in, that credit titles dissolve into each other, and that an optical

is used to mark divisions between titles and picture.

The modern producer devotes considerable time and thought to the creation of striking and symbolic main titles—the pictorial overture. They are calculated to arrest the eye, awaken interest and set the mood for the film that follows.

Innovations in the field of title work call for ingenuity in the title department. Let me sketch for you the techniques we used for a recent production. This type of title treatment is in common usage not only in motion pictures, but also in television commercials.

Our storyboard calls for the superimposition of white titles, with black shadows, over a live-action scene. The scene shows black buildings on a snow-covered landscape. The technical problem is to retain white titles against the snow. (See Fig. 7).

In this instance, since the live action is an inherent part of the desired effect, our problem is more complicated.

First, we render our lettering in white on a glass panel, drawing in the offset black shadows on the opposite side of the glass to give the illusion of depth.

We begin photography by bipacking a fine grain of the live-action shot, with negative stock. Our camera photographs the black shadows of the lettering acting as a matte over a white card, thereby resulting in a dupe negative (undeveloped, of course), of the scene with letters.

Next, we rewind the negative stock to starting mark previously made on the raw stock. We then photograph the lettering over a black card after first removing the fine grain. Now the shadow of the lettering is lost in the dark background and the white lettering itself is heavily exposed over the previously duped live-action scene. Thus, we arrive at the desired result, a duplicate negative of the live action over which is superimposed, in perfect regis-



Fig. 6. Composite matte shot.

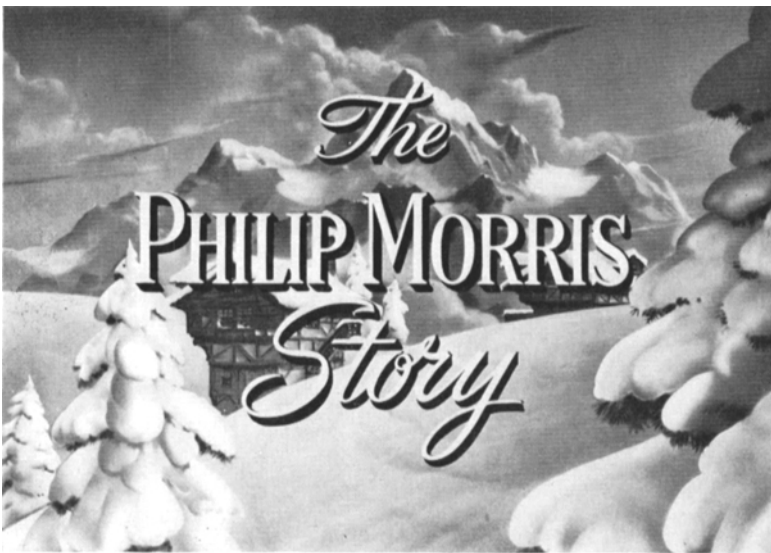


Fig. 7. Title, illustrating enhancement of white letters over predominantly white background.

tration, the white title with the black shadow (Fig. 7).

A further complication arises if the titles must move, as, for instance, when there is a considerable amount of copy. Only a pan title serves the purpose. In such a case, the previously described operations take place, but the letters and shadows are moved according to minute calibrations, accurately determined, depending upon the reading time necessary for comprehension. A photographic technique is utilized, to which we refer as "stop-motion," (frame by frame exposure), a necessity because of the extreme accuracy required in matching the position of both exposures of the lettering and shadows in action.

Television

Whatever importance you are inclined to attach to our new visual idiom with respect to motion picture productions, should be doubled for television.

We have found in our organization that we should never begin shooting without a prior conference of department heads. Nine times out of ten these discussions turn into involved debates on

optical treatments. We find that when the various components—live action, animation, stop-motion, etc.—*are pre-planned*, they come together in a smooth, optical integration of the segments, a composite of an effective, workable commercial.

We find, too, that optical effects are no longer confined to the optical bench. On our animation stands, in particular, much hard thinking on the part of the camera supervisors—plus the unusual gadgets we have developed—makes possible many of the special effects so necessary for television spots.

Films employing these effects enjoy a psychological advantage. From the very first frame the audience senses that it is in for a treat, one that comes only from a highly original job, professionally executed.

Acknowledgments

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