

COLOR CONSCIOUSNESS*

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Summary.—Color constitutes another step in the steady advancement of the motion picture toward realism, the same principles of color, tone, and composition applying to the motion picture as to the art of painting. In order fully to appreciate the color picture, a "color consciousness" must be adopted, the lack of which is tantamount in a degree to color blindness.

Monotony is the enemy of interest, a fact that argues for the color picture; but a superabundance of color is unnatural. Psychologically, colors fall into the "warm" and "cool" groups, and each color and shade has its psychological implications: red—danger, blood, life, heat; green—nature, outdoors, freedom, freshness; etc. To build up personalities and to harmonize emotions and situations, these principles must apply, even to the extent of "color juxtaposition," or the psychological relation of the various colors to each other. For example, of two adjacent or contiguous colors, each tends to "throw" the other toward its complement, considerably affecting the emphasis or import of the color.

On the walls of the cave in Altamira in Spain are found paintings, boldly sketched in three colors by Paleolithic man some fifty thousand years ago. These prehistoric paintings are quite artfully executed, and show that the artist possessed a fine sense of color and a desire to indicate motion as well as form. Various animals are depicted with the use of a red clay, an ochre earth, and a black pigment. One picture shows a wild boar in a standing position. In another picture, nearby, to show the same animal in a gallop, two sets of legs have been used. This ingenious method of showing action indicates the inherent desire of the artist to show motion in color. This ambition has come down through the intervening years to the present day. Now we see the culmination of that idea—motion pictures in color.

From a technical standpoint, motion pictures have been steadily tending toward more complete realism. In the early days, pictures were a mere mechanical process of imprinting light upon film and projecting that result upon a screen. Then came the perfection of

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detail—more accurate sets and costumes—more perfect photography. The advent of sound brought increased realism through the auditory sense. The last step—color, with the addition of the chromatic sensations, completed the process. Now motion pictures are able to duplicate faithfully all the auditory and visual sensations.

This enhanced realism enables us to portray life and nature as it really is, and in this respect we have made definite strides forward. A motion picture, however, will be merely an accurate record of certain events unless we guide this realism into the realms of art. To accomplish this it becomes necessary to augment the mechanical processes with the inspirational work of the artist. It is not enough that we put a perfect record upon the screen. That record must be molded according to the basic principles of art.

The principles of color, tone, and composition make painting a fine art. The same principles will make a colored motion picture a work of art. The precision and detail of Holbein and Bougereau, the light effects of Rembrandt, the atmosphere and arrangements of Goya, the color of Velasquez, the brilliant sunlight of Sorolla, the mysterious shadows of Innes—all these artistic qualities can eventually be incorporated into motion pictures through the medium of color. The design and colors of sets, costumes, drapes, and furnishings must be planned and selected just as an artist would choose the colors from his palette and apply them to the proper portions of his painting.

In order to apply the laws of art properly in relation to color, we must first develop a color sense—in other words, we must become "color conscious." We must study color harmony, the appropriateness of color to certain situations, the appeal of color to the emotions. Above all, we must take more interest in the colorful beauties that lie about us—the iridescent brilliance of the butterfly's wing, the subtle tones of a field of grain, the violet shadows of the desert, the sunset's reflection in the ocean. By such observation and study we develop a sense of color appreciation and train our eye to notice an infinite variety of hues.

Serious cases of color blindness are comparatively rare; yet, because the average person is not trained in color appreciation, a decided lack of color consciousness is not at all uncommon. In order to appreciate operatic or classical music, people study music appreciation. Color appreciation, as a study, is almost entirely neglected, although color plays a most important and continuous part in our

lives. The average person listens to music for only a short portion of the time, but every moment of the day he looks upon some form of color.

In the study of color appreciation we have two classes of objects. On the one hand, we have Nature, with its flowers, skies, trees, *etc.*; on the other hand, we have man-made objects of all kinds, including art pictures. In the first class the color is already created, and it remains for us only to enjoy and appreciate. In the second class we can exercise a certain amount of selectivity. Because of the general lack of color knowledge, that selectivity is not always tempered with wisdom. If the color schemes of natural objects were used as guides, less flagrant mistakes in color would occur. The use of black and white, however, to the complete exclusion of all color, is decidedly not in keeping with Nature's rules.

Natural colors and lights do not tax the eye nearly as much as man-made colors and artificial lights. Even when Nature indulges in a riot of beautiful colors, there are subtle harmonies which justify those colors. These harmonies are often overlooked by the casual observer. The most brilliant flower has leaves and stem of just the right hue to accompany or complement its gay color.

As we grow in the understanding of color and its uses, we find that our color appreciation develops simultaneously. All the better things in life require a color consciousness for their fullest appreciation and enjoyment.

The eye is the organ of perception. The impulses of light received by the retina are transferred over the optic nerve path to the brain, and we become conscious of light and dark, motion, form, and color. Vision is a sense of ancient lineage and of early development in the individual life. Its characteristic is the clearness and precision of the data it furnishes the mind. Compared to sight, the other senses are dull and groping. It is the sense by which we receive the greatest number of stimuli from the world about us. It is the sense which most frequently affects the nervous system, dominates the attention, and stimulates the mind.

It is a psychological fact that the nervous system experiences a shock when it is forced to adapt itself to any degree of unnaturalness in the reception of external stimuli. The auditory sense would be unpleasantly affected by hearing an actor upon the screen speak his lines in a monotone. The mind would strive to supply the missing inflections. The same is true, but to a greater degree, of the visual

sense. A super-abundance of color is unnatural, and has a most unpleasant effect not only upon the eye itself, but upon the mind as well. On the other hand, the complete absence of color is unnatural. The mind strives to supply the missing chromatic sensations, just as it seeks to add the missing inflections to the actor's voice. The monotony of black, gray, and white in comparison with color is an acknowledged fact. It is almost a psychological axiom that *monotony* is the enemy of *interest*. In other words, that which is monotonous will not hold our attention as well as that which shows more variety. Obviously, it is important that the eye be not assailed with glaring color combinations, nor by the indiscriminate use of black and white. Again taking our cue from Nature, we find that colors and neutrals augment each other. The judicious use of neutrals proves an excellent foil for color, and lends power and interest to the touches of color in a scene. The presence of neutrals in our composition adds interest, variety, and charm to our colors. On the other hand, the presence of color in our picture gives added force to the neutrals, emphasizing the severity of black, the gloominess of gray, the purity of white.

From a broader point of view, the psychology of color is of immense value to a director. His prime motive is to direct and control the thoughts and emotions of his audience. The director strives to indicate a fuller significance than is specifically shown by the action and dialog. If he can direct the theatergoer's imagination and interest, he has fulfilled his mission. The psychology of color is all-important in this respect, and we shall now show the manner in which certain colors upon the screen will give rise to certain emotions in the audience.

We have found that by the understanding use of color we can subtly convey dramatic moods and impressions to the audience, making them more receptive to whatever emotional effect the scenes, action, and dialog may convey. Just as every scene has some definite dramatic mood—some definite emotional response which it seeks to arouse within the minds of the audience—so, too, has each scene, each type of action, its definitely indicated color which harmonizes with that emotion.

The usual reaction of a color upon a normal person has been definitely determined. Colors fall into two general groups. The first group is the "warm," and the second the "cool" colors. Red, orange, and yellow are called the warm or advancing colors. They

call forth sensations of excitement, activity, and heat. In contrast, green, blue, and violet are the cool or retiring colors. They suggest rest, ease, coolness. Grouping the colors in another manner we find that colors mixed with white indicate youth, gaiety, informality. Colors mixed with gray suggest subtlety, refinement, charm. When mixed with black, colors show strength, seriousness, dignity, but sometimes represent the baser emotions of life.

As to the use of a single color alone, each hue has its particular associations. For example, red recalls to mind a feeling of danger, a warning. It also suggests blood, life, and love. It is materialistic, stimulating. It suffuses the face of anger, it led the Roman soldiers into battle. Different shades of red can suggest various phases of life, such as love, happiness, physical strength, wine, passion, power, excitement, anger, turmoil, tragedy, cruelty, revenge, war, sin, and shame. These are all different, yet in certain respects they are the same. Red may be the color of the revolutionist's flag, and streets may run red with the blood of rioters, yet red may be used in a church ritual for Pentecost as a symbol of sacrifice. Whether blood is spilled upon the battlefield in an approved cause or whether it drips from the assassin's dagger, blood still runs red. The introduction of another color with red can suggest the motive for a crime whether it be jealousy, fanaticism, revenge, patriotism, or religious sacrifice. Love gently warms the blood. The delicacy or strength of the shade of red will suggest the type of love. By introducing the colors of licentiousness, deceit, selfish ambition, or passion, it will be possible to classify the type of love portrayed with considerable accuracy.

Proceeding to the other colors, orange is bright and enlivening; it suggests energy, action.

Yellow and gold symbolize wisdom, light, fruition, harvest, reward, riches, gaiety; but yellow also symbolizes deceit, jealousy, inconstancy in its darker shades, and particularly when it is tinged with green.

Green immediately recalls the garb of Nature, the outdoors, freedom. It also suggests freshness, growth, vigor.

Dark green, blue, violet, and indigo are cooling, quiet colors. They are tranquil and passive. They do not suggest activity, as do the reds and orange. Blue is suggestive of truth ("true blue"), calm, serenity, hope, science, also cold steel, melancholy (we have the expression "blue as indigo").

Purple is a color which does not occur in the spectrum. It is a combination of warm red and cool blue. It will be aggressive and vital if the red predominates, or dignified and quiet if the blue overbalances the red. Purple denotes solemnity, royalty, also pomp and vanity.

Magenta is the combination of purple and red. It is very distinctly materialistic. It is showy, arrogant, and vain.

The neutrals, white, gray, and black, while theoretically not in the category of colors, also stimulate very definite emotional responses. Black is no color, but absorption of all color. It has a distinctly negative and destructive aspect. Black instinctively recalls night, fear, darkness, crime. It suggests funerals, mourning. It is impenetrable, comfortless, secretive. It flies at the masthead of the pirate's ship. Our language is replete with references to this frightful power of black—black art, black despair, black-guard, blackmail, black hand, the black hole of Calcutta, black death (the devastating plague of medieval Europe), black list, black-hearted, etc.

Even the poets recognized this symbolism. Shelly, in his dramatic *Alaster* tells how,

"I have made my bed
In charnels and on coffins, where black death
Keeps record of the trophies won—"

The poet Keats, in *The Prisoner of Chillon*, says,

"I, only, stirred in this black spot,
I, only, drew the accursed breath of dungeon-dew."

We are speaking a potent language to our audience when we make use of black.

Gray suggests gray skies and rain. It is gloomy, dreary, and represents solemnity and maturity. From its complete neutrality and lack of any color or distinctiveness, it represents mediocrity, indecisiveness, inaction, vagueness.

White reflects the greatest amount of light, it emanates a luminosity which symbolizes spirit. White represents purity, cleanliness, peace, marriage. Its introduction into a color sublimates that color. For example, the red of love becomes more refined and idealistic as white transforms the red to pink. White uplifts and ennobles, while black lowers and renders more base and evil any color. To the

degree in which colors are lightened or darkened will the qualities that the color exemplifies be altered.

Thus we see that all the colors in the spectrum speak their particular language. The flush of anger, the vigor of a sun-tanned skin, the richness of gold velvet, the violet mystery of distant mountains, the serenity of blue sky—these colors alone speak with more eloquence than could be described by words.

The modification of a positive color by the introduction of another hue modifies the mental reaction to the degree of the intensity of that hue which is introduced. For example, a positive blue is a cool color, but to the extent in which a red hue is introduced, the coolness of the blue will be altered by the warmth of red. However, these complexities do not alter the basic principles of color or the general reactions which we have outlined.

In the preparation of a picture we read the script and prepare a color chart for the entire production, each scene, sequence, set, and character being considered. This chart may be compared to a musical score, and amplifies the picture in a similar manner. The preparation of this chart calls for careful and judicious work. Subtle effects of beauty and feeling are not attained through haphazard methods, but through application of the rules of art and the physical laws of light and color in relation to literary laws and story values. In the first place, this chart must be in absolute accord with the story action. Again, it must consider the art, principles of unity, color harmony, and contrast. Again, it must consider the practical limitations of motion picture production and photography. The art director, however, in handling a color picture, must be forever mindful that the human eye is many times more sensitive than the photographic emulsion and many times greater in scope than any process of reproduction. Therefore, he must be able to translate his colors in terms of the process.

When we receive the script for a new film, we carefully analyze each sequence and scene to ascertain what dominant mood or emotion is to be expressed. When this is decided, we plan to use the appropriate color or set of colors which will suggest that mood, thus actually fitting the color to the scene and augmenting its dramatic value.

We plan the colors of the actor's costumes with especial care. Whenever possible, we prefer to clothe the actor in colors that build up his or her screen personality. In a picture which we recently

completed, two young girls play the parts of sisters. One is vivacious, affectionate, and gay. The other is studious, quiet, and reserved. For the first we planned costumes of pink, red, warm browns, tan, and orange; for the second, blue, green, black, and grey. In this way the colors were kept in unison with their film characters.

One very important phase of making color pictures is the necessity of obtaining distinct color separation. The term "color separation" means that when one color is placed in front of or beside another color, there must be enough difference in their hues to separate one from the other photographically. For example, there must be enough difference in the colors of an actor's face or costume and the walls of the set to make him stand out from the colors back of him; otherwise, he will blend into the background and become indistinguishable, as does a polar bear in the snow. If the colors are properly handled, it is possible to make it appear as though the actors were actually standing there in person, thus creating the illusion of the third dimension. Because of the general warm glow of flesh tints, we usually introduce the cooler tones into the backgrounds; but, if we find it advantageous to use warmer tones in the set, we handle the lighting so that the particular section in back of the actor is left in shadow. This gives a cool contrast to the faces, even though we have a general feeling of warmth in the room. When there are a number of players, all wearing differently colored costumes, it is necessary to disregard those playing relatively unimportant parts, and make the background in contrast to those whose action is most significant to this particular scene.

It is important that the sets have interest and variety. They must not be flat. When the sets have depth it is much easier to introduce interesting shadows and colored lights for special effects. Unless the dramatic aspect dictates to the contrary, it is desirable to have all the colors in any one scene harmonious. Otherwise, we strike an unpleasant, discordant note.

A point to be considered in set dressing depends upon one of the rules of composition in art. The law of emphasis states in part that nothing of relative unimportance in a picture shall be emphasized. If, for example, a bright red ornament were shown behind an actor's head, the bright color would detract from the character and action. Errors of this nature must be carefully avoided.

Color juxtaposition also plays a large part in the selection of colors for the screen. The effect of "color juxtaposition" is an

apparent change of hue when different colors are placed one over the other, or side by side. If two cards, one orange, the other blue-green, are placed side by side, the orange will appear more red than it really is, the blue-green more blue. Each color tends "to throw" the other toward its complement. In other words, the complement of orange is blue; therefore, the orange makes the blue-green appear bluer. When any two colors are placed together, the first emphasizes in the second the characteristics which are lacking in the first.

It can readily be seen from this how exceedingly important it is to consider the movement in the scene in determining its color composition because the juxtaposition of colors is constantly changing due to this movement. Quite a different problem from that of an artist, who paints a still scene where the characters remain in their set places, and whose color values, therefore, are not subject to frequently changing contrast.

We must constantly practice color restraint. In the early two-color pictures, producers sometimes thought that because a process could reproduce color, they should flaunt vivid color continually before the eyes of the audience. This often led to unnatural and disastrous results, which experience is now largely eliminating.

The synthesis of all these factors entails many conferences with directors, art directors, writers, cameramen, designers and others. Technicolor color directors, cameramen, and technicians act in a consulting and advisory capacity to the various studio departments during both the preparation and the shooting of the picture.

Music, graphic art, and acting have now been united, and become one expression of more ultimate art. Now for the first time a perfect expression of the combined inspirations of producer, writer, artist, actor, and musician can be adequately presented to an audience. Color has touched the sound picture and it fairly lives.