

MUSIC PREFERENCE AS AN
AUDIENCE VARIABLE IN FILM
COMMUNICATION

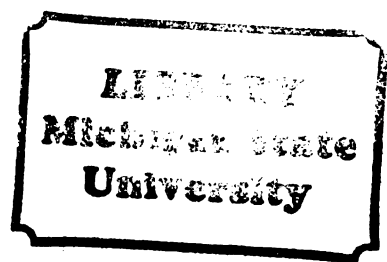
Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
NANCY L. BUERKEL

1974



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THESIS





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ABSTRACT

MUSIC PREFERENCE AS AN AUDIENCE VARIABLE IN FILM COMMUNICATION

By

Nancy L. Buerkel

Although music and film are recognized as two very pervasive elements in our society, little research has been done in the area of subjective audience response to music in film communication.

This study attempted to investigate the transactional relationship between film and audience preference about music used in that film as it affects subsequent audience evaluation of the film itself and the sponsor of the film. To do so, this study experimentally manipulated the compatibility of music accompaniment (as a sampling variable) using two types of music, rock and country.

The data collection process for this experiment was based on a "posttest-only control group" experimental design using five groups (two music treatment conditions, one no music condition, and two control groups). Each group was comprised of twelve college students selected from approximately 400 students at Michigan State University in September, 1974.

The selection of respondents was based on the results of a pre-measure profile questionnaire designed to identify subject

"music preference" and to eliminate respondents with vision or hearing impairments.

Measures were taken of the following: 1) attitudes toward the source or sponsor of the message measured by the Safety, Competency and Dynamism dimensions of source credibility; 2) attitudes toward Films in General as a communication medium; and 3) attitudes toward The Film used in the study.

The data collected was analyzed using analyses of covariance and Dunnett's test for planned comparisons using a control mean. All data was collected using semantic differential scales.

The scores for each of the treatment conditions were compared using a combined mean for the credibility measures. Evaluations of The Film were treated as a separate dependent variable. Films in General was used as a covariate in all analyses of covariance; The Film was used as a covariate for the tests of specific hypotheses.

It was hypothesized that incompatible music accompaniment would negatively affect audience evaluations of both The Film and the sponsor of the film and, conversely, that compatible music accompaniment would enhance audience evaluation of these variables. Previous research suggested that the negative effect would be the stronger of the two effects.

The results of the experiment support the contention that music can affect the formation of images about the message sponsor and can affect the evaluation of the message itself. The major findings can be summarized as follows:

- 1) music preferences have a definable effect upon image modification;
- 2) music preferences have a definable effect upon audience evaluation of the message in which the music is presented;
- 3) incompatible or "disliked" background music has a strong negative effect on the audience evaluation of the film and the sponsor of the film;
- 4) compatible or "liked" background music has a lesser absolute effect on the audience evaluation of the sponsor of the film than incompatible music;
- 5) incompatible music seems to have its greatest effect on the Competency and Safety dimensions of credibility; and
- 6) compatible music seems to have its greatest effect on the Competency dimension of credibility.

Clearly, music preference can be said to be a segmenting variable in film communication and should be carefully considered at the onset of such a production. The implication of this segmentation effect is that audiences cannot be treated as receivers of messages but, rather, should be considered active participants in the communication process.

MUSIC PREFERENCE AS AN AUDIENCE VARIABLE IN
FILM COMMUNICATION

By

Nancy L. Buerke¹

A THESIS

Submitted to
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in partial fulfillment of the requirements
for the degree of

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1974

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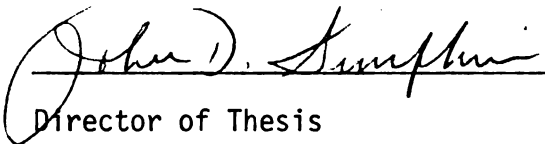
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Director of Thesis

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CHAPTER I

INTRODUCTION

Since the early days of religious services, when the human voice was used as an instrument, music has played a pervasive role in society. In one form or another, music reaches the individual nearly every day of his or her life -- from the lullabies in the cradle to the hymns in church and the Pepsi Cola jingles on television. The individual begins early in life to make discriminations about music and its utilization. Associations are made about types of music, about times and places when music is most appropriate, about which music is liked and disliked, and about the music most likely to be shared with friends. These associations are largely a product of experience, of social and cultural norms, and of interaction with peers and family. They form an attitudinal framework for the individual that, at least in part, determines appropriate behaviors as the individual moves from one musical contact to another.

A source of exposure to music that is readily available to virtually everyone in this society is film. Film is a creation of this century and does not share the long history enjoyed by music, but it represents an equally pervasive element of the communication system. Film is used as the shooting medium for television programming, as

the medium for television commercials, as an entertainment medium in its own right, as an educational tool, as a public relations tool, and for providing lasting pictures of the "dog and kids" for family enjoyment. To the average American, film is an extremely accessible and familiar medium. The impact of this medium and its transactional relationship with component parts -- such as music -- to audience needs and expectations is largely unknown, however.

The Problem

In the past thirty years, considerable research has been undertaken to evaluate various aspects of film communication, particularly in the field of education. The bulk of this research was completed in three projects: 1) the Pennsylvania State Army-Navy Studies, 1942 - 1950; 2) the Yale Motion Picture Research Project, 1946 - 1954; and 3) the Air Force Human Resources Research Laboratory Studies, 1950 - 1957. Since then, the number of completed studies reported has reduced drastically to one or two per year.

The previous research in the area of film communication has been categorized by Gerrero¹ into five major areas:

- 1) compares one form of presentation (film) with one or more different forms of presentation (lecture, slides, etc.) and usually tests for measures of learning;
- 2) tests viewer preferences for technical aspects of the film medium (color vs. black and white, sound vs. silent, picture vs. animation) and occasionally correlates these with viewer variables such as age or sex;
- 3) manipulates one or another element of the medium as the experimental variable (camera angle, embellishments or sound) and tests for differences in learning;

- 4) investigates utilization and environmental conditions such as size of group, type of viewing area, viewer comfort, room noise, etc.; and
- 5) uses the film medium for testing postulates from other disciplines such as information theory or learning theory.

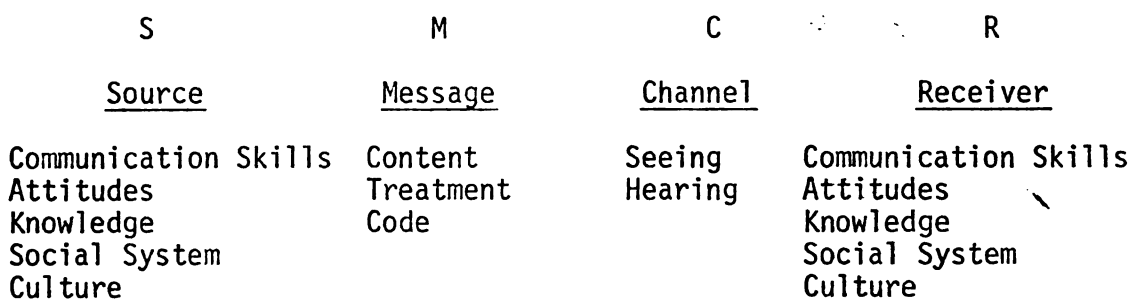
Only a handful of these studies have produced significant results, and a large number of these are (as yet) situation-specific. That is, although they were found significant under the testing conditions used, there is no reason to believe that such studies could be generalized to larger populations or even similar situations using the same populations.

Conspicuously absent is research dealing with subjective measures of audience characteristics as they pertain to audience behavior and reaction to film, specifically promotional or persuasive film. Several studies have been completed dealing with student evaluation of film as a classroom technique, with conflicting results. The Army-Navy studies include several which attempt to change attitudes, such as the negative attitude often found toward Army food. This research, thus far, has done nothing more than prove that it is possible to alter attitudes through film and does not pretend to address the question why?²

Also absent are studies dealing with the function of music in film communication. Of the fifty-plus studies in the Pennsylvania State project, only one attempts to deal with music as a film variable. Several other studies have been done subsequently, but none have established any relationship between predispositions for or against

certain types of music and audience reaction to the utilization of such music as a film variable. Indeed, virtually no experimental evidence exists in the purely audio literature that pertains to the effect of music as nonverbal communication.

To better understand the communication process as it pertains to music and film, it may be useful to examine film communication in the context of Berlo's model of communication³:



(fig. 1.1)

(It should be noted that this is fundamentally a uni-directional model of communication, but this fact should not detract substantially from the discussion of film communication.)

First of all, every Message has a Source -- the individual, corporation, or interest group creating and sponsoring the Message. Receiver perceptions of Source credibility, appearance, attitudes, past business or social records, and the like act as influences on Receiver acceptance or rejection of the Message. In addition, the Message itself and the Channel through which the Message is sent reflect on Receiver evaluation of the Source. It is the visual, musical, narrative (content) and treatment elements of the Message that the Receiver decodes as symbols of the Source's Message. And this entire decoding process is heavily influenced by Receiver characteristics such as attitudes about the Source, Message or Channel,

knowledge of the subject, ability to encode and decode, and interaction with the surrounding environmental and societal system.

Therefore, if one is to understand the process by which the audience evaluates the Source of a Message, it will be necessary to examine the human behavioral process as it determines perception, structures attitudes, orders cognition, and, finally, creates images in the mind of the audience members. To aid in doing so, the following four sections of this chapter -- perception, attitudes, meaning, and image -- will attempt to clarify this process.

Perception

No two individuals perceive the same stimulus in exactly the same manner because perception takes place in the mind of the individual and nowhere else. Perception is subjective.

Because of the infinite number of stimuli reaching a given individual at any time, it is literally impossible to attend to all conceivable inputs as they arrive. For this reason, perception must be selective. Audiences accept some information because it is more compatible with past experiences, mental readiness, attitude and belief structures, societal and cultural roles and situational needs and demands than other information.

Although a product of an individual's belief system, perception lacks the endurance of attitudes or beliefs. It is temporal. For this reason, perceptions of a product or service tend to be of short duration unless continuously supplemented with communicative input.

Finally, perception is summative. That is, audiences take many

sensations that reach awareness almost simultaneously and combine these sensations into a complete and unified whole. Explaining this summative property, Walters and Paul contend the following:

Most sales messages are more effective when both audio and visual techniques are utilized rather than when either one or the other is used singly.... The reason is that each sense message reinforces the others and aids in forming a consistent, unified impression.⁴

Perception, then, is a complex process dependent on audience variables that are both physical and subjective. Of primary importance to this perceptual process are the variables known as attitudes.

Attitudes

The basic unit with which an individual structures his or her environment is the "attitude." According to Allport, an attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related."⁵ Attitudes are a basic part of an individual's value system. They may be rooted in childhood learning and experience, and they are stronger and longer-lasting determinants of behavior than opinions.

According to Katz, attitudes perform the following functions:

- 1) the adjustment function (positive attitudes are formed toward stimuli giving pleasure; negative attitudes are formed toward stimuli giving pain);
- 2) the ego-defensive function (reduces anxieties by avoiding forces in the environment perceived as harmful);

- 3) the value-expressive function (hides the true nature of the individual and expresses central values reflective of the type of person he or she would like to be); and
- 4) the knowledge function (leads the audience member to seek information).⁵

An important element of the attitude structure is the notion of completeness. Completeness refers to the individual's need to supply missing details in a communication situation, details often based on insufficient information or transferred to the situation. That is, a consumer satisfied with the service at a certain department store may adopt an overall favorable impression of the management, quality of merchandise, store policy, and so on. The adjustment function of attitudes operates to transfer the positive evaluation from one aspect of the store to the overall operation. Since, to some extent, all audience attitudes are based on information, the less the individual knows about a product or sponsor of a product -- and the greater the pressure to express an opinion -- the more likely it will be that positive or negative evaluations of some aspect of the stimuli will be generalized.

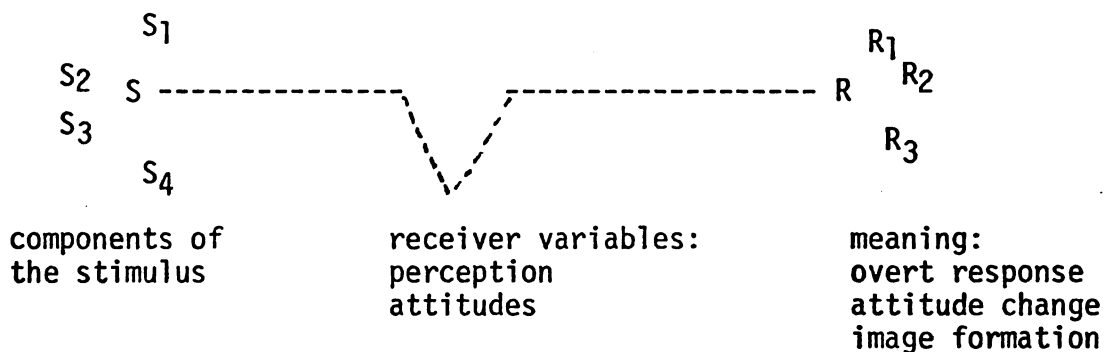
Meaning

The interaction between stimuli and audience variables produces a cognitive outcome commonly termed "meaning." Unfortunately, there are as many definitions possible for this term as there are people attempting to define it because meaning, like perception, is subjective.

Osgood defines meaning as:

that process or state in the behavior of a sign-using organism which is assumed to be a necessary consequence of the reception of sign-stimuli and a necessary antecedent for the production of sign-responses...."Meaning", like "emotion," is a relational or process concept. It is because language signs have certain meanings in the psychological sense (i.e., are associated with certain representational processes) that they are used consistently in certain situations and consistently produce certain behaviors (sociological meaning), and this is also the reason that they occur in predictable association with other signs in messages (linguistic meaning). But, on the other hand, it is the very consistencies among situations and behaviors in human experience, including the experience of hearing and seeing message sequences, that determines the nature of representational processes and hence psychological meaning.⁶

Combining Osgood's notion of the consistencies in the assignment of meaning with the previous discussion of perception and attitudes, the following S—R model should help to describe this process:



(fig. 1.2)

It should be remembered that a great many responses to familiar stimuli are "conditioned." That is, S_1 almost always produces R_1 even though the individual is barely cognizant of the evaluation process taking place. This is important because the phenomena of

classically conditioned responses to given stimuli gives rise to the concepts of stimulus generalization and response generalization.

The process of generalization is a process of transference of meaning from one stimulus to another highly similar stimulus or from one response to another highly similar response. That is, if S_2 is closely related to S_1 , it is quite probable that both stimuli will produce the same response. The more similarity between S_1 and S_2 , the greater the probability that both stimuli will produce the same response.

In combination with the adjustment function of attitudes and the tendency toward completeness, response generalization provides some interesting implications for the development of images. Before making any predictions about this process, it should be useful to examine what is known about the concept of image.

Image

According to Boulding, image is subjective knowledge. In other words, an image is not the fact of the thing, but it is fact derived from someone's perceptions, assigned meanings, and cognitions based on partial or inadequate information.⁷

If an image is really based on incomplete information, it seems reasonable to assume that the completeness tendency would be operating to generalize images from isolated experiences with the stimulus in question, or, for that matter, from highly related stimuli. In a previous example, it was suggested that a customer satisfied with the service at a store might, conceivably, generalize this favorable impression of one aspect of the store to all, or at least a

significant number, of the other aspects of the store. That is, the individual could be said to construct an image of the store from his or her isolated experiences with that store. This is the process of transference or generalization.

In an attempt to measure aspects of this phenomena, Berlo, et al⁸ studied the concept of image as it pertains to evaluation of source credibility. He cites three independent dimensions (based on Osgood's semantic differential scales and compiled lists of bipolar adjectives)⁹ for assigning "meaning" to audience evaluations of source image. These scales are as follows:

- 1) Safety, or general evaluative (the good-bad, pleasant-unpleasant scales);
- 2) Qualification (the skilled-unskilled, educated-ignorant scales); and
- 3) Dynamism (the active-passive, fast-slow scales).¹⁰

According to Berlo:

The studies emphasize the multi-dimensionality of the variable [source credibility], and they support the argument that source "image" should be defined in terms of the perceptions of the receiver rather than objective characteristics of the source. The "image" of the source is dynamic in that it both influences and is influenced by the communication event.¹¹

Given a description of the human evaluation process, some theories about human needs to make evaluations, and some scales with which to measure these evaluations, it seems that the groundwork for this study has been established. Still left is the need to understand the communication process by which the desired message reaches the

audience for evaluation. Of special importance in this process is the field of Nonverbal Communication.

REVIEW OF THE LITERATURE

The review of the literature presented below is divided into three major sections. The first section contains a brief overview of the discipline known as Nonverbal Communication. The second section deals with music and film as two distinct forms of Nonverbal Communication, and the last section reviews studies which examine music as a variable in communication research.

Nonverbal Communication

Since both music and film are instances of nonverbal communication and both transfer "meaning" through nonverbal coding systems, it seems appropriate to begin with an examination of this form of communication.

Although still a very young discipline, nonverbal communication is beginning to come into its own right as an important area of communication theory. Sociologists, psychologists, artists, ethnologists, psychiatrists, and others are making progress in isolating nonverbal consistencies and applying them to their respective interest areas.

As one might expect from the diversity of investigators interested in the field, nonverbal communication suggests an enormous collection of communicative behaviors. According to Harrison, a fairly comprehensive classification can be obtained using the following four major

sets of codes:

- 1) performance codes -- those nonverbal signs which originate in bodily action, such as facial expression, eye movement, gestures, body posture, tactile contact, and olfaction (included here also are those signs which emanate from nonverbal vocalization such as yawns, laughter, grunts);
- 2) artifactual codes -- those nonverbal signs which arise through the manipulation of cosmetics, dress, furnishing, art objects, status symbols, architecture, and the like;
- 3) mediational codes -- nonverbal signs which emerge in the selections, arrangements, and inventions within the media; for example, the editor, the film director, or the TV producer can recode events by selecting color or black-and-white, photography or cartoon, close-up or long-shot; and
- 4) contextual codes -- nonverbal symbols which arise in the use of time and space, crucial cues which set the tone and the pace of a communication system.¹²

Naturally, there are subsets of codes within each major grouping, and it should be remembered that each code interpreted in light of a different field (i.e., psychology vs. sociology) will produce a slightly different interpretation of the phenomena. Some theorists go so far as to label any stimulus coming into contact with man, animal, plant or machine nonverbal communication. On the other side of that argument, the more conservative theorists claim that only intentional forms of nonverbal behaviors (which would eliminate most body postures, scratching behaviors, etc.) qualify as bona fide nonverbal communication.

The inconsistencies aside, two major research strategies are

conspicuous in the area of nonverbal communication: 1) the structural approach (anthropological-linguist tradition) and 2) the external-variable approach (psychological tradition).¹³

The first approach treats nonverbal symbols in much the same way a linguist looks at language symbols. Two examples of this approach are represented by the research done by anthropologists Birdwhistle and Hall. In his work on body movement (kinesics), Birdwhistle isolates what he calls kines and kinemes (comparable to phones and phonemes in linguistics) and attempts to organize these nonverbal codes into a nonverbal linguistic structure, recognizing that there are wide intracultural disparities. Similarly, Hall, working with his theory of proxemics (cultural use of time and space), organizes his "isolates, sets and patterns"¹⁴ into a system comparable to linguistic phonemes, morphemes and syntax. Again, the cultural differences are strongly apparent.

It is the second area of research -- the external-variable approach -- that is of primary concern to this discussion, however. This approach, according to Harrison, "tends to isolate promising nonverbal behaviors and then to examine their relationships to other variables, such as the personality or emotional state of the performer, the interaction situation, or the judgments of an observer."¹⁵ It is this area of study that would encourage an examination of responses to sets of nonverbal cues such as music or film and a search for significant interactions in the responding environment. This approach tends to rely on experimental inquiry,

although most such research takes place under the auspices of human interaction and interpersonal communication.

The point to be taken from the discussion of nonverbal communication is that nonverbal cues reach us at a very low level of awareness, but are received in great quantity at all levels of human behavior. Indeed, the individual is culturally schooled in nonverbal communication encoding and decoding as an integral part of the human development process. It is no wonder, then, that nonverbal cues are so readily identifiable and useful in the interpretation of communication situations. It has been argued by some theorists that one learns to communicate nonverbally well in advance of verbal communication, and that, in an age of retouched photographs, rehearsed speeches, mass media techniques and the like, nonverbal cues are the most dependable sources of information about an individual, object or event.

There is an incredible amount of information in the environment to be processed at any given time. Some of this information is experienced through simple motor involvement -- stepping on glass, bumping into someone, riding a bicycle and so on. Other information is received constantly through the senses -- seeing objects, smelling fragrances and odors, hearing music or a train whistle. And, still other information is experienced as symbols -- the stop sign, 3.14159, student numbers, advertisements, and so on.

In the environment, we can distinguish two types of information: digital information and analogic information. According to Pryluck:

digital information generally includes words, numbers etc. They are usually socially agreed upon, arbitrary

units which can be manipulated according to fixed rules. Digital units are discrete and serial; fairly small units can be identified, which in use are presented one after the other. Rarely are digital units presented simultaneously. As arbitrary units, they have no particular significance apart from the system.

Analogic information includes everything else. Characteristically, analogic information is continuous and simultaneous. No matter what the environment, these kinds of information impinge on our consciousness. At home, in the street, in the classroom -- everywhere....¹⁶

Individuals deal with this continuous stream of stimuli through a process often described as selective perception. "Another way of speaking of the selection process is to say that we code aspects of the environment that are most significant to us. Coding can be defined as selectively structuring environmental data in such a way as to make it more easily usable, either immediately or at some future time."¹⁷

In his work on psychotherapy, Ruesch deals with differences in digital and analogic codes in the hope of identifying factors in human communication capable of adding to or detracting from mental health. One of his major contentions is that certain feelings or emotions are more easily and understandably coded and decoded in nonverbal, analogic forms.

But much of this discussion is related specifically to human interactional communication. To explore somewhat the relationship of nonverbal cues to the evaluation of verbal presentations, it will be useful to examine what Harrison refers to as "multi-band presentations":

Any message can be broken down into two parts: the content and the instructions on how to interpret that content. The source is likely to communicate his own evaluation of the content, his interest, his excitement, his intentions. Implicitly or explicitly, he tells the receiver how to react to the content. This part has been called meta-communication. The nonverbal band can carry content or instructions, but it seems to have a particularly important role in meta-communication. It allows the instructions to arrive at the same time as the content and... it tells us whether the message is sincere or sarcastic.¹⁷

In other words, the nonverbal cues operating in a medium (e.g., film) may directly contradict what is happening in the verbal portion of the communication. Although the speaker is talking about "peace and brotherhood," the Nazi armband and clenched fist may prove to be better indicators of the actual situation.

It should be remembered that nonverbal communication, like language, has been found to have a fairly regular structure which appears to be a product of social and cultural conditioning. It should also be remembered that, although most nonverbal cues reach the individual at a very low level of awareness, they are readily received and decoded innumerable times daily. Finally, since much nonverbal communication is essentially involuntary or unplanned, it may be inferred that nonverbal cues are sometimes more reliable indicators of the true "meaning" of the communication situation than verbal communication.

Hence, verbal and nonverbal communication are symbol systems which are decoded with considerable regularity in spite of the

infinite number of audience variables operating at any given time in this coding and decoding process. Music and film are subsets of that symbol system called nonverbal communication and should be expected to conform to many of the specifications established for nonverbal communication. It is instructional at this point to examine some specific aspects of these nonverbal subsets.

Film as Nonverbal Communication

Although an audio-visual medium usually containing speech, film is clearly a form of nonverbal communication. First of all, most film communication tends to be strongly visual -- regardless of its classification as entertainment, documentary or promotional. According to the Pennsylvania State film studies, the visual elements of film communication tend to be at least equally response-arousing and information-conveying as the audio portion. This theory is intuitively supported by a long history of filmmakers, who traditionally have utilized speech and sound effects as supplements to the photography.¹⁸ This fact is especially important when considering audience response to film communication. If decoding of nonverbal cues is a cultural process that is learned, a tradition of filmmaking that stresses visual cues should eventually condition its audience to utilize the visual track as the primary source of information and the audio track as the supplement to this information. Anyone who has gone to see a foreign film in a language he or she does not understand has tested this postulate. A strongly visual film will be understandable.

The visual communication in film is by no means the sole source of nonverbal information, however. If film may be theoretically divided into its component tracks -- one half audio and one half visual -- the nonverbal aspects of film communication represent at least 75% of the information presented. That is, the entire visual track and at least one half of the audio track contain nonverbal stimuli. It is especially important to consider the sound effects and music when examining the nonverbal aspects of film communication, because these stimuli act in combination with the visual track. That sound is often intended to be supplementary is really of little importance. The point to be made is that neither set of stimuli alone conveys exactly the same information as the audio and visual tracks convey in combination, and that the combination of visual stimuli with sound effects can conceivably be understandable without the speech. Clearly, then, nonverbal cues constitute a major portion of film communication.

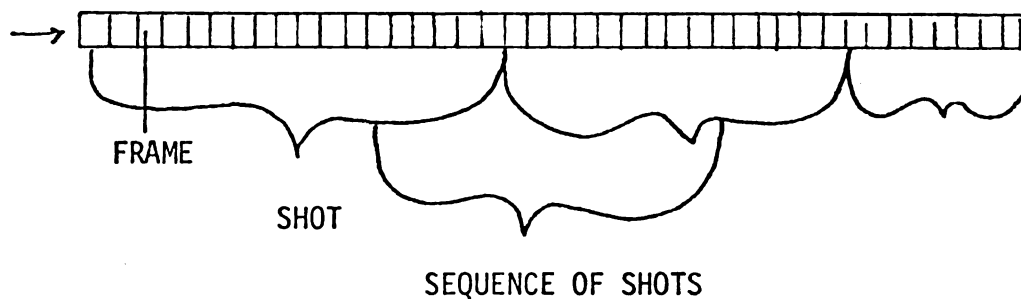
In addition, film communication embodies a fairly regular structure, just as can be said about kinesics, proxemics or linguistics.

The most basic element of the filmic structure is the single frame and the object within that frame. These frames are combined to form what is known as the shot (continuous footage, be it twenty-four frames or twenty-four million frames). The shot permits introduction of other objects and begins to suggest relationships between objects physically juxtaposed within the frame. Just as the individual word is helpless alone, the shot

requires juxtaposition with other shots to suggest meaning. The editing process (the "pasting together" of shots) is considered by nearly all filmmakers to be the creation or destruction of a great film. It is this process of linear sequencing that imposes structure on the film. Just as the rearrangement of "Jane is here" to "Is Jane here?" changes the meaning of the sentence, rearrangement of shot juxtaposition can produce significant changes in the meaning of the film.

This combination of shots, in turn, produces a sequence, which is then juxtaposed with still other sequences to form patterns within the film. This is the process Eisenstein calls "serial juxtaposition",¹⁹ that is, within the same track.

Serial Juxtaposition

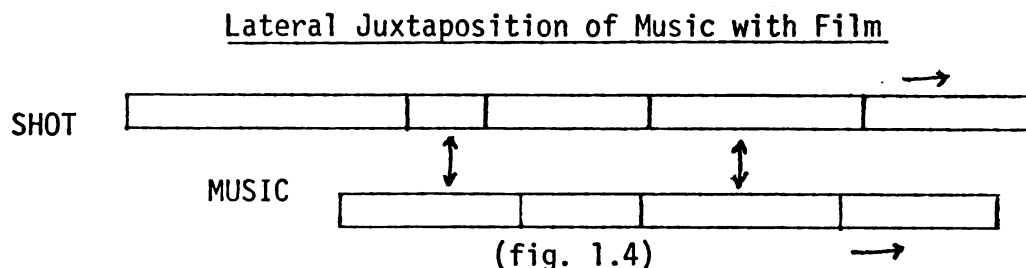


(fig. 1.3)

It should be noted that considerable analogic communication takes place at all phases of the language construction in film. Within the frame, an immediate cue to the importance of an object can be achieved through the use of the camera angle or distance from the object. A high shot from far away suggests importance. In addition, it should be remembered that the power of film is

largely a product of movement²⁰ -- the movement of frames to suggest time, the movement within the frame, the movement suggested by rapid cuts (montage) and so on. Each type of movement is deliberately manipulated by the filmmaker and suggestive of certain nonverbal meanings as an "intended" message. Audience variables determine whether or not this message is actually received.

Another dimension is added to this communication process when sound is added to the composition. This addition is referred to as lateral juxtaposition, because, although each track is physically independent, complex interrelationships are created by the combination. The "meaning" of two lion cubs cuffing each other and snarling and rolling around on the ground may be very different when juxtaposed with "Looney Tunes" music than the same visual stimulus juxtaposed with snarls and growls and dramatic music. Clearly, lateral juxtaposition makes use of the contention that perception is summative.



According to Freeburg, film communication makes three non-verbal appeals to its audience: 1) a purely sensual appeal to the eye; 2) an emotional appeal; and 3) an intellectual appeal.²¹

The sensual appeal is the graphic art of the film -- color, contrast, line, form, movement and other visual stimuli. Non-verbal cues associated with this appeal provide the setting, pace, tone, and overall artistry of the film. They may also provide clues as to quality of the production, expense, authenticity and competence of the filmmaker. This appeal is relevant even outside the context of the film because it refers to the art of composition and visual excitement of film in much the same way it could refer to the visual appeal of painting or sculpture.

The second, emotional, appeal is more closely tied to the film as a whole. Although isolated analogic cues may induce emotional response, these cues tend to be quite contextual in that emotion tends to be situation-oriented. That is, the emotional appeals are less specific in fact (less "seeable") than the visual appeals but are more specific to the activity within the film. One film may make an individual cry and another film may induce anger or fear. The dramatic elements of the film -- verbal and non-verbal -- operate to produce this emotional response, which is fundamentally a cumulative process. That is, a long shot from the top of a cliff may generate a second of "fear" and would, therefore, qualify as an emotional appeal for that second. In actuality, however, other nonverbal cues would need to be present at an earlier point in the film to suggest that distance is equated with danger which is, in turn, equated with fear. From a purely aesthetic sense, danger is not inherent in such visual

compositions as a view from the top of a cliff. Emotional appeals are most effective when they are contextual, and the use of analogic information (such as music) helps to heighten this appeal.

The third appeal, intellectual, is the all-encompassing aspect of film communication. Intellectual appeals may be related to the "intended message" of the film, to the technicalities and competencies of the message structure, to the analysis of subtle relationships within the film, and so on. Also cumulative and highly contextual, it is the intellectual appeal that leaves the individual wondering "but what does this mean?" And, as might be expected, this appeal is by far the most complex to describe. It encompasses visual stimuli in an attempt to "understand" or "assign meaning to" serial juxtaposition; it utilizes audio stimuli to make discriminations about and to elaborate on these visual juxtapositions; in short, it is the process of assigning meaning to the film as a whole.

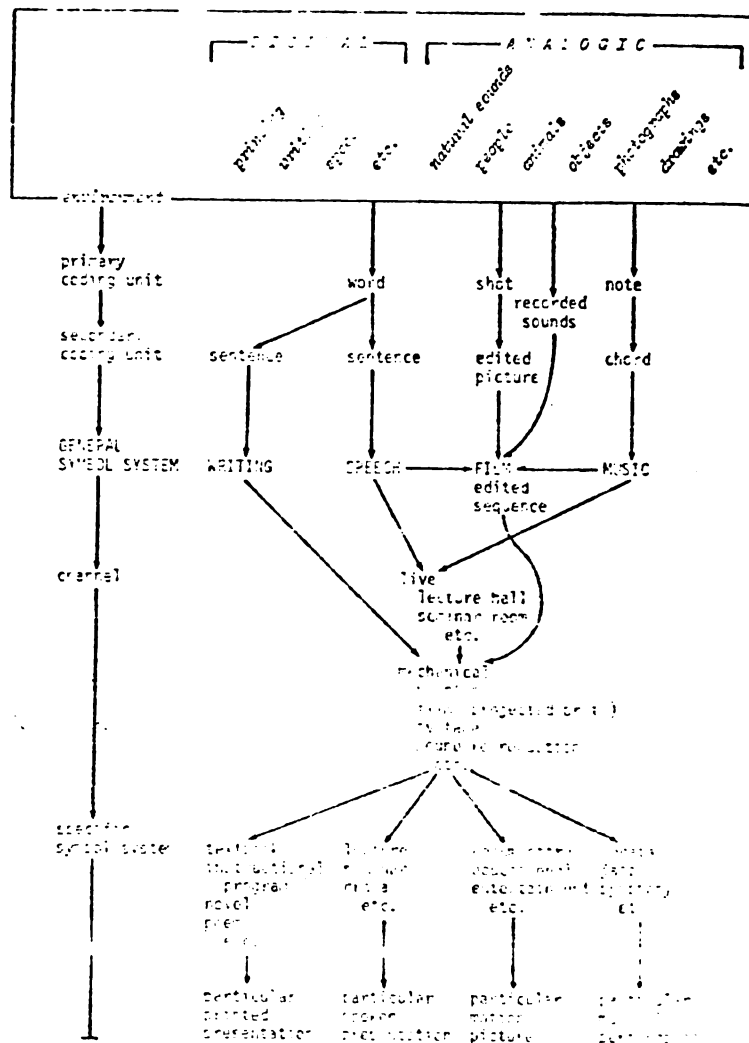
The real question to be asked at this point is just how effective a communication medium film can be said to be for eliciting audience response. Waldron suggests:

We know that the film viewer tends to project into or identify himself with what he sees on the screen; we know that film has, therefore, both emotional and intellectual force. We know that the illusion of reality on the screen is more immediately convincing than books or radio or still pictures, which are exclusively audio or visual, can be.²²

If such is the case, film can be said to be a forceful communicator, of sorts. Although still a vicarious, representational

process, the ability of film to simulate "reality" makes it more than a simple transmission channel; it represents a form of communication.

To better conceptualize the structure of film and its inter-relationship with music, writing, and verbal communication, the following illustration should prove useful:



(fig. 1.5)

First of all, it should be noted that writing, speech, film and music are all methods of coding the environment. Each is composed of a primary coding unit and a secondary coding unit which, in combination, produce the general symbol system. Of special importance is the inherent difference between 1) writing and speech and 2) film and music. The first pair is almost entirely digital (printing, writing, speech, etc.); the second pair is highly analogic (natural sounds, people, objects, scenery, etc.). Film, however, is at the center of the illustration, receiving both digital (verbal) and analogic (nonverbal) codes.

Clearly, the interrelationships produced by the juxtaposition of sight and sound are complex. Of special interest here is the emotional or intellectual appeals produced by lateral juxtaposition of certain visual and aural messages with certain types of music. Before it will be possible to examine such interactions, it will be necessary to understand some of the ways in which music operates as a form of nonverbal communication.

Music as Nonverbal Communication

Music is also a form of nonverbal communication containing a specific structural design. Instead of frames and shots, we are dealing with notes and chords, as illustrated in the previous diagram. Instead of two tracks, we are dealing with a single sensory input. But the nonverbal cues present in music communication are far from scarce or insignificant. Nor is the impact slight.

Typical musical variables include modes, rhythms, harmonies, melodies, rate of tempo and pitch. Like the single word or the single shot, a single note or melodic phrase "does not stand for any one thing, act, feeling, or passion, and can therefore mean any one of a thousand things and experiences, limited only by the hearer's wealth of imagery."²⁴

Clearly, music is an emotional and analogic form of non-verbal communication. It is impossible to see music; it is impossible to ascribe music listening behavior to a certain group or "type" of individuals. Still, music is symbolic in that it is a regularly organized phenomenon that is reflective of emotion and "meaning," (both "intended meaning" and "perceived meaning"). Although some generalities can be made about the effect of certain instruments, scales, rhythms, and tones, the "affective" meaning is different for each individual listener. As Schoen explains:

The problem of musical hearing of music arises from the common observation, which has been confirmed by numerous experimental investigations, that a musical composition arouses a greater variety of sensory impressions and mental operations and is valued and liked for a greater number of reasons, than is the case with any other art product. A number of persons may have a positive reaction to a piece of music, but if asked to state what it meant to them and what they got out of it, there are likely to be as many different and varied answers as there are people reporting.²⁵

Schoen identifies three levels of music appreciation:

1) sensation, 2) perception, and 3) imagination. The sensorial

listener derives whatever pleasure he receives from the total stimulus, independent of the musical structure. It is this level that may be considered the gross, undifferentiated involvement in music listening, and it is this level that is common to most individuals who listen to music. The perceptual response moves one level higher by imposing structure on the music listening experience. That is, at the perceptual level the listener is cognizant of tonal progression, sequence, motive, phrase, form, outline, contrast, ascent, descent, movement and other structural details. It is assumed that this level is somewhat more "intellectual" than the first and, according to Schoen, requires more exposure and training in music. Finally, the imaginal level includes the perceptual but adds to it the sense of the "imaginary" characteristic of only the trained musician and the superiorly talented layman, who have had frequent contact with music and who are acutely aware of aspects of music such as tonality and chordal resolutions. Since the imaginal level is a highly "structural" concept, it may be considered a more complex perceptual discrimination than the perceptual level.

Although interesting in a "music snobbery" sort of sense, the last level, and to a large extent the second level, is of little interest here. It would seem of greater value to approach music effect from a sociological viewpoint, a viewpoint of symbolic nonverbal communication applicable to a larger cross-section of the population.

According to Merriam, "music can be assigned even broader

symbolic roles in society and culture, roles in which the music itself is taken to symbolize values and even passions of the most specific yet most general nature."²⁶

A good example of such a symbolic role is the position held by jazz music between about 1920 and 1940. At that time, jazz was used by parents, civic leaders, religious leaders and the like as the symbol for an innumerable list of social problems. It was associated with crime, insanity, feeble-mindedness, barbarism, primitivism, savagery, and sundry other signs of the degeneration of youth. "The symbol of jazz as an inherently evil force was so prevalent and so intensely felt that as responsible a newspaper as the New York Times began to identify almost any unpleasant sound as jazz and to attribute evil influence to jazz no matter how distant the connection."²⁷

This phenomenon is characterized by the S -- R model discussed earlier. Jazz, a specific type of music (stimulus) was associated with negative and undesirable aspects of society and, when presented as a stimulus, invariably generated negative responses from those individuals making that association. It is the concept of association that is critical here. As a conglomeration of notes, tones, chords, and dischords, jazz is not inherently evil. It is the association of jazz with dope smoking, dark bars, drugs and illicit carryings-on that makes it possible to associate jazz with crime and degeneration. This same generalization process operates to link rock music with drugs or progressive thinking, country music with hicks or love of family, and classical music

with intellectual acuity or affected snobbery, depending on the perceptions of the individual receiving the stimulus. The point to be made is simply that associations -- be they positive or negative -- may be created through the discussion of or playing of certain types of music in relationship to "other" topics.

These associations can become more complex when tied with a visual medium such as film communication. According to Zackerman, music in combination with visuals is able to produce the following messages: 1) delineation of personality or character of film actors, 2) provision of subjective evaluation for an objective image, 3) emphasis for action, 4) telling a story, 5) recalling past events, and 6) fortelling the future.²⁸ In other words, music adds to the emotional and intellectual coding process taking place in film communication. Specifically, it aids in appropriate decoding of analogic information present in the film.

Soibelman adds that music "highly regarded by the audience might serve to secure favorable attitudes toward the visual and auditory material of films. This same device could operate in reverse."²⁹ This statement expresses exactly the spirit of this study.

The groundwork of conjecture, ideas and principles is now complete as it pertains to film and music as nonverbal communication symbol systems. The final step will involve an examination of pertinent empirical literature dealing with this subject. The following section will review this literature.

Music in Film Communication

Research in the area of interaction between music and film is, at best, scarce, and it is virtually nonexistent since the late 1940's and early 1950's. One reason for this gap is very simple: there has been no major research on FILM since this time, except for the studies done in the field of education. Unfortunately, the work done in education is of slight value to the foundation of this thesis, because it deals almost exclusively with learning and retention behaviors. The other reason is more subtle: music has traditionally been treated as a supplementary (and, hence, subordinate) variable in film communication -- not a transactional variable.

Music communication research has received much attention, but few findings pertain to audience characteristics beyond level of music training or exposure, and virtually none link music to a visual stimulus. For example, a great deal is known about the physical relationship of sound waves to the mechanisms of the ear; it is known that music listening behavior is present in nearly all populations of the world and that "types" of music vary culturally; it is known that the "average" music enthusiast is perfectly capable of appreciating music without ever having to identify a chordal progression, harmony or tone; and it is known that some music will make an individual tap a foot and other music will put that same individual to sleep. Intuitively obvious is the fact that music is everywhere and reaches everyone at one time or another. The car radio, the stereo, the background music

in offices and stores, TV and radio advertisements, and films -- all are sources of music exposure which an individual confronts every day. Assuming that the individual in question can select what he or she wants to hear, the emotional, intellectual and physiological responses can be predicted with a reasonable amount of dependability. But what happens when the reverse is true? How does the music affect the way that individual perceives that radio station, the manager of that office or store, the sponsor of the advertisement and the effect of that film?

The answers to these questions are very hard to come by in recent research. To construct the groundwork for this study, it should be useful to examine the results of only four researchers: Zackerman,³⁰ Tannenbaum,³¹ Gerrero,³² and Smith.³³

Zackerman, in his work with the Pennsylvania Army-Navy studies, cites the results of one study done to examine the relationship of music to film communication. He categorizes the following functional uses of music in films:

- 1) Informational functions where music provides information about objects or events such as the personality of a character, the setting of a scene, or in emphasizing action;
- 2) Emotional functions where music establishes certain atmospheres or moods, or cues which point up certain comic or dramatic events; and
- 3) Conceptual or integrative functions where music is used for unifying dramatic material, associating ideas, or connecting dialogue sequences.³⁴

Although a more analytical than empirical study, Zackerman has provided numerous possibilities for future empirical research. His three categories of film function give some direction in which to begin a more careful examination of elements of this functional process.

Working with three conditions of presentation of a one-act play presented over television, Tannenbaum completed a study of the effect of music on audience ratings of the play.³⁵ The three conditions used were 1) the stage presentation; 2) a one-camera recording made at the same time as the stage presentation with the single camera situated on the center aisle of the theater; and 3) a two-camera studio presentation utilizing all the techniques of TV production. Six groups were used -- a music and no-music condition for each of the presentation techniques. The results indicate that the addition of music added significantly to audience evaluation of the dynamism of the play, although the musical index did not significantly affect the evaluative judgments. This was true for all three treatment conditions. According to this study, then, the addition of music -- any music -- positively contributes to audience evaluation of the dynamism aspect of a visual/verbal presentation.

Gerrero's work investigates the influence of music on a film scene when that music is determined to be appropriate (congruent) to the scene.³⁶ He found that congruent music (as determined by the audience) had considerable impact upon the perceived meaning of a scene, and the extent of this power is directly related to the degree of congruency between the music and the scene.

The implications of this study deal with audience perceptions of music as a transactional variable in film communication. Clearly, the audience expects some relationship between a visual sequence and the music accompanying that sequence, and the stronger the relationship, the more "understandable" the film.

Although not pertaining to music in film communication, Smith's work on the relationship between compatibility of audience music preference and sponsor image evaluation serves as the ground-work for this study.³⁷ According to the results of that experiment, music incompatibility is capable of producing significantly negative evaluations of a message source. Smith's study produced the following findings:

- 1) music preferences have a definite effect upon the image of the message sponsor;
- 2) this effect has a significant influence on the image on three dimensions: safety, competency, and dynamism;
- 3) high or low interest in music or high or low interest in the message subject did not interact with music;
- 4) incompatible or disliked background music has a strong negative effect on the sponsor's image;
- 5) it is seemingly better to use no background music than to use disliked or incompatible background music; and
- 6) compatible music seems to have a greater effect on the safety dimension and thus contributes more to the trustworthiness image of the message sponsor.³⁸

Although this experiment was designed using radio commercials, it seems reasonable to assume that some of the same variables would operate in audio-visual communication mediums in much the same way. This is especially true since interest in music did not significantly affect the image evaluations.

The point to be taken from this review of the empirical literature is simply that this is an area which is wide open for research. Of the four studies cited, three pertain to audience behavior (audience evaluation of a play, audience "understanding" of a film scene, and audience evaluation of the sponsor of radio messages) -- and they represent virtually the extent of such research. Once again, it is to be remembered that music in audio-visual communication has, here-to-fore, been regarded as supplementary to the visual image. Why, then, should anyone want to investigate its effect on audiences?

Purpose of the Study

It is the purpose of this study to make a small move in the direction of linking subjective audience characteristics to audience reaction to film communication. Specifically, this study will investigate the transactional relationship between film and music used in the film as it affects audience evaluation of the film and the sponsor of the film.

It goes almost without saying that literally an infinite number of variables operate at any moment within and around an individual engaged in the film-watching/listening experience. Controlling for every conceivable variable is impossible, as is

usually the case in behavioral research. This does not doom such research to situation-specificity, however, so long as all experimental groups are handled in an approximate manner and care is taken to isolate important control variables.

Perhaps, a simple Message--Receiver model will help to illustrate the variables involved in the responding process:

Message--Receiver Variables in Film Communication

<u>Message</u>	<u>Receiver</u>
Copy	Internal variables
Vocal elements	External variables
Visual elements	
Music and sound	

(fig. 1.6)

Within the audio-visual message, four message elements are readily identifiable:

- 1) COPY. This is the verbal portion of the message, the actual script that is used. Its effectiveness is determined, at least in part, by appropriateness to the audience of word selection, grammatical structure, and content.
- 2) VOCAL ELEMENTS. This element pertains to the voice qualities of the actors or narrators -- qualities such as tone, pitch, inflection, character portrayal and general vocal control.
- 3) VISUAL ELEMENTS. This variable embodies the entire visual portion of the film -- the technical and aesthetic quality of the photography, brightness of screen, scratches on the film, quality of the projector, editing quality, "reality" vs. "dream state,"

quality and believability of sets, and any other visual impressions perceived by the audience.

4) MUSIC AND SOUND. This area represents the music and sound effects juxtaposed with the visual elements. Specifically, this is the background music and any nonverbal sound effects accompanying the visual image. (It is assumed here that structural differences in the music to be used such as tempo, rhythm, and melody will account for only a very small portion of any total variance, since it has been suggested earlier by Schoen³⁹ that only a small minority of the general population operates on a perceptual or intellectual level musically).

Clearly, the message cannot stand on its own and is of no real value without a receiver to provide some sort of evaluation. And, while message elements are relatively easily controlled in an experimental design, it is the receiver who poses the greatest management problem. The following are some common types of receiver variables:

1) INTERNAL VARIABLES. The internal variables are those hardest to identify and isolate. They include temperament and present mood of the respondent, predispositions about the investigator or subject matter of the film, physical disabilities such as sight impairment, reasons for participating in the experiment, distractions, general comfort, and past experiences related to all aspects of the experimental situation.

2) EXTERNAL VARIABLES. These are the variables associated with the environment of the experimental situation. Included are size

and location of room, seating arrangement, temperature, type of seats, distance from others, and other physical aspects of the testing environment.

It is the relationship between message and receiver that will be examined in this study. Specifically, this study will attempt to better define the importance of music in an audio-visual presentation as it relates to the receiver's perception of the message and message sponsor -- if, indeed, there are transactional relationships between music and film, and film and receiver.

The problem for this study, then, may be stated as the following: "What is the impact of audience preference levels for music types on evaluations of certain aspects of film communication?"

Hypotheses

Having completed the review of the literature, it is now possible to make some predictions about the outcomes expected for this study. The subsequent hypotheses are the following:

HYPOTHESIS 1: The type of musical accompaniment used in a promotional film will significantly affect the audience evaluation of the named sponsor of that film.

HYPOTHESIS 2: The type of musical accompaniment used in a promotional film will significantly affect the audience evaluation of the film itself.

HYPOTHESIS 3: If the musical accompaniment used is incompatible with audience musical preference, the resulting evaluation of the sponsor of the film will be significantly more negative than when no musical accompaniment is used.

HYPOTHESIS 4: If the musical accompaniment used is incompatible with audience musical preference, the resulting evaluation of the film itself will be significantly more negative than when no musical accompaniment is used.

HYPOTHESIS 5: If the musical accompaniment used is compatible with audience musical preference, the resulting evaluation of the sponsor of the film will be significantly more positive than when no musical accompaniment is used.

HYPOTHESIS 6: If the musical accompaniment used is compatible with audience musical preference, the resulting evaluation of the film itself will be significantly more positive than when no musical accompaniment is used.

HYPOTHESIS 7: The negative evaluation of the sponsor of the film will be significant at a higher level of confidence than will the positive evaluation.

HYPOTHESIS 8: The negative evaluation of the film itself will be significant at a higher level of confidence than will the positive evaluation.

Variables

The variables contained in the hypotheses listed above and investigated in this study include:

INDEPENDENT: Music. Music is defined as the musical accompaniment used as background for the film presentations. The music for this study is of two types -- rock and country.

DEPENDENT: Image. The image will be measured for the sponsor of the film. The instrument for measurement is defined as the three dimensions of credibility: 1) Safety, 2) Competency, and 3) Dynamism, defined by Berlo.⁴⁰

Evaluation of the film. This evaluation is defined as the audience attitude toward the quality and acceptability of the film itself en toto, measured with the general evaluative dimension of meaning described by Osgood.⁴¹

CONTROL: Evaluation of films in general. This evaluation is defined as the audience reaction to the quality and acceptability of films in general as a communication medium, using the general evaluative dimension of meaning described above.

Evaluation of the film. This evaluation, described as a dependent variable above, will also be used as a control variable for the test of specific

hypotheses.

Evaluation of the musical accompaniment. This evaluation is defined as the audience attitude about the musical accompaniment, measured using the general evaluative dimension of meaning. This evaluation will be used to verify one of the sampling criteria.

SAMPLE
SELECTION:

Musical preference. Musical preference is defined as the first-ranked music "type" measured by a respondent self-determined rank-order of possible musical choices.

Hearing ability. This variable is defined as a self-report of the hearing ability for each respondent.

Visual acuity. This variable is defined as a self-report of the visual acuity for each respondent.

The measures of these variables will provide the data to test the hypotheses described above in a posttest-only control group design described below.

Organization of the Study

This study is comprised of four chapters. The three chapters to follow deal with data collection, data analysis and results, and a discussion and summary of the results.

Chapter II contains a detailed description of the actual experiment; its design, sampling restrictions and procedures, questionnaire development and administration, message construction, and experimental procedures are discussed.

Chapter III presents the analysis of the data collected based on several different analysis designs. This chapter also presents the tabled results and lists the hypotheses as confirmed or not confirmed.

The final chapter, Chapter IV, offers a discussion of the findings and some attempts to theoretically explain these findings. A summary section completes the study.

CHAPTER II

METHODS AND PROCEDURES

The data collection process for this experiment was based on a "posttest-only control group" experimental design⁴² using five groups (two music treatment conditions, one no music condition, and two control groups). Each group was comprised of twelve college students, for a total of sixty respondents. These students were selected from approximately 400 students at Michigan State University in September, 1974.

The selection of respondents from the original 400 was based on the results of a pre-measure profile questionnaire administered two weeks prior to the experiment. The purpose of the questionnaire was to identify a population of respondents based on pre-determined sampling variables to facilitate the manipulation of the independent variable.

The Pre-Measure Profile

The pre-measure profile questionnaire (found in Appendix A) was divided into two sections: 1) demographic information and 2) media (radio, record player and tape music, television, and film) consumption behavior.

The demographic section of the questionnaire included sex, race, year in school, intended major, family income, age, and two

questions regarding hearing and vision acuity. The purpose of this section was only to eliminate hearing and vision impaired respondents.

The media consumption section was deliberately "cluttered" with media not wholly related to music (television and film) to somewhat conceal the music emphasis. The purpose of this section was to segment the respondents into groups with regard to an independent (sampling) variable -- music preference.

The pre-measure profile questionnaire was pretested with approximately twenty individuals similar to the respondent groups to check for clarity of questions and appropriateness of question presentation. Following the pretest, the questionnaire was administered, during classtime, to three introductory advertising classes of 100 or more students, and the final sample was selected from these approximately 400 respondents.

The Sample

Each pre-measure profile questionnaire was analyzed and separated into groups with respect to three control variables: hearing, vision and music preferences.

Because visual and aural acuity are essential to the conduct of such an experiment, the pre-measure profile questionnaire was used as a screening device to eliminate any individuals either aware of an uncorrected sight or hearing impairment or who had not undergone examinations to determine the state of these senses. Thus, the control for hearing and vision was accomplished by

respondent "self-reports."

Then, the questionnaires were screened for "music preference" patterns. Music preference is here defined as the number one selection made by the respondent in a self-determined rank-ordering of music types. That is, given "jazz, country, classical, rock and folk" as possible choices, the music preference for this study would be the type of music designated as #1. The music preference pattern is defined as a grouping by the pair of music types ranked #1 and #5, first and last choice. That is, all respondents designating rock as first choice and country as last choice became one group; those ranking jazz first and country last became another group and so on.

Because a simple rank-order does not indicate the size of the scale for the individual (i.e., the distance between number 1 and number 5), the respondent was asked to describe how his or her music listening time is allocated with regard to each of the five categories. This question was used as a second check on the music variable. A subject who spends nearly as much time listening to the type of music ranked last as he or she does listening to that of first preference would not be expected to discriminate against any of the five types of music and, hence, would not be an appropriate subject for this study. To control for this possibility, any individual indicating time spent listening to choice #5 was eliminated from the sample.

The initial screening process, then, involved elimination of all individuals 1) with uncorrected hearing impairments, 2) with

uncorrected vision impairments, 3) who had never been tested for hearing or vision acuity, and 4) who spend time listening to their least favorite type of music.

Of those remaining, the respondents who listed rock as their first choice, country as their last choice, and the other three types of music somewhere in between were selected for the sample. (The rock/country music preference pattern was selected because this combination represented the greatest number of possible respondents). All others were eliminated.

Finally, 129 students were asked to participate in the experiment, sixty of which were actually able to do so. These sixty respondents were randomly assigned to the five treatment conditions upon arrival at the experiment cite, providing the study with five groups of students compatible and incompatible with the same two types of music.

Message Construction

Four visually identical copies of a five minute promotional film (for a Michigan college) were prepared for this experiment, varying only the soundtrack. Since narration was to be used, the speakers were recorded once, reproduced for each of the copies of the film, and mixed with designated background music in a sound lab to provide the best possible reproduction. This soundtrack was recorded on magnetic tape and synchronized with the 16mm image of the film.

Treatment Conditions

Five treatment conditions were used in this experiment,

corresponding to four variations of the film and one no-treatment control group. These conditions were as follows:

FILM AND COMPATIBLE MUSIC: This group was exposed to a copy of the promotional film using rock music as the background accompaniment and the narrator's voice as the source of verbal information. This was the "compatible" condition because all respondents had indicated preference for rock music.

FILM AND INCOMPATIBLE MUSIC: This group was exposed to a copy of the film using country music -- least preferred -- as background music and the same narration. This describes the "incompatible" music condition because all respondents had indicated *country* music as the least preferred music type.

FILM AND NARRATION: This group was exposed to a copy of the film containing only the narration, no music. This group is the control or standard of comparison between the compatible and incompatible conditions.

FILM ONLY: This group was exposed to a completely silent copy of the film to account for the effect of visual stimuli in the film treatment.

NO TREATMENT CONTROL: This group neither saw the film nor heard the narration. These respondents were used to provide "pre-treatment" information about predispositions toward the "objects" evaluated in the experiment.

The Posttest Questionnaire

The posttest questionnaire administered to the four treatment groups consisted wholly of semantic differential evaluations of 1) the sponsor of the film; 2) the film itself; 3) the music in the film (a check on the compatible/incompatible sampling pre-measure); 4) the narration in the film (except for the visual only group); and 5) films in general.

The semantic differential scales used to evaluate the sponsor of the film were modeled after Berlo's et al⁴³ measures of source credibility dimensions. Five pairs of bi-polar adjectives were included for each dimension. Only general evaluative scales were used to evaluate the music, narration, film and films in general.

The fifth, no treatment group, completed a questionnaire seeking perceived semantic evaluations of the sponsor of the film (Saginaw Valley College), rock music, country music, the use of "testimonials" in promotional film production, and small Michigan colleges. Once again, the credibility dimensions of Safety, Competency and Dynamism were used to evaluate the sponsor of the film and general evaluative scales were used for evaluation of all other variables. (For copies of the questionnaires, see Appendix A).

The questionnaire was pretested on an audience similar to the respondents actually used in the study. At that time, needed revisions were made.

The Experiment

The subjects were instructed to arrive on the Michigan State campus at Wells Hall, section C, third floor between 6:15 and 6:30 PM. There, they were greeted by an investigator who randomly assigned (by a pre-determined system) each individual to one of the rooms reserved for the experiment.

Prior to the experiment, the rooms had been randomly assigned treatment conditions, and the rooms themselves had been randomly ordered with respect to respondent assignment rotation. Investigators were randomly assigned treatment conditions and corresponding rooms.

Once informed of room assignment, the subjects were instructed to proceed to that room and be seated. Investigators were present to oversee this procedure and ascertain that all respondents took seats in clear visibility of the screen and audibility of the stereo.

When all sixty subjects had arrived, films were shown simultaneously to four of the five groups. (For a detailed description of investigator instructions, see Appendix B). At the end of the film presentation, the investigator in charge of that room distributed the questionnaire. Instructions for filling in the questionnaire were printed at the top of each section and were read aloud by the investigator. Any questions pertaining to the actual mechanical responding process were answered.

The fifth group was not exposed to a film. This group received their questionnaire as soon as everyone had arrived and

filled it out immediately. Again, instructions for doing so were printed at the top of each section and were read aloud by the investigator. Questions pertaining to the completion of the questionnaire were answered.

When the respondents had completed the evaluations, they were thanked and permitted to leave individually. The experimental sessions lasted approximately 15 minutes.

CHAPTER III

RESULTS OF THE EXPERIMENT

As described earlier in this study, several measures were taken during the experiment to test the hypotheses presented in the previous chapter. Before presenting the results, it should be useful to review the design of the analysis and the variables involved.

Measures were taken of the following: 1) attitudes toward the source or sponsor of the messages measured by the Safety, Competency and Dynamism credibility dimensions; 2) attitudes toward Films in General as a communication medium; and 3) attitudes toward The Film used in the study. In total, there were five measures.

The design for the analysis is best described by Figure 3.1 below, and is the basis for much of the analysis. The analysis completed to test attitudes toward The Film was not a repeated measures model, however, but rather, a simple analysis of covariance (Figure 3.2).

Design for the Analysis of Covariance
with 3 Repeated Measures

	Safety	Competency	Dynamism
Group 1	$\begin{matrix} n_1 \\ \vdots \\ n_{14} \end{matrix}$		
Group 2		n = 10	
Group 3		n = 12	
Group 4		n = 12	
Group 5		n = 12	

Figure 3.1

Analysis of Covariance
One Dependent Variable

	The Film
Group 1	n = 14
Group 2	n = 10
Group 3	n = 12
Group 4	n = 12
Group 5	n = 12

Figure 3.2

Finally, it should also be useful to briefly describe the primary mode of analysis of this study -- analysis of covariance. McNemar offers the following definition:

[Covariates provide] a precise method for making allowance for an uncontrollable variable and ...the sampling error adjustment which is needed in testing the statistical significance of the difference between "corrected" means. This method is applicable whenever it seems desirable to correct the difference on a dependent variable for a known difference on another variable which for some reason could not be controlled by matching or by random sampling procedures.... It is useable for either large or small samples. It is assumed that the dependent variable has a distribution which does not depart too far from the normal type and that the variances from group to group are similar.⁴⁴

It is important at this point to indicate that all of the data collected for the analyses was gathered in the same manner, using the same technique -- semantic differential scales -- and approximating interval level data necessary for analysis of variance models. Measures were taken on various semantic scales using a range of 1 to 7.

The tests of the hypotheses included the following analyses of covariance:

- 1) analysis of covariance with one covariate and three dependent variables, five groups, repeated measures design (Table 1 below);

*Covariates included separate measures of attitudes about Film communication and The Film (used in the study).

- 2) analysis of covariance with two covariates and three dependent variables, four groups, repeated measures design (Table 2 below); and
- 3) analysis of covariance with one covariate and one dependent variable, four groups, simple analysis (Table 3 below).

In the first two designs, the three dependent variables were treated as the repeated measures and the treatment groups represented the levels. That is, for the first analysis of covariance, the three source evaluation measures were Safety, Competency and Dynamism, and the covariate was attitude measures for Films in General. For the second analysis, the source evaluation measures remain the same, but a second covariate, The Film (the specific film shown), was added to the covariate Films in General. Because measures of attitudes about the film were taken in only the four groups seeing the film, the no treatment group was dropped from this analysis. The final analysis of covariance was computed using the measures of attitudes toward Films in General as the covariate.

The results of the analysis of covariance tests are presented in the following tables:

TABLE 1
Summary of Analysis of Covariance
(One covariate, five groups)

Sources of Variance	df	MS	F
Music Treatment Conditions	4	22.14	13.67*
Error	54	1.62	
Credibility Measures	2	1.00	1.82
M X G	8	0.85	1.54
Error [#]	110	0.55	

The error term for the interaction test and the Measures main effect is computed as S: M X G.

* significant at the .01 level

TABLE 2
Summary of Analysis of Covariance
(Two covariates, four groups)

Sources of Variance	df	MS	F
Music Treatment Conditions	3	6.50	4.96*
Error	42	1.31	
Credibility Measures	2	1.43	2.98
M X G	6	0.97	2.02
Error	88	0.48	

* significant at the .01 level

TABLE 3
Summary of Analysis of Covariance
(Two covariates, four groups)

Sources of Variance	df	MS	F
Music Treatment Groups	3	3.92	4.34 [*]
Error [#]	44	0.90	
Total	47		

* significant at the .01 level

[#] MS_w

Because not all subjects in the "country" group found the accompanying background music to be incompatible with their music preferences and not all subjects in the "rock" group found the accompanying music compatible ("incompatible" being a mean for the music evaluation of 3.9 or below; "compatible" being a mean for the music evaluation of 4.1 or above), those subjects indicating compatibility with the music were included in the compatible (rock) group and those indicating incompatibility with the music were included in the incompatible (country) group. Since music preference is used in this experiment as the crucial sampling variable, this interchange of subjects was deemed necessary for maintenance of this condition. Hence, the groups used for all analyses of covariance described above had unequal n's.

The mean values for each treatment group on the three image

dimensions and for the evaluation of The Film were then computed. The results of this computation appear in Tables 4 and 5 below:

TABLE 4
Mean Summary Table

	Safety	Competency	Dynamism	X
Compatible	6.03	5.84	5.26	5.71
Incompatible	3.86	3.10	3.88	3.61
No Music	5.33	5.02	4.60	4.98

TABLE 5
Mean Summary Table

	Compatible	Incompatible	No Music
The Film	4.95	3.14	3.98

To test the directional hypotheses (Nos. 3, 4, 5, and 6), the statistical analysis used was Dunnett's test for paired comparisons with a control mean.⁴⁵ The difference between each treatment group and the control (no music) group was determined by taking the average of the three credibility dimensions for each group and subtracting. This number was

then tested for significance using Dunnett's table. Once again, The Film was treated as a measure separate from the Safety, Competency and Dynamism dimensions. The results of these paired comparisons are presented in Tables 6 and 7 below.

TABLE 6

Dunnett's Paired Comparison Tests
Safety, Competency and Dynamism

Comparison		tD Value	
		0.05	0.01
Compatible - Control	0.73	0.94	1.26
Incompatible - Control	1.37*	0.94	1.26

* significant at the 0.01 level

TABLE 7

Dunnett's Paired Comparison Tests
The Film

Comparison		tD Value	
		0.05	0.01
Compatible - Control	0.97*	0.77	1.05
Incompatible - Control	0.84*	0.77	1.05

* significant at the 0.01 level

The analyses revealed the following results of tests of the hypotheses:

HYPOTHESIS 1: The type of musical accompaniment used in a promotional film will significantly affect the audience evaluation of the named sponsor of that film. CONFIRMED.

HYPOTHESIS 2: The type of musical accompaniment used in a promotional film will significantly affect the audience evaluation of the film itself. CONFIRMED.

HYPOTHESIS 3: If the musical accompaniment used is incompatible with audience musical preference, the resulting evaluation of the sponsor of the film will be significantly more negative than when no musical accompaniment is used. CONFIRMED.

HYPOTHESIS 4: If the musical accompaniment used is incompatible with audience musical preference, the resulting evaluation of the film itself will be significantly more negative than when no musical accompaniment is used. CONFIRMED.

HYPOTHESIS 5: If the musical accompaniment used is compatible with audience musical preference, the resulting evaluation of the sponsor of the film will be significantly more positive than when no musical accompaniment is used. NOT CONFIRMED.

HYPOTHESIS 6: If the musical accompaniment used is compatible with audience musical preference, the resulting evaluation of the film itself will be significantly more positive than when no musical accompaniment is used. CONFIRMED.

HYPOTHESIS 7: The negative evaluation of the sponsor of the film will be significant at a higher level of confidence than will the positive evaluation. CONFIRMED.

HYPOTHESIS 8: The negative evaluation of the film itself will be significant at a higher level of confidence than will the positive evaluation. NOT CONFIRMED.

CHAPTER IV

DISCUSSION AND SUMMARY

The Effect of Music Preference

As indicated by the tabled results in Chapter III, music preference clearly had an effect on evaluations of dependent variables used in this study. This effect was significant at the 0.01 level for all analyses of covariance and, hence, operated as a meaningful variable in audience evaluations of both the dimensions of credibility and of The Film.

The Music Treatment Conditions -- variance between groups -- produced the only significant F value, however. The non-significant Measures main effect demonstrates a similar impact of the music preference variable across the three dimensions of credibility. Berlo et al.⁴⁶ reports these dimensions to be independent, but of each other, not of relationships to other variables. This absence of differential effect, however, meets one of the correlation requirements necessary for the use of a repeated measures analysis of covariance design. Although there was not a significant Measures by Groups interaction for the four and five group analyses, it will be useful for this discussion to examine the data for such interaction in a three group

analysis -- the two treatment conditions and the no music condition.

Some explanation should be given at this point for the selection of the covariates. It was reasoned that respondents placing a high value on film as a communication medium might also rate a film presentation proportionately higher than a respondent rating film as a disreputable, boring medium. Likewise, it was felt that a respondent who reacted strongly for or against the production of the specific film shown would transfer some of this attitude to his or her evaluation of the sponsor of that film. In an effort to account for these interaction problems, it was decided to use measures of general evaluations for Films in General and The Film as covariates. This inclusion of covariates is a demonstration of principles of attitude structures discussed in Chapter I. However, these issues are not the central focus of this discussion.

Of primary importance is the significant F value for the Music Treatment Conditions test. This variance means simply that the independent variable operated on each group in such a way as to provide significant differences between the five treatment groups. This significant value, combined with the covariates, suggests that there is a complex inter-relation between audience music preference, the message and audience response. Further, the significant difference between groups confirms the overall effect hypothesis and provides the needed basis for continuing with the specific tests of the hypotheses

using the procedure outlined in Chapter III.

Comparing the results of this study with those of the Simpkins and Smith⁴⁷ study, it is no surprise that the incompatible music treatment produced significantly negative audience evaluations of the film and the sponsor of the film. Nor is it surprising that the compatible treatment failed to produce significantly positive evaluations of the sponsor of the film. These findings confirm those of the Simpkins and Smith experiment. The divergent measurement used in this study pertains to the audience evaluation of The Film. Although the Simpkins and Smith study did not attempt to secure measurements for the ads used in the experiment, the findings suggest that compatible music does not significantly improve audience response to some elements of promotional communication. According to the findings in this study, however, compatible music can significantly affect audience evaluation of the total message of which the music is a part. This phenomena will be discussed at length later in this chapter.

Perhaps, an examination of Tables 4 and 5 will help to better explain the nature of the differences between treatment groups. Since no hypothesis deals with individual dimensions of credibility (only the average of the three dimensions), it is not necessary that they be examined separately. However, since the Simpkins and Smith study mentioned above deals with individual dimensions, it will be useful to do so here for the sake of direct comparison.

Clearly, the introduction of compatible background music contributed to the sponsor evaluation for all three dimensions of credibility. Likewise, the introduction of incompatible music produced a drop in the evaluation scores for all three dimensions.

It should be noted, however, that the degree of change (See Table 8 below) reflected by the difference between the no music and the music treatment groups varies from one dimension of credibility to another, when examined separately.

TABLE 8
Differences of Mean Scores

	Safety	Competency	Dynamism	The Film
Compatible - Control	0.70	0.82	0.66	0.97
Incompatible - Control	1.47	1.92	0.72	0.84

The Simpkins and Smith⁴⁸ study found Competency and Dynamism to be the dimensions most sensitive to music preference. The results of this study indicate, however, that the use of incompatible music strongly affects the Competency and Safety dimensions. In fact, checking with the tabled differences necessary for significance using Dunnett's test (Tables 6 and 7), the 0.72 difference between the control and the incompatible

treatment group on the Dynamism dimension is 0.22 from being significant at the 0.05 level! In contrast, the Safety and Competency dimensions are significant at less than the 0.01 level (differences of 1.47 and 1.92 respectively).

As would be expected from the nonsignificant Measures effect (see Table 1), the dimensions of credibility operate similarly with the addition of compatible music. Again, Competency is the most affected dimension, significant at less than the 0.05 level on Dunnett's table. Safety, though not significant, is the next most sensitive, and Dynamism least.

Averaging across dimensions and comparing means (Table 4) permits a better understanding of the tests of the hypotheses.

The addition of compatible music increases the mean evaluation to 0.73 -- which is 0.21 short of significance at the 0.05 level. Clearly, the addition of compatible music to the promotional film positively affected the audience evaluation of the message sponsor, even though this effect was significant on only the Competency dimension.

As is to be expected, the juxtaposition of the film with incompatible music produced a comparable -- though more significant -- change in the evaluation of the sponsor. This affect is significant (again, using the average of the three dimensions of credibility) at less than the 0.01 level, even though the Dynamism dimension was not found to be significantly affected when computed alone.

The audience evaluation of The Film (Table 5) is the only

instance where the addition of compatible music had as much of an absolute effect as incompatible music. Comparing means, there is a 0.97 difference between the compatible and the control means, and only a 0.84 difference between the control mean and the incompatible group. Using Dunnett's test for planned comparisons, both values are shown to be significant at less than the 0.05 level.

Clearly, the audience evaluation of the message/medium is somehow different from the audience evaluation of the source of that message. One reason for this disparity seems almost too obvious to be plausible. That is, if music is commonly associated as being a part of film communication, it seems logical that evaluations of the music and the message should be very highly correlated. That is, if the mean of the music evaluation for the compatible group is 5.0, the mean of the control group 4.0, and the mean of the incompatible group 3.0. it would be intuitively obvious to expect roughly the same evaluations of the context in which the music appears. In other words, asking for an evaluation of the film itself may somehow call attention to the musical element moreso than an evaluation of the sponsor, since the music is a part of the film.

Checking the means for the compatible and incompatible treatment groups, it was found that the compatible group gave the music used in the film a 5.5 mean score, and the incompatible group rated the music an average of 3.5 -- that is, + 1.5 from the 4.0, neutral, score. Clearly, the "distance" from neutrality

was the same for both groups.

Explaining the host of differences in the credibility dimensions is nowhere near as explicit, however. The study confirms Simpkins and Smith's⁴⁹ findings that incompatible music produces the greatest absolute change in mean scores. That study did not measure the effect of compatible music, but a quick analysis of the tabled mean scores⁵⁰ suggests that this effect was not significant.

It may be postulated from an approach/avoidance behavior model of human behavior (which simply states that individuals approach positive stimuli and avoid negative stimuli), that incompatible music calls attention to itself moreso than does compatible music. That is, the individual, as a matter of habit, surrounds him or herself with music that is pleasant, and, hence, pleasant music becomes an almost expected aspect of the environment. It is more easily ignored. On the other hand, the intervention of music found to be unpleasant becomes a pervasive negative aspect of the environment (even at a low level of awareness) and is disruptive to the formation of positive images.

Looking again at the effect of compatible and incompatible music on the individual measures of credibility (Table 8), some possible reasons for differences between measures become apparent.

According to the Tannenbaum study,⁵¹ the addition of any music contributed significantly to the audience evaluation of the Dynamism of a play. This finding may account for the absence of

significance in either treatment group on this dimension. That is, if the addition of music contributes to the Dynamism dimension, somehow this variable must interact with the tendency to like or dislike the music. Unfortunately, this theory directly conflicts with the Simpkins and Smith study, which found Dynamism to be the most sensitive scale. It can only be postulated this time that the discrepancy might be explained by the addition of visual stimuli.

The most sensitive dimension in this study, Competency, was found to be very highly correlated with audience evaluation of The Film. This should be no surprise, though it does offer some possible explanation for the responsiveness of this scale to music preference. Those respondents who felt that the film was poorly produced also tended to rate the sponsor of the film negatively. Intuitively, this says that a source that produces an inferior message is perceived somehow as incompetent. Of special importance, however, is the relationship of Competency to music selection. If it is remembered that compatible and incompatible music choice affect the audience evaluation of The Film equally, it can be suggested that each negative evaluation of the music will produce a negative evaluation of the film. And, if this is the case, the positive correlation between evaluations of The Film and evaluations of the Competency dimension of credibility could account for the significant activity -- both negative and positive -- of this dimension. The question to be asked here is which of the transactional variables has the most "power" for influencing behavior, and under what conditions?

Clearly, this discussion is all guesswork and will not be theoretically sound until more specific relationships between aspects of visual communication, music preference, and sponsor credibility dimensions are isolated and investigated. Still, the results of this study offer a number of implications for future research. And, in addition, the disparities between this study and the Simpkins and Smith study add possibilities to future research endeavors.

The obvious questions to be asked are 1) Why does incompatible music produce a greater absolute deviation than compatible music? 2) Why was Dynamism found to be the least responsive dimension of credibility and Competency the most responsive? 3) How strong is the correlation between evaluation of the music and evaluation of the film, and how dependable a predictor is this relationship of other audience responses? 4) How strong is the correlation between evaluations of Films in General and evaluations of the sponsor of the film, and what implications does this relationship have for the selection of film as a promotional medium? 5) What effect, if any, would using evaluations of small Michigan colleges as a covariate have on the analysis?

Obviously, this list is nowhere near complete. The effect of music preference on audiences extends well beyond film communication, and, in turn, innumerable other variables operate in any film communication message. As mentioned earlier, music is one of the most pervasive elements of our society. If music

preference can affect image formation or modification in film communication, what is the effect of music preference on audience evaluations of radio programming, the manager of the store playing Christmas music, the manager of the office, the doctor or dentist, or anyone else using music as part of a communication message? And, with respect to film communication, what are the other possible effects of music preference beyond sponsor evaluation? For example, what effect could music preference have on learning or retention measures in film? Finally, if music preference can produce a significant effect on audience perceptions of source credibility, what would be the effect of preference about other message elements -- visual techniques, vocal qualities, timeliness of the message, length of the message, novelty, and so on? Clearly, the list of possibilities is very long. Of special importance, however, is the class of variables involved -- the fact that these are subjective audience - centered measures. It is important that the emphasis of communication planning focus on the audience to which the message will be directed, NOT the message elements.

Summary

The purpose of this study was to investigate the effects of music in film communication. Specifically, this study was designed to measure the impact of music preference under different music environments on audience evaluations of the film and the sponsor of the film. The results of this study support the contention

that music can affect the formation of images about the message sponsor and can affect the evaluation of the message itself.

The results of this study can be summarized as follows:

- 1) music preferences have a definable effect upon image modification;
- 2) music preferences have a definable effect upon audience evaluation of the message in which the music is presented;
- 3) incompatible or disliked background music has a strong negative effect on the audience evaluation of the film and the sponsor of the film;
- 4) compatible or "liked" background music has a lesser absolute effect on the audience evaluation of the sponsor of the film than incompatible music;
- 5) incompatible music seems to have its greatest effect on the Competency and Safety dimensions of credibility; and
- 6) compatible music seems to have its greatest effect on the Competency dimension of credibility.

Clearly, music preference can be said to be a segmenting variable in film communication and should be carefully considered at the onset of such a production. The implications of this segmentation effect is that audiences cannot be treated as receivers of messages but, rather, should be considered active participants in the communication process. It is not enough to design the message and make the selection of background music on the basis of assumed congruence between music and message; the selection should be based on knowledge about audience preferences, if the message is to be successful. The point to be remembered is that communication is not a one-way broadcast system; it is a process.

Limitations

It is recognized that an experiment performed using 60 students from Michigan State University cannot be blandly generalized to a number of other populations. It is here maintained, however, that students do represent that "real world" to a large degree, and it is believed that research done using students as respondents can produce results of considerable merit.

It is also recognized that this experiment was performed once, using one film and one sponsor. This fact is not so much a limitation, however, as it is an invitation to other investigators to duplicate or refute the results.

Finally, the respondents used in this experiment were in no way representative of the "intended" audience for the message -- that is, high school seniors about to make a decision about college choice. Perhaps a "better" test would have selected from a sample more appropriate to the content of the message. It should be remembered, however, that the salience of the topic was probably equally low for the respondents used in this study, providing somewhat of a "control" for this specific shortcoming.

END NOTES

¹Richard H. Gerrero, "Music as a Film Variable," Unpublished Ph.D. Dissertation, Michigan State University, 1969, p.8.

²John V. Zackerman, Music in Motion Pictures: Reviews of Literature with Implications for Instructional Films. Pennsylvania State University Instructional Film Research Program (Port Washington, New York: U.S. Naval Training Devices: enter, office of Naval Research Technical Report No. SDC 209-7-2, 1949).

³David K. Berlo, The Process of Communication (New York: Holt, Rinehart and Winston, 1960), pp. 30-33.

⁴C. Glen Walters and Gordon W. Paul, Consumer Behavior, an Integrated Framework (Illinois: Richard D. Irwin, Inc., 1970), p. 281.

⁵Gordon W. Allport, "Attitudes," in Readings in Attitude Theory and Measurement, ed. by Martin Fishbein (New York: John Wiley and Sons, Inc., 1967), p. 8.

⁵D. Katz, "The Functional Approach to the Study of Attitudes," Public Opinion Quarterly, Vol. 24 (Summer 1960), pp. 163 - 204.

⁶Charles Osgood, George Suci and Percy Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957), p. 9.

⁷Walters et al., Consumer Behavior, p. 269.

⁸David K. Berlo, James B. Lemert and Robert J. Mertz, "Dimensions for Evaluating the Acceptability of Message Sources," Public Opinion Quarterly 33:563-576 (Winter 1969-70).

⁹Osgood et al., The Measurement of Meaning, p. 17.

¹⁰Berlo et al., "Dimensions for Evaluating the Acceptability of Message Sources," p. 573.

¹¹Berlo et al., "Dimensions for Evaluating the Acceptability," p. 576.

¹²Randall P. Harrison, "Nonverbal Communication: An Approach to Human Communication" in Approaches to Human Communication, p. 257.

¹³Ibid., p. 259.

¹⁴Edward T. Hall, The Hidden Dimension (New York: Doubleday & Co., Inc., 1969), p. 94.

¹⁵Harrison, "Nonverbal Communication," p. 259.

¹⁶Calvin Pryluck, "Structural Analysis of Motion Pictures as a Symbol System," AV Communication Review, Vol. 16, No. 4 (Winter 1968), p. 380.

¹⁷Ibid., p. 381.

¹⁷Harrison, "Nonverbal Communication," p. 258.

¹⁸Zackerman, Music in Motion Pictures.

¹⁹Pryluck, "Structural Analysis of Motion Pictures," p. 395.

²⁰Joseph Von Sternberg, "Film as a Visual Art," in Film and the Liberal Arts, ed. by T. J. Ross (New York: Holt, Rinehart and Winston, Inc., 1970), p. 199 - 215.

²¹Victor Oscar Fraeburg, The Art of Photoplay Making (New York: Arno Press & The New York Times, 1970), p. 11.

²²Gloria Waldron, The Information Film (New York: Columbia University Press, 1949), p. 7.

²³Pryluck, "Structural Analysis of Motion Pictures," p. 374.

²⁴Max Schoen, The Psychology of Music (New York: The Ronald Press Company, 1940) p. 104.

²⁵Ibid., p. 78.

²⁶Alan P. Merriam, The Anthropology of Music (Northwestern: Northwestern University Press, 1964), p. 88.

²⁷Ibid., p. 90.

²⁸Zackerman, Music in Motion Pictures.

²⁹D. Soibelman, Therapeutic and Industrial Uses of Music (New York: Columbia University Press, 1948), p. 13.

- ³⁰Zackerman, Music in Motion Pictures.
- ³¹Percy H. Tannenbaum, "The Indexing Process in Communication," in Communication and Culture, ed. by Alfred G. Smith (New York: Holt, Rinehart and Winston, 1966), p. 485.
- ³²Richard H. Gerrero, "Music as a Film Variable."
- ³³John D. Simpkins and Jack A. Smith, "Effects of Music on Source Evaluations," Journal of Broadcasting, Vol. 18 (Summer 1974), pp. 361 - 367.
- ³⁴Zackerman, Music in Motion Pictures.
- ³⁵Osgood et al., The Measurement of Meaning, p. 26.
- ³⁶Gerrero, "Music as a Film Variable."
- ³⁷Simpkins et al., "Effects of Music," pp. 361 - 367.
- ³⁸Ibid., pp. 364 - 365.
- ³⁹Schoen, The Psychology, p. 78.
- ⁴⁰Berlo et al., "Dimensions for Evaluating the Acceptability."
- ⁴¹Osgood et al., The Measurement of Meaning.
- ⁴²Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally & Company, 1966), p. 13.
- ⁴³Berlo et al., "Dimensions for Evaluating the Acceptability."
- ⁴⁴Quinn McNemar, Psychological Statistics (New York: John Wiley and Sons, Inc., 1949), p. 92.
- ⁴⁵Roger E. Kirk, Experimental Design: Procedures for the Behavioral Sciences (California: Brooks/Cole Publishing Company, 1969), p. 94.
- ⁴⁶Berlo, et al., "Dimensions for Evaluation the Acceptability."
- ⁴⁷Simpkins and Smith, "Effects of Music."
- ⁴⁸Ibid., p. 365.
- ⁴⁹Ibid., p. 366.
- ⁵⁰Jack A. Smith, "Music Preferences as Influencing Agents in Image Formation," Unpublished M.A. Thesis, Michigan State University, 1972 (Abstract).

Name: _____ Student #: _____
Address: _____ Phone: _____

CONSUMER PROFILE QUESTIONNAIRE

Section I: Please check or fill in the correct answer

1. Sex: _____ Male (1)
_____ Female (2)

2. Race: _____ Black (1)
_____ White (2)
_____ Brown (3)
_____ Other (4)

3. Age: _____

4. Year in school: _____ Freshman (1)
_____ Sophomore (2)
_____ Junior (3)
_____ Senior (4)
_____ Grad. (5)

5. Major or intended major: _____

6. Approximate annual combined income of family:

_____ less than 10,000 (1)
_____ 10,001 - 15,000 (2)
_____ 15,001 - 20,000 (3)
_____ 20,001 - 25, 000 (4)
_____ over 25, 000 (5)

7. Have you ever had a hearing test? _____ Yes (1) _____ No (2) _____ DK (3)

If yes, were any hearing impairments diagnosed? _____ Yes (1) _____ No (2)

If yes, has it been corrected? _____ Yes (1) _____ No (2)

8. Have you ever had a vision test? _____ Yes (1) _____ No (2) _____ Dk (3)

If yes, were any vision impairments diagnosed? _____ Yes (1) _____ No (2)

If yes, has it been corrected? _____ Yes (1) _____ No (2)

Section II

9. Do you own a record or tape player? ____ Yes (1) ____ No (2)
10. Do you collect records or tapes? ____ Yes (1) ____ No (2)
11. Approximately how many records or tapes do you presently own? ____
12. How often would you say you purchase records or tapes?
____ One or more per week (1)
____ One per month (2)
____ One every six months (3)
____ Less than one per year (4)
13. Do you own or have access to a radio? ____ Yes (1) ____ No (2)
14. On the average, how often do you listen to the radio?
____ 4 or more hours per day (1)
____ 1 or 2 hours per day (2)
____ less than 1 hour per day (3)
____ 1 hour every two or three days (4)
____ 1 hour or less per week (5)
15. Please rank the following types of music in order of your listening preference. Please number them with 1 being the type of music you most prefer and so on to 5 being the type of music you least prefer. (Please number all types).
- ____ Folk
____ Rock
____ Country
____ Classical
____ Jazz
16. On the average, approximately how many hours per day do you spend listening to music? ____
17. On the average, approximately how many hours per day do you spend listening to
____ Jazz
____ Country
____ Classical
____ Rock
____ Folk
18. Do you play a musical instrument? ____ Yes (1) ____ No (2)
If yes, which instrument? ____
How long have you been playing an instrument? ____
Does anyone else in your family plan an instrument? ____
19. Have you ever taken a music appreciation course? ____ Yes (1) ____ No (2)

20. Do you own or have frequent access to a television set?
 _____ Yes (1)
 _____ No (2)
21. On the average, how many hours per day do you watch television?
 (Please circle the correct response).
 1 2 3 4 5 6 7 8 9
22. On the average, do you watch TV most often
 _____ in the early morning (7AM - 10AM) (1)
 _____ mid-morning (10AM - noon) (2)
 _____ early afternoon (noon - 4 PM) (3)
 _____ late afternoon (4PM - 6PM) (4)
 _____ prime time (6PM - 10PM) (5)
 _____ late evening (10PM - 2AM) (6)
23. On the average, how often would you say you go to a movie?
 _____ One or more per week (1)
 _____ One per month (2)
 _____ One every six months (3)
 _____ Less than one per year (4)
24. Please rank the following types of movies in order of your watching preference. Please number them with 1 being the type of movie you most prefer and so on to 5 being the type of movie you least prefer. (Please number all types).
 _____ Comedy (1)
 _____ Documentary (2)
 _____ Drama (3)
 _____ Musical (4)
 _____ Western (5)
25. Have you ever taken a motion picture history or theory class?
 _____ Yes (1)
 _____ No (2)
 a drama class?
 _____ Yes (1)
 _____ No (2)
 a photography class?
 _____ Yes (1)
 _____ No (2)
 a radio/TV class?
 _____ Yes (1)
 _____ No (2)
 an art class?
 _____ Yes (1)
 _____ No (2)

COPY TEST QUESTIONNAIRE

Name: _____ Student #: _____

SECTION I: In this section, you will be asked to evaluate a number of concepts using a series of adjective "opposites." For example, if you were asked to evaluate the quality of the color in a film, you would proceed as follows:

If you feel that the quality of the color is very closely related to one end of the scale, you would place your X as illustrated below:

Bright X _____ Dull

or

Bright _____ X Dull

If you feel that the quality of the color is quite closely related to one or the other end of the scale (but not extremely), you would place your X as illustrated below:

Bright _____ X _____ Dull

or

Bright _____ X _____ Dull

If the quality of the color seems only slightly related to one side as opposed to the other side (but is not really neutral), then you would place your X as illustrated below:

Bright _____ X _____ Dull

or

Bright _____ X _____ Dull

The direction toward which you check, of course, depends upon which of the two ends of the scale seems most characteristic of the thing you're judging.

If you consider the concept to be neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, then you would place your X in the middle space:

Bright _____ X _____ Dull

PLEASE EVALUATE THE FOLLOWING CONCEPTS:

1. Saginaw Valley College

openminded	_____	closedminded
unjust	_____	just
friendly	_____	unfriendly
unpleasant	_____	pleasant
hospitable	_____	inhospitable
untrained	_____	trained
experienced	_____	inexperienced
unqualified	_____	qualified
skilled	_____	unskilled
uninformed	_____	informed
aggressive	_____	meek
hesitant	_____	emphatic
forceful	_____	forceless
noninnovative	_____	innovative

2. the film you have just seen

pleasant	_____	unpleasant
repelling	_____	attracting
valuable	_____	worthless
bad	_____	good
sociable	_____	unsociable
disreputable	_____	reputable
interesting	_____	boring
inferior	_____	superior

3. the music in the film you have just seen

unsociable	_____	sociable
reputable	_____	disreputable
boring	_____	interesting
superior	_____	inferior
unpleasant	_____	pleasant
good	_____	bad
repelling	_____	attracting
valuable	_____	worthless

4. the narration in the film you have just seen

worthless							valuable
sociable							unsociable
disreputable							reputable
superior							inferior
unpleasant							pleasant
good							bad
boring							interesting
attracting							repelling

5. films in general

inferior							superior
pleasant							unpleasant
bad							good
attracting							repelling
worthless							valuable
sociable							unsociable
disreputable							reputable
interesting							boring

APPENDIX B: INVESTIGATOR INSTRUCTIONS

Groups 1, 2, 3, and 4

BE SURE THAT ALL RESPONDENTS ARE PROPERLY SEATED. SEATS WILL BE DESIGNATED FOR YOU, SO MAKE SURE THAT ALL RESPONDENTS ARE CONFINED TO THIS DESIGNATED SEATING ARRANGEMENT.

READ THE FOLLOWING:

First of all, I'd like to thank you for coming this evening. You've been selected to help us evaluate a promotional film. You will first be shown the film, and then you will receive a questionnaire on which to record your impressions.

SHOW FILM. (GROUPS 1, 2, and 3: TURN ON THE PROJECTOR. THERE WILL BE 3 SECONDS OF LEADER ON THE TAPE RECORDER, SO WHEN THE COUNT-DOWN ON THE FILM REACHES 3, TURN ON THE TAPE RECORDER).

HAND OUT THE QUESTIONNAIRE.

READ THE FOLLOWING:

Now that you've seen the film, please complete this questionnaire as completely and true to your own impressions as possible. You need not fill in your name or student, but please write in male or female in the space left for "Name," whichever is appropriate.

To avoid any confusion, I will read the instructions aloud and answer any questions pertaining to the questionnaire at this time. (ANSWER ONLY QUESTIONS ABOUT FILLING IN THE QUESTIONNAIRE, NOTHING ELSE).

READ FIRST PAGE OF QUESTIONNAIRE.

Okay, you may begin. When you've completed the questionnaire, you may leave. Other rooms may still be in session, however, so please leave as quickly and quietly as possible.

THANK EACH RESPONDENT AS HE OR SHE LEAVES!

THANK YOU!

INVESTIGATOR INSTRUCTIONS: GROUP 5

READ THE FOLLOWING:

First of all, I'd like to thank you for coming this evening. You've been selected to help us evaluate some components of promotional communication.

HAND OUT QUESTIONNAIRE.

Please complete this questionnaire as completely and true to your own impressions as possible. You need not fill in your name or student number, but please write in male or female in the space left for "name", whichever is appropriate.

To avoid any confusion, I will read the instructions aloud and answer any questions pertaining to the questionnaire at this time. (ANSWER ONLY QUESTIONS ABOUT FILLING IN THE QUESTIONNAIRE, NOTHING ELSE).

READ FIRST PAGE OF QUESTIONNAIRE.

Okay, you may begin. When you've completed the questionnaire, you may leave. Other rooms may still be in session, however, so please leave as quickly and quietly as possible.

THANK EACH RESPONDENT AS HE OR SHE LEAVES!

THANK YOU!

BIBLIOGRAPHY

Books

- Beebe-Center, J. G. The Psychology of Pleasantness and Unpleasantness. New York: Russell & Russell, 1965.
- Benoit-Levy, Jean. The Art of the Motion Picture. New York: Coward-McCann, Inc., 1946.
- Berlo, David K. The Process of Communication. New York: Holt, Rinehart and Winston, Inc., 1960.
- Birdwhistell, Ray L. Introduction to Kinesics. Louisville: University of Kentucky Press, 1952.
- Boorstein, Daniel J. The Image: A Guide to Pseudo-Events in America. New York: Harper & Row, Publishers, 1961.
- Bosmajian, Haig A. (ed.) The Rhetoric of Nonverbal Communication: Readings. Illinois: Scott, Foresman and Company, 1971.
- Burch, Noel. Theory of Film Practice. New York: Praeger Publishers, 1973.
- Copland, Aaron. What to Listen for in Music. New York: McGraw-Hill Book Co., 1931.
- Dale, Edgar. How to Appreciate Motion Pictures. New York: Arno Press and the New York Times, 1970.
- Diserens, Charles M. The Influence of Music on Behavior. Princeton: Princeton University Press, 1926.
- Feldman, Shel (ed.). Cognitive Consistency, Motivational Antecedents and Behavioral Consequents. New York: Academic Press, 1966.
- Farnsworth, Paul R. The Social Psychology of Music. New York: The Dryden Press, 1958.
- Festinger, Leon. A Theory of Cognitive Dissonance. Stanford, California: Stanford University Press, 1964.

Hall, Edward T. The Silent Language. New York: Doubleday, Inc., 1959.

Harrington, John. The Rhetoric of Film. New York: Holt, Rinehart and Winston, Inc., 1973.

Jacobs, Lewis (ed.). The Movies as Medium. New York: Farrar, Straus & Giroux, 1970.

Jarvie, I. C. Movies and Society. New York: Basic Books, 1970.

_____. Towards a Sociology of the Cinema. London: Routledge & Kegan Paul, 1970.

Jinks, William. The Celluloid Literature: Film in the Humanities. California: Glencoe Press, 1971

Kracauer, Stanley. Theory of Film. New York: Oxford University Press, 1960.

Lindgren, Ernest. The Art of the Film. London: George Allen & Unwin, Ltd., 1963.

Ludin, Robert W. An Objective Psychology of Music. New York: The Ronald Press Co., 1953.

Lynch, William F. The Image Industries. New York: Sheed and Ward, 1959.

MacCann, Richard D. (ed.). Film and Society. New York: Scribner's, 1964.

May, Mark A. and Lumsdaine, Arthur A. Learning from Films. New Haven: Yale University Press, 1958.

Merriam, Alan P. The Anthropology of Music. Northwestern: Northwestern University Press, 1964.

Meyer, Leonard B. Emotion and Meaning in Music. Chicago: University of Chicago Press, 1956.

Osgood, Charles, Suci, George, and Tannenbaum, Percy. The Measurement of Meaning. Chicago: University of Illinois Press, 1957.

Payne Fund Studies, The. Motion Pictures and Youth. New York: Macmillan, 1933, 1935.

Reid, J. C. and MacLennan, D. W. Research in Instructional Television and Films. Washington: U.S. Government Printing Office, 1967.

Rommtevit, Ragnar. Selectivity, Intuition and Halo Effects in Social Perception. Oslo: Oslo University Press, 1960.

- Ross, T. J. Film and the Liberal Arts. New York: Holt, Rinehart and Winston, Inc., 1970.
- Ruesch, J. and Bateson, Gregory. Communication: The Social Matrix of Psychiatry. New York: W. W. Norton, 1951.
- _____ and Kees, W. Nonverbal Communication. Berkeley: University of California Press, 1956.
- Schoen, Max. The Effects of Music. New York: Harcourt, Brace and Co., Inc., 1927.
- _____. The Psychology of Music. New York: The Ronald Press Co., 1940.
- _____. The Understanding of Music. New York: Harper & Brothers, 1945.
- Seldes, Gilbert. The Movies Come from America. New York: Scribner's, 1937.
- Soibelman, D. Therapeutic and Industrial Uses of Music. New York: Columbia University Press, 1948.
- Stevenson, Ralph and Debrix, Jean R. The Cinema as Art. England: Penguin Books Ltd., 1965.
- Travers, Robert M. A. Research and Theory Related to Audio-visual Information Transmission. Revised Edition. U.S. Department of Health, Education and Welfare, 1967.
- Tyler, Parker. The Shadow of an Airplane Climbs the Empire State Building. New York: Doubleday & Co., Inc., 1972.
- Waldron, Gloria. The Information Film. New York: Columbia University Press, 1949.
- White, David Manning and Averson, Richard (eds.). Sight, Sound and Society: Motion Pictures and Television in America. Boston: Beacon Press, 1968.
- Wolfenstein, M. and Leites, N. Movies: A Psychological Study. New York: Fress Press, 1950.
- Zackerman, John V. Music in Motion Pictures: Reviews of Literature with Implications for Instructional Films. Pennsylvania State University Instructional Film Research Program. Port Washington, New York: U. S. Naval Training Device, office of Naval Research, Technical Report No. SDC 209-7-2, 1949.

Articles

- Berlo, David K., Lemert, James B. and Mertz, Robert J.
 "Dimensions for Evaluating the Acceptability of
 Message Sources." Public Opinion Quarterly,
 33 (1969), 563-576.
- Cook, Page. "Film Music as Noise," from "The Sound
 Track." Films in Review, March (1968). 162 - 166.
- Katz, E. and Foulkes, D. "On the Use of the Mass Media as
 'Escape': Clarification of a Concept." Public Opinion
 Quarterly. 26 (1962), 377 - 388.
- Maccoby, E. and Wilson, W. "Identification and Observational
 Learning from Films." Journal of Abnormal Psychology.
 55 (1957), 76 - 87.
- Osgood, Charles and Tannenbaum, Percy H. "The Principle
 of Congruity in the Prediction of Attitude Change."
Psychology Review, 62 (1955), 42 - 55.
- Washburn, M. F. and Dickenson, S. L. "The Sources and Nature
 of the Affective Reaction to Instrumental Music," in
The Effects of Music. Max Schoen (ed.), op. cit.,
 121 - 131.
- Weld, Henry P. "An Experimental Study of Musical Enjoyment."
American Journal of Psychology, 23 (1912), 245 - 308.

Unpublished Material

- Gerrero, Richard H. "Music as a Film Variable." Unpublished
 Ph.D. Dissertation, Michigan State University, 1969.
- Pallett, Earl M. "Music Communication Research: The Connotative
 Dimensions of Music Meaning." Unpublished Ph.D. Dissertation,
 Michigan State University, 1967.
- Smith, Jack A. "Music Preferences as Influencing Agents in
 Image Formation." Unpublished M. A. Thesis, Michigan
 State University, 1972.

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