A COMMUNICATIONS METHOD OF
NON-THEATRICAL FILM PRODUCTION:
A DESCRIPTION AND A DEMONSTRATION

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This is to certify that the

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ABSTRACT

A COMMUNICATIONS METHOD OF
NON-THEATRICAL FILM PRODUCTION:
A DESCRIPTION AND A DEMONSTRATION

by Francis Leon McConkey

American universities are faced with serious prob-
lems of escalating enrollments, rapid increases in new
knowledge and concurrent recognition of the need to improve
the quality of instruction. University film production
units have been given the opportunity to share in an all-
out effort to solve these problems. While their resources
are not equivalent to those of commercial producers, they
have not yet realized the potential of untapped resources
near at hand.

For almost half a century there has developed a
body of research findings in film and communications which
seems to offer much needed help to the overburdened producer
of non-theatrical films. But, to date, there has been no
systematic effort to coordinate these findings or develop
a system in which they can be applied.

It was the purpose of this study to develop and
describe through demonstration, a method of planning, pro-
ducing and evaluating films which, recognizing the practical
considerations and limitations of university film units,
provides for application of research findings and techniques

in the critical areas of film design and evaluation.

A communications method of non-theatrical film production was developed to enhance the successful performance of university productions. It accomplishes this objective in these specific ways: (1) it calls for the use of relevant research findings as aids to film design, (2) it provides for evaluation of actual performance with the sponsor and selected audience members, (3) it calls for analysis and interpretation of results by the producer, who (4) makes any modifications in the film which are necessary and feasible, (5) modifies the method if necessary, (6) identifies any findings which may be of subsequent use to himself and to others, and (7) shares his findings with the sponsor to whom he makes recommendations for supplementary materials and other modifications in use procedures which may have been indicated by an interpretation of the findings.

The film, A Second Look, planned, produced and evaluated for this study, can be obtained by contacting the Lansing Community Services Council, Lansing, Michigan. It is a 20 minute, sound, black and white, 16 millimeter production. It is typical of a university film producer's assignments.

To demonstrate experimentally how research findings might be adapted to a creative process, a review of literature in communications and film research was conducted to find materials appropriate to the nature and purpose of the film. Selections from the writings of some 18

authors were used to construct a rationale for each of the film's sequences.

The operational objective of the film was to gain acceptance for the film's message by the sponsor and the target audience. The implied objective was to persuade potential employers of Lansing to hire handicapped workers.

To demonstrate how university film units can conduct simple but effective evaluations, the film was tested with the sponsoring committee of the whole, a subcommittee, two target audiences selected by the sponsor, and one small group representing business, industry and education.

The tests developed for the study were designed to illustrate alternate ways of feeding relevant information back into the production system. A practical consideration of the evaluation was that it provide valid and pertinent information for both producer and sponsor without being unnecessarily lengthy or cumbersome to administer.

To assist the producer in making use of his evaluations, an analysis of results was demonstrated.

FINDINGS

1. For the Coordinating Committee for the Handicapped, the sponsor, it was concluded that, (1) the film had a positive effect, and (2) the film was accepted.

2. The Employ the Handicapped Committee, a sponsor subcommittee that worked closely with the production, was

asked to predict typical target audience member responses to various test items. It was concluded that, (1) they predicted the film would have a positive effect on the typical target audience member, but that (2) there would be little change in the way they thought of handicapped workers on such dimensions as Safety, Flexibility and Productivity, and that (3) the film would be accepted by the typical target audience member.

3. As a result of the analysis of the predictions of this subcommittee as compared with actual responses of target audiences, it was concluded that, (1) with Service Club B the predictions were close, and (2) with Service Club A the predictions were close but erred consistently on the conservative side.

4. As a result of the analysis of the data collected from Service Club A, it was concluded that, (1) for this target audience the film had a positive effect, and (2) the film was accepted by this target audience.

5. As a result of the analysis of the data collected from Service Club B, it was concluded that, (1) a significant change in the members' positions toward hiring handicapped workers was not detected, (2) the film had a positive effect on the way they thought of handicapped workers on such dimensions as Safety, Flexibility and Productivity, and (3) the film was accepted by this target audience.

6. From an informal critique of the film by a small group of professional people involved in the hiring process came suggestions for using the film and an insight into whether or not the application of theory was working.

7. In general, on the basis of the evidence collected from five showings and the administration of four evaluative devices, it was concluded that the experimental film, A Second Look, designed and evaluated by the communications method described in this study, achieved its operational objective, i.e., acceptance of the film's message by the sponsor and target audience.

To demonstrate the ways in which the method can be of help to university film producers, an analysis of results indicated that application of the method used in this study can be: (1) an aid to film design; (2) an aid to instruction; (3) an aid to experimentation; (4) an aid to film modification; (5) an aid in use situations; (6) an aid to modification of the method; and (7) an aid to subsequent production, planning and development.

The communications method of non-theatrical film production is recommended to university film producers as a means of strengthening their units. It takes cognizance of the limitations of university film units in that the procedures it requires of them are well within their capabilities. It also recognizes the tremendous potential of such film units to influence human behavior. It is toward this end that the method is advanced.

A COMMUNICATIONS METHOD OF

NON-THEATRICAL FILM PRODUCTION:

A DESCRIPTION AND A DEMONSTRATION

By

Francis Leon McConkey

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
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Dedicated To

My wife, Carmella, and my children, Mary Lee, Scot and
Christi; their understanding and giving of themselves
made the difference.

ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION

THE PROBLEM

Generally, university film producers do not use the findings of research as guides to message design, nor do they use research techniques to evaluate their films.[1] In ignoring empirically developed theories in message construction, they are not taking advantage of the growing body of literature in this area. In passing over experimental research techniques which could be used to evaluate their productions, they seem to be violating the 'feedback' principle of good communications.

BACKGROUND OF THE PROBLEM

A large body of supporting film research literature exists, the most extensive being that produced by the Instructional Film Research Program under a contract between Pennsylvania State University (then the Pennsylvania State College) and the United States Departments of the Army and

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[1]"We would be less than candid if we didn't acknowledge that many university film makers, like their colleagues in industry, never go beyond the 'souffle' stage in their development."--Ernest D. Rose, "Motion Picture Research and the Art of the Film Maker," Journal of the University Film Producers Association, XV (1963), p. 8.

the Navy. It might be said that the general objective of
this research was to determine the governing factors in
films which influence audience behavior. No small part
of the program was the development of research tools.

Ken Kendall, of the National Film Board of Canada,
reporting on the Instructional Film Research Program for
the Society of Motion Picture and Television Engineers,
concluded that, "The most important implication of this
work is that existing methods of film production and utili-
zation can be greatly improved by applying research methods."[2]

The Instructional Film Research Program stirred up
some controversy by daring to offer some rather concrete
proposals to producers and users of film, based on findings
of the research. Film director and author Don Livingston
said, "One time I found that a certain organization was
spending time, money, and effort on a survey designed to
discover the merits of opticals in teaching films! This
is like trying to discover the merits of commas, periods,
and paragraphs in a textbook."[3]

In spite of such criticism, the Instructional Film
Research Program's 'principles' have remained unchallenged
in kind until recently. Robert Travers, in his presidential

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[2]Ken Kendall, "Film Production Principles—The Sub-
ject of Research," Journal of the SMPTE, LVIII (May, 1952),
p. 441.

[3]Don Livingston, Film and the Director (New York:
The Macmillan Company, 1953), p. 192.

address given by retiring presidents of the American Psy-
chological Association, described the beginning of a two
year research project to determine, among other things,
if more information is acquired when the same information
is transmitted simultaneously through both the auditory
and visual senses than when a single channel is used.[4]

This seems to challenge the 'both' factor identi-
fied in the Instructional Film Research Project studies
which led to the suggestion that both audio and visual
channels should be properly integrated.[5]

Another Penn State principle was that of Picture
Primacy. "The influence of the motion picture is primarily
in the picture, secondarily in the accompanying language
and/or music, and is relatively unaffected by 'slickness'
of production."[6]

In recent research at Stanford University, Breitrose,
Maccoby, and Rose found in one particular case that "the
contribution of the picture to a correct understanding of
the situation was almost negligible in comparison to the

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[4]Robert M. W. Travers, "Transmission of Information
to Human Receivers," Presidential Address of Division 15,
Educational Psychologist, II (1964), pp. 1-5.

[5]Charles F. Hoban, Jr., and Edward B. vanOrmer,
Technical Report No. SDC 269-7-19 INSTRUCTIONAL FILM RE-
SEARCH (Rapid Mass Learning), 1918-1950, Navexos P-977,
Special Devices Center (Port Washington, L.I., N.Y.).

[6]C. R. Carpenter, Special Report No. 1, Practical
Principles Governing the Production and Utilization of
Sound Motion Pictures (The Pennsylvania State College
Instructional Film Research Program, 1 August 1950), p.
10.

contribution of the sound track."[7]

An unfortunate consequence of dissent and conflicting findings is that many film makers continue to operate as though no research had been conducted at all.

One attempt to resolve this neutralizing effect was that of Edward Levonian, Associate Research Psychologist at the University of California, Los Angeles. After experimenting with a film tailored for a specific audience, Levonian concluded that:

> The term 'pre-production planning' seems inapt,
> for it appears to imply that it is possible to
> plan a film before shooting begins so that the
> final product will have a predicted effect . . .
> there is little evidence to indicate such a pre-
> diction has been achieved to any great extent.[8]

Levonian's method provides for tentative versions of a film before producing a 'final' version.

Such an approach has academic value for communications researchers and thus potential value for university film producers, but it does not solve the immediate and pressing need for these small, non-commercial units to do a better job of producing non-theatrical films. They operate under the stringent limitations of low budgets, short production time and with few personnel. They are not afforded the luxury of lengthy experimentation, yet they are

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[7]Rose, op. cit., p. 11.

[8]Edward Levonian, "Development of an Audience-Tailored Film," AV Communication Review, VIII (1960), p. 67.

expected to produce films at least comparable in quality to those of larger, commercial units.

The temptation is to release films of low quality with only a token effort, if any, to determine actual effect.

The need is for an approach which considers the limitations of the university film unit while recognizing the demands made on it. It would be discouraging if, as Levonian indicates, film producers could not predict actual performance with a fair degree of confidence on the basis of careful pre-production planning. It would be discouraging, too, if the wealth of research findings in film and communications had no concrete value in terms of planning, production and evaluation for the university film producer.

IMPORTANCE OF THE STUDY

One question rarely, if ever, answered satisfactorily in the literature is the practical application of theory. Non-theatrical producers are cautioned against its indiscriminate use. "It would be folly for film makers to rush in blindly and begin applying what little we have learned in such experiments helter-skelter in everything they do." Rather, they should search " . . . not merely for patterns of ideas but for understanding."[9]

It is worth considering whether simple, inexpensive, yet meaningful studies might not eventually be provided

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[9]Rose, op. cit., p. 23.

for in film contracts without impairing production effec-
tiveness or efficiency.

One weakness of the traditional process of film
making is an almost total dependence on intuition. Intui-
tive thinking, at its best, may achieve excellent results
quickly and, indeed, may find solutions that analytic methods
could not find. Intuitive thinking at its worst may achieve
bad results quickly and the damage may never be discovered.
As Bruner points out, "Some men are good intuiters, others
should be warned off."[10]

To the film designer who worries lest creativity
suffer under the yoke of scientific influence, reassuring
words can be found in Bronowski.

> . . . there exists a single creative activity,
> which is displayed alike in the arts and sciences.
> It is wrong to think of science as a mechanical
> record of facts, and it is wrong to think of the
> arts as remote and private fancies.[11]

And, while this does not negate the possibility
that the product of the scientist could be used to restrict
the creativity of the artist, science historian, Derek J.
deSolla Price believes that to stand on the shoulders of
others is to take advantage of the cumulative knowledge

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[10] Jerome S. Bruner, The Process of Education (New
York: Vintage Books, Random House, 1963), p. 60.

[11] J. Bronowski, Science and Human Values (New York
and Evanston: Harper Torchbooks/Science Library, Harper
and Row, 1959), p. 35.

of 5000 years of recorded history.[12]

On the surface Bronowski appears to be contradicting this borrowing from others when he cautions, "A man must see, do and think things for himself, in the face of those who are sure that they have already been over all that ground."[13]

In fact, he is saying that truth must be tested in action. "Science confronts the work of one man with that of another and grafts each on each. . . . Only by these means can science pursue its steadfast object, to explore truth."[14]

Hoban and vanOrmer argue that although the research findings of the past 30 years may be fragmentary and subject to qualifications, they can facilitate the process of predicting the influence a film will have on its audience.[15]

The film designer must concern himself with the film medium's potential to affect human behavior. As Berlo said, " . . . we communicate to influence—to affect with intent."[16]

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[12]Derek J. deSolla Price, _Science Since Babylon_ (New Haven and London: Yale University Press, 1961), p. 93.

[13]Bronowski, _op. cit._, p. 78.

[14]_Ibid._, p. 81.

[15]Hoban and vanOrmer, _op. cit._, p. 4.

[16]David K. Berlo, _The Process of Communication, An Introduction to Theory and Practice_ (New York: Holt, Rinehart and Winston, 1960), p. 12.

If it is the purpose of university film producers to influence human behavior consistently rather than depending upon the hit-or-miss and ill-defined ways of the few truly gifted and artistic geniuses in their midst, they may find it useful to operate within some standard, rational system. Hoban and vanOrmer are optimistic about the application of research findings in such a system.

> Perhaps one of the virtues of research in an applied field, such as that of the instructional motion picture, is that judgments involved in each step of the process can be 'educated' judgments. Such judgments, formed on the basis of experimental and testimonial evidence, (though with an awareness of alternatives and hunches), are more likely to lead to the production of more effective instructional films and to a more effective way of utilizing them.[17]

It may be said that successful films have been made and will continue to be made without a thought being given to the findings of relevant research. Two questions should be raised in reference to such a claim: (1) how is the term 'successful' to be operationalized; and (2) if the film is 'successful' how can it help future designers without their knowing the rationale of its construction?

The use of empirically developed theory in design, and research techniques in evaluation can add to the art of film production because these methods can be explained and either used or rejected by others; their effect is cumulative.

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[17]Hoban and vanOrmer, op. cit., p. 4.

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The unique functions of university film units—those of teaching future producers of educational films by apprenticeship, developing better methods of production, and serving the immediate film needs of their universities—are too important to be disregarded. Their importance demands that a serious effort be made toward developing a method of production which will facilitate their achievement.

PURPOSE OF THE STUDY

The purpose of this descriptive dissertation is to demonstrate a communications method of non-theatrical film production which makes use of research findings in film design and uses research techniques to develop, administer and analyze responses to various evaluative devices.

METHODOLOGY FOR THE STUDY

To accomplish the purpose of this study, the following general procedures were followed:

1. <u>Introduction</u> The major problem leading to the development of this study is identified, discussed and its background reviewed. A rationale is developed for approaching the problem through demonstration of a communications method of non-theatrical film production. A definition of terms related to the communications method of non-theatrical film production is listed.

2. <u>Description of the Method</u> A rationale for the method is given. Elements of the method and the

strategy used for demonstrating the method are described.

3. <u>Theoretical Justification of Film Sequences</u>   A review of communications and film research literature was conducted. Relevant findings were used to design an experimental film. A rationale for each of the experimental film's 15 sequences was developed and reported.

4. <u>Evaluative Techniques</u>   Several evaluative devices were developed and administered. The methodology is discussed.

5. <u>Analysis of Data</u>   Responses to the various evaluative devices are analyzed and reported.

6. <u>Discussion</u>   A communications method of non-theatrical film production as demonstrated in this study is summarized. Conclusions are drawn concerning its utility. Implications of the method are proposed for university film producers. Suggestions are made for future research on the problem.

<div align="center">
DEFINITION OF TERMS RELATED TO
THE COMMUNICATIONS METHOD OF
NON-THEATRICAL FILM PRODUCTION
</div>

It may be helpful to describe some of the terms important to this study, especially as they may vary in interpretation from common usage.

Animation Scene -- A scene in which the subject matter
is some form of graphic material and is generally manip-
ulated to produce movement.

Close Shot -- A picture of the subject matter which
reveals less than the total subject.

Communications Method of Non-Theatrical Film Production --
A systematized approach to pre-production planning,
production and evaluation that incorporates research
findings in film design and uses research techniques
to develop, administer and analyze responses to various
evaluative devices. Chapter Two will treat this term
at some length.

Criterion Instruments -- Tests used to evaluate actual
performance of a film.

Cut -- The point at which two scenes are joined. The
expressions used are 'cut away from' and 'cut to.'

Design -- The structure or 'blueprint' of a film as
described by its script and given form by the steps
of production.

Dissolve -- This term is used in reference to both visual
and sound elements. In a visual dissolve the fade out
of one scene is superimposed over the fade in of another
scene. In a sound dissolve the fade out of one sound
element is superimposed over the fade in of another
sound element.

Effects -- A term used to indicate various sound effects, i.e., traffic, footsteps.

Entropy -- From the physicists' second law of thermodynamics, the tendency to disorganization; used in communications theory as a measure of uncertainty.

Evaluation -- Determination of a film's actual effect.

Fade -- This term is used in reference to both visual and sound elements. In a visual fade out, the scene gradually becomes black. In a sound fade out, the volume gradually diminishes. In a visual fade in, the picture gradually appears from black. In a sound fade in, the volume gradually increases in intensity.

Feedback -- Control based on the determination of actual performance rather than expected performance, i.e., analysis of test results may lead to changes in utilization of the film and/or modification of elements within the production method.

Intelligent System or an Open System -- A system in which the film producer can introduce research findings and/or various production techniques and use the results of feedback to modify the system or the communication.

Live Scenes -- A term used to differentiate live or real subject matter from animation or still pictures.

Long Shot or Full Shot -- A picture of the subject
matter which reveals the total subject. Since the
picture establishes the subject it is frequently re-
ferred to as an establishing shot.

Montage -- A series of short scenes, generally but
not necessarily related, joined together to produce
a single effect.

Opticals -- Special film effects printed in a labora-
tory rather than photographed in a camera, i.e., fades,
dissolves, supers.

Pan -- Camera movement from side to side.

Picture Primacy -- A principle which states that the
picture in a film is more influential than its sound
track.

Pre-Production Planning -- Those steps such as research,
consultation, budgeting, script writing, and search
for talent which precede the actual filming.

Production -- The steps of filming, editing and sound-
ing the script.

Pull Back -- Camera movement away from a subject.

Scene -- A film segment joined to others to form a
sequence. Roughly the equivalent of a paragraph in
a book. The term is a convenience used by writers and

directors to break the script down into units for production.

Sequence -- A series of scenes joined together. Roughly the equivalent of a chapter in a book.

Still Scene -- A scene in which the subject matter is a still picture.

Super (short form of Superimposure) -- An optically printed scene in which one scene is superimposed over another.

System -- A set of components arranged in an orderly fashion with the purpose of accomplishing a specified goal or goals.

Tilt -- Camera movement up and down.

Visual -- The picture part of the scene or sequence.

Wipe -- The appearance and movement of an optically printed scene from side to side, hence the expressions 'wipe on' and 'wipe off.'

SUMMARY

University film producers are faced with the unique problem of serving the immediate film needs of their respective universities while effecting an on-the-job training program for future film makers and acting as pace setters for the educational film industry. They are expected

to achieve these objectives though operating with smaller budgets, fewer facilities and less personnel than their counterparts in commercial production.

If these interrelated objectives are to be achieved, a standard, rational system must be developed and implemented which encompasses pre-production planning, production and evaluation. Lacking this, there can be no orderly and consistent approach to the solution of their problem.

Over the past 50 years there has developed a body of research findings in film and communications which seems to offer much needed help to the producer of non-theatrical films. But, to date, there has been no systematic effort to coordinate these findings or develop a system in which they can be applied.

It is the function of this study to demonstrate a method of operation which, recognizing the limitations of university film units, provides for a practical application of research findings and techniques in the critical areas of film design and evaluation.

It is felt that the demonstration of this communications method of non-theatrical film production is a necessary first step in its development. Its adoption by university film producers may eliminate the suspicion and fear they have of incorporating the labors of researchers in their creative efforts. It may be of help to them in producing effective films more efficiently. Its adaptability may open up new techniques of expression to them.

Its procedures may be of help to those bewildered neophytes who so often are left on their own to divine the mystery surrounding the how and why of film design.

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CHAPTER II

DESCRIPTION OF THE METHOD

Film producers may pale at the very mention of the term 'system' or 'method.' To them such words may suggest a lock step organization which could infringe on the independence of their units with subsequent control being transferred to professional administrators.

But, while autonomy may have been gained initially for university film units through the simple expediency of knowing more about production than anyone else, it cannot be maintained indefinitely by experts operating in isolated pockets independent of other departments within their own universities or without profitable liaison with similar film units at other universities.

It would seem that a sure way to lose this independence is to ignore the dynamics of American society in general and university societies in particular, the very distinct trend being toward more organization. In order to cope with the very real threat of having to do more things in less time, it has been necessary for universities to tighten their organizational structures and find more efficient ways of achieving their objectives.

As noted in Chapter I, certain objectives have

accrued to university film units beyond the initial one
of 'making movies.' Because of their physical presence
at centers of higher education, their film efforts take
on the aura of authority both in subject matter and in form.
Because of their limited professional staffs which causes
them to employ student help, they have become (by default)
trainers of the next generation of educational film pro-
ducers. This is a mixed blessing. Students come and go,
but production schedules are not sympathetic to the rhythm
of quarters or semesters. There is little time to develop
on-the-job training programs. Much of the education these
unofficial apprentices receive is not conducive to the long
range development of themselves or the film profession.

The method to be described is a way of approaching
these seemingly diverse but very much related problems of
university film units. The method is flexible, allowing
for individual, creative expression. It is orderly, pro-
viding for efficient accomplishment of operational objec-
tives. It is amenable to analysis and explanation, ensur-
ing openness within units, within universities and among
universities.

RATIONALE

Film production is seen as a communications system
of messages, media-instrumentation, men, methods, and en-
vironment. It is a specialized application of the communi-
cations process.

The objective of communications is " . . . to influence—to affect with intent."[18]

To achieve this objective in any other than a random manner it is necessary to have a controlled system. Control based on the determination of actual performance rather than expected performance is known as feedback,[19] the property of being able to adjust future conduct by past performance.[20]

It is uncommon for university film units to obtain an evaluation of their films. Most often, verbal approval by the sponsor is considered adequate. If the film is placed in the university's film library for off campus distribution, a standard evaluation form (see Appendix I) may be sent to the customer along with the film. Those few that are filled out and returned reflect more on the physical condition of the film than on its content.

The communications method proposed here makes use of criterion instruments, i.e., evaluative devices, as indicators of actual performance. The results are fed back directly to the producer who, after analysis and interpretation, gives them to the sponsor along with such recommendations as appear of value in putting the film into use.

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[18]Berlo, op. cit., p. 12.

[19]Norbert Wiener, The Human Use of Human Beings. Cybernetics and Society (New York: Doubleday Anchor Books, 1954), p. 24.

[20]Ibid., p. 33.

If relevant research findings are inserted into
the design process they can serve the function of memory,
or stored data. In other words, they can be used as part
of the feedback control system which is anti-entropic, work-
ing for a more effective communications system.

An apparent weakness is that once a film is released
it might seem like an exercise in futility to expend fur-
ther time or money on improving it. Obviously the purpose
is not to reproduce a completed film, although it is impor-
tant that revealed weaknesses can be shored up with supple-
mentary printed materials and/or amplificatory statements
by a laboratory assistant or instructor. The purposes of
inserting the findings of film and communications research
into the design process and inserting the results of eval-
uation into the film production system are to reduce the
uncertainty inherent in message design, and to provide for
an 'intelligent' system.

While it may be said that conflicting research find-
ings could lead to uncertainty, these findings also open
up new alternatives to the film designer, thus enabling
him to make better predictions based on more complete evi-
dence.

In brief, the method while designed for application
to individual films has a cumulative potential in that,
used in an ongoing system, it is flexible--providing for
a feedback mechanism to ensure adaptability while also
allowing for the "alterations produced by outer sense

impressions to be retained as more or less permanent changes of structure or function."[21]

The key component of this communications method is feedback, the input of research findings being considered as part of the long range feedback mechanism. If results of evaluative data are used only to criticize and supplement the 'film of the moment' they exercise a restricted although perhaps beneficial control.

"If, however, the information which proceeds backward from the performance is able to change the general method and pattern of performance, we have a process which may well be called learning."[22]

Relevant findings of past research in film and communications are considered as base line information or 'starters' for the system. It is for the producers individually in their own units, and collectively through their professional organization, the University Film Producers Association, to begin to accumulate and collate the 'memory' component of the system from which all members can benefit.

ELEMENTS OF THE METHOD

In Figure 1, an adaptation of Westley and MacLean's communications model is used to describe a communications

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[21]Ibid., p. 55.

[22]Ibid., p. 61.

method of non-theatrical film production.[23]

Figure 1. A Communications Method of Non-Theatrical Film Production

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10. Feedback--Audience to Sponsor (f_{AS})

10. Feedback--Sponsor to Producer (f_{SP})
    and Producer to Sponsor (f_{PS})

(X_1)

(X_2)

(X_3)

(X_4)

(X_5)

.

.

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(X_{oo})

7.
I n t e r a c t i o n (I)

1.
Sponsor

8.
Sponsor's Message
(X')

2.
Producer

9.
Producer's Message
(X'')

3.
Audience

10. Feedback--Audience to Producer (f_{AP})
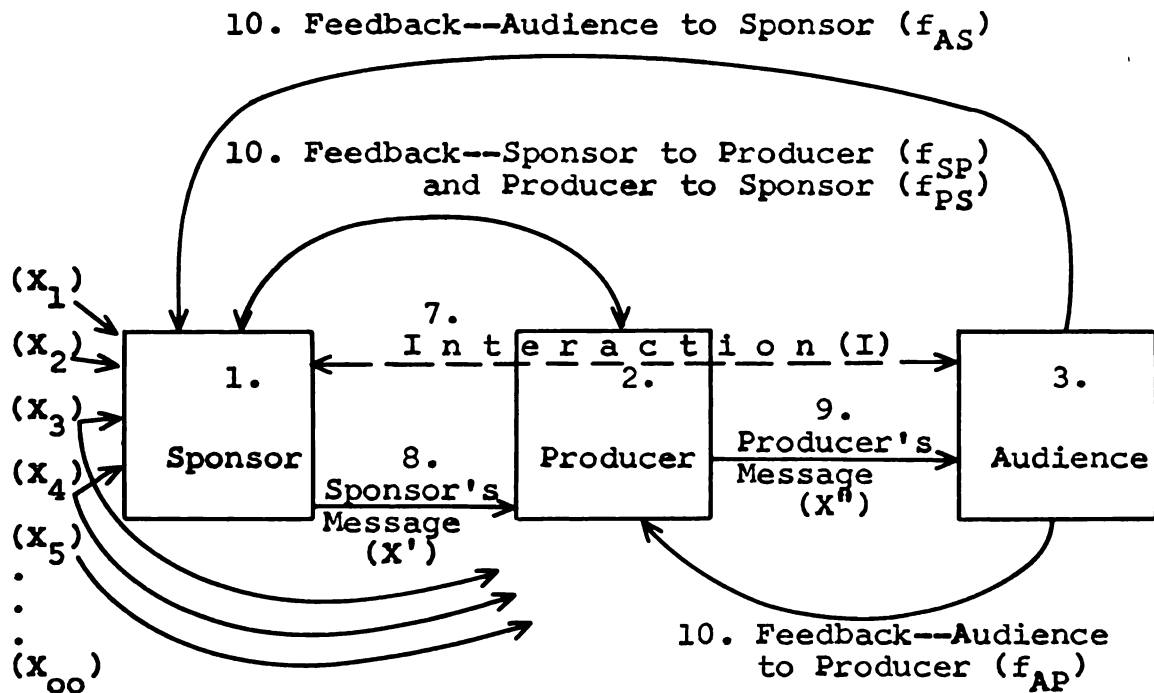
4,5,6. Information Relevant to Subject or Design of Film.

Key to Figure 1:

1. The Sponsor, equivalent to the source of a message in the communications process, is one or more persons who has accumulated a body of experience in a specialized area and who is motivated by it to communicate.

2. The Producer, equivalent to the mediator of the message,

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[23]Bruce H. Westley and Malcolm S. MacLean, Jr., "A Conceptual Model for Communications Research," *Journalism Quarterly* (Winter, 1957), pp. 32-35.

i.e., one responsible for message design in the communications process, is one or more persons who has accumulated a body of experience in a specialized area and who is designated by the sponsor to design a message.

3. The Audience, equivalent to the receiver in the communications process, is one or more persons who has been designated by the sponsor to be the receiver of the message as mediated by the producer.

4. The symbols $X_1 \ldots X_{oo}$ represent different bits of information relevant to the subject or design of the film which are available to the sensory field.

5. The symbols $X_1 \ldots X_4$ represent relevant information in the sponsor's sensory field. X_1 and X_2 are esoteric information about the subject not shared by the sponsor and producer.

6. The symbols $X_3 \ldots X_5$ represent relevant information in the producer's sensory field. X_3 and X_4 are films and/or printed literature shared by the sponsor and producer. X_5 is communications and film research information not shared by the sponsor and producer.

7. The symbol 'I' represents interaction between the sponsor and producer concerning message design, scheduling, budget, procedures. Implied in interaction is information the sponsor can infer about the producer, information the

producer can infer about the sponsor, and information both sponsor and producer can infer about the audience through interaction with them.

8. The sponsor's message to the producer (X'). This message is influenced by relevant information in the sponsor's sensory field, the sponsor's past experience in the specialized area plus information gained from interacting with the producer and the audience.

9. The producer's message to the audience (X"). This message is influenced by relevant information in the producer's sensory field, the producer's past experience in his specialized area plus information gained from interacting with the sponsor and the audience.

10. (a) The audience's feedback to the sponsor (f_{AS}).

    (b) The audience's feedback to the producer (f_{AP}).

       (Feedback from the audience yields information about the producer's message as perceived by the audience.)

    (c) The sponsor's feedback to the producer (f_{SP}).

       (Feedback from the sponsor to the producer yields information about the producer's message as perceived by the sponsor. It includes the dimensions of (1) the sponsor's acceptance of the message, and (2) his prediction of the target audience's acceptance of the message.)

    (d) The producer's feedback to the sponsor after analysis and interpretation of the evaluation (f_{PS}).

Essentially the method assures successful performance, or makes it less uncertain. Steps 1 to 5 are fairly standard in non-theatrical production. The communications method begins to deviate in Step 6, specifically by inserting an element such as X_5 (relevant research findings) into the design process. Step 10 is far from standard procedure; generally, a film contract is considered fulfilled with delivery of a specified number of release prints to the sponsor.

In one sense it is not possible to produce a successful message without feedback because success, by definition, implies knowledge of results. Feedback in this narrow sense, however, is no guarantor of success. It is only when knowledge of results and other relevant research findings are inserted into the design and utilization processes that uncertainty can be reduced, i.e., successful performance can be assured.

STRATEGY OF THE DEMONSTRATION

Since element X_5 (relevant research findings) of Step 6, and elements f_{AP}, f_{SP}, f_{PS} which represent feedback from the audience to the producer, feedback from the sponsor to the producer, and feedback from the producer to the sponsor, of Step 10 are the key components which differentiate this method from standard production procedures, the burden of demonstration will fall on them. The design of the film will be discussed, its use situations described,

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evaluation techniques for each use situation will be discussed, the method will be evaluated on the basis of analysis of data from the several criterion instruments (see Appendices II, III, IV and V), and implications of the method for university film producers will be discussed.

The criteria for determining successful message design will be a positive effect of the film on the sponsoring film committee as determined by its responses to a criterion instrument, and a positive effect on the target audience as determined by its responses to a criterion instrument.

SUMMARY

The communications method of non-theatrical film production developed, described and demonstrated for this study is an attempt to solve the basic problem of the university film producer—how to produce effective films more efficiently.

Essentially the method provides for a mode of operation that ensures successful performance. It accomplishes this objective in four specific ways: (1) it calls for the use of relevant research findings as aids to film design; (2) it provides for evaluation of actual performance with the sponsor and selected audience members; (3) it calls for analysis and interpretation of results by the producer who (4) gives the information to the sponsor along with recommendations for supplementing the film with spoken or

printed material if it is felt that this action is necessary on the basis of analysis and interpretation of test results.

CHAPTER III

THE FILM

To demonstrate a communications method of non-
theatrical film production, a film was planned, produced
and evaluated. The film selected represents a typical
assignment handed to a university film producer. It was
chosen because it happened to be the first such assignment
received after this study was undertaken.

DESCRIPTION OF THE FILM

The film, A Second Look, was produced for the Em-
ploy the Handicapped Committee, a subcommittee of the Co-
ordinating Committee for the Handicapped, of the Lansing
Community Services Council, and the Special Education De-
partment of the Michigan State University. The producer
was the Michigan State University Audiovisual Center. The
target audiences were service clubs of Lansing such as the
Lions and Kiwanis. The operational objective of the film
was to gain acceptance for the film's message. The implied
objective was to persuade potential employers in Lansing
to hire handicapped workers. The central theme of the film
stressed social responsibility. The techniques employed
in the film were use of cognitive and affective arguments,
literal illustration and symbolism, narration by peers,

and familiar settings. (For a more detailed, sequence script of the film see Appendix VI.)

RATIONALE OF FILM SEQUENCES

Selections from the writings of some 18 authors (see Appendix VII) were used as aids in the process of message design to enhance achievement of the film's operational objective, i.e., acceptance for the film's message by both the sponsor and the target audience. From these writings a rationale was developed for each of the film's 15 sequences. (See Discussion, Chapter VI.)

The following analysis of individual sequences represents a review of the literature in communications and film research, the procedure called for in Step 6 of the communications method and designated symbolically as element X_5 (see Chapter II).

<u>Sequence One</u>   The basic problem of an introduction is to gain the attention of an audience. The message must be pleasing for them to attend to. "Since no communication is effective unless it is attended to, attending behavior must be reinforced."[24]

And, if they are to attend, they must not be antagonized too early. " . . . when your objective is to persuade

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[24]Frank R. Hartman, "A Behavioristic Approach to Communications: A Selective Review of Learning Theory and a Derivation of Postulates," AV Communication Review, XI (1963), p. 183.

or motivate an audience, be it a group or a single individual . . . too direct an approach may arouse resistance and antagonism, where a less direct beginning may later put you in a position to make your point."[25]

The film begins leisurely with a slow, sweeping look at storefronts of downtown Lansing during the Christmas season. The audience hears the tinkling, 'Christmasy' sound of a music box and an elderly voice combined to cajole them into a state of readiness.

This pattern of stimuli would seem to fit Berlyne's category of relative novelty, i.e., it " . . . would possess familiar elements or qualities in a combination or arrangement that had not been met with in the past."[26]

The reason for the novel introduction is to gain audience interest at the outset of a communication. Relative, rather than absolute novelty, i.e., " . . . one with some quality that had never been perceived before"[27] is employed since, according to Berlyne:

> . . . some of the effects proper to novel stimuli,
> including their ability to influence stimulus se-
> lection, are apparently not at their strongest with

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[25]A. A. Lumsdaine, "A Basis for Decisions in Planning Communications," Ball, John, and Byrnes, Francis C. (eds.), Research, Principles, and Practices in Visual Communication (The Department of Audiovisual Instruction of the National Education Association, 1960), p. 81.

[26]D. E. Berlyne, Conflict, Arousal, and Curiosity (New York: McGraw-Hill, 1960), p. 19.

[27]Ibid.

maximum novelty. They seem rather to be most strongly elicited by an intermediate degree of novelty, with a stimulus that is rather like something well known but just distinct enough for it to be 'interesting'. We are indifferent to things that are either too remote from our experience or too familiar. A relatively slight variation in a familiar pattern has a unique piquancy.[28]

The heart of downtown Lansing was selected as the setting in order to involve the audience immediately. According to Baker, empathy, the imaginative projection of one's own consciousness into another human being, is aroused by a familiar scene.[29]

Since the film is primarily emotional and not informational, the music box was selected to establish a mood. "Music might provide an emotional tone or excitement to the learning experience."[30] It is to be expected that the Christmas theme will arouse positive emotions in businessmen since Christmas is one of the best business seasons of the year.

Sequence Two   The purpose of this sequence is to introduce some key elements, i.e., the narrator, his bookstore, objects in the window display, the main musical composition.

Selection of a narrator, his relationship to the other film elements, his right to speak to the audience,

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[28]Ibid., p. 21.

[29]Stephen Baker, Visual Persuasion (New York: McGraw-Hill, 1961), Chapter 6.

[30]Kendall, op. cit., p. 435.

all are troublesome problems for the film maker. "From a
production point of view, the effectiveness of a film de-
signed to change audience attitudes will depend on the
selection of a main character who is suitable for 'hero-
worship' or 'identification mechanisms' set up in the in-
tended audience."[31]

It was decided that since the target audience was
Lansing service clubs with their heavy representation of
businessmen and industrialists, the narrator ideally should
be a noncontroversial peer of this group. When conferences
with the film committee failed to turn up such a candidate,
the burden fell upon the film maker to create one. The
end product was patterned after a local bookseller; a rough
approximation of his shop was constructed in the film studio
for reasons of convenience.

In this sequence the audience is given its first
exposure to a bust of Beethoven, Milton's book, Paradise
Lost, and a Renoir picture from his later years. These
objects will be used several times throughout the film and
will ultimately become symbols of handicapped workers.
Hartman provides the theoretical justification for this
technique:

> . . . repeated usage is necessary for any new (and
> therefore meaningless) stimulus items which the
> communicator wishes to use . . . one can create
> some measure of meaning simply through repeated

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[31]Ibid., p. 434.

usage . . . the need for selection of items mean-
ingful to the recipients of a communication hardly
needs emphasis or explanation.[32]

The objects were selected for several reasons.
First, they represent the three major classifications of
handicaps, i.e., blind, deaf, crippled. Second, they were
objects which legitimately would be found in a store sell-
ing books, sheet music, and art prints. Third, while rec-
ognizable as creative geniuses, their handicaps are not
generally known, thus providing an element of surprise later
in the film.

Berlyne, in discussing the element of surprise as
a supplementary variable of novelty, says, "It implies the
existence of an expectation with which the stimulus dis-
agrees."[33] The expectation assumed in the case of the ob-
jects in the display is that the artists were not handicapped,
that their works, i.e., sheet music, a book, a painting,
are simply items displayed for sale during the Christmas
season.

The implications of the association of Beethoven,
Milton and Renoir with handicapped workers will be discussed
in Sequence 15.

Sequence 2 also introduces the audience to the pri-
mary musical element, Beethoven's Ninth Symphony, the
"Choral." This work was selected for several reasons:

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[32]Hartman, op. cit., p. 172.

[33]Berlyne, op. cit., p. 23.

it was written during Beethoven's later years when he was
totally deaf; it is a powerful work; its theme is stated
in several interesting variations which make it more useful
to the film maker, one such use being as a motif for handi-
capped workers. It is not expected of the audience members
that they realize the composer was deaf when he wrote the
Ninth. Indeed, there is never an obvious connection between
composer and symphony until it is revealed in the credit
titles at the end of the film.

Tannenbaum, in discussing the effect music can have
on an audience, said:

> Music background, then, can be considered to have
> an influence on the rating of the drama, with this
> influence being most pronounced on the connotative
> dimensions of potency and activity, but not to a
> significant degree in terms of changing the eval-
> uation of the play. There may, of course, be other
> ways in which the presence of music background can
> operate on the judgment of the drama, but these
> were not investigated in the present research.[34]

Sequence Three   In an attempt to strengthen the credibility
of the narrator, the bookseller is represented as an elderly
Lansing businessman who exhibits an interest in and know-
ledge about his town.

A photograph album, narration and nostalgic music
are combined to arouse a feeling of community pride in the
viewer to make the issue salient.

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[34]Percy H. Tannenbaum, "Music Background in the
Judgment of Stage and Television Drama," AV Communication
Review, IV (1956), p. 99.

It is felt that the viewer will be more receptive to the very biased persuasion of the next sixteen minutes if the argument is couched in a noncontroversial context. In other words, it will be difficult to reject the argument because it is imbedded in a complex, socially acceptable theme.

This strategy is suggested by Sarnoff and Katz. " . . . to change attitudes in a predictable manner, it appears to be necessary to devise influence procedures which are aimed at the different underlying motivations."[35]

The people-and-their-industry theme will be treated further in Sequences 4 and 5. It develops into the social responsibility theme of sequences 6, 7, 8, 11, 13 and 14.

Sequence Four   The pride-in-community, people-and-their-industry theme is continued and expanded. The implication is that Lansing is a successful business and industrial community today because of a symbiotic relationship between people and industry.

The ponderous, majestic musical theme stated in low pitched instruments will be used henceforth as an industrial motif. It is the same theme which will be used as a motif for handicapped workers with one exception; their theme will be stated with stringed instruments in a warmer,

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[35]I. Sarnoff and D. Katz, "The Motivational Bases of Attitude Change," Journal of Abnormal Psychology, XLIX (1954), p. 124.

more emotional tone.

Kendall reports on a finding of the Instructional

Film Research Project which supports the technique:

> Music might be used as a clue suggesting associa-
> tion by inference with a new experience not previ-
> ously related to familiar ones. In the same way,
> the function of music, used as a clue, might aid
> in pointing toward a problem's solution.[36]

The industrial and handicapped workers motifs will

merge into a social responsibility motif when the theme

is stated powerfully and dramatically in sequences 14 and

15 by both human voices and instruments of the orchestra.

<u>Sequence Five</u>   Hartman notes that, "The first step is to

accomplish familiarity with all the stimulus units in the

communication. The second step is to establish relations

among units using illustrative materials as mediators when

there is a lack of meaningful relation among the units to

be associated."[37]

In this sequence an attempt is made to nail down

the symbiotic relationship between people-and-their-industry

and begin the transition to the social responsibility theme

by including the handicapped worker in the 'people' half

of the relationship.

As recommended by Gropper,[38] animation is used to

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[36]Kendall, <u>op</u>. <u>cit</u>., p. 435.

[37]Hartman, <u>op</u>. <u>cit</u>.

[38]George L. Gropper, "Why <u>Is</u> a Picture Worth a
Thousand Words?" <u>AV</u> <u>Communication</u> <u>Review</u>, XI (1963), p. 80.

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focus attention by isolating the objects of concern, i.e., normal and handicapped workers. As the last picture of the sequence, and through the device of an animated line, special attention is directed to the handicapped worker.

Three of the seven workers pictured in this sequence will be featured as handicapped workers in later sequences. Their exposure in this sequence should cue responses when they are seen later; they should be remembered as people needed by and contributing to the success of their community. It is intended that their use both here and later will establish them as being representative of Lansing's handicapped work force.

Sequence Six   This is the first of four live sequences featuring handicapped workers. Essentially, the four sequences are the same, i.e., a handicapped worker is shown performing a job, a peer of the audience members speaks favorably of the worker and advances the general argument, each handicapped worker is introduced with his appropriate motif, the heavy industry is associated with its appropriate motif.

If the message designer exposes the pertinent elements of his message frequently and avoids any association with elements of negative value, these elements should increase in value and acceptance. Hartman suggests that, " . . . we become accustomed to things through meeting them repeatedly and . . . we value the things to which we have

grown accustomed."[39]

Mr. Lundberg, a Lansing industrialist used as one of the film's narrators, said what may be the first dissonance producing line for the initially opposed: I THINK IT'S SORT OF A RESPONSIBILITY OF INDUSTRY TO HIRE THE HANDICAPPED WHERE IT DOESN'T HANDICAP THE BUSINESS ITSELF.

Festinger, in his theory of cognitive dissonance, suggests that the existence of dissonance (imbalance), being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance (balance, or homeostasis).[40] For the initially opposed, Mr. Lundberg's implication of responsibility may stimulate covert argument. His qualifier, WHERE IT DOESN'T HANDICAP THE BUSINESS ITSELF, may be taken as part of the defensive argument. At this point the magnitude of dissonance is probably not high although there may be a cumulative effect from the very mention of 'handicapped workers' in scene 43 of the previous sequence. The magnitude of dissonance may rise throughout the sequence as the following points are made: handicapped workers are compatible, skilled, flexible, punctual and regular. The film argument is that, in this case, the handicapped worker has not handicapped the business. A one-sided argument plus a few opposing

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[39]Hartman, op. cit., p. 173.

[40]Leon Festinger, A Theory of Cognitive Dissonance (Evanston, Ill.: Row, Peterson, 1957).

points made early but not explicated is generally thought
to be more effective than just a one-sided argument, and
better than listing major opposing arguments and refuting
them.[41]

It is unlikely at this point that the initially
opposed can tune out the message since he is a captive aud-
ience. He can distort the message, or simply accept the
dissonance and as a business executive he has probably learned
how to do this quite well. Then again, he may decide to
receive the remainder of the message positively. It can
be expected that no behavior changes will occur at this
point other than a decision to listen.

Osgood and Tannenbaum suggest that a feeling of
incongruity can be expected among the initially opposed
since two objects of judgment (handicapped workers, business
and industry) have been connected with an assertion, "they
can do a good job." Stated another way, "Business and in-
dustry (positive for them) should hire handicapped workers
(less positive for them). It is to be hoped that, as a
result of this sequence, the handicapped worker will be
considered a little more positive than he may have orig-
inally been.[42]

Newcomb is concerned with symmetry between two

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[41]H. I. Abelson, _Persuasion_ (New York: Springer, 1959).

[42]C. E. Osgood and P. H. Tannenbaum, "The Principle of Congruity in the Prediction of Attitude Change," _Psycho-logical Review_, LXII (1955), pp. 42-55.

persons (A and B) toward an object of judgment (X).[43] In the case of the film argument, the initially opposed could be substituted for 'A,' Mr. Lundberg (a peer of the audience member) for 'B,' and handicapped workers for 'X.' Assuming that (1) the initially opposed doesn't like handicapped workers, (2) that the initially opposed likes Mr. Lundberg, (3) the initially opposed perceives that Mr. Lundberg likes handicapped workers, and (4) the initially opposed perceives that Mr. Lundberg likes him, then there is perceived asymmetry.

The initially opposed could achieve symmetry by (1) continuing to dislike handicapped workers, and (2) changing his attitude toward Mr. Lundberg from one of like to one of dislike. Or, he could achieve symmetry by changing his attitude toward handicapped workers from one of dislike to one of like.

Figure 2 illustrates the conditions of asymmetry and alternative methods of achieving symmetry.

Of course, if the initially opposed feels no strain toward symmetry he will simply tolerate the asymmetry or perceive none. Strain toward symmetry would be more likely if the initially opposed considers his peer, Mr. Lundberg, a highly credible source.

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[43]Theodore M. Newcomb, "An Approach to the Study of Communicative Acts," Psychological Review, LX (1953), pp. 393-404.

Figure 2. The Conditions of Asymmetry (1), and Alternative Methods (2 and 3) by which a Person Initially Opposed (A) to an Object of Judgment (X) Could Achieve Symmetry in His Relationship with a Peer (B)

(1) Perceived Asymmetry
(2) Perceived Symmetry
(3) Perceived Symmetry
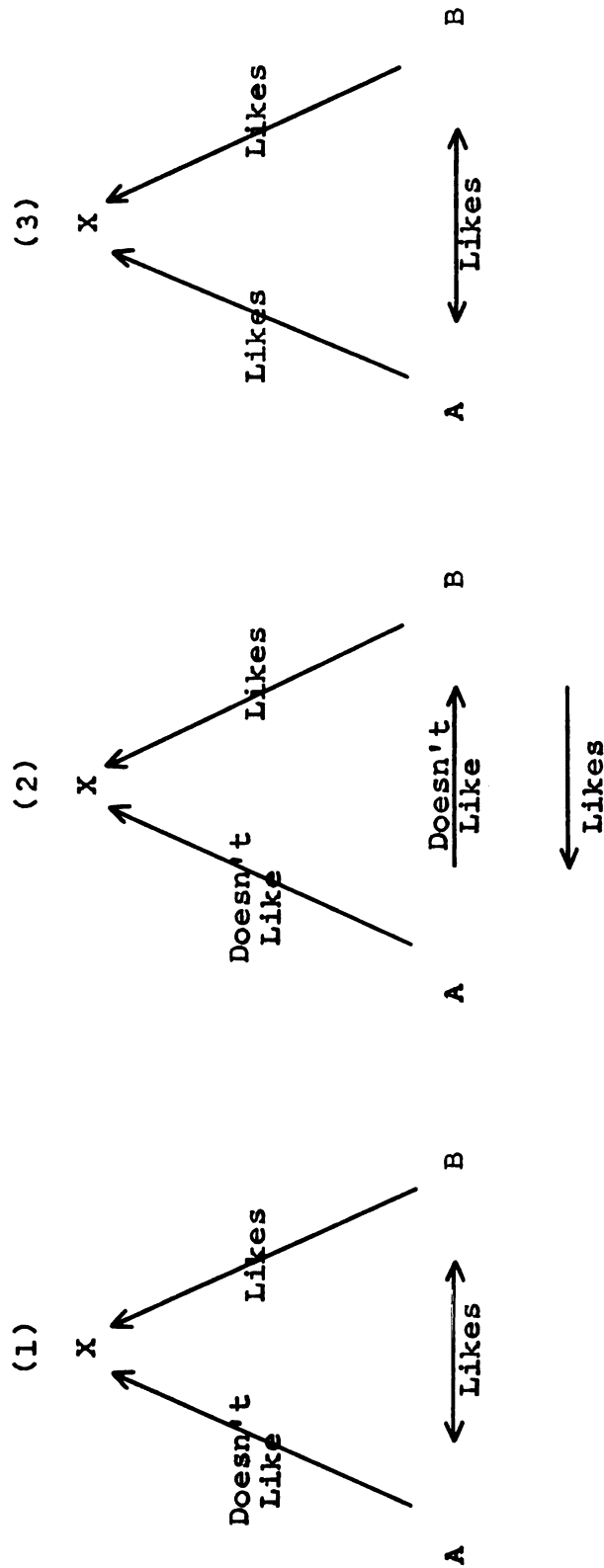
KEY: A = Initially Opposed
      B = Peer (Mr. Lundberg)
      X = Object of Judgment (Handicapped Workers)

Hovland, Janis and Kelley[44] indicate that source credibility has maximal effects on acceptance when the source and content are such that there would be considerable discrepancy between the attitudinal responses to each of them alone. In other words, if the initially opposed feel positive toward Mr. Lundberg but negative toward handicapped workers we could expect his persuasion to have a good effect. On the other hand, Osgood's congruity principle would predict that there would be a greater chance of acceptance if the initial attitudinal 'distance' between the source and object was not great.[45]

Heider's theory of balance would pose this condition: When high credibility is attributed to a person but not to what he communicates, attitudes related to him are in an 'unbalanced' state.[46]

The unbalanced state tends to be resolved in any of three ways: (1) change in attitude toward the communication (which would include either accepting it or rejecting it); (2) change in attitudes toward the communicator; and (3) change in perception of the communicator's role in originating the communication. To counteract the third

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[44]Carl I. Hovland, Irving L. Janis and Harold H. Kelley, Communication and Persuasion. Psychological Studies of Opinion Change (New Haven and London: Yale University Press, 1953).

[45]Osgood and Tannenbaum, op. cit.

[46]F. Heider, "Attitudes and Cognitive Organization," Journal of Psychology, XXI (1946), pp. 107-112.

alternative, the sequence was filmed in the Lundberg plant; Mr. Lundberg delivers his own lines and appears in two scenes.

In Sherif and Cantril[47] is found justification for presenting handicapped workers in positive work situations, i.e., judgment of stimuli shift according to the background furnished by a related series of stimuli.

In addition to showing them performing skilled jobs, a strong musical motif is used when handicapped people are seen. Further contribution to a positive ground is the narrative track which carefully depicts the featured workers as dependable, compatible, skilled, flexible and punctual.

Sequence Seven   Christmas is used again since it is the best business season of the year and thus should command the receiver's attention as well as arouse positive emotions in him. But, rather than reinforcing him for attending, a negative note is introduced by stating a variation of the social responsibility theme. The images, pictorially rich but ambiguous in the early scenes, become more literal toward the end. The narration follows the same scheme. This technique is suggested by Gropper. " . . . intermediary sequences are therefore likely to be needed to transfer control from the indirect visual examples to the verbal propositions they are intended to represent."[48]

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[47]Muzafer Sherif and Hadley Cantril, "The Psychology of Attitudes," _Psychological Review_, LII (1945), pp. 295-319.

[48]Gropper, _op. cit._, p. 92.

The verbal implication of unmet social responsibility can be anxiety producing. Hovland, Janis and Kelley make the assumption that a threat appeal is most likely to induce an audience to accept the communicator's conclusions if: (a) the emotional tension aroused during the communication is sufficiently intense to constitute a drive state; and (b) silent rehearsal of the recommended belief or attitude is immediately followed by reduction of tension, i.e., Content Cues:C.....Emotional Reaction:E.....Reassuring Recommendations:R.[49]

Sequence Eight   Following Hovland, Janis and Kelley's prescription for audience acceptance of the communicator's conclusion, the sequence of Content Cues:C.....Emotional Reaction:E (dissonance).....Reassuring Recommendations:R, is completed by offering the reassuring information that this community is organized to assist employers in finding qualified handicapped workers. Thus, if employers find implied social disapproval to be dissonance producing they are likely to accept the recommendation of seeking assistance as a way to reduce dissonance and restore balance.

Sequence Nine   Another peer of the audience assures them that handicapped workers, when properly placed, can perform as well as non-handicapped workers. This technique is supported by another Instructional Film Research Program

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[49]Hovland, Janis and Kelley, op. cit., pp. 56-96.

principle as reported by Kendall. A "slow rate of develop-
ment and the use of built-in repetition are important con-
tributors to effectiveness."[50]

Sequence Ten   The third case study, as did the ones pre-
ceding it, illustrates a handicapped person's ability to
do a job when properly placed. While the repetition may
seem redundant, there is some analogy between this communi-
cation problem and the one stated by Weaver:

> If the transmission is sent via a channel with
> noise, then elimination of redundancy is bad for
> redundancy combats noise. If the channel is noise
> free then a coding process which eliminates re-
> dundancy is good.[51]

It could be said that, in this case, the noise to
combat is the resistance of the initially opposed which
could take the extreme form of perceptual restructuring
of the message. Thus repetition is used to " . . . pene-
trate into a communication and storage apparatus suffici-
ently to serve as the trigger for action."[52]

Wiener concludes:

> Semantically significant information in the machine
> as well as in man is information which gets through
> to our activating mechanism in the system that re-
> ceives it, despite man's and/or nature's attempts
> to subvert it.[53]

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[50]Kendall, op. cit., p. 433.

[51]C. E. Shannon and W. Weaver, The Mathematical
Theory of Communication (Urbana: University of Illinois
Press, 1949), p. 112.

[52]Wiener, op. cit., p. 94.

[53]Ibid.

Sequence Eleven   Gropper advises that when film designers
wish to condition audience response to some criterion sit-
uation, they employ " . . . criterion visuals, or visual
which are similar to them along some relevant dimension . . .
to provide an occasion for student practice of appropriate
responses to them."[54]

As Jerry Van Liew (the handicapped worker featured
in sequence 12) said quite revealingly in a pre-production
interview, "They (fellow workers and superiors) expected
to find somebody who'd be kind of a freak at first." One
purpose of this sequence is to allow the viewer to see a
variety of handicaps in a situation non-threatening to him.
The responses he is expected to practice are cued by the
narrator. It is hoped that these practiced responses will
carry over into criterion situations when he is face-to-
face with a handicapped applicant.

Bob Stone (a Lansing industrialist) has, in effect,
become the principal narrator. The bookseller, a contrived
character, was useful in the introductory sequences to de-
velop a general social responsibility theme. As an elderly
gentleman who loves Lansing, its people and industry, he
could establish an emotional tone. He is withdrawn now
in favor of an audience peer who is willing to be quite
specific, one who slugs it out with the audience on its
own terms and thus may be more recognizable to them. To

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[54]Gropper, _op. cit._, p. 78.

introduce Bob Stone earlier in the film would have been
to risk antagonizing and alienating the audience before
they had developed an emotional readiness for his forth-
right persuasion.

Sequence Twelve   This is the fourth and final case study.
Jerry, as a pathetic looking figure, could have been used
earlier to shock the viewer, but this would have been of
dubious value. It is felt that his appearance at this time
will be more memorable. The audience has been prepared
for him for thirteen minutes. They have seen the deaf,
the blind and the halt. Now they see a tiny, pathetically
disfigured human being lifted into a chair, yet courageously
wheeling himself into confrontation with the hard realities
of the world of private enterprise. Jerry admits to his
very human weaknesses of fear and frustration. But, essen-
tially, this sequence repeats the theme of the other case
studies, i.e., placed in a job where their handicap makes
no difference, these people can perform as well as non-
handicapped workers.

Sequence Thirteen   As in Sequence 7, visuals are used which
by themselves bear little or no relationship to the prob-
lem at hand. There is a dependence on sound effects, music,
and narration to make the visuals meaningful. And because
of this combination of ambiguous elements, more gets said
than if a literal interpretation had been employed.

Gropper's statement used in theoretical justification

of sequence 7 is appropriate here. " . . . where the verbally described referent is unobservable, a generalization, or abstract, indirect visual representation can be used."[55]

At this point in the film it is not felt that intermediary sequences are necessary to make the connection between indirect visual examples and the verbal propositions they are intended to represent. Fifteen minutes have been devoted to the development of all of the elements required to make this symbolism work, i.e., the voice of Bob Stone should cue perception of a peer of the viewer, the voice of Jerry Van Liew should cue the perception of a multiply handicapped worker succeeding against great odds, the music box should cue Lansing during the Christmas season.

There is a feeling that opposition to the hiring of handicapped workers goes beyond logic for some people. It penetrates deep into value-belief systems, emotions, religion. G. W. Allport sums it up well:

> Whenever a pre-existing attitude is so strong and inflexible that it seriously distorts perception and judgment, rendering them inappropriate to the demands of the objective situation, the social psychologist usually designates this tenacious attitude as a stereotype, a prejudice, or sometimes, more loosely, as a logic-tight compartment.[56]

Use has been made of logic, illustration, direct

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[55]Ibid., p. 92.

[56]G. W. Allport, "Attitudes," C. A. Murchison (ed.), A Handbook of Social Psychology (Worcester: Clark University Press, 1935), p. 814.

and indirect persuasion. Audience peers have argued and handicapped workers shown by performance that they are dependable, compatible, flexible, skilled, mobile, attractive, competent, safe, responsible, human.

Called upon now is the cumulation of experience the viewer has had in the previous fifteen minutes to help the film help him penetrate the 'logic-tight' compartment. Jerry Van Liew, the most physically unattractive example, calls a spade a spade by using the word 'freak' as applied to himself. And Bob Stone, peer of the audience, tells them that this very real social problem won't go away simply by pretending it isn't there.

Once more, as in sequence 7, the film employs the Hovland, Janis and Kelley theory that a threat appeal is most likely to induce an audience to accept the communicator's conclusion if: (a) the emotional tension aroused during the communication is sufficiently intense to constitute a drive state; and (b) silent rehearsal of the recommended belief or attitude is immediately followed by reduction of tension, i.e., Content Cues:C.....Emotional Reaction: E.....Reassuring Recommendation:R.[57]

In this sequence, scenes 110-117 are used as content cues to arouse emotional tension. Scene 118 permits several seconds for silent rehearsal of the recommended attitude, i.e., this is a real problem demanding a solution.

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[57]Hovland, Janis and Kelley, op. cit.

The Reassuring Recommendation:R which, if accepted, can lead to reduction of tension, follows immediately in the next sequence.

<u>Sequence Fourteen</u>   Bob Stone offers the reassuring recommendation: The only way you're gonna' solve it is by working with the people who are trying to get jobs for the handicapped. This completes the Hovland, Janis and Kelley chain of responses. This was the same theory used in Sequence 7 and Sequence 8, the reassuring recommendation was identical: Work with the people who are trying to get jobs for the handicapped. If the theory is correct and was applied well, the initially opposed will seek to reduce the dissonance aroused by implication of social disapproval by accepting the reassuring recommendation.

Allport stated it another way. "An attitude is retained as long as it satisfies the individual, but it is likely to be modified under the provocation of serious affective disorganization."[58]

In an important sense there is ambiguity in this sequence. Sherif and Cantril note:

> If the stimulus situation is ambiguous and there are no established frames to which it can be related, new norms will be readily accepted and will effectively structure people's thinking.[59]

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[58]Allport, <u>op</u>. <u>cit</u>., p. 814.

[59]Muzafer Sherif and Hadley Cantril, "The Psychology of Attitudes," <u>Psychological Review</u>, LIII (1946), p. 20.

It is for the film designer to create an unstable situation in which he can establish a frame of reference more advantageous to his objective.

At first glance, outrageous liberties seem to have been taken with the audience and the design of the film. After touching down briefly with the bookseller, who is listening to disembodied voices of Bob Stone and Jerry Van Liew and then glances toward the bust of Beethoven, the viewer is quite abruptly confronted with a rather startling closeup of an eye reflecting despair and horror. As the camera pulls back to reveal a distraught character, the voice of Mr. Lundberg talks abstractly about a 'human junkheap' and connects the hiring of handicapped workers with social responsibility as did Bob Stone in the preceding paragraph. The relationship between picture and narration could be tenuous indeed except for several factors which should help the audience member make the connection desired of him. In almost every sequence since the beginning of the film, the social responsibility theme has been developed. And at least five times the point has been made that an economically healthy town will use all of its people. Too, a musical motif for handicapped people, which had been established earlier, carried throughout this sequence. The implication is that either employers exercise their social responsibility and strengthen their town by extending employment opportunity to all qualified applicants or they will create a rather sorry social problem which will

be a drain on their tax dollars.

Hartman sums up the theoretical justification of this technique:

> If stimuli generalize on the basis of their emo-
> tional responses, contiguity is sufficient to es-
> tablish a generalization of their meaning. Since
> contiguity alone is necessary for meaning to be
> transferred from one communication unit to another,
> repeated pairing of two units results in meaning-
> ful shifts of each toward the other. . . . The
> communicator can produce emotional reactions and
> attitudes to some units in his message by associ-
> ating them with other units producing emotional
> reactions . . . connotative meaning theory implies
> that when strong emotional reactions are involved,
> the associations will be established without con-
> scious practice being necessary.[60]

Thus, at this point in the film, the audience should be able to take its cues quickly and generalize almost any visual to the film's argument; "Since generalization among emotional reactions is nonverbal, meaning can be attached to items which are not at all verbalizable."[61]

Emotion and ambiguity have been allied here because logic can be carried just so far in an argument such as the one undertaken in the film. At some point in persua-sion if the argument is to be effective it must be internal-ized, it must be accepted by the receiver into his value system. Hartman suggests that this can be done by a judic-ious pairing of stimuli. And, if the film designer is suc-cessful, "Interference is unlikely from any source, including

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[60]Hartman, op. cit., p. 177.

[61]Ibid.

the recipient's critical thinking processes. . . . Resistance to forgetting is high. Generality is high."[62]

Emotions must be aroused slowly but, "the knowledge that an emotional reaction will occur and persist allows the communicator to introduce a communication that will profit from the aftermath of the emotion."[63]

At this point seventeen minutes of the film have gone by. There will be no more real situations or literal cases. It is the intent of this sequence that emotional reactions will place the argument beyond the reach of the receiver's critical thinking processes. This procedure could raise the specter of means and ends, i.e., should film makers ever undertake to becloud their audiences' critical thinking processes on any issue?

Certainly not if moral rectitude is attached to critical thinking, and emotional reaction is considered as a lesser and separate process. But hopefully it is more than rationalization to assume that values arrived at through a lengthy and continuous process involving a gradual transition from definition of terms to the ideas they imply, have been openly arrived at without doing violence to ethical procedure. For purposes of this analysis the dichotomy between critical thinking processes and emotional reaction is an ad hoc expediency to explain an extremely subtle point

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[62]Ibid., p. 178.

[63]Ibid.

in the learning process at which time the transition from externalization to internalization takes place.

In any case, the metaphor between picture and sound is continued since, "The purpose of metaphor is to enrich a symbol or object through the variety of its associates and to provide more opportunity for two or more people in communication to achieve symbols whose meanings they share."[64]

The purpose of the ambiguity, then, was to impose a frame of reference from which the viewer could restructure his way of perceiving the entire issue and establish a more positive way of evaluating handicapped people.[65]

<u>Sequence Fifteen</u> Asch challenges the basic proposition that an unchanged object of judgment (handicapped worker) undergoes a change of evaluation. He contends that there occur apparent changes in evaluation which are due to a " . . . change in the object of judgment, rather than in the judgment of the object."[66]

The bookseller places a new card over Beethoven's identification card revealing that the composer was deaf. Similarly, he reveals Milton's blindness and Renoir's arthritic hands. Asch's point is valid; although these displays

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[64]<u>Ibid</u>., p. 165.

[65]Sherif and Cantril, <u>op</u>. <u>cit</u>.

[66]S. E. Asch, "The Doctrine of Suggestion, Prestige, and Imitation in Social Psychology," <u>Psychological Review</u>, LV (1948), p. 256.

have been seen several times, they are seen now in a dif-
ferent light because suddenly they have been invested with
new meaning. If they are judged differently it is because
they have changed. They symbolize the object of judgment
of this film--handicapped workers.

It is the intention of the film that the receiver
will change his evaluation of the handicapped workers of
Lansing because now he sees them in a different perspective.
They have changed for him. They have risen above their
handicap, as did the artistic geniuses of the window dis-
play, and have shown the prospective employer that they
are not the pitiful tax burdens they once were. They have
become trained, skilled and reliable workers for the viewer
who has made the metaphorical extension.

Other than in Sequence 8, which identifies the Em-
ploy the Handicapped Committee by name and its members visu-
ally, the audience will see no credit titles until Sequence
15 when the credits will be superimposed over the film's
final scene. Until this time the identity of the source
of the communication has been withheld. This element of
design made it appear that the bookseller, Mr. Lundberg,
Mr. Stone, Mr. Rathbun, Mr. Mullin, and the other on-screen
actors were the collective source. What effect the credit
titles will have on the perceived trustworthiness of the
multiple source as it is now revealed is not clear. Hovland,
Janis and Kelley believe that, " . . . where the audience
has little or no prior basis for judging the trustworthiness

of the communicator, expectations of manipulative intent would be highly dependent upon the content of the message."[67] In other words, perceived trustworthiness would be highest if the viewer doesn't think the source is trying to persuade him for personal gain.

It would be most difficult for a receiver to infer any but altruistic motives from the source, collectively or individually. There can be no question of the film's intent to manipulate, but, if the receiver considers the source trustworthy it is to be hoped that he will consider the attempt to persuade him to be out of concern for, and in the best interests of, the business and industrial complex of Lansing and its people.

SUMMARY

A contention of this study is that university film producers can benefit from the research conducted in film and communications over the past half century. To demonstrate the use that can be made of the largely untapped findings of this research, a film was developed in which relevant findings were used as key elements in the design process. The film selected for the demonstration is typical of a university producer's assignments.

To find material appropriate to the nature and purpose of this film it was necessary to conduct a review of

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[67]Hovland, Janis and Kelley, op. cit., p. 296.

relevant literature. Since the nature of the film is emo-
tional and its purpose is to persuade, psychological studies
were found to be helpful. Readings in dissonance theory,
attitudes, visual persuasion, and related communications
theories were analyzed for ideas which were then used to
construct rationales for the film's sequences.

Once the rationales were constructed it was neces-
sary to operationalize such concepts as empathy, reinforce-
ment, motivations, social approval, redundancy, dissonance,
source credibility and ambiguity.

In the experimental film, empathy emerged as scenes
of downtown Lansing familiar to the audience, source cred-
ibility as peers of the audience used as actors and nar-
rators, ambiguity as art objects which were developed into
symbols of handicapped workers.

This is at once a challenge and an opportunity for
the film maker. There is no pat formula for converting
theory into screen images. It remains for the producer,
script writer, director, cameraman, editor and soundman
to apply individual and collective creativity to the task.
It must be remembered that a film script is a blueprint,
a plan of action. Film design is never truly consumated
until the film has been screened, evaluated and modified
within the limitations of budget, personnel and time.

It is an unjustified fear that creativity will suffer
when combined with research. They are compatible. They
are symbiotic. One gives form to the other. One finds
realization in the other.

CHAPTER IV

EVALUATION OF THE FILM

Now that the film has been designed and produced, the demonstration of a communications method of non-theatrical film production continues with Step 10 (feedback from the audience to the producer and from the sponsor to the producer). The purpose of this evaluation is fourfold: (1) to determine actual performance of the film; (2) to use this knowledge of results to modify the film (if necessary and feasible) or to modify the way in which it is used; (3) to use the knowledge of results to modify the method if necessary; and (4) to accumulate information which may be analyzed, interpreted and used in future productions.

It is the purpose of this chapter to describe the groups on which the film was tested and the situations in which they were tested as well as give a general description of the instruments used to collect the data, the hypothesis to be tested and the models used to test the hypothesis.

THE GROUPS TESTED

The operational objective of the experimental film, A Second Look, was to gain acceptance for the film's message by the sponsor and the target audience. While it would

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be convenient to have just one person as the sponsor and one group as the target audience such is not the case with all films. Such was not the case with the film chosen for demonstration in this study. It was necessary to test the film with five groups, using four evaluative devices to collect enough data for a meaningful interpretation to be made.

Group One, The Sponsor   This was the committee of the whole, the Coordinating Committee for the Handicapped of the Lansing Community Services Council, which included its sub-committee, the Employ the Handicapped Committee and its special interest group, the film committee. This committee of the whole is designated as the sponsor.

Testing Situation   The film was shown at a luncheon banquet meeting celebrating the 10th anniversary of this group and marking the premiere of the experimental film. The meeting was attended by 118 members.

The test, Criterion Instrument A (see Appendix II) was folded in half, then inserted in a small 10th anniversary report program and distributed as part of the place settings before the members arrived. When the meeting was underway the program chairman asked the members not to look at the evaluation form until after the film had been shown.

Immediately before the showing, the chairman of the Employ the Handicapped Committee gave a brief history of how the film came to be produced.

Immediately after the showing, the members were requested to fill the forms out quickly, refold them, then place them in a box by the exit as they left the room. Of the 118 members in attendance, 86 complied.

Group Two, The Employ the Handicapped Committee   The 16 members of this volunteer committee meet for breakfast on the second Tuesday of each month. While they saw the film at least twice and presumably participated in the evaluation as part of the Coordinating Committee, they were asked to complete another form to predict audience responses.

Testing Situation   The test, Criterion Instrument B (see Appendix III), was folded and distributed at the place settings on the breakfast table. The film was not shown. All 10 members present that morning completed the form as they arrived. The forms were refolded by them before collection.

Group Three, Service Club A   This organization meets once a month for lunch. The members are professional men of Lansing; both employers and employees are represented. As a group they lend support to selected civic and social projects. Service Club A was one of any number of similar organizations designated by the sponsor as target audiences.

Testing Situation   Criterion Instrument A was administered to this group and in the same manner in which it was administered to the sponsor. Of the 90 members in attendance, 46 completed and returned the form.

Group Four, Service Club B   This civic organization is
similar in makeup to Service Club A in that its members
are professional men of Lansing; both employers and employees
are represented.   Its 30 members meet once a month for dinner.
As a group they lend support to selected civic and social
projects.   Service Club B was one of any number of similar
organizations designated by the sponsor as target audiences.

Testing Situation   Criterion Instrument C (see Appendix
IV) was administered to Group Four in a pre-post sequence
immediately preceding and following the showing.

After the club's business was concluded and intro-
ductions made, the folded pre-test was distributed to the
21 members present.   As soon as all members had completed
and refolded the form, it was collected.   The film was shown.
Immediately after the showing, the post-test was distributed,
completed and collected, using the same procedures that
were followed for the pre-test.

Group Five, Small Group Interview   This group was composed
of an owner of a small clothing store, a manager of a res-
taurant-motel chain, an assistant employment manager from
a large automotive industry, a personnel director from a
large motor company, and an assistant personnel director
from a large university.   All of the small group members
were from the greater Lansing area and all were in a posi-
tion to hire or not hire.   The group members were selected
on the basis of their positions, availability and willingness

to cooperate.

<u>Testing Situation</u>   The group was invited to preview the experimental film at the Michigan State University Audio-visual Center and join in a post film critique which would be taped.   The members were assured that the source of any responses would not be revealed.

As soon as the group was assembled the film was shown.   After the showing a series of questions was asked (see Criterion Instrument D, Appendix V) and the responses tape recorded.

THE TESTS

Four tests were developed and administered to demon-strate Step 10 (feedback) of the communications method. As noted earlier, the evaluation served the purposes of collecting data to achieve a short range objective of en-suring successful performance of the experimental film, and a long range objective of providing information useful to future productions.

Successful performance of the experimental film was operationalized as positive responses made to items on the tests.   While four different tests were used, they all covered pretty much the same ground.   This was done to illustrate different techniques of obtaining information.

<u>Criterion Instrument A</u>   This test was used with two groups, one of which (the sponsor) should have been biased toward

the message. The second group (Service Club A) represented a target audience selected by the sponsor. It is a paper and pencil test eliciting multiple choice responses on such dimensions as the subjects' positions on hiring handicapped workers, emotional effect of the film, and liking for the film.

The subjects' before and after film positions were both determined after the film showing. This procedure requires that the pre-film position be called a 'perceived position.' This variation of a pre-post design was done in order to determine how the subjects thought the film affected them. It represents an attempt to gather information simply and inexpensively to help the producer decide whether or not his message was accepted by both the sponsor and the target audience.

The instructions stressed that this was a secret ballot. The members were asked not to write their personal or company's name on the form. They were asked to refold the completed form and place it in a collection box. This procedure is suggested by Edwards:

> It would seem that, despite the limitations of the method of direct questioning, verbal behavior, under many circumstances, would provide a better, that is, more accurate, indication of the feelings or attitudes of individuals than observations of their non-verbal behavior. This, as we have pointed out earlier, is most apt to be the case when the social atmosphere is free from pressure so that feelings can be verbally expressed without fear of social disapproval. Some assurance of anonymity, as provided for in secret ballots, may result in individuals giving verbal expression to attitudes that

they might otherwise deny or attempt to conceal.[68]

Criterion Instrument B   This test can be looked at in two ways. First, it represents the Employ the Handicapped Committee's ability to empathize with a target audience by predicting responses to Criterion Instrument A. Second, it represents another check on the committee's estimate of the film.

It is a paper and pencil test eliciting responses on the same dimensions as those of Criterion Instrument A with the exception that the members were asked to predict target audience responses. And, similarly, the instructions stressed that this was a secret ballot.

Criterion Instrument C   This test contained pretty much the same items as Criterion Instrument A but added the dimension of social distance, how the members of Service Club B feel about the issue of hiring handicapped workers on a continuum from abstraction to reality demanding immediate action. This test was presented in a pre-film showing and a post-film showing sequence.

Criterion Instrument D   This test contained items basic to the other forms but capitalized on the informality of a small group by probing the responses in depth through

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[68]Allen Edwards, <u>Techniques of Attitude Scale Construction</u> (New York: Appleton-Century-Crofts, Inc., 1957), p. 8.

free discussion. It also sought information on additional
dimensions such as source credibility, representativeness
of actors, effect of specific design elements, suggested
use situations, and why some people do not cooperate in
evaluations.

RELIABILITY

The use of four criterion instruments represents
an attempt to determine the reliability of the items by
eliciting responses on pretty much the same dimensions over
five groups of subjects. A degree of consistency of responses
was noted. (See Table A.1, Appendix VIII.)

VALIDITY

The use of Criterion Instrument A with a supposedly
biased group, the sponsor, and with Service Club A, a group
assumed to possess less bias toward the message, represents
an attempt to determine validity of the items. Differences
reflected by test responses between these two groups were
noted. (See Table A.2, Appendix IX.)

Differences reflected by test responses between
the sponsor and Service Club B were also noted. (See Table
A.3, Appendix X.)

When the total item mean scores of the sponsor were
compared with the averaged total item mean scores of Serv-
ice Clubs A and B, it was noted that the sponsoring group
responded more favorably to the test items than did both
target audience groups. (See Table A.4, Appendix XI.)

THE HYPOTHESIS TESTED

The theoretic hypothesis was that the film had a positive effect. The null hypothesis tested with the sponsor and the target audience was that the film had no effect. This statistical analysis was made on the dimension of the subjects' pre and post positions on hiring the handicapped.

THE MODELS USED

The McNemar Test for the significance of changes was used to analyze data collected from the administration of Criterion Instrument A since it is applicable to "before and after" designs in which each person is used as his own control.

The Sign Test was used to analyze data collected from the administration of Criterion Instrument C since it is appropriate for the analysis of subjects who can be ranked with respect to each other.

SUMMARY

It is standard procedure for university film producers to consider a contract terminated upon delivery of a specified number of release prints. The sponsor's permission to have the prints made is interpreted as adequate evaluation of the production. This is very probably the only evaluation the producer will get unless audiences complain so bitterly that the sponsor feels compelled to register these complaints with the producer. The producer's only defense is a signed contract. Legally he is on safe

ground; professionally he has been remiss in executing the sponsor's message to the audience.

The communications method of non-theatrical film production guards against such an eventuality by providing for an evaluation which determines the film's acceptance by both sponsor and target audience.

To demonstrate how feedback can be accomplished, the film experimentally designed for this study was tested with the sponsoring committee of the whole, a subcommittee, two target audiences selected by the sponsor, and one small group representing business, industry and education.

The tests developed for the study were tailored for the film and the groups who would see it. Four different tests were used to collect information on similar dimensions from five groups of subjects.

The information will be analyzed and interpreted to (1) determine actual performance of the film, (2) to modify the film if necessary and feasible, or to modify the way in which it is used, (3) to modify the communications method if necessary, and (4) to be stored as 'memory components' of the method where they may serve useful purposes in future productions.

CHAPTER V

ANALYSIS OF RESULTS

It is the purpose of this study to demonstrate a
method of film production which uses research findings to
help design a film and provides for evaluation by both spon-
sor and target audience.

Chapter I explored the reasons why such a study
was considered important to university film producers.
Chapter II described the method to be demonstrated. The
method is called a communications method of non-theatrical
film production because it adapted a communications model
to describe its procedures, and because the method concerns
itself with the educational and documentary productions
of university film units. Chapter III described the ap-
plication of selected research findings to the design of
film sequences. Chapter IV described the groups on which
the film was tested, the testing situations and the various
tests. For an exhibit of tests see Appendices II, III,
IV and V.

This chapter presents the findings of the informa-
tion collected in the various testing situations. It will
be remembered that the purpose of the evaluation was to
demonstrate Step 10 of the communications method which calls

for feedback from the audience to the producer and from the sponsor to the producer. To do this, two groups representing the sponsor and two groups representing audiences selected by the sponsor were tested. A fifth group was selected by the sponsor and the producer for an informal critique of the film.

FINDINGS FROM GROUP 1, THE SPONSOR

The first testing situation was with the sponsor, the Coordinating Committee for the Handicapped. Of the 118 members present at the showing, 86 cooperated in the evaluation.

Position on Hiring the Handicapped To determine whether or not the film had an effect, a hypothesis of no-effect was tested. Analysis was made of the subjects' perceived pre-film positions on hiring handicapped workers and their post-film positions. Of the 86 subjects who participated in the evaluation, 27 indicated positive changes; one indicated a negative change. (See Table A.5, Appendix XII, for a summary of the data.)

To determine the significance of the changed positions, the data were analyzed using the McNemar Test for the significance of changes. (The perceived pre-film and post-film changes are summarized grossly in Table A.6, Appendix XIII.)

The null hypothesis stated that the film had no

effect: of the subjects changing from a perceived pre-film position on hiring the handicapped, to a post-film position, just as many are likely to change to a less favorable position as there are subjects who change to a more favorable position.

The significance level was set at a = .01. N = 86, the total number of sponsor subjects.

A Chi Square of 22.3214 was observed; the probability of this occurring under a null hypothesis of no differences is p < .001. Since this is less than the previously set level of significance, a = .01, the null hypothesis is rejected at that significance level. It was concluded that the subjects showed a significant tendency to change to a perceived more favorable position toward hiring the handicapped.

Emotional Effect   To determine the sponsor's acceptance of the film, analysis was made of the degree of emotional effect the film had for sponsor subjects. Of the 85 members responding to the question, 79 (93%) indicated a positive to strongly positive emotional effect.

Liking for the Film   A second question designed to determine the sponsor's acceptance of the film asked the subjects to indicate their degree of liking for the film. Of the 86 members responding to the question, 84 (98%) indicated a 'like' to 'strongly like' position.

Agreement with Statement on Social Responsibility   Since
the central theme of the film stressed social responsibil-
ity, an analysis was made of the subjects' agreement with
a statement expressing the social responsibility of business
and industry to hire handicapped workers. Of the 86 members
responding to the question, 85 (98%) indicated an 'agree'
to 'strongly agree' position.

Conclusions   On the basis of analysis of the data collected
from the Coordinating Committee for the Handicapped, it is
concluded that (1) for the sponsor, the film had a positive
effect, and (2) that the film was accepted by the sponsor.

FINDINGS FROM GROUP 2,
A SPONSOR SUBCOMMITTEE

A second testing situation was with the Employ the
Handicapped Committee, a subcommittee of the Coordinating
Committee for the Handicapped. This group worked more
closely with the production than did the committee of the
whole. All of the subcommittee's 10 members cooperated
in the testing.

They were asked to predict responses typical target
audience members would give to test questions.

Predicted Position on Hiring Handicapped Workers   Of the
10 members, nine predicted that the typical target audience
member would favorably change his position after seeing
the film.

Predicted Emotional Effect   Of the 10 members, nine predicted that the film would have a positive to strongly positive emotional effect on the typical target audience member.

Predicted Liking   Of the 10 members, nine predicted that the typical target audience member would like to strongly like the film.

Predicted Post-Film Agreement with Statement on Social Responsibility   All of the six members responding to this item predicted that the typical target audience member would agree to strongly agree with the statement after seeing the film.   Six of 10 had predicted that the typical target audience member would agree with the statement before seeing the film.

Predicted Agreement with Statement on Attributes   The members were asked to predict how typical target audience members would respond to the following statement before seeing the film: Handicapped workers are loyal, skilled, able to grow on the job, punctual, dependable, accepted by their fellow workers, productive, flexible, and safe.   Of the 10 members, seven predicted agreement on the Loyalty attribute, five predicted agreement to strong agreement on Skill, four predicted agreement on Ability to Grow on the Job, six predicted agreement to strong agreement on Punctuality, six predicted agreement on Dependability, two predicted agreement on Acceptability, three predicted agreement on

Productivity, one predicted agreement on Flexibility, and seven predicted agreement on Safety.

Of those attributes which the subjects predicted the typical target audience member would rate handicapped workers higher on after seeing the film, two of the subjects predicted a higher rating on Loyalty, one predicted a higher rating on Skill, four predicted a higher rating on Ability to Grow on the Job, one predicted a higher rating on Punctuality, three predicted a higher rating on Dependability, three predicted a higher rating on Acceptability, five predicted a higher rating on Productivity, one predicted a higher rating on Flexibility, and one predicted a higher rating on Safety.

<u>Conclusions</u>　On the basis of the analysis of the information collected from the Employ the Handicapped Committee, it is concluded that this sponsor subcommittee predicted that (1) the film would have a positive effect on the typical target audience member, but that (2) there would be little change on the attribute scale, and that (3) the film would be accepted by the typical audience member.

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FINDINGS FROM GROUP 3,
SERVICE CLUB A

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A third testing situation was with Service Club A, selected by the sponsor as any one of a number of similar groups to be designated as target audiences. Of the 90 members present for the showing, 46 members participated

in the evaluation (see Suggestions for Future Research, Chapter VI).

Position on Hiring the Handicapped   To determine whether or not the film had an effect, a hypothesis of no-effect was tested. Analysis was made of the subjects' perceived pre-film positions on hiring the handicapped and their post-film positions. Of the 46 subjects who participated in the evaluation, 20 indicated positive changes; two indicated negative changes. (See Table A.7, Appendix XIV, for a summary of the data.)

To determine the significance of the changed positions, the data were analyzed using the McNemar Test for the significance of changes. (The perceived pre-film and post-film changes are summarized grossly in Table A.8, Appendix XV.)

The null hypothesis stated that the film had no effect: of the subjects changing from a perceived pre-film position on hiring the handicapped, to a post-film position, just as many are likely to change to a less favorable position as there are subjects who change to a more favorable position.

The significance level was set at a = .01. N = 46, the total number of Service Club A subjects.

A Chi Square of 13.1365 was observed; the probability of this occurring under a null hypothesis of no differences is $p < .001$. Since this is less than the previously

set level of significance, a = .01, the null hypothesis
is rejected at that significance level. It was concluded
that the subjects showed a significant tendency to change
to a perceived more favorable position toward hiring the
handicapped.

Emotional Effect   To determine Service Club A's acceptance
of the film, analysis was made of the degree of emotional
effect the film had for the target audience's subjects.
Of the 44 members responding to the question, 42 (95%) in-
dicated a positive to strongly positive emotional effect.

Liking for the Film   A second question designed to deter-
mine acceptance of the film asked the subjects to indicate
their degree of liking for the film. Of the 46 members
responding to the question, 44 (96%) indicated a 'like'
to 'strongly like' position.

Agreement with Statement on Social Responsibility   Since
the central theme of the film stressed social responsibil-
ity, an analysis was made of the subjects' agreement with
a statement expressing the social responsibility of business
and industry to hire handicapped workers. Of the 45 members
responding to the question, 43 (96%) indicated an 'agree'
to 'strongly agree' position.

Conclusions   As a result of the analysis of the data col-
lected from Service Club A, it is concluded that (1) for
this target audience the film had a positive effect, and

(2) that the film was accepted by the target audience.

FINDINGS FROM GROUP 4,
SERVICE CLUB B

A fourth testing situation was with Service Club B, selected by the sponsor as any one of a number of similar organizations designated as target audiences. All of the 21 members present for the showing participated in the evaluation.

Effect of the Film   To determine if the film had an effect, a hypothesis of no-effect was tested. Analysis was made of the subjects' pre-film and post-film responses to items on a social distance scale (see Items 1-10, Criterion Instrument C, Appendix IV). The data are graphically represented in Figure 3 (see Table A.9, Appendix XVI, for a summary of the data).

To determine the significance of the difference between mean scores of items before and after seeing the film, the data were analyzed using the Sign Test.

The null hypothesis stated that the median of these differences is zero.

The significance level was set at a = .01. N = 9, the total number of items on the social distance scale.

The null hypothesis of no differences will be rejected if a value is found whose associated probability of occurrence under the null hypothesis is equal to or less than a = .01.

Figure 3. Service Club B Subjects' Positions on Items of Social Distance Scale Before Film and After Film
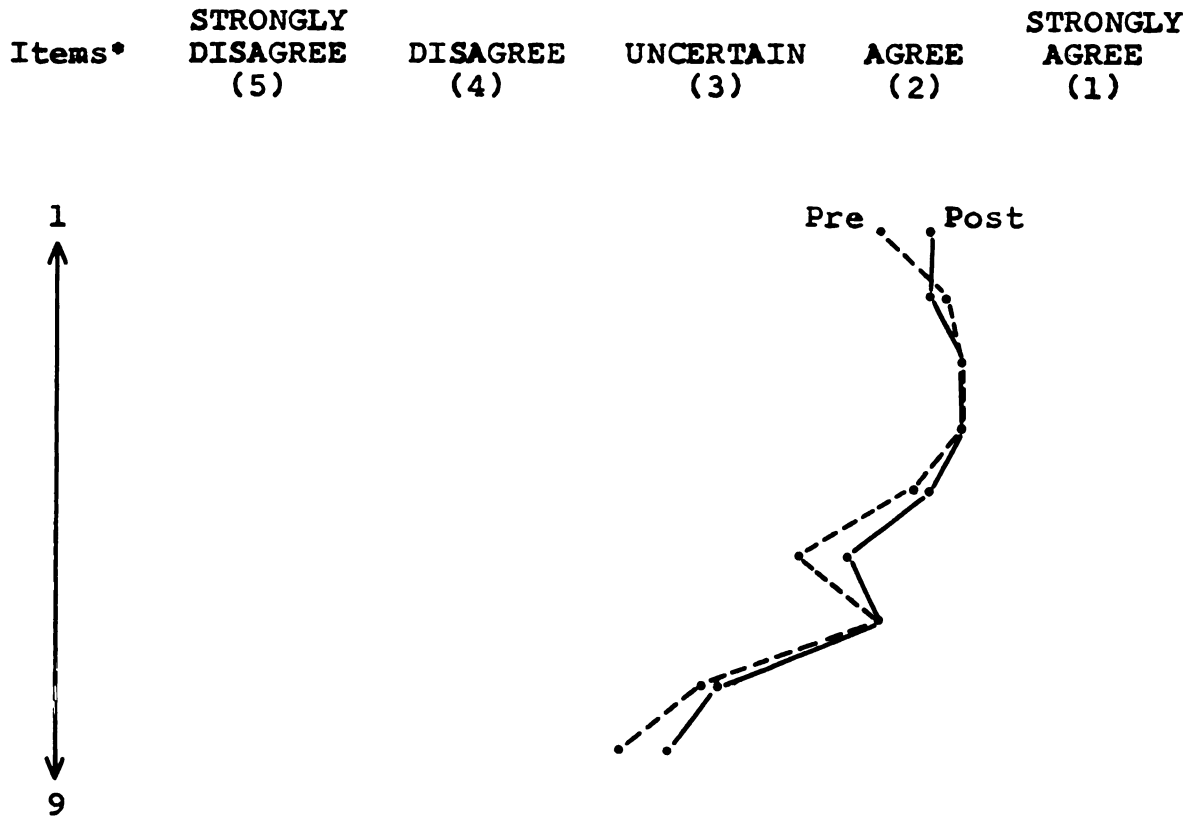
*In terms of social distance, Items 1 to 9 represent an issue on a continuum from general, non-threatening distance to specific and immediate personal involvement.

KEY: The dots represent mean scores of each item. The weights given to the categories such as Strongly Disagree, Disagree, are given underneath the category, i.e., Strongly Disagree (5). The broken line connects the mean scores of item on the Pre-Test. The solid line connects mean scores of items on the Post-Test.

Since the probability of the value found in the analysis was p = .254, and inasmuch as that probability is larger than the previously set level of significance, a = .01, the null hypothesis cannot be rejected at that level.

It will be noted that the bulk of the initial responses were near the top of the scale. This gave the subjects very little room in which to move.

A second test of effect was made by analyzing the subjects' responses to items on an attributes scale (see Item 10 of Criterion Instrument C, Appendix IV). The data are graphically represented in Figure 4 (see Table A.10, Appendix XVII, for a summary of the data).

To determine the significance of the differences between mean scores of items before and after seeing the film, the data were analyzed using the Sign Test.

The null hypothesis stated that the median of these differences is zero.

The significance level was set at a = .01. N = 9, the total number of items on the attributes scale.

The null hypothesis of no differences will be rejected if a value is found whose associated probability of occurrence under the null hypothesis is equal to or less than a = .01.

Since the probability of the value found in the analysis was p = .002, and inasmuch as that probability

Figure 4.   Service Club B Subjects' Positions on Attributes
of Handicapped Workers Before and After Film
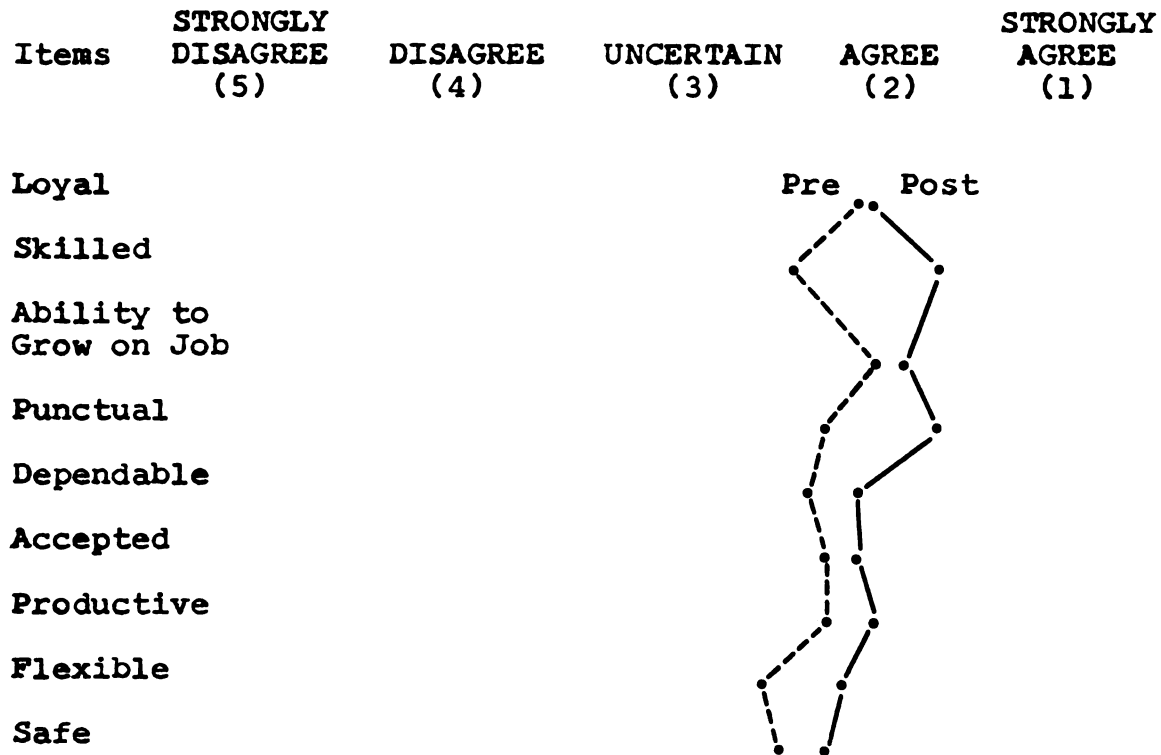
Items	STRONGLY DISAGREE (5)	DISAGREE (4)	UNCERTAIN (3)	AGREE (2)	STRONGLY AGREE (1)

Loyal

Skilled

Ability to
Grow on Job

Punctual

Dependable

Accepted

Productive

Flexible

Safe

KEY: The dots represent mean scores of each item.   The
weights given to the categories such as Strongly Disagree,
Disagree, are given underneath the category, i.e., Strongly
Disagree (5).   The broken line connects the mean scores
of items on the Pre-Test.   The solid line connects mean
scores of items on the Post-Test.

is smaller than the previously set level of significance,
a = .01, the null hypothesis is rejected at that level of
significance.

Emotional Effect   To determine Service Club B's acceptance
of the film, analysis was made of the degree of emotional
effect the film had for this target audience's subjects.
Of the 17 members responding to this question, all 17 in-
dicated a positive emotional effect.

Liking for the Film   A second question designed to deter-
mine Service Club B's acceptance of the film asked the sub-
jects to indicate their degree of liking for the film. Of
the 17 members responding to the question, 15 indicated a
liking for the film, and two indicated a strong liking.

Conclusions   As a result of the data collected from Serv-
ice Club B, it is concluded that (1) a significant change
in the members' positions on hiring handicapped workers
was not detected, (2) that the film had a positive effect
on responses made to items of the attributes scale, and
(3) that the film was accepted by this target audience.

COMPARISON OF PREDICTIONS
TO ACTUAL RESPONSES

It will be remembered that Group 2, a sponsor sub-
committee who had worked closely with the film, predicted
responses typical target audience members would give to
test questions.

As a result of the analysis it is concluded that
with Service Club B the predictions were close, only once
being as much as one mean score away from the target aud-
ience's mean score (see Table A.11, Appendix XVIII, for
a summary of the data). With Service Club A the predictions
erred consistently on the conservative side but were never
more than half a mean score away from the target audience's
mean score (see Table A.12, Appendix XIX, for a summary
of the data).

FINDINGS FROM GROUP 5, SMALL GROUP INTERVIEW

A fifth testing situation was with a small group
of five professional people involved in the hiring process
in the greater Lansing area.

Question 1 asked: What did you like and dislike about the
film?

The following responses were recorded.

1. I thought that on the whole the thing was very well
   done. If it's going to be used to arouse enthusiasm
   for hiring the handicapped...it did that for me.

2. I don't feel that the complements (credits) should be
   pinpointed down to four or five organizations. I think
   you've worked with numbers of them. I think they could
   be more general because I think most manufacturing con-
   cerns in Lansing are interested in it.

3. Well see, actually, Christmas time of the year most
   industries in Lansing...your larger industries aren't
   doing much hiring.

4. About the only field that might be adding additional
   help then would be in the retailing field...on a tem-
   porary basis.

Question 2 asked: How did the film affect you emotionally?

The following responses were recorded.

5. I was very moved by it...I am not in a position to hire handicapped people although I would very likely hire them if...I would have no objection to hiring them if I had an opening for someone that could fill the job, regardless of whether they were handicapped. Putting myself in the position of someone who could hire a handicapped person I think that I would have through the efforts of the film.

6. It disturbs me to see a man around machinery who can't see. You're not dealing in sentimentality. There are things you can't have people do if there's danger. Can you train someone to anticipate danger if something goes haywire?

7. With the compensation law that's recently been signed it's pretty rough.

Question 3 asked: Who was the originator of the message? Do you think they are reliable? Trustworthy? Sincere? What do they have to gain? Do you believe them?

The following responses were recorded.

8. The handicapped committee themselves.

9. I think we would all agree that they're fully behind... in their efforts to help these people out. I think all of us who've had experience in working with them and in trying to place handicapped persons...at times you reach a point you know where it's just...get off my back, we're doing the best we can. I think this is so, they're extremely dedicated to getting a job done and their job is to help these people find gainful employment. I think that when you realize that this is the source of the message I think that it is strongly emotionally oriented or aimed and with this type of pitch I'd say, yes, that is the type you would expect from them, as far as trusting them you have to trust their sincerity and know that they are trying to help these people out immensely.

10. I wouldn't think they're looking for any personal gain, the gain they're looking for is to get these handicapped people hired. They're probably going at it a little bit harder than someone else might be who might want to reach the same goal but, because this is their job and this is what they're trained to do they're probably doing it a little bit harder than someone else might be.

11. ...there probably...I'd say maybe (is) a job for every
     person that he can do regardless of his particular
     handicap. But on the particular job that he can do
     then he is not handicapped...on that job, he's no
     longer handicapped.

Question 4 asked: Were the actors typical? Did you believe
them? Which ones did you like best?

The following responses were recorded.

12. They looked pretty typical to me.

13. They were probably selected to a point but I think
     that they were probably, well, average of those who
     are handicapped and who are working, but probably se-
     lected for the type of job they're doing and to show
     to the best of the film's ability the job they can
     do with the handicap they have.

14. The blind.

15. The multiply handicapped.

Question 5 asked: What was the role of the narrator? Was
he convincing? Did he and his bookstore seem real or staged?
Was he necessary to the film?

The following responses were recorded.

16. I don't personally care for the Christmas theme...I
     think it's an unnecessary embellishment. There were
     some very, very fine points, I mean moments, and there
     were other kinda corny, syrupy or something.

17. Personally, I have known of Beethoven and then one
     of the others and I surmised what would be coming at
     the end of it. The one I'm not that well versed on,
     well the painter. I could readily see what was going
     to probably happen.

18. You know that's something that escaped me entirely!

19. Well...to see the film start out I wouldn't have thought
     it but of course we know what this film was about...
     was handicapped and we know Beethoven was deaf.

20. (Suggestions were made of other, more contemporary,
     more well known handicapped people who could have been
     cited: Roosevelt, Helen Keller. All subjects seemed
     to know Beethoven, but Milton and Renoir were obscure.)

21. Of course what are the alternatives available? You want to soften this thing up slightly and this at least this is a transitional thing...if they just came bouncing out...a guarded reaction would come up quite a bit quicker.

22. Yeah, it is a bit stagish, but on the other hand what else are you going to do?

23. I thought the staging of the bookshop front meshed very well with the showing of the downtown streets and as the bus went by all of a sudden you had a close-up of the bookshop...it could very likely have been a bookshop on the street, it did look staged...you could tell right away it wasn't an actual store.

24. I don't think the majority of the people...that would see the film would notice too much difference about it.

25. No, I had no idea that the bookstore was staged...I thought it was the real thing.

Question 6 asked: How important is the message?

The following responses were recorded.

26. By all means (it is important).

27. Definitely.

28. I frankly was shocked when I got into personnel work, and got into the recruitment end of it, at the total numbers or the proportion of the total population that had some handicap. It is important to try to find some way to utilize all our wasted manpower.

Question 7 asked: Was the film convincing? Do you think it will influence behavior of Lansing employers?

The following responses were recorded.

29. Probably very little.

30. Do you think people are really against? I think it just isn't feasible in most businesses...to bring in somebody that might be a burden. When they're doing business it's bad enough.

31. ...if an employer is definitely against handicapped, I don't think that it would help...but in a case where

maybe the employer hasn't thought about some of the particular jobs that a person who is physically impaired can do...if you can educate them that there are jobs that these people can do I think it would go over big.

Question 8 asked: What approach would have been better?

The following responses were recorded.

32. (Show breadwinners.)

33. (Show how they progress educationally.)

Question 9 asked: Do you feel it was a good idea, or necessary, to produce a film in Lansing for Lansing audiences?

The following responses were recorded.

34. It brings it down to localities and places in the area that people are familiar with.

35. The thing that you did do though was identify the... individual businesses downtown and you didn't go to, well to industry or to education as far as possible.

36. Well, I noticed that they did have two or three or four shots of the skyline...it might be better...to show some of your larger industries which can probably do more than the Michigan National Bank or somebody which is the outstanding building there. I think it helps personalize. I think we're all a little bit more interested in what happened to the people of Lansing than we are in Philadelphia or Baltimore.

Question 10 asked: Do you think the social responsibility theme was effective?

The following responses were recorded.

37. (How will employers react to it?) Poorly.

38. I don't want someone to tell me I'm responsible.

39. ...it's more of a thinking of what you can do for that person's family which is not a responsibility. We realize that naturally on welfare cases and so forth that we are socially responsible where financially you're gonna pay for it one way or the other, but I think the point should be put across more that these

people were human beings, they can do the job, they
can do it as well as anybody else if they're in a par-
ticular job. They have a family to support but we're
not responsible for them.

40. I didn't feel it, that social responsibility was stressed
too much...if you try to push it you might run into
a problem...but I think if it was being pushed in there
it was very subtle.

Question 11 asked: How do you think the film should be
used for best effect?

The following responses were recorded.

41. (Handicapped Week best for TV.)

42. (Needs someone to go along and 'talk it up' when shown
to organizations.)

43. (Show during hiring periods.)

44. (Show on individual basis to members of management.)

45. (Show to American Society of Personnel Directors, early
November.)

46. ...it doesn't hurt—general distribution, either...
you can condition people to see...it's good for people
to see this, you know they might wonder, 'Well, why
do they have somebody around like that...'

47. (Show to Lansing Industrial Personnel Association—
made up of personnel directors—in September.)

48. (Show to group of handicapped people who are not em-
ployed...might be of some help to them to realize that
they are employable.)

49. I do think that I would suggest that maybe there be
a little bit of backing and maybe a few remarks or
something added to the film by local labor unions.
And I have a reason for that. If you're experienced,
and many of these fellows are, in hiring handicapped,
the one problem that comes about is the fact...due
to a reduction...maybe that particular job is not
available for awhile and this person has acquired
seniority in the plant so naturally your labor unions
are interested in seniority more than ability or any-
thing else...so there's this person who is handicapped
and you're going to run yourself into a fight—what
are you going to do with him? I think the unions have

to be interested in this thing, be part of it, so that it can be understood that if the particular job is restricted and for some reason you have to take that person off that job, it's not up to the company to try to make another job for him. And that is one of the large reasons for not putting on handicapped people.

Question 12 asked: What do you think are the most significant arguments for or against hiring handicapped workers?

The following responses were recorded.

50. (Second injury clause of workmen's compensation law.)

51. (Seniority.)

Question 13 asked: In one service club almost half of the members did not fill out an evaluation form after being requested to do so by their president, program chairman and investigator. Why do you think they didn't fill out the form? What was the significance of their failure to do so?

The following responses were recorded.

52. (Some who didn't fill it out may not have been employers.)

53. (Fifty percent is a high percentage of returns even in a captive group. People are just generally lazy. They don't want to take time to stop and think about what they might have to answer.) I think that you get better response on a verbal thing such as we're doing here tonight. Very frankly, I think if I were in a group like that and given a questionnaire to fill out or an evaluation sheet to fill out I might be inclined not to answer it or maybe answer some of the questions that wouldn't take up too much time or go into too much thought about it. But when you're sitting around and just talking I think people are more inclined to voice their opinions. Because when possibly one person is saying something it brings something to their mind and they'll come up with it and say it rather than...sit there and think the whole thing out for themselves.

54. They saved seven minutes...people don't like to commit themselves.

55. (Could we assume that the half of the membership who didn't fill it out didn't like the film?) No. (Unanimous.)

56. They wouldn't fill it out if you asked them if they wanted a free beer. They probably didn't read it.

57. They may have had no opinion at all one way or the other.

58. We've had that even in supervisory meetings...they don't like to commit themselves.

59. (Luncheon meetings perhaps a bad place for evaluation since people are pressed to get back to work.)

No analysis was made of the data; they will be discussed in Chapter V.

SUMMARY

Step 10 of the communications method demonstrated in this study calls for feedback from the audience to the producer and from the sponsor to the producer.

It is the intent of this method that the information be used to: (1) determine actual performance of the film; (2) to modify the film if necessary and feasible; (3) to modify the way in which the film is to be used if necessary; (4) to modify the method if necessary; and (5) to accumulate 'memory components' (useful information) for use in future productions.

To meet these demands, the film was tested on two groups representing the sponsor, and two groups representing target audiences selected by the sponsor. A fifth group was selected by the sponsor and the producer for an informal critique of the film.

On the basis of analysis of the information collected from these various testing situations, it was

concluded generally that (1) the film was accepted by both
sponsor and target audience groups, and (2) the film had
a positive effect on both sponsor and target audience groups.
The exception to a positive effect was found with Service
Club B, a target audience group. No significant change
was detected in this group's position on hiring handicapped
workers.

No analysis was made of the responses tape recorded
during the fifth group's critique session. This informa-
tion, as well as that collected from the more formal test-
ing situations, will be interpreted in Chapter VI.

As this demonstration of a method made practical
application of research findings to the design of a film,
so will it use the findings of the evaluation to make any
modifications necessary to ensure successful performance.
Interpretation of the data will also be applied to an eval-
uation of the method. Additionally, identification will
be made of any information recovered from the evaluation
of the film which may profitably be stored and shared with
other university film producers.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The demonstration of a communications method of non-theatrical film production incorporates a review of the study as a whole plus an illustration of the logical consequences of Step 10 of the method. Step 10 calls for the feeding back into the system, or method, the results of the film's actual performance. These findings of the evaluation are part of the feedback-control system. This means that they can be used by the producer to make any modifications he finds necessary and feasible. The determination of whether or not changes are to be made in the film or the method will follow from an interpretation of the results given in this chapter in the Discussion section. The discussion will also serve the purpose of evaluating the method and identifying useful information gleaned from the evaluation which may be worth retaining and sharing with others.

In the conduct of the demonstration, there arose many questions which were beyond the nature and scope of this study. Those of sufficient significance will be suggested as questions for future investigations.

SUMMARY OF THE STUDY

University film production units are faced with the unique problem of serving the immediate film needs of their respective universities while training future film makers and acting as pace setters for the educational film industry. They are expected to achieve these objectives though operating with smaller budgets, fewer facilities and less personnel than their counterparts in commercial production.

Over the past 50 years there has developed a body of research findings in film and communications which seems to offer much needed help to the overburdened producer of non-theatrical films. But, to date, there has been no systematic effort to coordinate these findings or develop a system in which they can be applied.

Purpose   It was the purpose of this study to develop and describe through demonstration a method of planning, producing and evaluating films which, recognizing the practical considerations and limitations of university film units, provides for application of research findings and techniques in the critical areas of film design and evaluation.

The Method   The communications method of non-theatrical film production is so-called because a communications model was adapted to describe its procedures, and because it is concerned with the educational and documentary productions of university film units.

Essentially, the method was developed to enhance the successful performance of university productions. It accomplishes this objective in these specific ways: (1) it calls for the use of relevant research findings as aids to film design; (2) it provides for evaluation of actual performance with the sponsor and selected audience members; (3) it calls for analysis and interpretation of results by the producer who (4) makes any modifications in the film which are necessary and feasible; (5) modifies the method if necessary; (6) identifies any findings which may be of subsequent use to himself and to others; and (7) shares his findings with the sponsor to whom he makes recommendations for supplementary materials and other modifications in use procedures which may have been indicated by interpretation of the findings.

The Film   Step 6 of the method calls for the use of research findings to be used as aids in the design process. The film selected for the demonstration was typical of a university film producer's assignments. To demonstrate how research findings could be adapted to a creative process, a review of literature was conducted in communications and film research to find materials appropriate to the nature and purpose of the film. Selections from the writings of some 18 authors were used to construct a rationale for each of the film's sequences.

The film, **A Second Look,** planned, produced and

evaluated for this study, can be obtained by contacting the Lansing Community Services Council, Lansing, Michigan. It is a 20 minute, sound, black and white, 16 mm production.

Evaluation of the Film   The operational objective of the film was to gain acceptance for the film's message by the sponsor and the target audience.   The implied objective was to persuade potential employers of Lansing to hire handicapped workers.

Step 10 of the method calls for an evaluation which determines the film's acceptance by both the sponsor and the target audience.

To demonstrate how feedback can be obtained, the film was tested with the sponsoring committee of the whole, a subcommittee, two target audiences selected by the sponsor, and one small group representing business, industry and education.

The tests developed for the study were tailored for the film and for the groups who would see it. A criterion of the evaluation was that it would provide useful information to the producer but not be too lengthy or prove too cumbersome to administer.

CONCLUSIONS

It is the intent of the communications method to assist the university film producer in ways which will enhance the successful performance of his productions. The ways in which the method can be of help to the producer

were enumerated earlier in this chapter (see The Method, pp. 91-92). It was the intent of this study to develop and describe the method by the process of demonstrating it.

Step 6, calling for the use of research findings in the design process, and Step 10, calling for feedback from the audience to the producer, and from the sponsor to the producer, bore the burden of the demonstration.

To assist the producer in making use of his evaluations, an analysis of results was demonstrated.

Findings

1. As a result of the analysis of the information collected from testing the Coordinating Committee for the Handicapped, it was concluded that (1) for the sponsor, the film had a positive effect, and (2) that the film was accepted by the sponsor.

2. The Employ the Handicapped Committee, a sponsor subcommittee that worked closely with the production, was asked to predict typical target audience member responses to various test items. It was concluded that (1) they predicted the film would have a positive effect on the typical target audience member, but that (2) there would be little change on an attributes scale (see Item 10 of Criterion Instrument C, Appendix IV), and that (3) the film would be accepted by the typical target audience member.

3. As a result of the analysis of the predictions of this subcommittee as compared with actual responses of target audiences, it was concluded that (1) with Service Club B the predictions were close, and (2) with Service Club A the predictions were close but erred consistently on the conservative side.

4. As a result of the analysis of the data collected from Service Club A, it was concluded that (1) for this target audience the film had a positive effect, and (2) the film was accepted by this target audience.

5. As a result of the analysis of the data collected from Service Club B, it was concluded that (1) no significant change was detected in this group's position on hiring handicapped workers, (2) that the film had a positive effect on responses made to items of an attributes scale (see Item 10 of Criterion Instrument C, Appendix IV), and that (3) the film was accepted by this target audience.

6. No statistical analysis or description was made of an informal critique by a small group of professional people involved in the hiring process. Their responses will be interpreted in the Discussion section. A transcript of the responses will be given to the sponsor along with a list of the other findings.

7. In general, on the basis of the evidence collected
    from five showings and the administration of four
    evaluative devices, it is concluded that the ex-
    perimental film, **A** Second Look, designed and eval-
    uated by the communications method described in
    this study, achieved its operational objective,
    i.e., acceptance of the film's message by the spon-
    sor and target audience.

DISCUSSION

A communications method of non-theatrical film pro-
duction was developed to enhance the successful performance
of university produced films. To demonstrate the ways in
which the method can be of use to the producer, an inter-
pretation will be made of the findings of the study.

Aid to Film Design   One claim made for the method is that
the findings of research can be applied successfully to
the creative process. For example, one theory applied in
the film stated that empathy is aroused by a familiar scene.
This was verified by verbal responses recorded during an
informal critique of the film.

Another applied theory was that an indirect approach
is best when persuasion or motivation is the object. Again,
responses supported the theory.

While some applications drew conflicting responses,
generally it can be said that the use of theory aided the
design process by (1) forcing the film designer to bring

the purpose of each sequence into sharp focus and then (2) provided him with well reasoned and tested arguments for achieving those purposes.

There are problems associated with this technique which need some discussion here and need a future investigator to resolve them.

Some questions facing a film designer who wishes to use the method described in this study are: (1) how to go about reviewing the literature; (2) how to choose one theory over another; and (3) what sources of help are available to him?

All of the literature which may be useful to a film maker was not necessarily written for him. There are three broad categories into which relevant literature could be cast: (1) behavioral science research; (2) message design research; and (3) studies relating specifically to film production. A sample list of recommended readings will be found in Appendix XX.

It would be helpful for a university producer to have a background in psychology and communications. If he does not, then he should take the steps necessary to acquire one. This need stems from his choice of profession and not from his selection of one method of production over another.

A reading of the literature will reveal some conflicting findings. This does not mean that they cancel each other out and that man's accumulation of knowledge

in that area recedes accordingly. On the contrary, man is better off for having two or more reasoned positions on any subject. And so is the film designer better off with two or more alternatives to choose from. His decision will be based on the analysis of the several arguments. Whatever his judgment, it will be better for having been an educated one.

If he has time and money he can test the conflicting findings as variables of design. More likely, he will arrive at a generalization and proceed to operationalize it. Just what filmic form will be given to the theory depends upon the creative and technical resources of the unit.

Just what sources of help are available to university film units is a question worthy of future investigation, as is the related question of retrieval of relevant information. Resources which come quickly to mind are: (1) libraries; (2) computer centers; (3) on-campus researchers; and (4) interested faculty members.

Aid to Instruction   The use of the method can serve an instructive purpose in that the execution of its systematic procedures demands a keeping of records and an organization of materials. This information, being amenable to analysis, can be of help to those teaching and learning the processes involved in film production.

Aid to Experimentation   The university film production unit is looked to as the pace setter of the educational

film industry. This is as it should be since these units are located at the very dynamic centers of learning. But the contemporary producer, with his limited resources, faces a crowded schedule. There simply is not time for aimless experimentation. The communications method offers a way of production in which new things can be tried and evaluated. The use of research findings in itself opens up unlimited possibilities for using new ideas and techniques. These need cost no more nor require more time to execute than would normally be provided for in film contracts.

Aid to Film Modification   The communications method provides for an evaluation of actual performance. Since films designed by this method are amenable to analysis, and if the analysis points to structural weaknesses, the producer can quickly determine the need for, and feasibility of, modifications.

For example, it was revealed in the informal critique that there might be resentment on the part of some organizations because they were not included in the film's credit titles. There are several constructive ways to handle this problem. The most expensive way would be to re-make the credit titles. A less expensive way would be to print a list of organizations who had anything to do with the production. Such a list could then be circulated with the film. These organizations could be acknowledged by whoever happens to be introducing the film.

Aid in Use Situations   In addition to indicating a need for supplementary materials, the evaluation might suggest uses for the film which the sponsor and producer might have overlooked. From the informal critique came suggestions that the film should be shown during hiring periods, shown on an individual basis to members of management, and shown to unemployed handicapped people to build their confidence.

Aid to Modification of the Method   The communications method provides for feedback which is defined as control based on the determination of actual performance rather than expected performance. Evaluation of the product implies evaluation of the method. When needs are realized and acted upon to modify the methods of production, a result will be more successful films. The needs realized as a result of this study are listed in this chapter under Suggestions for Future Research.

Aid to Subsequent Productions   If the analysis points to a particularly successful technique, the film maker has the advantage of being able to refer to a rationale, a map of his strategy, for clues as to why the technique was successful. The rationale of message construction is equally useful to subsequent productions if the data indicate failure of some element of design.

An example of the first case is attention given to development of source credibility by allowing peers of the target audience to do much of the persuading. Responses

to the informal critique gave credence to the technique.

An example of a technique that could alienate a segment of the audience was that of selecting certain locations to the exclusion of others. At best, this error of omission was a misapplication of the theory of empathy. A better relationship between the audience and scenes familiar to it should be attended to in future designs.

Such findings should be filed by the individual film units doing the research, and shared with others through the Journal of the University Film Producers Association.

Concluding Statement   The communications method of non-theatrical film production described and demonstrated in this study is recommended to university film producers as a means of strengthening their film units. Only through an organized and rational system will the university film makers be able to cope with the dynamics of American society in general and university societies in particular. The pressures resulting from having to do more things with fewer resources make it necessary to tighten organizational structures and find more efficient ways of achieving objectives.

The communications method employs a much neglected resource, research findings gleaned from over half a century, as one means of helping the film designer without increasing time or cost factors. It adds evaluation of its product and of itself as a means of ensuring that the energies of time, money and personnel were well used and

will continue to be well used.

The communications method takes cognizance of the limitations of university film units in that the procedures it requires of them are well within their capabilities. It also recognizes the tremendous potential of such film units to influence human behavior. It is toward this end that the method is advanced.

SUGGESTIONS FOR FUTURE RESEARCH

The purpose of this study was to develop and describe by demonstration a communications method of non-theatrical film production. While there are a great many variables which enter into the successful production of a film, this study concerned itself with two, message design and evaluation. This oversimplification of a complex, creative process was intended not to distort but rather to focus attention on critical, neglected areas. The following research needs became evident as the study uncovered questions beyond its nature and scope.

1. Since the variable, 'use of research findings in message design,' was not controlled, it cannot be said that the film was successful because its design was based on the findings of relevant research. A future investigator may establish this contribution.

2. If the investigator designs a study which tests

the effect of a research based design against one
which is non-research based, he may also make a
significant contribution by making a comparative
cost analysis of the two methods.

3. The subject of finance is related to film contracts,
another largely untouched aspect of production,
yet one which has ramifications for an organized
communications system. The contract evolves after
many consultations between sponsor and producer.
It represents definitive, summary agreement on what
shall be done and by whom within specified limits
of time and money. An organized production system
is imperative to the successful execution of legal
contracts. Not only can it execute contracts effi-
ciently, but also it can fashion them to the unit's
advantage.

The question of legal rights of actors, copy-
right infringement and distribution of the completed
film need definitive treatment. They are as much
a part of film making as is the question of effi-
ciency which implies conservation of the unit's
and the university's resources.

4. A study of contracts should include a section on
research proposals. The criteria for research to
be conducted cooperatively by sponsor and producer
must include considerations of time and personnel.

Research resources available on college and university campuses should be explored for their possible help to university film producers.

5. One barrier standing between theory and its application is a retrieval problem. It would be a service to university film units if a future investigator would undertake to compile a summary edition of film research conducted over the past 50 years. It should be prepared in such a way that film designers can use it for practical help in the solution of their everyday design problems.

6. A future investigator could profitably examine those target audience members who do not cooperate in evaluations. An attempt should be made to sample opinions from such groups to determine in what respects they may differ from their fellow members who do cooperate.

7. Osgood, Suci and Tannenbaum theorize that, " . . . we would expect the effect of one sign upon another to decrease as the time interval between them increases. . . ."[69] This has implications for film producers and users. Since research indicates that

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[69]Charles E. Osgood, George J. Suci and Percy H. Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957), p. 207.

two showings of a film increases retention of factual

information,[70] can it be assumed that this same

procedure would have the same positive effect on

attitudes? Osgood, Suci and Tannenbaum think that

this may be the case. They theorize that repeated

interaction between the two signs (evaluation of

source and concept connected by an assertion) will

reduce the difference between them until they share

a point of common intensity which is a point of max-

imum congruity;[71] the effect would be much the same

as that resulting from conditioning.

A future investigation could explore the valid-

ity of this theory and determine if keeping the

issue salient through the use of related materials

and other media is as effective as repeated show-

ings of the film which produced the original reac-

tion.

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[70]William H. Allen, "Audio-Visual Communication," Chester W. Harris (ed.), Encyclopedia of Educational Research (New York: The Macmillan Co., 1960), pp. 115-137.

[71]Osgood, Suci and Tannenbaum, op. cit., pp. 208-209.

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APPENDICES

APPENDIX I

STANDARD EVALUATION FORM

1. The film _____ was of
    material assistance in helping me achieve my teaching
    objectives.

    Yes _____ No _____

2. The film arrived in good physical condition.

    SOUND WAS GOOD _____ POOR _____
    PHOTOGRAPHY WAS GOOD _____ POOR _____

    Comment _____

3. I question this film because _____

    _____

    _____

    _____

4. I have seen a film that the Center does not have in its
    library, but should have.

    TITLE _____ 16 mm sound

    SOURCE _____

    _____

    If this film is in GOOD CONDITION and served your ob-
    jectives, please tell us, BUT....

    If it didn't, or if it was in POOR CONDITION, it is
    even more important that you TELL US!

APPENDIX II

CRITERION INSTRUMENT A

Instructions: PLEASE GIVE US YOUR THOUGHTFUL AND VERY FRANK OPINION ON THIS FILM AND THE SUBJECT OF HANDICAPPED WORKERS. YOUR RESPONSES WILL BE ANONYMOUS AND CONFIDENTIAL SINCE WE REQUEST THAT YOU DO NOT WRITE YOUR PERSONAL OR COMPANY'S NAME ON THIS FORM. AFTER COMPLETION, PLEASE FOLD FORM TO ENSURE SECRECY. THANK YOU.

1. Please underline the word or words which most nearly describe:

   a) your position on hiring handicapped workers **before** seeing this film

      strongly against; against; no position; for; strongly for.

   b) your position on hiring handicapped workers **after** seeing this film

      strongly against; against; no position; for; strongly for.

   c) the influence this film had on your attitudes toward handicapped workers

      none; very little; uncertain; some; a great deal.

   d) how the film affected you emotionally

      strongly negative; negative; no effect; positive; strongly positive.

   e) your liking for the film

      strongly dislike; dislike; uncertain; like; strongly like.

f) your agreement with this statement: I believe that
it is the social responsibility of business and in-
dustry to hire qualified handicapped applicants.

strongly disagree; disagree; uncertain; agree;

strongly agree.

g) your agreement with this statement: As a result
of this film I will hire handicapped workers.

strongly disagree; disagree; uncertain; agree;

strongly agree.

2. Please list your arguments _for_ hiring the handicapped:
(one or two words are sufficient for each argument.)

a.   f.

b.   g.

c.   h.

d.   i.

e.

3. Please list your arguments _for not_ hiring the handi-
capped: (one or two words are sufficient for each ar-
gument.)

a.   f.

b.   g.

c.   h.

d.   i.

e.

(Please use back for any additional comments on film.)

APPENDIX III

CRITERION INSTRUMENT B

PLEASE PUT YOURSELF "IN THE SHOES" OF A TYPICAL MEMBER OF
THE TARGET AUDIENCE (MEMBER OF THE LIONS, KIWANIS, ETC.,
WHO REPRESENT THE PROFESSIONAL, BUSINESS AND INDUSTRIAL
COMMUNITY OF LANSING). ANSWER THE QUESTIONS THE WAY YOU
PREDICT HE WOULD ANSWER THEM. PLEASE ANSWER ALL QUESTIONS.
WE REQUEST THAT YOU DO NOT WRITE YOUR NAME OR YOUR COMPANY'S
NAME ON THIS FORM. THANK YOU VERY MUCH.

1. Please underline the word or words you predict a typ-
    ical member of the target audience would select to
    describe:

    a) his position on hiring handicapped workers <u>before</u>
       seeing the film "A Second Look"

       strongly against; against; no position; for;

       strongly for.

    b) his position on hiring handicapped workers <u>after</u>
       seeing the film

       strongly against; against; no position; for;

       strongly for.

    c) how the film affected him emotionally

       strongly negative; negative; no effect; positive;

       strongly positive.

    d) his liking for the film

       strongly dislike; dislike; uncertain; like; strongly

       like.

    e) his agreement with this statement before seeing the
       film: I believe it is the social responsibility
       of business and industry to hire qualified handi-
       capped applicants.

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strongly disagree; disagree; uncertain; agree;

strongly agree.

f) his agreement with this statement: As a result of
this film I will hire handicapped workers or would
if I were in a position to.

strongly disagree; disagree; uncertain; agree;

strongly agree.

g) his agreement with the following statements before
seeing film: Handicapped workers are

LOYAL

strongly disagree; disagree; uncertain; agree;

strongly agree

SKILLED

strongly disagree; disagree; uncertain; agree;

strongly agree

ABLE TO GROW ON JOB

strongly disagree; disagree; uncertain; agree;

strongly agree

PUNCTUAL

strongly disagree; disagree; uncertain; agree;

strongly agree

DEPENDABLE (ON THE JOB EVERY DAY)

strongly disagree; disagree; uncertain; agree;

strongly agree

ACCEPTED (BY FELLOW WORKERS)

strongly disagree; disagree; uncertain; agree;

strongly agree

PRODUCTIVE

strongly disagree; disagree; uncertain; agree;

strongly agree

FLEXIBLE

strongly disagree; disagree; uncertain; agree;

strongly agree

SAFE

strongly disagree; disagree; uncertain; agree;

strongly agree

Of these 9 attributes which ones, if any, do you think the typical target audience member will rate handicapped workers higher on <u>after</u> seeing the film?

Loyal; skilled; able to grow on job; punctual; dependable

(on the job every day); accepted (by fellow workers); pro-

ductive; flexible; safe.

h) his agreement with this statement <u>after</u> seeing the film: I believe that it is the social responsibility of business and industry to hire qualified handicapped applicants.

strongly disagree; disagree; uncertain; agree;

strongly agree.

CRITERION INSTRUMENT C

PLEASE GIVE US YOUR THOUGHTFUL AND VERY FRANK ANSWERS TO
THESE QUESTIONS BY DRAWING A LINE UNDER THE WORD OR WORDS
WHICH MOST NEARLY DESCRIBE YOUR AGREEMENT WITH THE STATE-
MENTS. IT IS VERY IMPORTANT THAT YOU ANSWER ALL THE QUES-
TIONS. YOUR RESPONSES WILL BE ANONYMOUS AND CONFIDENTIAL
SINCE WE REQUEST THAT YOU DO NOT WRITE YOUR PERSONAL OR
COMPANY'S NAME ON THIS QUESTIONNAIRE. AFTER COMPLETION
PLEASE FOLD FORM TO ENSURE SECRECY. THANK YOU.

1. Communities would have stronger economies if all of
   their citizens could be gainfully employed.

   strongly disagree; disagree; uncertain; agree; strongly

   agree.

2. Business and industry have certain responsibilities
   for the economic and social welfare of their communi-
   ties.

   strongly disagree; disagree; uncertain; agree; strongly

   agree.

3. I believe people should be given a chance to become
   productive members of their communities.

   strongly disagree; disagree; uncertain; agree; strongly

   agree.

4. Handicapped workers should be given a chance to con-
   tribute to the economy of their community.

   strongly disagree; disagree; uncertain; agree; strongly

   agree.

5. Handicapped workers should be hired if they are qual-
   ified.

   strongly disagree; disagree; uncertain; agree; strongly

   agree.

6. It is the social responsibility of business and industry to hire handicapped workers.

   strongly disagree; disagree; uncertain; agree; strongly agree.

7. I will hire handicapped workers, or would if I were in a position to.

   strongly disagree; disagree; uncertain; agree; strongly agree.

8. I will contact the Employ the Handicapped Committee tomorrow to get more information about handicapped workers.

   strongly disagree; disagree; uncertain; agree; strongly agree.

9. Before leaving this meeting I will make an appointment with a member of the Employ the Handicapped Committee.

   strongly disagree; disagree; uncertain; agree; strongly agree.

10. PLEASE UNDERLINE THE WORD OR WORDS WHICH MOST NEARLY DESCRIBE YOUR AGREEMENT WITH THE FOLLOWING STATEMENTS: HANDICAPPED WORKERS ARE

LOYAL

strongly disagree; disagree; uncertain; agree; strongly agree

SKILLED

strongly disagree; disagree; uncertain; agree; strongly agree

ABLE TO GROW ON JOB

strongly disagree; disagree; uncertain; agree; strongly agree

PUNCTUAL

strongly disagree; disagree; uncertain; agree; strongly agree

DEPENDABLE (ON THE JOB EVERY DAY)

strongly disagree; disagree; uncertain; agree; strongly agree

ACCEPTED (BY FELLOW WORKERS)

strongly disagree; disagree; uncertain; agree; strongly agree

PRODUCTIVE

strongly disagree; disagree; uncertain; agree; strongly agree

FLEXIBLE

strongly disagree; disagree; uncertain; agree; strongly agree

SAFE

strongly disagree; disagree; uncertain; agree; strongly agree

(Items 1 through 10 were administered in a pre-post sequence. Items 11 and 12 were administered post film only.)

11. PLEASE UNDERLINE THE WORD OR WORDS WHICH MOST NEARLY DESCRIBE

how the film affected you emotionally

strongly negative; negative; no effect; positive; strongly positive.

12. PLEASE UNDERLINE THE WORD OR WORDS WHICH MOST NEARLY DESCRIBE:

your liking for the film

strongly dislike; dislike; uncertain; like; strongly
like.

Additional comments:

APPENDIX V

CRITERION INSTRUMENT D

1. What did you like and dislike about the film?

2. How did the film affect you emotionally?

3. Who would you say was the originator of the filmed message (who was the source, sponsor)? Do you think they are reliable, trustworthy? What do they have to gain? Are they sincere? Can you believe them?

4. Were the actors typical? Did you believe them? Which ones did you like best?

5. What was the role of the narrator? Was he convincing? Did he and his bookstore seem real or staged? Was he necessary to the film?

6. How important is the message?

7. Was the film convincing? Do you think it will influence behavior of Lansing employers?

8. What approach would have been better?

9. Do you feel it was a good idea, or necessary, to produce a film in Lansing for Lansing audiences?

10. Do you think the social responsibility theme was effective?

11. How do you think the film should be used for best effect?

12. What do you think is the most significant argument for or against hiring handicapped workers?

13. In one service club almost half of the members did not fill out an evaluation form after being requested to by their president, program chairman and investigator. Why do you think they didn't fill out the form? What was the significance of their failure to do so?

APPENDIX VI

SEQUENCE SCRIPT OF EXPERIMENTAL FILM

A SECOND LOOK

Sequence 1: Live scenes 1-5; Cumulative time 0:21 to 1:25.

Visual: Pan business district Lansing. Snowfall. Store windows decorated for Christmas. No people in evidence.

Narration: (Bookseller) MEN MAY SEEK AND NEVER FIND, THE EYE MAY LOOK AND NEVER SEE, AND EVEN SEEING MAY BE BLIND. HOW QUIET A TOWN SEEMS WHEN ITS HEARTBEAT ISN'T HEARD, HOW PEACEFUL WHEN ITS PEOPLE AREN'T SEEN. WE CAN CHOOSE THE SERENITY OF THE DEAF AND BLIND, OR TAKE THE DISCOMFORT THAT AWARENESS BRINGS TO THOSE WHO LISTEN...AND HEAR, TO THOSE WHO LOOK...AND SEE.

Music: Music box.

Effects: No traffic sounds until cued by narrator's "...AND HEAR."

Super: Head title, A SECOND LOOK, wipes on as bus drives through scene; cued by narrator's "...AND SEE."

Sequence 2: Live scenes 6-8; Cumulative time 1:25 to 2:37.

Visual: Bookstore window and interior. Elderly bookseller approaches window display, places cards in front of Renoir picture, Milton book, bust of Beethoven. Cards identify Beethoven, Milton, and Renoir. Bookseller walks toward office, stops, looks at photo album, picks it up, sits down.

Narration: (None)

Music: Music box fades out; it is replaced with slow choral section from Beethoven's Ninth symphony.

Effects: Traffic fades out near head of scene 6.

Super: Head title fades out near head of scene 6.

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Sequence 3:   Still, live scenes 9-19; Cumulative time 2:37
to 4:07.

Visual: Bookseller opens album, looks at aerial view of
          Lansing. Dissolve to old map of Michigan. Book-
          seller turns page. Sees four historical stills
          featuring people, on next page sees four histor-
          ical stills featuring people and their industry.

Narration: (Bookseller) LANSING, THE HEART OF MICHIGAN.
WE'RE HERE BECAUSE WE'RE HALFWAY FROM HERE TO THERE (Points
out east-west borders with finger)...ALMOST. BECAUSE A
LEGISLATURE DECREED (other voice) THAT THE SEAT OF GOVERN-
MENT OF THIS STATE SHALL BE IN THE TOWNSHIP OF LANSING,
IN THE COUNTY OF INGHAM. (Bookseller) FROM THE BEGINNING,
TWO THINGS MARKED THIS COMMUNITY; PEOPLE, PIONEER STOCK,
THEY SAW THE FUTURE IN FORESTS AND RIVERS. PEOPLE, AND
THEIR INDUSTRY. UPSTART, CONTEMPTUOUS OF THE FACT THAT
THEY WERE IN THE MIDDLE OF NOWHERE, DETERMINED WITH MID-
WESTERN STUBBORNNESS TO GO SOMEWHERE.

Music: Harmonica and banjo.

Effects: Crowd reaction to announcement of location of
           capitol; gavel.

Sequence 4:   Still, live scenes 20-30; Cumulative time
4:07-5:30.

Visual: Industrial montage. Still aerial picture of Lan-
          sing followed by a series of exterior industrial
          scenes.

Super: Faces from historical still pictures are superim-
         posed over industrial scenes.

Narration: (Bookseller) AND NOW THAT WE'VE ARRIVED...A
HUNDRED YEARS AND A HUNDRED THOUSAND PEOPLE LATER...WHAT
DO WE SEE WHEN WE BACK OFF AND TAKE A SECOND LOOK? SOME-
TIMES THE SIMPLE IDEA OF A TOWN CAN GET LOST IN THE VERY
ACT OF ITS GROWING UP. MACHINERY NEEDS POWER AND POWER
MAKES NOISE AND SMOKE. IT COULD OBSCURE THE NEEDS OF THE
PEOPLE WHO STARTED IT ALL. MORE THAN A CENTURY AGO THESE
PEOPLE WORKED TOGETHER, DEPENDED ON EACH OTHER TO CARVE
THEIR FUTURE OUT OF A FOREST ON A RIVERBANK. IN A SENSE
WE'RE HERE TODAY BECAUSE THEY BOTHERED TO GIVE THIS PLACE
A SECOND LOOK. OH, WE'VE CHANGED IN A HUNDRED YEARS. BUT
THERE'S A QUALITY ABOUT PEOPLE AND THEIR INDUSTRY THAT
DOESN'T CHANGE. THERE'S A NEED FOR EACH OTHER THAT TRANS-
CENDS TIME.

Music: Beethoven's Ninth. Slow, heavy instrumental.

Effects: Whistle blast, drop forge.

Sequence 5: Still, animation scenes 32-43; Cumulative time 5:30-6:08.

Visual: A series of work situations showing drop forge (one of Lansing's oldest industries), power-shovel, office, welding machine, store, hospital room, with the worker in each case covered by a gray silhouette. The series is repeated but this time the worker emerges through the silhouette to become visible. The rhythm is interrupted in the last picture when part of the worker, rather than appearing like the others, is outlined by an animated white line; at the conclusion of the outlining procedure, the worker becomes visible.

Narration: (Bookseller) A TOWN CAN'T GET ALONG WITHOUT ALL OF ITS HUMAN SKILLS: TYPISTS, WELDERS, CLERKS, NURSES. WE'VE TRIED, HERE IN LANSING, TO USE ALL OF OUR PEOPLE; WE'VE COME A LONG WAY. FOR EXAMPLE, IF A JOB CALLS FOR JUST TWO ARMS, ONE LEG, STRONG BACK, AVERAGE IQ, NO SPEECH, NO HEARING, IT COULD BE DONE BY A SO-CALLED HANDICAPPED PERSON—LIKE BOB SWAGGART, DEAF MUTE.

Music: (None until Handicapped Worker's theme when deaf mute still picture appears.)

Effects: (None)

Sequence 6: Live scenes 44-57; Cumulative time 6:08-8:07.

Visual: Bob Swaggart at work; discussing work with foreman through friend who speaks sign language. Mr. Lundberg, Bob's employer, seated at office desk. Fellow workers at machines. Machined product. Bob and fellow worker leaving shop. Light bulb alarm click burns out.

Narration: (Mr. Lundberg) BOB'S BEEN A VERY DEPENDABLE WORKER—BEEN WITH US 10-12 YEARS. IT SO HAPPENED THAT THERE WAS A YOUNG FELLOW WORKED BESIDE HIM WHO WANTED TO HELP HIM OUT BECAUSE HE WAS HAVING TROUBLE COMMUNICATING WITH THE FOREMAN, SO HE LEARNED SIGN LANGUAGE ALL ON HIS OWN. SINCE THAT TIME THESE TWO MEN HAVE BECOME VERY CLOSE FRIENDS. (Bookseller) HIS EMPLOYER, MR. LUNDBERG, OF LUNDBERG SCREW PRODUCTS COMPANY. (Mr. Lundberg) I THINK IT'S SORT OF A RESPONSIBILITY OF INDUSTRY TO HIRE THE HANDICAPPED—WHERE IT DOESN'T HANDICAP THE BUSINESS ITSELF. (Bookseller) THE OTHER SHOP PEOPLE? YOU CAN'T SAY HOW THEY ALL FEEL ABOUT IT. THEY'RE SKILLED MEN...DOING A JOB...THEY RESPECT GOOD

WORK...AND THE MAN WHO CAN DO IT. (Mr. Lundberg) WE'RE
A JOB SHOP AND HAVE TO HAVE MEN WHO CAN ADAPT TO DIFFERENT
JOBS. THEY HAVE TO BE ABLE TO ADAPT VERY QUICKLY, SOMETIMES
SEVERAL TIMES A DAY. AT FIRST WE WONDERED WHETHER BOB COULD
DO THIS...OR WHETHER ANY HANDICAPPED PERSON COULD...BUT
BOB HAS BEEN ABLE TO DO THIS PERFECTLY OK. (Bookseller)
BOB SWAGGART, DEAF MUTE, LATE TO WORK ONCE IN 12 YEARS...
WHEN HIS LIGHT BULB ALARM CLOCK BURNED OUT.

Music: Handicapped Workers' motif. Industrial motif.

Effects: Machine shop. Clock ticking. Silence and dark-
ness.

Sequence 7: Still, live scenes 58-65; Cumulative time
8:07-9:06.

Visual: Night scene of capitol and a few buildings during
the Christmas season. Start on dark area. Pan
right to out-of-focus star on light standard.
Resolve focus. Pull back to reveal deserted
street and sidewalk. Window displays: bells
twirling, mechanical dolls dancing. Downtown
shopping area, people and cars at intersection.
Group of people, including woman on crutches,
enter store.

Narration: (Bookseller) I WONDER IF LANSING OR ANY OTHER
COMMUNITY IS SO RICH THAT IT CAN AFFORD TO THROW AWAY ITS
HUMAN RESOURCES. A TOWN HAS MANY PROBLEMS THAT CAN'T BE
SOLVED BY TURNING AWAY. WE'VE GOT A HUNDRED THOUSAND PEOPLE—
ONE OUT OF FIVE WITH SOME DISABILITY—ONE OUT OF FIVE.

Music: Music box.

Effects: (None)

Sequence 8: Still scene 66; Cumulative time 9:06-9:39.

Visual: Three still pictures of the Employ the Handicapped
Committee in session. Pan left to right.

Narration: (Bookseller) THIS COMMUNITY HAS ORGANIZED A
LOCAL EMPLOY THE HANDICAPPED COMMITTEE. ITS JOB IS TO BREAK
DOWN THE BARRIERS STANDING IN THE WAY OF DISABLED BUT QUAL-
IFIED WORKERS. AND THERE ARE THREE MEMBER ORGANIZATIONS
READY TO HELP EMPLOYERS MATCH SKILLS TO JOBS: THE MICHIGAN
EMPLOYMENT SECURITY COMMISSION; DIVISION OF VOCATIONAL RE-
HABILITATION OF THE DEPARTMENT OF PUBLIC INSTRUCTION; AND
THE DEPARTMENT OF SOCIAL WELFARE'S DIVISION OF SERVICES
TO THE BLIND.

Music: (None)

Effects: (None)

Sequence 9: Live scenes 67-70; Cumulative time 9:39-10:19.

Visual: Crippled girl gets out of her car. Typing at of-
fice desk. Her employer at his desk. Girl takes
notes at her desk.

Narration: (Bookseller) THEY SAY THEY DON'T ASK FOR SPEC-
IAL FAVORS OR SYMPATHY. JUST A LONG, HARD SECOND LOOK TO
DETERMINE A HUMAN BEING'S REAL WORTH. THIS IS CAROL LA BELLE,
RECEPTIONIST AT THE RATHBUN INSURANCE AGENCY. (Mr. Rathbun)
I DON'T SEE THAT IT MAKES ANY DIFFERENCE IN OUR CASE, SHE'S
DOING THE SAME JOB ANY GIRL WOULD DO WHETHER SHE WAS HANDI-
CAPPED OR NOT HANDICAPPED. (Bookseller) THIS IS MR. RATHBUN,
CAROL'S EMPLOYER. (Mr. Rathbun) JUST TO GIVE YOU AN EX-
AMPLE, ONE FELLOW WALKED IN THIS MORNING...HE WORKS UPSTAIRS
I BELIEVE...SHE WAS WALKING TO THE FILE OR SOMETHING, USING
HER CRUTCHES, AND HE SAID, 'CAROL, ARE YOU HANDICAPPED?
I DIDN'T KNOW THAT!'

Music: Handicapped workers' motif.

Effects: (None)

Sequence 10: Live scenes 71-83; Cumulative time 10:19-12:01.

Visual: Blind worker operating welding machine, learning
new job, walking on company street, being inter-
viewed by a representative of the Department of
Social Welfare, Division of Services for the Blind.
Bob Stone, Safety Director at Oldsmobile, at desk
and walking with blind worker.

Narration: (Bookseller) THIS IS JOHN MULLIN. (John Mullin)
TODAY IN THE FACTORY PRODUCTION IS HIGH AND YOU CAN'T EX-
PECT TO BE ASSIGNED TO ONE JOB AND STAY THERE. YOU HAVE
TO BE FLEXIBLE, ABLE TO MOVE AROUND. WHITEY HAS TAUGHT
ME LOTS OF JOBS, LIKE MY NORMAL ONE WHICH IS RUNNING THE
WELDER, OR HE MAY COME UP TO ME AND SAY, 'JOHN, HOW'D YOU
LIKE TO LEARN A NEW JOB?' I'LL SAY, 'I'LL GO LOOK AT IT
AND IF I CAN DO IT, OK.' HE'LL HAVE ME DOING ANYTHING FROM
GLOVE BOX LIGHT ASSEMBLY TO--WELL, LIKE THIS ONE HERE--LOWER
BEARING ASSEMBLY. (Bob Stone) OF COURSE, WE DO NOT ATTEMPT
TO SELECT THESE PEOPLE OURSELVES...WE DON'T JUST TAKE THESE
PEOPLE IN OFF THE STREET...WE HAVE THE DEPARTMENT OF SOCIAL
WELFARE, DIVISION OF SERVICES FOR THE BLIND, SELECT THEM
FOR US. WE KNOW THEY KNOW THESE PEOPLE AS WELL AS THEY

KNOW THEMSELVES BECAUSE THEY WORK WITH THEM, SOME OF THEM
RIGHT THROUGH SCHOOL...TAKE AL WICHNER, FOR EXAMPLE...
(Bookseller) BOB STONE, SAFETY DIRECTOR AT OLDSMOBILE.
(Bob Stone) THE TRAVEL IS NO PROBLEM AT ALL. GIVE THESE
BLIND PEOPLE A COUPLE OF DAYS AND THEY CAN GET AROUND AS
WELL AS YOU OR I...OUR PROBLEM IS TO FIND A JOB THAT IS
ALREADY ESTABLISHED THAT YOU CAN DO WITH YOUR EYES CLOSED.
THAT'S THE WHOLE PROBLEM. I DON'T THINK WE'VE EVER HAD A
LOST TIME ACCIDENT WITH A BLIND PERSON.

Music: Handicapped workers' motif. Industrial motif.

Effects: Welder, traffic.

Sequence 11: Live, still scenes 84-98; Cumulative time
12:01-13:16.

Visual: Bookseller looks at twelve still pictures of per-
          sons with various handicaps. Six are in working
          situations. Six are in job seeking situations.

Narration: (Bob Stone) THE HANDICAPPED PERSON...AND RE-
MEMBER, THEIR HANDICAP IS NOT ALWAYS SOMETHING YOU CAN SEE...
IS USUALLY A VERY DESIRABLE PERSON...ON THE JOB EVERYDAY...
GETTING ALONG WITH PEOPLE...GETTING THE JOB DONE. HERE'S
MY ARGUMENT: I THINK THAT THERE IS JOB OPPORTUNITY WITHIN
ANY GIVEN AREA, ESPECIALLY AN INDUSTRIAL AREA LIKE LANSING,
TO ABSORB ALL THE HANDICAPPED PEOPLE WHO ARE EMPLOYABLE.
THIS IS A LOCAL PROBLEM. YOU SHOULD SAY, 'ALL RIGHT, THESE
PEOPLE ARE PART OF OUR LOCAL GROUP. WE'VE GOT TO TAKE CARE
OF THEM AND WE CAN IF WE JUST ORGANIZE OURSELVES RIGHT.'
THE FIRST THING WE HAVE TO DO IS TO RID OURSELVES OF THIS
IDEA THAT IF A MAN ISN'T 100% PHYSICALLY PERFECT FROM HIS
HEAD TO HIS TOES THAT WE CAN'T USE HIM. WE CAN! THERE
IS A HUMANITARIAN ASPECT: I DON'T THINK WE HAVE THE RIGHT
TO TELL OUR HANDICAPPED NEIGHBORS THAT THEY DON'T FIT INTO
THE EMPLOYMENT PICTURE OF OUR COMMUNITY.

Music: Handicapped workers' motif.

Effects: (None)

Sequence 12: Live scenes 99-109; Cumulative time 13:16-
15:04.

Visual: Basket case being lifted from car into wheelchair.
          Wheels self into shop. A fellow worker lifts him
          from wheelchair to office chair where he performs
          his job of service controller for an automobile
          repair shop. He is shown interacting with fellow
          workers via an intercom system.

Narration: (Bob Stone) THERE'S A PLACE FOR ALL OF THEM
SOMEWHERE. I KNOW THERE IS IF YOU GO OUT AND LOOK FOR IT.
ONCE YOU FIND THE PLACE, THEN WHO IS STANDING IN THE WAY?
THE MAN WHO SAYS YES OR NO TO WHETHER OR NOT HE IS HIRED.
(Jerry Van Liew) YEAH, IT WAS A DIFFERENT JOB. THE FIRST
ONE I EVER HAD. I REALLY DIDN'T KNOW WHAT TO EXPECT WHEN
I FIRST CAME HERE. I WAS MOSTLY SCARED THAN ANYTHING ELSE.
(Bookseller) JERRY VAN LIEW, SERVICE CONTROLLER AT STORY
OLDSMOBILE. (Jerry) I GUESS YOU COULD SAY I WAS AFRAID.
AFRAID I COULDN'T HANDLE THE JOB, THAT THE MECHANICS MIGHT
NOT LIKE ME. THAT I MIGHT NOT BE ACCEPTED. I'M RESPONSIBLE
FOR THE SERVICE DEPARTMENT OUT THERE, ROUTING THE CARS TO
THE DIFFERENT DEPARTMENTS, SEEING THAT THE TIME SCHEDULE
IS MET AND THE CUSTOMER GETS HIS CAR ON TIME. WE SERVICE
BETWEEN 125 AND 300 CARS A DAY. IT WAS QUITE DIFFICULT
AT FIRST BEING UP IN THE TOWER AND BEING COOPED UP SO LONG
AND FOR SUCH A LONG PERIOD OF TIME. I FELT AS IF THE WALLS
WERE PRESSING AGAINST ME. (Bob Stone) WE DON'T HAVE TO
WORRY ABOUT THEM GETTING ALONG WITH THEIR FELLOW WORKERS.
HUMAN BEINGS ARE A LOT MORE COMPATIBLE THAN WE GIVE THEM
CREDIT FOR BEING...AND THEY'RE A LOT MORE COMPASSIONATE
THAN WE GIVE THEM CREDIT FOR BEING.

Music: Handicapped workers' motif.

Effects: Intercom.

Sequence 13: Live scenes 110-118; Cumulative time 15:04-
15:45.

Visual: Cars going by snowmen in Christmas Lawn Decoration
         display. Cars reflected in store window as doll
         peers out. Shelf of toy trucks in store window.
         Little boy points to window display. Mechanical
         boy-doll shakes Christmas package close to ear.
         Mechanical fairy doll waves wand. Wand touches
         down on a scene of sun reflected through silhou-
         etted star decoration on light standard.

Narration: (Jerry) FOR ABOUT TWO OR THREE WEEKS, EVERY
TIME I'D GO HOME AT NIGHT ALL I COULD SEE WAS CARS, LICENSE
NUMBERS AND PEOPLE YELLING AT ME. I'D HEARD ABOUT PEOPLE
SEEING THINGS IN THEIR SLEEP...BUT IT'S THE FIRST TIME THAT
IT EVER HAPPENED TO ME. IT WAS KIND OF ROUGH. I GUESS
THEY EXPECTED TO FIND SOMEBODY WHO'D BE KIND OF A FREAK
AT FIRST. SO, FOR A WHILE, I FELT LIKE SOMETHING ON DIS-
PLAY IN A WINDOW. (Bob Stone) THIS IS A REAL PROBLEM.
YOU WON'T SOLVE IT BY WAVING A MAGIC WAND OR SOMETHING LIKE
THAT...IT WON'T JUST DISAPPEAR.

Music: Music box.

Effects: Traffic, silver bell tinkling as wand touches
          scene.

Sequence 14: Live, still scenes 119-126; Cumulative time
15:45-18:02.

Visual: Bookseller looking at album. He looks up as if
         listening to the voice on the sound track. As
         the camera moves closer to the bookstore, the book-
         seller glances over toward the bust of Beethoven.
         Close shot bust of Beethoven. Close shot Michael-
         angelo's Condemned Sinner—start on eye, pull back
         to full figure. Cut to still drawing Michaelangelo's
         Eve rising up from Adam's body as God beckons to
         her. Eve has hands folded in prayerful manner.
         Cut to Michaelangelo's Adam's hand stretched to-
         ward God's hand. Cut to still drawing of Mary
         adoring Christ child. Start close on Mary's crossed
         hands, pull back. Cut to Jewish mother holding
         child (live). Cut to group shot: mother and child,
         cantor, young girl. The family is celebrating
         Channukah. Girl lights candle. Cantor places
         candle in center of candelabrum.

Narration: (Bob Stone) THE ONLY WAY YOU'RE GONNA SOLVE
IT IS BY WORKING WITH THE PEOPLE WHO ARE TRYING TO GET JOBS
FOR THE HANDICAPPED. (Jerry) THEY DIDN'T KNOW WHAT TO
EXPECT, EITHER. THEY WERE AFRAID THEY'D FIND SOMEBODY WHO
WOULDN'T LIVE UP TO THE CAPABILITIES OF DOING THE JOB AND
WOULDN'T LAST LONG IN THE FIRST PLACE BECAUSE OF THEIR BEING
HANDICAPPED. BUT I DID! (Bob Stone) WHEN YOU GET RIGHT
DOWN TO IT, YOU HAVE TO HAVE A LITTLE FAITH IN THESE PEOPLE.
WORKER OR EMPLOYER, I DON'T THINK YOU CAN IGNORE YOUR RE-
SPONSIBILITY ONE NEIGHBOR TO ANOTHER. (Mr. Lundberg) I
DON'T SEE HOW WE CAN SIT HERE AND SAY, 'WELL, IF A PERSON
IS HANDICAPPED, PUT HIM ON A HUMAN JUNKHEAP AND WE'LL CON-
TRIBUTE SO MUCH IN TAXES TO KEEP HIM OVER ON SOME FARM OR
SOMETHING LIKE THAT. I JUST DON'T BELIEVE THAT. I BELIEVE
IT'S A RESPONSIBILITY OF BUSINESS AND INDUSTRY TO MAKE USE
OF HANDICAPPED PEOPLE WHEREVER POSSIBLE. (Jerry) THE WAY
I LOOK AT IT, I DON'T THINK I SHOULD EXPECT ANY MORE THAN
A NORMAL PERSON WOULD, JUST A GOOD WAGE AND A DECENT PLACE
TO WORK. I DON'T EXPECT ANY SPECIAL FAVORS AND I DON'T
FEEL I RECEIVE ANY EITHER, AND I DON'T WANT ANY BECAUSE
THERE'S NO USE IN WANTING SOMETHING YOU DON'T NEED...NO,
REALLY, THERE'S NO SENSE IN WANTING SOMETHING YOU DON'T
NEED. (Bob Stone) YOU HAVE TO HAVE A LITTLE COMPASSION
IN THIS THING. YOU'VE GOT TO BE WILLING TO REACH OUT AND
GIVE THESE PEOPLE A HAND. THEY CALL LANSING THE HEART OF
MICHIGAN; YOU KNOW AS WELL AS I DO THAT THEY MEAN SOMETHING
MORE THAN GEOGRAPHICAL LOCATION. NOW, I KNOW IT MAY SOUND

CORNY, BUT WHAT'S WRONG WITH HAVING A HEART? (Bookseller)
A HUNDRED YEARS...OR MORE...SINCE IT STARTED. A HUNDRED
THOUSAND PEOPLE LATER, AND THE FIRE OF HUMANITY STILL GLOWS
IN OUR TOWN.

Music: Handicapped workers' motif.

Effects: Voices are filtered as if bookseller might be
          recalling them.

Sequence 15: Live scenes 127-133; Cumulative time 18:02-
21:31.

Visual: Start on aerial of Lansing (still picture). Pull
         back to an over-the-shoulder shot of bookseller.
         He closes album. Cut to long shot of bookstore.
         Bookseller gets up, puts album on table by office
         door, walks to window display. Cut to close shot.
         Bookseller places card by Beethoven bust, identi-
         fying composer as being deaf. Places card by
         Milton's book, Paradise Lost, identifying the
         author as being blind. Places card by Renoir's
         painting, identifying the artist as having arth-
         ritic hands. Cut to full shot of store. Bookseller
         walks to door, looks out. Cut to exterior street
         scene of Lansing at night. Cut to close shot of
         window display. Pan across "Arthritic Hands" sign
         to "Blind" sign to "Deaf" sign. Come to rest on
         Beethoven bust. Cut to full shot of store. Book-
         seller looks at clock. Turns lights out. Prepares
         to go home. The credit titles begin a slow crawl
         from top to bottom of darkened store.

Narration: (Jerry, on exterior street scene) I WAS SCARED...
AFRAID I WOULDN'T LAST...BECAUSE OF MY HANDICAP. (Jerry,
on "Arthritic Hands" sign) BUT I DID. (Jerry, on "Blind"
sign) I DID. (Jerry, on "Deaf" sign) I DID.

Music: Handicapped workers' motif and Industrial motif
        restated chorally. Concludes soon after lights
        are switched off. Music box is background music
        for credit titles.

Effects: Traffic, Jerry's voice in echo chamber.

Super: Credit titles.

                    Employ the Handicapped Committee:

Tom Hurley, Chairman   Oscar Wade, Secretary

Arthur Brokenshire	W. C. Collins
Robert Combs, M.D.	Carl Cook
Richard Crable	John Davis
Richard A. Gerst	Robert Gutshall
Larry LaLone	Jane Potts
Bob Sheldon	Harold Spangler
Clyde Stephens	Glenn A. Stockton

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Story Oldsmobile, Inc.

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Historical Photos:

Michigan Historical Commission Archives

Album, "Music Box Christmas":

Columbia Records
Rita Ford, Incorporated
American Federation of Musicians

Beethoven Symphony No. 9:

Epic Records

For Appearing and Speaking in the Film Our Thanks to:

Carol LaBelle	John Mullin
Bob Swaggart	Jerry Van Liew

...and their employers and fellow workers.

Motion Picture Photographers:

G. William Hughes	Jack J. Leonard
F. L. McConkey	Gunter Pfaff

Still Photographer and Animator: Tom Tryon

Set Designer: William Gilmore

Sound Engineer: Ron LaMothe

Production Assistant: Harry Howard

Writer, Director, Editor: F. L. McConkey

Producer: Ed McCoy

This Film is a Cooperative Effort of:

The Lansing Community Services Council, Employ the Handi-
capped Committee, The Department of Special Education, and
the Audiovisual Center, Michigan State University.

APPENDIX VII

SOURCES USED IN

CONSTRUCTING RATIONALES

FOR FILM SEQUENCES

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TABLE A.1.   Summary of Item Mean Scores of the Sponsor,
Service Club A and Service Club B

ITEMS:	MEAN SCORES*		
	SPONSOR	CLUB A	CLUB B
Emotional Effect of Film	1.7	1.8	2.0
Liking for Film	1.5	1.8	1.9
Before Film Position on Hiring Handicapped Workers	1.6	2.1	2.0
After Film Position on Hiring Handicapped Workers	1.2	1.6	2.0
Acceptance of Social Responsibility Statement	1.4	1.8	2.1
TOTAL	7.4	9.1	10.0

*Where the mean score was determined by assigning arbitrary weights to the five categories of responses in the following order: Strongly Disagree (5), Disagree (4), Uncertain (3), Agree (2), and Strongly Agree (1). Consequently, the smaller the mean score the more favorable the position.

APPENDIX XII

TABLE A.5. Summary of Sponsor Changes from Perceived Before-Film Positions on Hiring the Handicapped, to After-Film Positions. N = 28.

Positive Changes	Number of Subjects
Against to Strongly For	1
No Position to For	3
No Position to Strongly For	5
For to Strongly For	18
Negative Changes	
Strongly For to For	1
TOTAL	28

APPENDIX XIII

TABLE A.6. Summary of Gross Changes for All Sponsor Subjects in Positions on Hiring the Handicapped. N = 86.

Positions	Number of Subjects Pre-Film	Number of Subjects Post-Film
Strongly Against	0	0
Against	1	0
No Position	8	0
For	31	17
Strongly For	46	69
TOTAL	86	86

APPENDIX XIV

TABLE A.7. Summary of Service Club A Subjects' Changes from Perceived Before-Film Positions on Hiring the Handicapped to After-Film Positions. N = 22.

Positive Changes	Number of Subjects
Against to For	2
No Position to For	8
No Position to Strongly For	2
For to Strongly For	8
Negative Changes	
Strongly For to For	2
TOTAL	22

TABLE A.8. Summary of Gross Changes for all Service Club A Subjects in Positions on Hiring the Handicapped. N = 46.

Positions	Number of Subjects Pre-Film	Number of Subjects Post-Film
Strongly Against	0	0
Against	2	0
No Position	11	1
For	21	25
Strongly For	12	20
TOTAL	46	46

TABLE A.9. Summary of Service Club B's Before-Film and After-Film Responses to Items of a Social Distance Scale. Before-Film N = 21. After-Film N = 19.

	STRONGLY DISAGREE (5)	DISAGREE (4)	UNCERTAIN (3)	AGREE (2)	STRONGLY AGREE (1)	MEAN*
Item 1:	Communities would have stronger economies if all of their citizens could be gainfully employed.					
Before	1	1	2	11	6	2.0
After	0	1	1	10	7	1.8
Item 2:	Business and industry have certain responsibilities for the economic and social welfare of their communities.					
Before	0	0	0	15	6	1.7
After	0	1	0	12	6	1.8
Item 3:	I believe people should be given a chance to become productive members of their communities.					
Before	0	0	0	13	8	1.6
After	0	0	0	11	8	1.6
Item 4:	Handicapped workers should be given a chance to contribute to the economy of their community.					
Before	0	0	0	13	8	1.6
After	0	0	0	12	7	1.6
Item 5:	Handicapped workers should be hired if they are qualified.					
Before	0	1	1	13	6	1.9
After	0	0	2	11	6	1.8
Item 6:	It is the social responsibility of business and industry to hire handicapped workers.					
Before	0	5	4	7	5	2.4
After	0	3	0	11	5	2.1

TABLE A.9 (continued)

Item 7: I will hire handicapped workers, or would if I were in a position to.

Before	0	1	2	15	3	2.0
After	0	1	4	8	6	2.0

Item 8: I will contact the Employ the Handicapped Committee tomorrow to get more information about handicapped workers.

Before	0	6	10	4	1	3.0
After	0	6	9	1	3	2.9

Item 9: Before leaving this meeting, I will make an appointment with a member of the Employ the Handicapped Committee.

Before	0	9	12	0	0	3.4
After	0	7	9	1	2	3.1

*The means were determined by assigning arbitrary weights to the five categories of responses, i.e., Strongly Disagree (5), Disagree (4).

TABLE A.10. Summary of Service Club B's Before-Film and After-Film Responses to Items of an Attributes Scale. Before-Film N = 20. After-Film N = 19.

	STRONGLY DISAGREE (5)	DISAGREE (4)	UNCERTAIN (3)	AGREE (2)	STRONGLY AGREE (1)	MEAN*
Item 10:	Please underline the word or words which most nearly describe your agreement with the following statements: Handicapped workers are					

LOYAL

Before	0	0	6	12	2	2.2
After	0	1	3	12	3	2.1

SKILLED

Before	0	0	13	6	1	2.6
After	0	0	3	11	5	1.9

ABLE TO GROW ON JOB

Before	0	1	2	15	2	2.1
After	0	0	2	14	3	2.0

PUNCTUAL

Before	0	0	9	9	2	2.4
After	0	0	4	10	5	1.9

DEPENDABLE (ON THE JOB EVERY DAY)

Before	0	1	9	9	1	2.5
After	1	0	4	10	4	2.2

ACCEPTED (BY FELLOW WORKERS)

Before	0	1	6	12	1	2.4
After	0	1	3	13	2	2.2

TABLE A.10 (continued)

	STRONGLY DISAGREE (5)	DISAGREE (4)	UNCERTAIN (3)	AGREE (2)	STRONGLY AGREE (1)	MEAN*
			PRODUCTIVE			
Before	0	1	7	11	1	2.4
After	0	1	2	14	2	2.1
			FLEXIBLE			
Before	0	2	13	4	1	2.8
After	0	2	3	13	1	2.3
			SAFE			
Before	1	1	9	8	1	2.7
After	0	1	6	11	1	2.4

*The means were determined by assigning arbitrary weights to the five categories of responses, i.e., Strongly Disagree (5), Disagree (4).

TABLE A.11. Comparison of Mean Scores of Predictions by a Sponsor Subcommittee with Mean Scores of Actual Responses of Service Club B

ITEMS:	MEAN SCORES*		
	SPONSOR SUBCOMMITTEE PREDICTIONS	SERVICE CLUB B RESPONSES	DIFFERENCES
Emotional Effect of Film	2.0	2.0	.0
Liking for Film	2.0	1.9	+ .1
Before-Film Position on Hiring Handicapped	3.0	2.0	+ 1.0
After-Film Position on Hiring Handicapped	2.1	2.0	+ .1
Before-Film Acceptance of Social Responsibility Statement	2.5	2.4	+ .1
After-Film Acceptance of Social Responsibility Statement	1.8	2.1	- .2
Attributes of Handicapped Workers	(Before-Film Responses)		
LOYALTY	2.3	2.2	+ .1
SKILL	2.4	2.6	- .2
ABILITY TO GROW ON JOB	2.6	2.1	+ .5
PUNCTUALITY	2.3	2.4	- .1
DEPENDABILITY	2.4	2.5	- .1
ACCEPTABILITY	3.0	2.4	+ .6

TABLE A.11 (continued)

	MEAN SCORES*		
	SPONSOR SUBCOMMITTEE PREDICTIONS	SERVICE CLUB B RESPONSES	DIFFERENCES
Attributes of Handi-capped Workers (continued)			
PRODUCTIVITY	2.9	2.4	+ .5
FLEXIBILITY	2.3	2.8	- .5
SAFETY	2.4	2.7	- .3

*Where mean scores were determined by assigning arbitrary weights to the five categories of responses, i.e., Strongly Disagree (5), Disagree (4).

APPENDIX XIX

TABLE A.12. Comparison of Mean Scores of Predictions by
a Sponsor Subcommittee with Mean Scores of Actual Responses
of Service Club A

| | MEAN SCORES* | | |
ITEMS:	SPONSOR SUBCOMMITTEE PREDICTIONS	SERVICE CLUB A RESPONSES	DIFFERENCES
Emotional Effect of Film	2.0	1.8	+ .2
Liking for Film	2.0	1.8	+ .2
Before-Film Position on Hiring Handicapped Workers	3.0	2.1	+ .9
After-Film Position on Hiring Handicapped Workers	2.1	1.6	+ .5
After-Film Acceptance of Social Responsibility Statement	1.8	1.8	.0

*Where mean scores were determined by assigning arbitrary
weights to the five categories of responses, i.e., Strongly
Disagree (5), Disagree (4).

APPENDIX XX

A SAMPLE BIBLIOGRAPHY OF

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